THE THINGS I WILL DO FOR YOU:
INVESTIGATING GRATITUDE’S EFFECTS ON PROSOCIAL RULE BREAKING WILLINGNESS IN SUPERVISOR-SUBORDINATE RELATIONSHIPS

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A Dissertation Submitted to the Faculty of Graduate Studies in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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Toronto, Ontario

June, 2015

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ABSTRACT

Relationship-based gratitude (RBG), defined broadly as feelings of appreciation in relationships (Gordon, Impett, Kogan, Oveis, & Keltner, 2012), has been found to influence prosocial behaviours, or actions intended to benefit the parties of a relationship (e.g., Algoe, 2012; Algoe, Gable, & Maisel, 2010). Yet, little is known about the darker side of gratitude's prosocial action tendencies in relationships, particularly from the perspective of the organization, in the form of breaking rules to help another person, or prosocial rule breaking. This dissertation sought to address this limitation by investigating whether RBG leads to prosocial rule breaking willingness in supervisor-subordinate relationships. This dissertation draws on the Risk Regulation Framework (Murray, Holmes, & Collins, 2006) to shed light on how RBG functions in perhaps darker ways in supervisor-subordinate relationships. This theory suggests that gratitude can trigger a relationship-promotion path of behavioural regulation and a willingness to break organizational rules when faced with the opportunity to help the other party. Study 1 was a laboratory experiment of working professionals who were asked to complete a vignette task. The results suggest that manipulated RBG influenced rule breaking willingness for one's supervisor. In Study 2, the effects of Study 1 were replicated in a field study with existing supervisor-subordinate relationships by manipulating RBG and measuring rule breaking willingness at different points in time. In addition, a theoretically relevant moderator, moral disengagement, defined as a person's propensity to rationalize unethical behaviour (Bandura, 1990), was tested for influencing the relationship-promoting effects of RBG on rule breaking willingness. Overall, the results of Study 1 and Study 2 lend support to the notion that RBG's relationship-promoting effects can evoke a willingness to break organizational rules in supervisor-subordinate relationships.
ACKNOWLEDGEMENTS

I would first like to thank York University School of Human Resource Management Faculty and administration. They have given me an excellent PhD education and comprehensive training preparing me for my primary field of study on gratitude. During the PhD program at York University I was given access to many novel and interesting opportunities. I have received consistent support and encouragement from leading scholars in the field of human resource management. My experience at York University will continue to influence my work in years to come.

I would like to give a warm thank you to my dissertation chair, Marie-Helene Budworth. Marie-Helene has always supported my research ideas. She has helped me understand the larger picture and she has provided rich insight that I would not have thought of on my own throughout my dissertation. Her devotion to my professional development is unmatched. It has contributed to a fulfilling life as a PhD student. I am grateful to work with and learn from such an exceptional scholar.

I would also like to extend a special thank you to my dissertation committee. Parbudyal Singh has helped me with learning how to theorize and develop meaningful contributions to scholarship. He has always encouraged my research. I admire Parbudyal's cautious optimism. Amanda Shantz has been a source of inspiration during my dissertation and I am grateful to learn experimental research from her. Amanda has also provided thoughtful criticism on my writing. I am thankful that Amanda has helped me become a better writer.

I would also like to thank Tom Stone. Tom's insight on rule breaking behaviours has been instrumental. Throughout my dissertation, I have learned a great deal from Tom about research, teaching and life. I am truly blessed to have worked with such an amazing scholar. I would also like to extend a thank you to Jeffery Spence for his kindness. Jeff provided helpful advice on measurement and data collection. I would also like to thank Michelle Bligh for her dedication to helping me understand dyadic analysis and just how truly interdependent our feelings and behaviours are with one another. I would also like to thank my examiners Jamie Gruman and Kevin Tasa for their insightful feedback.

I would like to thank my fellow PhD students for emotional and social support. My cohort, Janet Boekhorst, has enriched the program with her positivity and humour. Janet is an amazing person, friend, and coauthor. I am fortunate to have met Janet. I would also like to extend my thanks to Al-Karim Samnani, Lax Manroop, Angus Duff and Shayna Frawley for their ongoing support.

Finally, I would like to thank my family and friends. Without these supports completing a PhD would not be enjoyable. I am grateful to have loving and supportive parents. My sister has also been a great source of strength during the program.
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CHAPTER ONE:

INTRODUCTION

Employee rule breaking can be costly to organizations. For example, workplace fraud alone is estimated to cost US organizations more than 760 billion US dollars per year (Schminke, Cadwell, Ambrose, & McMahon, 2014). The press has reported stories about behaviours that defy organizational rules, such as employees falsifying records to help their bosses during the Enron scandal (Bajaj, 2006) and supervisors helping their subordinates by overlooking subordinates' rule breaking during the JP Morgan scandal (Protes & Silver-Greenberg, 2013). Ethic codes and corporate cultures have been identified as sources of these behaviours (Manroop & Harrison, 2015), but another cause of these behaviours may spring from the quality of interpersonal relationships between supervisors and their employees (Anderson & Jap, 2005).

An important factor influencing behaviours in interpersonal relationships is gratitude. The study of gratitude has received extensive attention from scholars in the personal relationships literature. This literature has defined gratitude broadly as feelings of appreciation in relationships (Gordon, Impett, Kogan, Oveis, & Keltner, 2012). There is considerable agreement about the importance of gratitude for maintaining bonds in intimate and close relationships (Algoe, 2012; Algoe, Haidt, & Gable, 2008; Algoe & Haidt, 2009; Bartlett & DeSteno, 2006; Joel, Gordon, Impett, MacDonald, & Keltner, 2013; Kubacka, Finkenauer, Rusbult, & Keijsers, 2011). According to the Social Functional Perspective on emotions (e.g., Keltner & Haidt, 1999), discrete emotions act as social coordinating system that directs a person’s goals, motivations, and behaviours. As a discrete positive emotion, in general, gratitude is linked to driving prosocial action tendencies, or behaviours that are intended to benefit the welfare of others (Emmons & Crumpler, 2000; Fredrickson, 2001, 2004; McCullough & Tsang, 2004).
Yet, across the extant literature, gratitude has typically been associated with prosocial action tendencies that are assumed to benefit a given benefactor, whether it is a stranger, a partner, close friend, or family member. The organizational context may complicate our understanding of gratitude's prosocial action tendencies because employees hold multiple relationships in organizations, such as those with colleagues, supervisors, suppliers, customers, and with the broader organization itself. Parties may have varying goals (e.g., Latham & Sue-Chan, 2014) and what may be considered to benefit one party may not benefit another (Brief & Motowidlo, 1986; Warren, 2003). For instance, in the context of relationships between supervisors and subordinates, gratitude's effects on prosocial behaviours may be in line with the relationship, and at the same time, contradict the goals of the organization in the form of breaking rules. In this example, supervisors and subordinates are faced with a trade-off between helping the other party and following organizational rules. Indeed, theory has hinted at the notion that gratitude can cause people to act in ways that benefit some parties and not others (Buck, 2004; McCullough & Tsang, 2004), but these effects remain largely unexplored.

This dissertation investigated whether gratitude in supervisor-subordinate relationships predicts organizational rule breaking willingness. A specific form of rule breaking is examined, namely prosocial rule breaking, also known as exercising lenience in abiding by organizational rules (Morrison, 2006; Vardaman, Gondo, & Allen, 2014) to benefit another person. In line with previous work on gratitude in relationships (Gordon et al., 2012), this dissertation draws from the Risk Regulation Framework (Murray, Holmes, & Collins, 2006) to explain how gratitude functions in supervisor-subordinate relationships. This framework suggests that when parties experience gratitude in supervisor-subordinate relationships, it satisfies acceptance goals, thereby prompting prosocial action tendencies through a relationship promotion path of behavioural
regulation. A relationship-specific conceptualization of gratitude may shed light on gratitude's
darker side from the perspective of the organization, in the form contradicting organizational
rules. Further, it is proposed that when parties have a high propensity to morally disengage, or
rationalize unethical behaviour (Bandura, 1990), they will be more willing to engage in rule
breaking for their supervisor or subordinate to promote the relationship.

**An Overview of the Present Research**

In Chapter Two, the gratitude literature is reviewed. First, the history of gratitude and
gratitude's importance for relationship functioning are discussed. Second, conceptualizations of
gratitude, as both trait and state, are described. Third, gratitude's prosocial function is explained
in relation to the leading view on gratitude, namely the Moral Affect Model. Fourth, a brief
review on what is known about the darker side of gratitude is provided. The review is concluded
with an overview on the distinct treatment of gratitude in the personal relationships and
management literatures.

In Chapter Three, the theoretical framework and hypotheses are presented. The Risk
Regulation Framework (Murray et al., 2006) is presented as an overarching theory to explain
gratitude's relationship-promoting effects in supervisor-subordinate relationships. This approach
is premised on the assumption that gratitude satisfies acceptance goals. It is proposed to explain
why gratitude can influence darker forms of prosocial behaviours with the primary aim of
benefiting the other party in the relationship at the expense of the organization.

In Chapter Four, the results of two experimental studies are presented. In Study 1,
relationship-based gratitude was manipulated in working professionals and they were given a
rule breaking vignette. In Study 2, the effects from Study 1 were replicated in a field experiment
by manipulating relationship-based gratitude and measuring rule breaking willingness at
different times. The extent to which a person's propensity to rationalize breaking rules, or propensity to morally disengage, was also tested as a moderator of gratitude's relationship-promoting effects on rule breaking willingness.

In Chapter Five, the findings are summarised and discussed. Specifically, contributions of the current research to scholarship domains, including: gratitude, prosocial rule breaking and the dark side of workplace relationships are discussed. In addition, theoretical implications of applying a Risk Regulation Framework to explain gratitude in a new relationship type, namely supervisor-subordinate relationships, are considered.
CHAPTER TWO:
LITERATURE REVIEW

History of Gratitude and Importance for Relationships

Scholarly interest in gratitude dates back centuries. Gratitude was deemed to serve an important function for interpersonal relationships and broader society (c.f. Emmons, 2004). The philosopher and economist Adam Smith (1790) wrote about gratitude in the Theory of Moral Sentiments, and described it as, “the sentiment which most immediately and directly prompts us to reward” (1976, p. 43). Smith argued that feelings of gratitude are necessary for maintaining a society based on goodwill in order to promote social stability. The philosopher Immanuel Kant (1797) wrote about gratitude in The Metaphysics of Morals, and defined it as “honoring a person because of kindness he has done” (1964, p. 123). George Simmel (1908), in Faithfulness and Gratitude referred to gratitude as “the moral memory of mankind” (1950, p. 388) and argued that it functions to bond and solidify relationships.

Historical writing on gratitude implies that gratitude serves as a social function in interpersonal relationships. It implies that gratitude is a positive feeling in response to experiencing kindness from another person. It suggests that experiencing gratitude prompts people to act in ways that benefit others. This gratitude experience appears to become part of memory and activates bonding between people. The next section reviews gratitude conceptualizations in the psychology literatures.

Gratitude Conceptualizations

Emotions, such as gratitude, can be considered as a stable trait or somewhat fluctuating state. In other words, gratitude can be a disposition (McCullough, Emmons, & Tsang, 2002), or
under some circumstances, it can be stimulated in people irrespective of their dispositional tendencies (Gordon et al., 2012; Spence et al., 2013).

As a stable disposition, the widely used Gratitude Questionnaire (GQ6) conveys gratitude as a trait that predisposes people to a positive memory bias (Watkins, Grimm, & Kolts, 2004) toward appreciating life in general and the actions of others (e.g., “I have so much in life to be thankful for” and “I am grateful to a wide variety of people”; McCullough et al., 2002). As a disposition, gratitude has been found to predict satisfaction with life, positive affectivity, subjective well-being and job satisfaction (Chan, 2010; Emmons & McCullough, 2003; Waters, 2012; Watkins, 2004).

As a state, or momentary experience, the General State Gratitude scale (GSG) captures momentary gratitude feelings that are considered warm and pleasant (e.g., “I feel a warm sense of appreciation” and “I am happy to have been helped by others”; Spence et al., 2013). State gratitude predicts organizational citizenship behaviours directed toward helping other people and organizations (Spence et al., 2013). However, as a general state, the direction of the gratitude is not specified nor is the target of the helping behaviour, thus the measure does provide clarity on the social function of gratitude in relationships.

Because gratitude is considered to have a dyadic function and be simultaneously experienced between two people in a relationship, a relationship-specific measure of state gratitude was developed. The Appreciation in Relationships Scale (AIRS) assesses feelings of appreciation between partners and it is premised on the assumption that gratitude signals acceptance in relationships. It is based on two subfactors: felt gratitude from another person and feelings of gratitude toward the other person (e.g., “I feel appreciated by my partner” and “I feel appreciative toward my partner”; Gordon et al., 2012). As a relationship-based state, gratitude
predicts prosocial responsiveness between intimate partners (Gordon et al., 2012). While this measure provides clarity on the specific source of gratitude feelings, similar to the other measures, it too, has been studied exclusively in connection to positive behaviours in relationships (e.g., partners helping one another). This measure has not been applied to relationships that exist outside of intimate relationships, such as organization-based relationships.

In summary, there are several implications of previous gratitude conceptualizations for this dissertation. First, as a fluctuating state rather than a stable trait, it is expected that gratitude feelings between supervisors and subordinates can be manipulated and have subsequent influence on behaviours. Second, because the primary aim of this dissertation is to investigate whether gratitude influences prosocial rule breaking in supervisor-subordinate relationships, the source of gratitude feelings has implications for the target of the behaviours. Thus, this dissertation draws on Gordon and colleagues (2012) conceptualization of gratitude because it is relationship-based and target specific for prosocial responses.

In the following section, gratitude's prosocial action tendencies are reviewed in connection to the Moral Affect Model. This model provides background on why gratitude has been linked to prosocial action tendencies while highlighting that a darker side of these action tendencies may exist.

**Gratitude's Prosocial Action Tendencies**

The leading psychological framework on gratitude is based on the Moral Affect Model (McCullough, Kilpatrick, Emmons, & Larson, 2001). This model states that gratitude is a moral emotion (Haidt, 2003). According to Buck (2004) moral emotion “involve[s] learned expectations about what circumstances should result in social emotions” (p.109). In line with this understanding, McCullough et al. (2004) argued that gratitude, as a state, serves three moral
functions: (1) a moral barometer that tells us when we have benefited from another’s kindness; (2) a moral motivator prompting people to behave prosocially; and (3) moral reinforcement, setting future expectations about moral behaviour between a beneficiary and benefactor.

The Moral Affect Model highlights that gratitude’s prosocial function is derived from moral principles about how one should feel, think and behave. Moral principles guide social interactions and ultimately exchanges between people that lead to feelings of gratitude. For instance, there are two readily applicable moral principles to gratitude that are also in line with social exchange explanations. First, the moral principle of reciprocity, which is about helping those who have helped you (Gouldner, 1960). Second, the moral principle of equity, which is about upholding a balance of exchanged inputs and outputs between parties (Blau, 1964). Consistent with this understanding, Komter (2004) affirmed “gratitude functions in the chain of reciprocity” (p. 204).

People may also experience gratitude by making attributions about the nature of social exchanges, or valued benefits that are received (Weiner, 1985). Tesser, Gatewood and Driver (1968) supported the view that feeling gratitude is determined by the recipient’s perceptions of the value of the benefit along with intentions of and costs to the benefactor. In line with this understanding, Tsang (2007) conceptualized gratitude as “positive emotion that is experienced when an individual perceives that someone has intentionally given them a valued benefit” (p. 157), and Lazarus and Lazarus (1994) conceptualized gratitude as an “empathetic emotion” because it reflects recognition or appreciation of a benefit after it is given. Indeed, Heider (1958) argued that people feel grateful when they have received a benefit from a benefactor who the recipients believe intended to benefit them.
The Moral Affect Model connects gratitude experiences with prosocial motives toward the benefactor and others more generally (McCullough et al., 2004). According to Haidt (2003), this is because as a form of moral affect, the experience of gratitude links “the interests or welfare either of society as a whole or at least of persons other than the judge or agent” (p. 853). For this reason, prosocial responses to gratitude are other-focused rather than self-focused. Indeed, Fredrickson (2004) stated “the momentary thought-action tendency sparked by gratitude appears to be the urge to behave prosocially oneself, either toward the benefactor, toward others or both” (p. 150). McCullough et al. (2001) also contended that experiencing gratitude prompts people “to contribute to the welfare of the benefactor (or third party) in the future” (p. 252). One might thus conclude that gratitude's prosocial action tendencies are always beneficial to parties. Yet, the dynamics of interpersonal relationships in organizations may complicate the value placed on behaviours motivated by gratitude. Prosocial action tendencies may not always carry a benefit. Experiencing gratitude may promote darker forms of prosocial behaviours that present a trade-off between helping one party over another.

The Darker Side of Gratitude's Prosocial Action Tendencies

The notion that there is a darker side to gratitude's prosocial function was discussed in the context of prosocial unethical behaviour over 10 year ago. In a review of the prosocial consequences of gratitude, McCullough and Tsang (2004) contended that, “some causes and effects of gratitude, although perhaps “prosocial” in nature, are amoral or even immoral” (p.134). They explained that the experience of gratitude can have a powerful impact on moral rationalization processes. McCullough and Tsang (2004) stated that in some situations, “people who experience gratitude can come to perceive immoral actions as being moral” (p.134). These propositions support the view that another side of gratitude’s prosocial function exists, one that is
prosocial, but darker and potentially harmful to another party. In an organizational context, relationships between persons may encourage gratitude's darker effects in the form of prosocial rule breaking.

Recent research has demonstrated that prosocial actions can include deviant behaviours such as breaking organizational rules. Morrison (2006) found that employees break organizational rules with the goal of benefiting the organization itself. Morrison (2006) showed that prosocial behaviours are empirically distinct from prosocial rule breaking behaviours, but that they share the same prosocial action tendency toward a given target (e.g., the organization). Morrison argued that employees break organizational rules to help the organization and include rationales such as: 'to do one's job better'; 'to help a subordinate or colleague'; and/or 'to provide more effective customer service'. A recent practical example includes the story about Georgia teachers falsifying students' standardized test scores in order to save their school from closing down (Aviv, 2013).

The prosocial rule breaking literature has not addressed the notion of breaking organizational rules to benefit parties within work-based relationships, such as subordinates benefiting supervisors. The idea of one’s supervisor as a target or reason for prosocial rule breaking has been largely overlooked in the prosocial rule breaking literature. A notable exception is Bryant, Davis, Hancock, and Vardaman (2010). They proposed an extension of Morrison’s (2006) prosocial rule breaking construct to include managerial prosocial rule breaking. However, Bryant and colleagues assumed that managerial prosocial rule breaking is also performed with the primary intention to help the organization, rather than another person in a workplace relationship. This dissertation extends this research by examining the willingness of supervisors and subordinates to break rules with the primary aim of benefiting the other party.
In summary, the theoretical proposition advanced thus far by scholars, that experiencing gratitude may reveal a darker side, broadens the scope of traditional gratitude scholarship. However, the Moral Affect Model of gratitude relies heavily on social exchange explanations (Stephens, Heaphy & Dutton, 2011; Spence et al., 2013) stemming from the moral principles of reciprocity and equity. These explanations may not fully account for how gratitude becomes activated in relationships and the full range of prosocial behaviours it may promote between parties. The next section provides a review on what is known about gratitude's function in the personal relationships. In particular, gratitude has been treated as a focal variable and has been found to play a key role in personal relationships by satisfying acceptance goals and promoting prosocial behaviours directed toward the other party.

Gratitude as a Focal Variable in the Personal Relationships Literature

Theoretical and empirical work on the function of gratitude in personal relationships (Algoe, Fredrickson, & Gable, 2013; Gordon, et al., 2012) has considerably outpaced work on gratitude in organization-based relationships. In addition, the extant research has studied gratitude as a focal variable based on evidence of it playing a key role in relationships. The following section reviews selected research on the influence of gratitude on behaviour in intimate and close relationships. Studies have typically focused on experiencing gratitude feelings in relationships.

As an emotional expression, gratitude has been found to provide benefits in intimate relationships. For instance, newly married couples benefit from expressing gratitude in their relationships because gratitude for one's partner is related to higher marital satisfaction and better adjustment (Schramm, Marshall, Harris, & Lee, 2005). In addition, it was found that among newly married couples, perceived positive behaviour of a partner was associated with greater gratitude toward that partner on a given day (Mikulincer, Shaver, & Slav, 2006). A more recent
study found that partners who expressed gratitude to their long-term relationship partners for three weeks (in comparison to the control group) saw their relationship as having greater communal strength (Lambert, Clark, Durtschi, Fincham, & Graham, 2010).

Moving beyond expressing gratitude feelings from one partner to another, a large body of work has emerged in recent years focusing on the experience of gratitude in personal relationships (c.f. Algoe, 2012). This line of research was developed based on the assumption that gratitude in ongoing relationships plays a different role compared to gratitude directed towards a stranger for a random act of kindness. For instance, early work by Algoe et al. (2008) examined the influence of gratitude in ongoing relationships between sorority sisters at a large university and found that it influences the formation of relationships. Specifically the authors tested the hypothesis that relational features of a benefit (e.g., gift giving from old members to new members) were associated with feelings of gratitude for the person receiving the benefit. The authors also investigated whether perceived responsiveness, or asking participants how thoughtful their Big Sister was in providing the particular benefit, predicted feelings of gratitude. Algoe and colleagues found that a Little Sister’s gratitude predicted her feelings about her benefactor (Big Sister) while controlling for liking and the benefit received itself. In other words, this study provides support for the notion that gratitude functions to promote relationship formation and maintenance.

In building on this work, Algoe et al. (2010) investigated the role of gratitude and indebtedness – distinct emotional responses – in established relationships or romantic relationships (of heterosexual couples). They used a daily-experience sampling method of both partners over 14 days. Both partners were asked to report on their daily behaviour (e.g., I did something thoughtful for my partner) and their emotional responses to perceived responsive
behaviours, such as daily relationship connection (e.g., I felt accepted and connected to my partner) and daily relationship satisfaction (e.g., rating the satisfaction of the relationship from terrible to terrific). Gratitude was assessed by asking each partner to rate how the other made him or her feel on a given day (e.g., thankfulness, appreciation, gratitude). Beyond relationship satisfaction, gratitude predicted relationship quality for both partners. While it was found that a partner’s thoughtful gesture on a given day predicted increased feelings of gratitude and increased feelings of indebtedness, only gratitude predicted increased feelings of relationship quality (with the partner toward whom they felt grateful on the previous day). This study offers evidence that gratitude plays a social function in relationships – beyond causing economic exchanges based on obligation to reinforcing behaviour based on caring (Algoe et al., 2010).

Based on the work of Algoe et al. (2010), Gordon et al. (2012) developed a more precise measure of relationship-specific gratitude in order to investigate its role in relationship maintenance between married couples. Consistent with a communal approach that assumes that behaviour is motivated by obtaining acceptance from others, Gordon et al. (2012) conceptualized gratitude as consisting of two distinct factors: felt appreciation from one’s partner and feelings of appreciation towards one’s partner. In line with Algoe et al. (2010), Gordon et al. (2012) found that gratitude feelings predicted responsiveness, satisfaction and commitment in relationships. This study extended previous work by introducing gratitude processes as part of a risk regulation system used by people in relationships. A risk regulation system suggests that felt gratitude from one’s partner on a given day acts as a positive cue to his or her partner about how the person is valued and cared for. In turn, according to Gordon et al. (2012), parties develop feelings of gratitude toward their partners and this influences their relationship maintenance behaviours.
In light of the above stream of research in the personal relationships literature, gratitude has typically been studied as an experience and state. It also has been studied in relation to prosocial behaviours as a social function in close and intimate relationships. To reflect the aforementioned findings, Algoe (2012) developed the Find-Remind-and-Bind Theory. This theory states that when gratitude is experienced, its primary function is to capitalize on the opportunity to improve the interpersonal connection between parties. Gratitude is argued to help parties find new interpersonal connections or remind them of previously held high-quality connections with partners, and bind individuals to the benefactor. The theory has yet to be empirically tested, however Algoe (2012) cautioned against the use of testing the Find-and-Bind Theory in relationships with strangers because it is intended for ongoing relationships. Specifically, Algoe (2012) stated, “…stranger relationships may sometimes lead to significantly different hypotheses than those that might be made for meaningful (e.g., close) relationships. Relationship context needs to be carefully considered when making predictions and drawing conclusions” (p 19).

In summary, there has been considerable theoretical and empirical advancement of understanding the role of gratitude in personal relationships in social psychology. The above body of work shifts the emphasis of gratitude - from providing an economic function based simply on social exchange - to consideration of communal motivations. An emphasis on a communal lens illustrates that people can be dependent on others in situations where they seek acceptance and belongingness and this appears to be at the core of understanding how gratitude works in relationships. A limitation of these studies for applicability to organization-based relationships is that samples consisted of friends and romantic partners. Further, behaviours investigated in these studies were prosocial but also inherently considered positive for parties. Not captured in these studies are the other kinds of behaviours, such as responses to include
benefiting the other person in the relationship at the expense of another relationship. These kinds of responses to gratitude feelings may be of interest in an organizational context where parties hold multiple relationships and where it is possible to help one party at the expense of another party.

**Research on Gratitude in Organizations**

Gratitude has rarely been a focal point of empirical research in organizational settings (Meyers, van Woerkom, & Bakker, 2013; Mills, Fleck & Kozikowski, 2013; Stephens, et al., 2011). Instead, it has been primarily treated as an incidental variable (see recent exception discussed below, Spence et al. 2013).

For example, Grant and Wrzesniewski (2010) investigated gratitude as an anticipated emotional state as part of a larger model. They conducted three field studies across public service and call center populations to determine if and when positive self-concept predicts job performance (e.g., total number of gift-related contacts made, financial productivity and initiative). They assessed core self-evaluations, other-orientation (e.g., prosocial motivation, agreeableness, duty), anticipated feelings of guilt (e.g., I would feel that I disappointed others if I fail), and anticipated gratitude from supervisors (e.g., my manager will appreciate my work if I succeed). They found that for people with high core self-evaluations there was an increase in job performance for those people also high in other-orientation. These people were more sensitive to anticipating feelings of gratitude and guilt. It is important to point out that in this study gratitude was defined as a person’s anticipated gratitude from another person in the future. As such, the extent to which the employees felt gratitude in the moment from their managers and whether this influenced job performance remains unclear.
A second study of gratitude in organizations was conducted by Grant and Gino (2010) who investigated the effects of gratitude expressions. Specifically they investigated the mediating processes of expressing gratitude on prosocial behaviours using student and employee (e.g., fundraisers) samples. Grant and Gino (2010) assessed whether gratitude expressions (e.g., expressing thank you) enhanced prosocial behaviour (e.g., number of voluntary calls, voluntarily providing help) through communal motivation. Communal motivation assumes that people desire to be needed and be accepted by others (Deci & Ryan, 2002; Leary & Baumeister, 2000). This desire fuels peoples' motivation to behave in ways to obtain acceptance from others. Grant and Gino’s (2010) work emphasizes the role of the fundamental need to feel socially valued, needed and cared for. Grant and Gino (2010) explained that when people feel socially valued, it signifies an interpersonal bond or positive relationship with another person. This study draws attention to the connection between receiving gratitude and feeling valued by the organization. In contrast to Grant and Wrzesniewski (2010) in which managers were the source of gratitude feelings, in this study the source of gratitude feelings was the organization itself.

A third study that examined gratitude in an organizational context was carried out by Grant and Dutton (2012). They examined the relationship between employee support programs and organizational commitment. Grant and Dutton conducted semi-structured interviews with employees from a large retail company. Their qualitative results shed light on a relationship between gratitude and affective commitment. They suggested that employees' affective commitment was based on the gratitude they held toward their organization for enabling their own prosocial behaviour and the identities they attached to these behaviours. This study highlights how employees can become grateful toward their own organizations.
The exception to treating gratitude as an incidental variable in the management literature is the recent work of Spence and colleagues (2013) who investigated general state gratitude on a daily basis as a predictor of organizational citizenship behaviours. Using student samples and a working population, Spence et al. (2013) found that state gratitude and organizational citizenship behaviour are time-variant. In other words, state gratitude, on a given day (based on events), predicted organizational citizenship behaviours. Interestingly, state gratitude was manipulated by asking participants to recall why they are grateful in general. The outcome variable was measured by self-report on organizational citizenship behaviours not necessarily directed toward a specific target. Therefore, as the authors point out, both the gratitude manipulation and the outcome variable were not target specific. Nevertheless, this work highlights the role of daily events in prompting the feelings of gratitude, a discrete positive emotion, and prosocial behaviours.

In summary, studies that have advanced gratitude as a focal variable fall under the personal relationship literature based in social psychology. The current dissertation draws from social psychology and personal relationships research in order to understand the function of gratitude in supervisor-subordinate relationships. In doing so, gratitude is embedded in a relationship framework to understand a broader prosocial function to include more deviant forms. This approach may explain why gratitude can influence darker forms of prosocial behaviours, from the perspective of the organization, such as prosocial rule breaking with the primary aim of benefiting the other party in the relationship. The next section presents a theoretical framework to shed light on gratitude's relationship-promoting effects in supervisor-subordinate relationships.
CHAPTER THREE:
THEORETICAL FRAMEWORK AND HYPOTHESES

An Overview of the Risk Regulation Framework

The Risk Regulation Framework (Murray et al., 2006) provides an overarching theoretical model that is useful for understanding the relationship-promoting effects of gratitude in supervisor-subordinate relationships. The key assumption of the Risk Regulation Framework is that individuals are generally motivated by a regulatory system intended to resolve the goal conflict of pursuing acceptance while avoiding rejection from others (Baumeister & Leary, 1995). Murray and colleagues (2006) described the organizing assumption of this system stating that “perceptions of a partner's regard and caring control a cognitive, affective and behavioural system for resolving this goal conflict” (p. 642). In other words, the possibility of experiencing rejection, a form of pain, motivates individuals to act in ways toward others such that they will avoid getting hurt.

The Risk Regulation Framework draws a theoretical parallel to evolutionary models of cooperation between people in non-kin relationships. According to Trivers (1971), people in non-kin relationships help others as long as the help is reciprocated in the future. This notion was termed reciprocal altruism and it was deemed to evolve out of the necessity to exchange resources, such as food and tools in the interest of survival. The Risk Regulation Theory builds on this theory by specifying context of the exchange of relational resources in interdependent situations. Feelings of acceptance in interdependent relationships is also a resource and a necessity for survival of the relationship.

Furthermore, it is logical that the Risk Regulation Framework also compliments social exchange explanations of behaviours in relationships (e.g., Blau, 1964) because it assumes that
feelings of acceptance or rejection are based on previous interactions with one's partner and the quality of perceived investments (e.g., responsiveness behaviour as inputs and outputs). The distinction is that the Risk Regulation Framework is an overarching framework that is specifies behaviour in interdependent relationships how parties use affective cues (feelings based on repeated encounters of responsiveness) from each other in order to inform acceptance from the other party and guide subsequent behaviours.

**Relationship-Based Gratitude in Supervisor-Subordinate Relationships**

The present research embeds gratitude in the Risk Regulation Framework in order to explain the function of gratitude between supervisors and subordinates in relation to rule breaking willingness. In doing so, this research argues that *relationship-based gratitude* (RBG), as a state, acts as an affective cue to positive regard from one’s supervisor or subordinate (Gordon et al., 2012). Felt positive regard implies that parties can feel whether their partner values and cares for them. Supervisors and subordinates experience *felt gratitude* from one another (as a form of felt positive regard), and in turn, they experience *feelings of gratitude* toward their supervisor or subordinate.

This view of gratitude is aligned with established lines of scholarship in the personal relationships literature and it acknowledges the element of positive felt regard, or the feeling of being accepted as central to understanding appreciation in relationships (Algoe, 2012; Gordon et al., 2012) and gratitude’s broad prosocial function. However, the current dissertation is careful not to limit the scope of prosocial action tendencies that RBG can activate. In particular, the current dissertation argues that when RBG is experienced by parties in supervisor-subordinate relationships, gratitude's prosocial-oriented tendencies are focused on benefiting the welfare of the other person in the relationship and may include, from the perspective of the organization,
deviant forms of prosocial behaviours (e.g., helping that contradict organizational goals). Thus, the present research departs from major traditions of gratitude scholarship in one important way – by broadening the prosocial action tendencies of gratitude to include more deviant forms in relationships.

According to the Risk Regulation Framework, a relationship-promotion path, or a sense of assurance that stems from feeling connected, is triggered under three conditions: (1) when parties link situations of dependence for acceptance to the goal of obtaining acceptance (e.g., realizing and caring about being liked by the other party); (2) when parties link perceptions of a partner’s acceptance to gratified feelings and gains in self-esteem (e.g., feeling grateful and good about oneself knowing that the other party accepts them); and (3) when parties link perceptions of a partner’s acceptance to the willingness to risk future dependence (e.g., befriending the other party and risking further vulnerability given the sharing of information).

The Risk Regulation Framework is also able to predict and explain behavioural consequences of gratitude. Murray and colleagues (2006) noted that the Risk Regulation Framework is proficient at making predictions about “how people transform a situation that has the possible risk of rejection into a situation that activates the goal of being connected” (p. 661). Specifically, Murray, Holmes, and Griffin (2000) and Murray, Holmes, Griffin, Bellavia, and Rose (2001) argued that parties may respond to satisfying connectedness goals by being responsive and making sacrifices for that person. These sacrifices may reflect a broadened scope of prosocial behaviours in the form of prosocial rule breaking in response to RBG.

Parties who feel that they have obtained acceptance in the relationship are likely to feel secure and focus on ways to be responsive to the other person. A relationship promotion path implies that parties strive to maximize relationship satisfaction and continued acceptance by
being responsive to their partner (Murray et al., 2006). This prediction gives the Risk Regulation Framework a novel advantage compared to previous work relationship models (e.g., Dutton & Heaphy, 2003, Stephens et al., 2011) because it specifies a relationship-promotion path regulation in response to affective cues and considers the broader cognitive and behavioural regulatory system.

**Application of the Risk Regulation Framework to Supervisor-Subordinate Relationships**

In their call for future research Murray and colleagues stated, “…subsequent research might also extend the risk regulation model to non-romantic relationship domains” (2006, p. 456). In doing so, Murray, Derrick, Leder, and Holmes (2008) asserted that risk regulation dynamics are applicable in relationships in which two conditions are met: (a) each partner’s dependence on the other is voluntary, thus each partner must make decisions about how much dependence to risk and (b) the prospect of rejection is painful and concerning because the value of their partner’s regard and caring cannot be easily substituted. This research contends that these dynamics exist in supervisor-subordinate relationships, thus satisfying these two conditions with modifications given the organizational context. The logic of the present research is guided by the following assumptions.

First, in supervisor-subordinate relationships, like romantic relationships, parties choose how much dependence to risk with the other person. Dependence refers to the degree to which each person controls the other’s outcomes (e.g., felt security about the other’s responsiveness to one’s need for approval; Murray et al., 2006). A greater dependence heightens risk because it reduces the power over one’s own outcomes (Overall & Sibley, 2009). Experiencing a greater dependence in a supervisor-subordinate relationship should amplify concerns about the other party’s gratitude. It is important to highlight that while the employment relationship may not be
voluntary (e.g., a supervisor may not hire his or her subordinate; a subordinate generally does not choose his or her supervisor), parties’ choice of dependence to risk is voluntary. For example, in workplace relationships parties assess the extent to it is psychologically safe to voice their concerns (Carmeli & Gittell, 2009). Voicing concerns to another party about the workplace is considered an interpersonal risk. This is because the other party may not share the same concerns and they may not responsive in the expected way. Thus people rely on cues to signal whether they are secure in their relationship and it is psychologically safe to risk further dependence.

Second, concerns for obtaining acceptance from others, as in other close relationships, can also be a concern for supervisors and subordinates (Loi, Lai, & Lam, 2012; Shore, & Wayne, 1993). For example, both supervisors and subordinates seek relational commitment in the same ways from one another as assurance, irrespective of their job status difference (Landry & Vandenberghe, 2012). An absence of feeling accepted may result in a decrease of supervisor and subordinate willingness to help the other party. For example, supervisors may reduce or withhold their support directed toward their subordinate in ways such as providing career opportunities and facilitating promotions (Judge & Bretz, 1994). Yet, subordinates can also reject their supervisors in subtle ways, such as withholding information. Indeed, empirical evidence suggests that people withhold prosocial behaviours if they do not feel that they are valued (Grant & Gino, 2010). Nevertheless, responses will take shape in the given context of the relationship and what is deemed appropriate by both parties.

**Relationship-based Gratitude and Prosocial Rule Breaking Willingness**

An essential feature of the prosocial rule breaking concept is the definition of 'prosocial'. Brief and Motowidlo (1986) first introduced the concept of prosocial behaviour to the organizational context by proposing that people go above and beyond their job responsibilities in
order to help others in the workplace and outside what is expected of employees (Spreitzer & Soneshein, 2003). They suggested that 'helping' behaviours can be functional or dysfunctional, but that they are considered prosocial because they are intended to help other people. Building on this idea, Morrison (2006) argued that people also enact prosocial behaviours to benefit organizations, not just other people. In a review of prosocial definitions, Vardaman and colleagues (2014) pointed out that a key difference between Brief and Motowidlo's (1986) and Morrison's (2006) conceptualizations of 'prosocial' are the targets. Vardaman et al. (2014) argued that prosocial behaviours have been studied in relation to helping individuals or helping organizations.

A logical gap from the aforementioned definitions of 'prosocial' is the consideration of the notion that behaviours can be enacted to help one party, but at the same time, these behaviours may be at the expense of another party. For example, supervisors and subordinates may behave in ways that benefit each other that are not necessarily in line with organizational goals (Brief & Motowidlo, 1986; Warren, 2003). Indeed, it has been found that a reason that employees break organizational rules is to help other employees and promote social bonding (Hollinger, 1986; Sims, 2002). Thus, this dissertation defines prosocial rule breaking broadly as intentional violations of organizational rules or policies (Bryant et al., 2010; Morrison, 2006; Vardaman, et al., 2014) with the intention of benefiting one's supervisor or subordinate. This rule breaking behaviour may be positive for the supervisor-subordinate relationship but it is not considered to be in line with the goals of the organization. When supervisors and subordinates are faced with situations of deciding whether they will break organizational rules in order to help the other party, they will be faced with the trade-off between benefiting the other person in the relationship and doing what is best for the organization (e.g., following the organizational rule).
This demonstrates that prosocial rule breaking may present a situation where employees are faced with the immediate decision of benefiting one party over another.

When parties in a supervisor-subordinate relationship are faced with a trade-off decision between benefiting the other person in the relationship and following an organizational rule, relationship-based gratitude may evoke leniency with breaking organizational rules. Experiencing relationship-based gratitude in supervisor-subordinate relationships activates a relationship-promotion path of behavioural regulation for parties (Gordon et al., 2012; Murray et al., 2006). This relationship-promotion path of behavioural regulation may evoke lenience in parties to break organizational rules with the intention of benefiting one's supervisor or subordinate. Gino and Galinsky (2012) found that when people felt psychologically close to another person, they were more likely to exercise lenience in ethical decision making and this lead them to behave unethically themselves. In addition, Gino and Margolis (2011) found that people in a promotion-focused state, associated with general positive feelings, were more likely to engage in unethical behaviours (e.g., risk taking) relative to those in a prevention-focused state which was associated with having negative feelings. In light of this evidence, it is proposed that experiencing RBG will evoke a relationship-promotion path of regulation in supervisors and subordinates and subsequent rule breaking willingness that will be intended to the benefit the other party.

**Hypothesis 1.** Parties of a supervisor-subordinate dyad experiencing relationship-based gratitude directed toward their supervisor [or subordinate] will be more willing to engage in prosocial rule breaking to benefit their supervisor [or subordinate].
The Role of Moral Disengagement

According to the Risk Regulation Framework (Murray et al., 2006), individual differences can play a role in shaping parties of a relationships' responses to one another by modifying self-regulation strategies. The theory suggests that individual differences can 'interfere' with processing information as part of the broader affective, cognitive and behavioural regulation system. A relevant factor that may shape parties RBG's effects on prosocial rule breaking willingness may be the extent to which parties automatically rationalize breaking rules as ethical in order to help the other party. A propensity to rationalize rule breaking is argued to depend on a person's level of moral disengagement.

In general, moral disengagement refers to a person's cognitive framing, understanding, and processing of unethical information as ethical (Moore, Detert, Treviño, Baker, & Mayer, 2012). People rationalize unethical behaviour because they are motivated by the basic need to see the self as moral and good (e.g., Aronson, 1969, Steele, 1988). There are several methods people may use to rationalize their own rule breaking behaviour as good and beneficial for the relationship itself (Bandura, 1990; Detert, Treviño, & Sweitzer, 2008). Supervisors and subordinates may reinterpret rule breaking as a moral action by pointing to a higher cause, diffusing responsibility, downplaying personal agency or vilifying others outside the relationship. Supervisors and subordinates may also reinterpret rule breaking as a moral action when it is positioned to help the party (Klotz & Bolino, 2013).

Traditionally moral disengagement has been measured as a stable disposition referring to a person's tendency to rationalize what may normatively be considered unethical behaviour as ethical (Bandura, 1990; Bandura, 1999). According to this understanding, people with a high tendency to rationalize unethical behaviour as ethical are predisposed to making unethical
decisions without feeling distress (Moore et al., 2012). More recently, moral disengagement has been measured as a momentary state that can be caused by specific contextual factors, such as the experience of general positive affect (Vincent, Emich, & Goncalo, 2013). Consistent with Bandura's theory (1999, 2000), a person's tendency to rationalize unethical behaviour as ethical, may be activated by interaction and reciprocal influences of the person him or herself, their behaviour and their environment (Moore et al., 2012). This line of reasoning suggests that moral disengagement can also be motivated in specific situations. It implies that the decision to engage in unethical behaviour is based on impulse rather than automation.

In line with the Risk Regulation Framework, moral disengagement, as an individual difference rather than a state, is theorized to influence prosocial rule breaking willingness for other parties of supervisor-subordinate relationships automatically. This is because the magnitude of RBG’s effects on rule breaking willingness will be contingent on the extent to which supervisors and subordinates are predisposed to rationalizing their own rule breaking behaviours. Indeed, as Moore and colleagues (2012) described, high moral disengagers have a more developed "self-justifying system". Thus, the theoretically approach in this dissertation treats moral disengagement as a disposition irrespective of the situation.

Supervisors and subordinates with higher moral disengagement, rather than lower moral disengagement, will be more likely to rationalize prosocial rule breaking for the other party as ethical. High moral disengagers will be more likely to use their relationship with the other person as justification because they will see their welfare as overlapping with the other party. Indeed, Gino and Galinsky (2012) found that high moral disengagers were more likely to justify unethical acts involving another party that they felt psychologically close to. High moral disengagers may also demonstrate disregard for causing harm to others outside the relationship.
(Folmer, & De Cremer, 2012), such as the organization itself. Empirical evidence supports the notion that high moral disengagers rationalize the act of breaking organizational rules in order to benefit other parties (Moore, 2008; Moore, et al., 2012; Morrison, 2006) and this may provide moral justification for going against the organization in order to help the other party in the relationship (Bandura, 1999; Klotz & Bolino, 2013).

**Hypothesis 2.** Parties experiencing relationship-based gratitude toward their supervisor [or subordinate], will be more willing to engage in prosocial rule breaking to benefit their supervisor [or subordinate] when they have a higher propensity to morally disengage, relative to those with a lower propensity to disengage.

**Relationship-based Gratitude and Prosocial Rule Breaking Willingness in Supervisor-Subordinate Dyads**

Gratitude is considered to be a dyadic emotion serving a social function (Algoe et al., 2013). In relationships, a person who causes gratitude feelings in another person may also experience gratitude feelings from that person. Thus, gratitude feelings in relationships are interdependent between parties. In supervisor-subordinate relationships, the Risk Regulation Framework suggests that the two parties simultaneously experience RBG; both felt from the other party and felt toward the other party (Gordon et al., 2012). For instance, a supervisor may behave in ways that makes the subordinate feel appreciated, while at the same time, the subordinate feels appreciative toward the supervisor and then acts in ways to make the supervisor feel appreciated. Indeed, in the intimate relationships literature, Lambert and Fincham (2011) found that marital partners felt appreciated when their partners expressed gratitude to them on a frequent basis. More recently, Gordon and colleagues (2012) found that baseline feelings of appreciation were interdependent between marital partners.
As a dyadic emotion, experiencing RBG may also be fostered within supervisor-subordinate dyads through emotional contagion processes resulting from face-to-face interaction. Emotional contagion, or the spreading of emotions, occurs when feelings are transferred from one person to another, or across levels (Tee, Ashkanasy, & Paulsen, 2013). Emotional contagion processes are triggered by observing and expressing emotions to others. For example, the spreading of gratitude from a supervisor to a subordinate may occur by mirror neuron activity and/or mimicry (Hatfield, Cacioppo & Rapson, 1994; Van Kleef, 2010). These affective signals are means for providing social information to parties (Van Kleef, Homan, & Cheshin, 2012), such as the extent to which one party feels appreciative toward another party. Thus, it is expected that RBG feelings are interdependent between supervisors and subordinates.

There is also evidence to suggest that rule breaking willingness of supervisors and subordinates can be interdependent within dyads. For example, social influence explanations for the contagion of behaviours have also been applied to the spreading of unethical behaviours in groups. Gino, Ayal and Ariely (2009) found that the unethical behaviour (e.g., dishonesty) of one person in a group influences the unethical behaviour of peers. Thus, taken together, it is expected that the relationship-promoting behavioural effects of RBG are interdependent within supervisor-subordinate dyads. It is expected that RBG's effects will influence rule breaking willingness of both parties in supervisor-subordinate dyads.

Hypothesis 3. Relationship-based gratitude will be positively related between supervisors and subordinates within dyads.

Hypothesis 4. Relationship-based gratitude in supervisor-subordinate dyads will predict prosocial rule breaking willingness between dyads.
An Overview of the Proposed Model

In summary, in response to experiencing relationship-based gratitude (RBG), it is argued that supervisors and subordinates will feel accepted and seek to promote the relationship with prosocial rule breaking when faced with the opportunity. As shown in Figure 1, at the individual level, RBG gratitude positively influences the extent to which supervisors and subordinates are willing engage in prosocial rule breaking to benefit the other party (H1). This is because RBG feelings satisfy one’s need for acceptance. This creates a low risk situation in which parties seek to promote their relationship with their supervisor or subordinate with behaviours that are responsive to the other person’s needs. Supervisors and subordinates' propensity to morally disengage, or rationalize breaking rules as moral and good for relationships, is proposed to enhance relationship-promoting effects of RBG on prosocial rule breaking willingness (H2). At the dyad level, supervisors and subordinates are nested within relationships. RBG feelings within supervisor-subordinate relationships are argued to accumulate and build over time, thus being positively related between parties (H3). Finally, RBG is hypothesized to influence prosocial rule breaking willingness in supervisor-subordinate dyads (H4).
Figure 1: Investigative model depicting Hypotheses 1-4.
Notes: RBG = Relationship-based gratitude; PRBW = Prosocial rule breaking Willingness
Study in bold.
CHAPTER FOUR:

RELATIONSHIP-BASED GRATITUDE EXPERIMENTAL INVESTIGATIONS

Pilot Study of the Manipulation

Prior to testing the hypotheses, the relationship-based gratitude (RBG) manipulation was developed. To the author's knowledge, this was the first research effort directed toward manipulating RBG in a supervisor-subordinate context. The RBG manipulation was developed by drawing from an autobiographical task procedure designed to evoke general positive feelings (Ashton-James, Maddux, Galinsky, & Chartrand, 2009). Prior work has manipulated feelings of gratitude by taking a similar approach. For example, gratitude manipulations have included instructing participants to recall reasons why they are grateful in general (e.g., Spence et al., 2013), reasons why they are grateful toward a sorority sister for receiving acts of kindness (e.g., Algoe & Haidt, 2009), or toward a best friend (e.g., Lambert & Finchman, 2011). These manipulations have been based on a single factor conceptualization of gratitude feelings.

Alternatively, Gordon et al.'s (2012) two subfactor conceptualization of RBG suggests that feelings of gratitude are first activated through feeling gratitude from another person and it is this felt gratitude that generates feelings of gratitude toward that person. This two subfactor process has been empirically demonstrated to trigger a relationship promotion path of regulation. Thus, the RBG manipulation was developed to reflect this two subfactor conceptualization of RBG in order to test the hypothesis that RBG influences the likelihood of breaking organizational rules when presented with the opportunity.

Participants

To test the validity of the RBG manipulation, a Pilot Study was conducted with an independent sample (n = 50). Participants were recruited from a large university campus in Canada. An advertisement was posted seeking participants for a study on “feelings in supervisor
and subordinate relationships” in exchange for a $3.00 coffee card. A pre-condition to participation was having part-time or full-time employment at the time of the study (71% of participants were working in a part-time job). Participants were from a wide variety of industries e.g., retail, service, construction, sales, etc. 70% of participants were female and 80% of participants were under 25 years of age. The relationship duration subordinates had with their supervisor (referred to in the manipulation task) was 2.06 years ($SD = 1.59$ years).

**Procedure**

Participants were instructed to complete an autobiographical task. Following modifications to Ashton-James et al.’s (2009) autobiographical task, participants were randomly assigned to one of two conditions: (1) RBG and (2) Control. In the RBG condition the participants were instructed to recall and write about a specific experience of a relationship they had with a current, or former, supervisor as the subordinate. The task included two parts in order to conceptually replicate Gordon et al.’s (2012) two subfactor conceptualization of RBG. First, participants were asked to describe a time that they felt appreciated from their supervisor for who they are and what they do as a person. Second, they were then asked to describe a time they felt appreciative toward their supervisor for who they are and what they do as a person. Together, completion of this task was intended to activate RBG feelings and a relationship-promotion path of regulation from subordinates toward their selected supervisors. Participants in the control condition were asked to complete a neutral task which included describing the location of their work space relative to their supervisor's. Completing this task was intended to have a neutral effect on participants' feelings. All participants completed these tasks successfully. Participants were then asked to complete a manipulation check that assessed the extent to which they experienced RBG with their respective supervisors based on their autobiographical accounts.
Analysis and Results

*Manipulation check.* The manipulation check items were based on Gordon et al.’s (2012) 16-item Appreciation in Relationships Scale (AIRS). The items were adapted by substituting terms “my partner” for “my supervisor”. Items were assessed on a 7-point Likert-type scale (1 strongly disagree to 7 strongly agree). Participants were asked to indicate the extent to which they experienced RBG with their selected supervisor based on their accounts. Sample items included “My supervisor makes sure I felt appreciated” and “I appreciate my supervisor”. The measure of RBG demonstrated adequate reliability ($\alpha = .88$).

A one-way ANOVA revealed that subordinates in the RBG condition ($M = 4.86, SD = .88$) reported experiencing RBG significantly more than those in the control condition ($M = 3.81, SD = .91$), $[F(1, 48) = 16.83, p = .000]$.

Because of the nature of the manipulation, participants may not have recalled specific feelings of gratitude, in turn, recalling other positive emotions. To assess the effectiveness of the manipulation in terms of participants' responses for feelings of appreciation versus general positive affective feelings, responses were coded by a research assistant who was blind to the purpose of the study. The research assistant was asked to read the accounts and code the descriptions for “feelings of appreciation” ($1 = $ included, $0 = $ not included) and “other general positive feelings” ($1 = $ included, $0 = $ not included).

A within-subjects ANOVA was conducted to examine the effect of the RBG manipulation on the number of responses that described feelings of appreciation versus general positive emotions (e.g., joy). The results indicate that those manipulated with RBG described significantly more feelings of appreciation ($M = .84, SD = .37$), than other positive feelings ($M = \ldots$)
.20, \( SD = .40 \) [\( F(1, 24) = 25.18, p = .001 \)]. These results provide evidence that participants wrote about feelings of gratitude in the RBG manipulation rather than other positive emotions.

Study 1

The aim of Study 1 was to examine the influence of RBG on prosocial rule breaking willingness (H1). This study tested whether RBG affects the likelihood that subordinates will break organizational rules to benefit their supervisors.

Methods

Participants

Working professionals were recruited from an executive-level program at a large university in Canada. Participants were informed that the study was about “feelings in supervisor-subordinate relationships” and they were offered $3 in exchange for their time. A total of 91 participants completed the study but 3 participants were excluded because they were entrepreneurs, 7 participants did not follow the instructions, and 1 participant expressed a concern about reporting on their relationship with their manager. The final sample consisted of 80 participants (80% female). Participants’ ages included (under 25 = 20%, between 26-35 = 62.5%, between 36-45 = 16.5, between 46-55 = 1 %). Participants reported the mean working relationship length for the selected supervisor in the manipulation was 2.60 years (\( SD = 2.01 \) years). 58% of participants were working for the supervisor featured in the manipulation at the time of the study (\( SD = .52 \)).

Procedure

Consistent with the procedures in the Pilot Study, participants were randomly assigned to one of two conditions: (1) RBG and (2) Control. All participants were then given the same prosocial rule breaking vignette to read and they were asked to respond to a set of rule breaking
questions based on the vignette. Morrison's (2006) prosocial rule breaking vignette was selected and slightly adapted to the supervisor-subordinate context. This vignette was selected because the scenario and corresponding questions demonstrated previous good reliability with a working population (Morrison, 2006). Further, the vignette method was selected because of the nature of the dependent variable. Organizational rule breaking willingness is a minor form of unethical behaviour (e.g., Vardaman et al., 2014) and it may encourage social desirable responding from participants. The vignette method is helpful for reducing social desirable responding because it allows for methodological separation of measurement for the predictor variable and the criterion variable (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In addition, the use of vignettes allows for assessing rule breaking willingness in an ethical manner (Aguinis & Bradley, 2014). The scenario read as follows:

You are an applications designer for a growing software company that creates customer software applications for small-and medium-sized businesses. You have been with the company for 3 years. Your responsibilities include developing customer software for clients. You are working on a project that is very important to your supervisor and your supervisor is up against a tight deadline. To meet that deadline, you need to have two additional employees allocated to work with your team. You know that the company has rules governing how people get allocated to projects. But following these rules in this case would take too much time and could cause your supervisor to lose out on an important opportunity. You are to consider whether to “borrow” a few people without following normal procedures, even though this would mean violating the rules, and you could get in trouble for this (from someone outside your team if they found out). You are really torn. You
do not like the idea of bypassing the rules, but you know how important the project is for your supervisor.

Following reading the vignette, all participants responded to a number of statements, as per the measures below. Finally, participants completed information containing the demographic variables.

**Measures**

*RBG manipulation check.* Gordon et al. (2012) 16-item Appreciation in Relationships Scale (AIRS) was adapted to the supervisor-subordinate relationship context. The term “my partner” was substituted with “my supervisor”. Participants were instructed to indicate to what extent they experienced RBG with their supervisor based on their autobiographical accounts. Items were assessed on a 7-point Likert-type scale (1 strongly disagree to 7 strongly agree). There were two subscales. The appreciated subscale, or felt gratitude, included 7 items. A sample item for the appreciated subscale, or felt gratitude, included, “My supervisor makes me feel appreciated” (α = .90). The appreciative, or feelings of gratitude subscale included 9 items. A sample item for feeling gratitude included, “I make sure my supervisor feels appreciated” (α = .92). The Cronbach alpha for the original 16-item RBG manipulation check was α = .86.

*Prosocial rule breaking willingness.* Morrison’s (2006) 6-item measure of prosocial rule breaking was used to assess rule breaking based on the aforementioned scenario. The items were slightly adapted to reflect rule breaking for a supervisor based on the modifications to the scenario. Items remained theoretically appropriate in that they did not suggest that the supervisor asked the subordinate to break an organizational rule. This is important to highlight because RBG is theorized to trigger positive relationship-promotion path of regulation and wanting to help the other person rather than being asked and feeling obligated or indebted. The items were
assessed on a 5-point Likert-type scale. A sample item includes, “In this situation, how likely would you be to violate the policy and place a rush on the order?” (1 likely to 5 unlikely). This item, as with the others, implies that subordinates were not asked to violate rules by their supervisors in the scenario. The Cronbach alpha for the original six items was $\alpha = .77$.

*Preliminary Analyses of the Measures*

The RBG manipulation check and the rule breaking willingness measure are relatively new and they were both adapted in this study to the supervisor-subordinate context. Further, both the RBG manipulation check and rule breaking willingness measure had a common target (i.e., the supervisor), the measures were completed by the same source (i.e., the subordinate), and completed at the same time. Therefore, an exploratory factor analysis (EFA) was conducted with maximum likelihood estimation to examine the unidimensionality of the manipulation check and the rule breaking willingness measure. Promax rotation was set to extract two factors from these data because the relationships between measures were expected to be nonorthogonal, or have limited overlap. The majority of items loaded highly on its respective factor meaning that the adapted items were suitable. The EFA results are shown in Table 1.

Additional analyses were also conducted to test whether the measurement model had good fit (Hu & Bentler, 1999). A series of confirmatory factor analyses (CFA) using AMOS version 18 were also conducted to determine the internal consistency of the items and their respective constructs. Relative to EFA, a CFA is known to be a more rigorous test for theory-driven models (Hu & Bentler, 1999). A measurement model was tested with two latent factors (i.e., RBG manipulation check and rule breaking willingness) and 22 items (16 items for RBG and 6 items for rule breaking willingness). The measurement model was evaluated based on the standardized root mean square residual (SRMR), the comparative fit index (CFI), the Tucker-
Lewis index (TLI), and the root-mean square error of approximation (RMSEA) as recommended by Hu and Bentler (1999). In particular, they stated that the model provides a good fit to the data if SRMR < .08, CFI > .95, TLI > .95, and RMSEA < .06. However Hu and Bentler (1999) suggested that the SRMR and the CFI should be used as the decisive indicators of fit because the RMSEA and TLI tend to over-reject models when the samples size are small (i.e., samples under 250). Results with the original items revealed poor fit with the data. The fit statistics did not meet the recommended standards with the SRMR exceeding .08 and the CFI falling below .95.

Modification indices revealed that the lack of fit was generated by items 5, 6, 10, 12, 14, 15, and 16 for the RBG manipulation check, and item 6 for the rule breaking measure. Removal of these items generated better fit statistics. In addition, there was error covariance between items 8 and 9 and between 11 and 13. Co-varying these items further improved the model fit. The final measurement model consisted of 9 items for the RBG manipulation check (5 items for the felt appreciation subfactor; and, 4 items for the feeling appreciation subfactor) and 5 items for rule breaking willingness. The model had an acceptable fit ($\chi^2 = 103.32$, $df = 73$, $p \leq .001$; SRMR = .06; CFI = .96; TLI = .96; RMSEA = .07; Hu & Bentler, 1999). All of the indicators had statistically significant ($p \leq 0.001$) loadings on their respective constructs with standardized loadings exceeding .60. Standardized loadings ranged from .66 to .92 for the nine items relating to RBG. Concerning the outcome variable, standardized loading ranged from .62 to .82 for the five items relating to rule breaking willingness. Taken together the results of the CFA and model fit suggest robust internal consistency of the RBG manipulation check ($\alpha = .92$) and rule breaking willingness for the modified scales ($\alpha = .86$).
Analysis and Results

RBG manipulation check. A one-way ANOVA revealed that the RBG manipulation (\(M = 4.78, SD = 1.43\)), had a significant overall effect in comparison to the control group (\(M = 4.08, SD = 1.35\)), [F (1, 78) = 7.34, \(p = .05\)]; thus the manipulation check was effective.

Hypothesis 1 Test. Hypothesis 1 stated that subordinates in the RBG condition would be more willing to break organizational rules to help their supervisor based on the vignette, relative to those in the control condition. Results of a one-way ANOVA revealed that those in the RBG condition (\(M = 2.78, SD = .78\)), had significantly higher rule breaking willingness (\(M = 2.23, SD = .75\)) [F (1, 78) = 6.05, \(p = .002\)], thus providing support for H1. The effect size was calculated using Cohen’s \(d\) (\(d = .71\)) indicating a small effect size (\(r = .34\)). Tables 2 and 3 present the results of rule breaking willingness by the two conditions.

To add to the robustness of the results, an additional test of H1 was conducted by using hierarchical linear regression in SPSS version 22 while controlling for age and gender. Analyses were conducted with both control variables and without the control variables. In step 1, the controls variables were regressed on the dependent variable, rule breaking willingness. In step 2, the condition was added as the independent variable (coded as 1, 0) and it was regressed on the dependent variable. As expected, the RBG condition was related to rule breaking willingness, showing a small effect of manipulated RBG on rule breaking willingness (\(b = .32, p < .01\)), while controlling for age and gender. Gender, in both steps, was the only significant control variable suggesting a negative relationship with the dependent variable. The incremental variance explained was 10 percent. Table 4 presents the means, standard deviations and intercorrelations of study variables. Table 5 presents the results of the regression test.
Discussion

The results of Study 1 provide preliminary evidence in support of the hypothesis that manipulating feelings of RBG promotes subordinates’ willingness to break organizational rules to benefit their supervisors (H1). The RBG manipulation used in Study 1 is helpful for establishing a baseline of directional causality. In other words, manipulated RBG feelings appear to precede rule breaking willingness. However, there are several notable limitations that are outlined below.

First, Study 1 does not address external validity. A drawback of using the vignette is that it has difficulty creating the same real-world pressures (Aguinis & Bradley, 2014). To overcome this limitation, Study 2 was conducted in a field setting among existing supervisor-subordinate relationships. In doing so, Study 2 improves the external validity by investigating manipulated RBG feelings and its effects on rule breaking willingness in a workplace context. A second limitation to Study 1 is that the condition under which manipulated RBG influences rule breaking willingness is not clear. Study 2 investigated an individual difference, moral disengagement, as a factor influencing reactions to manipulated RBG on rule breaking willingness (H2). A third limitation to Study 1 is that RBG was manipulated from the subordinate's perspective and did not capture the perspective of the supervisor. Study 2 investigated both perspectives of supervisors and subordinates in existing relationships. In doing so, Study 2 explored whether manipulated RBG is positively related between supervisors and subordinates (H3) and whether RBG's effects on rule breaking willingness at the individual level can be replicated in existing supervisor-subordinate relationships at the dyad level (H4).
Study 2: Supervisor-Subordinate Dyads

Study 2 had four goals. The first goal was to replicate Study 1 (H1). The second goal was to explore a condition under which RBG influences rule breaking willingness. A theoretically relevant individual difference, moral disengagement, is investigated as influencing relationship-promoting effects of manipulated RBG on rule breaking willingness (H2). A third goal is to explore whether manipulated RBG is positively related between supervisors and subordinates (H3). A fourth goal is to investigate whether manipulated RBG in supervisor-subordinate dyads influences willingness to break organizational rules for both members (H4).

In addition, Study 2 methodologically extends Study 1 in three ways. First, Study 2 was conducted in a field setting with existing supervisor-subordinate relationships, thus improving the external validity (Shadish, Cook, & Campbell, 2002). Second, Study 2 takes a two-wave experimental approach by separating data collection of each of the variables across different points in time. This separation of data collection between the independent variables and dependent variable is intended to reduce social desirability concerns associated with self-report data (Podsakoff et al., 2003). Finally, because Study 2 manipulates feelings of RBG in both subordinates and supervisors, dyad analysis can be conducted. In doing so, Study 2 is able to uncover whether there is within dyad covariance and between dyad covariance of RBG and rule breaking willingness.

Methods

Participants

Participants were recruited through an MBA course at a large university in the U.S. in exchange for a partial course credit (5%). Participants were instructed that the research was about “feelings in supervisor-subordinate relationships” and would take place over three data
collection points. Given the time commitment asked of participants (e.g., Bolger & Laurenceau, 2013), and that this was a graduate student-recruited sample (Wheeler, Shanine, Leon, & Whitman, 2014), it was deemed necessary to offer an incentive to students to increase their motivation because they were asked to both participate and recruit their supervisors for the study. Participants were either at home or at work when they completed the components of the study.

In order to partake in the study, participants were required to be employed full-time and to have a direct supervisor. A total of 42 eligible participants (24% female) completed the online background questionnaire. Twenty-three of these participants (54%) successfully recruited their supervisors to participate, resulting in a total of 65 participants for the background portion of the study. The final sample consisted of 46 supervisors and subordinates, or 23 supervisor-subordinate complete dyads participating in the in the background, morning, and evening portions of this study. Participants were from a number of industries with a large majority from the military (71%). The mean age was 33.28 ($SD = 9.46$ years). The mean working relationship length reported was 46.69 months ($SD = 62.65$ months).

**Procedure**

Two weeks before the study was active, participants were directed to complete an online background questionnaire. Participants were asked to create their own identifier code (Mother’s maiden name last two initials, shoe size, and day of birth) in order to be matched across response times. Subordinates were instructed to ask their supervisors to participate in a study and for permission for the researcher to obtain their email for future correspondence. In order to verify the authenticity of the supervisor-subordinate relationships, all participants were asked for their work emails. Participants were instructed to refrain from discussing the study with one another beyond recruitment.
Approximately two weeks later, all participants were emailed a survey in the morning available from 8:00 a.m. until 11:59 a.m. Participants were randomly assigned to one of two conditions: (1) RBG (n = 22) and (2) Control (n = 24). Participants were asked to complete the same manipulation as in Study 1 based on Gordon and colleagues conceptualization of gratitude with slight modification for the supervisor-subordinate relationships in a field setting. In the RBG condition, supervisors and subordinates were asked to describe five reasons they felt appreciated by their supervisor or subordinate for who they are and what they do as a person, and to describe five reasons why they felt appreciative toward their supervisor or subordinate for whom they are and what they do as a person. In the control condition, supervisors and subordinates were asked to describe five features of their work-space. In the evening that day, participants were sent a questionnaire including the rule breaking willingness measure. Participants were instructed to complete the survey between 6:00 p.m. and 11:59 p.m.

Measures

Background Questionnaire

Participants completed a basic online background questionnaire with basic demographic information, including: age and gender. In addition, the moral disengagement measure was taken.

Moral disengagement. The 24-item measure of moral disengagement originally developed by Bandura et al. (1996), and later adapted by Moore and colleagues (2012), was used to assess participants’ tendency to rationalize unethical acts. Since moral disengagement was conceptualized as a disposition, the measure was given to participants during the background portion of the study. Separating data collection points was intended to reduce concerns about the possibility of the RBG manipulation having an effect on moral disengagement as a state. Items
were assessed on a 7-point Likert-type scale (1 disagree strongly to 7 agree strongly). Sample items included, “It is alright to lie to keep your friends out of trouble” and “It’s okay to gloss over certain facts just to make your point” (α = .91).

Morning Measure

RBG manipulation check. Four items from Gordon et al.’s (2012) scale was used as a manipulation check (two items for each subfactor). Since the primary aim of the manipulation was to induce RBG feelings between supervisors and subordinates, the items selected reflected the specific feelings of appreciation in that moment. The high factor loadings in Study 1 justified selection of these items. The items were assessed on a 7-point Likert-type scale (1 strongly disagree to 7 strongly agree). Sample items included “My supervisor [or subordinate] makes sure I feel appreciated” and “I appreciate my supervisor [or subordinate]” (α = .88).

Evening Measure

Prosocial rule breaking willingness. The items were selected from the “co-worker aid” subfactor from Dahling et al.’s (2012) prosocial rule breaking measure. The measure was adapted to include “subordinate” and “supervisor” instead of “employee”. The measure consisted of four items. For example, a sample item included, “When my supervisor (or subordinate) needs my help, I disobey organizational policies to help him/her” (1 strongly disagree to 7 strongly agree) (α = .97).

Analysis and Results

Individual Level Analysis

Age and gender were included in the analysis as control variables. Analyses were run with and without the control variables. Table 6 presents the means, standard deviations and intercorrelations of the study variables.
RBG manipulation check. A one-way ANOVA revealed that the RBG manipulation ($M = 5.94$, $SD = .58$), had a significant overall effect in comparison to the control group ($M = 5.28$, $SD = .83$), $[F (1, 44) = 3.07, p = .004]$. 

Hypothesis 1 test. The first hypothesis stated that supervisors and subordinates given the RBG manipulation in the morning, compared to the control condition, would be more willing to engage in rule breaking to benefit their supervisor or subordinate that evening (H1). Results of a one-way ANOVA revealed that the RBG manipulation in the morning ($M = 2.47$, $SD = 1.54$) had marginally significant overall effect on rule breaking willingness in the evening, compared to the control ($M = 1.86$, $SD = .62$) $[F (1, 44) = 1.77, p = .082]$. The effect size was calculated using Cohen’s $d$ ($d = .52$) indicating a small effect size ($r = .25$). Thus there was marginal support for H1. Results are presented in Table 7 and Table 8.

Hypothesis 2 test. The second hypothesis was that moral disengagement would moderate the effects of RBG on rule breaking willingness of supervisors and subordinates (H2). Hierarchical moderated regression was used to test this hypothesis because this approach shows the incremental variance explained from entering the variables in three steps. In the first step the control variables, age and gender, were entered. In the second step the manipulation and moral disengagement were entered. The third step entered the interaction term of the manipulation and moral disengagement. All variables were standardized and the analysis was run with and without the control variables (Becker, 2005).

Table 9 presents the hierarchical moderated regression test for rule breaking willingness. In step 2 the manipulation and moderator were significant with the incremental variance explaining 16 percent. In Step 3, the interaction effect was not significant ($b = .21 p = .69$). Consequentially Hypothesis 2 was not supported.
Dyad Level Analysis

At the dyad level, both scores of the subordinate and the supervisor are included in analysis. Thus, to test the final two hypotheses the data needed to be restructured. Consistent with the recommendations of Kenny, Kashy, and Cook (2006), the data were reorganized to reflect a pairwise data design so that subordinate and supervisor data corresponded. A pairwise data design allows for each supervisor-subordinate dyad to have two cases, or individual scores for each supervisor and subordinate while treating the dyad as the unit of analysis. A pairwise data design is a combination of individual and dyad level structures, thus allowing for the potential analysis of both levels (Kenny et al., 2006). The pairwise structure included the distinguishable job status variable (within-dyad variable) coded as (1 = supervisor, -1 = subordinate), the distinguishable condition variable (between-dyad variable) was coded as (1 = RBG, -1 = control), and the continuous variables (mixed-dyad variable) or rule breaking willingness. The final data structure consisted of between-dyads, within dyads, and mixed-dyad variables, thus an appropriate data structure for testing the Actor-Partner Interdependence Model (APIM) using multilevel modeling.

Ferrin, Bligh, and Kohles (2010) pointed out that the APIM has the same set of assumptions as ordinary least squares but it models interdependence rather than assuming independence. In doing so, the APIM allows for testing both the subordinate's (actor's) own RBG effects and the supervisor's (partner's) own RBG effects on rule breaking willingness. This is important because when supervisors and subordinates interact, each person's rule breaking willingness may be affected by both his or her own effects and the other person's effects (Ferrin, et al., 2010).
Table 10 presents the descriptive statistics of study variables within dyads by condition. Interestingly across the conditions, supervisors' prosocial rule breaking willingness mean scores were higher than subordinates' prosocial rule breaking willingness mean scores. Following the recommendations of Kenny et al. (2006), to test the effects of single within-dyads variables, or the role of the actor (subordinate) and partner (supervisor), paired t-tests were conducted in order to assess mean-level differences on the variable scores. Results showed no significant differences between supervisors and subordinates on the RBG manipulation check or the rule breaking willingness measure.

Hypothesis 3 test. Hypothesis 3 stated that RBG would be positively related between supervisors and subordinates (H3). Since nonindependence is estimated as covariance, or correlational, rather than as variance, Kenny, Kashy, and Bolger (1998) recommend testing for power of effect size within dyads. They recommended that the sample should include at least 25 dyads to obtain 83 percent power to rule out the null hypothesis with an effect size of .60. For studies with less than 25 dyads, Kenny et al. (2006) recommended that scores be presumed as nonindependent. While the current sample did not meet this mark, it appears that the effect sizes could be meaningfully estimated because of the experimental design. Indeed, experiments are an effective strategy for increasing power for small samples (McClelland, 2000). Therefore, Pearson correlations were computed in order to provide insight into potential within dyad covariance.

Table 11 presents the Pearson correlation matrix for study variables. Correlations between supervisor and subordinate scores for the RBG manipulation check showed that subordinates' (actors') RBG feelings were positively related supervisors' (partners') RBG feelings (r = .65, p < .01), thus providing evidence of interdependence of gratitude feelings between both members. Consequentially, H3 was supported. In addition, the correlations between the
condition and rule breaking willingness for both subordinates and supervisors were similar to one another \((r = .25, p < .05)\). Interestingly, subordinates' rule breaking willingness was not related to supervisors' rule breaking willingness. Nevertheless, in light of the evidence showing that subordinates' RBG and supervisors' RBG were strongly correlated, in subsequent analysis the supervisor-subordinate dyad was treated as the unit of analysis using APIM, rather than traditional linear models which treat the individual as the unit of analysis.

*Hypothesis 4 test.* Hypothesis stated that manipulated RBG in supervisor-subordinate dyads predicts rule breaking willingness in dyads (H4). Multilevel modeling was used to estimate the effects of manipulated RBG on rule breaking willingness in supervisor-subordinate dyads while addressing the statistical dependence from nested data.

The following steps were completed according to the APIM procedures described by Kenny et al. (2006) for multilevel (mixed linear modeling) procedures using heterogeneous compound symmetry in SPSS. Heterogeneous compound symmetry allows the error variances to differ for the two types of dyad members, thus allowing for heterogeneous variances (Kenny et al., 2006). All predictor variables were mean-centered. The outcome variable, rule breaking willingness was calculated by taking the average of two members. The “dyad ID” was entered into “subjects” and “job status” was entered into the “repeated measures” because the members were heterogeneous based position, or distinguishable (supervisor vs. subordinate). Next, rule breaking willingness (mixed variable) was entered as the dependent variable. The condition was entered as a main effect with the RBG manipulation check for both supervisors and subordinates being entered as covariates to control for subordinates' (actors') own effects and supervisors' (partners') own effects as predictors.
Table 12 presents the actor and partner effects for rule breaking willingness in relation to manipulated RBG in supervisor-subordinate relationships. The results show that there is significant between-dyad covariance by condition on rule breaking willingness (b = -.72, p < .01). With each one unit increase in feelings of RBG for supervisor-subordinate dyads, as generated by the RBG manipulation, there was a difference of .72 likelihood of rule breaking willingness for dyads in the control condition. In addition, a pairwise comparison test was run in order to provide further interpretation of the negative coefficients. Based on the estimated marginal means, the test revealed higher scores on prosocial rule breaking willingness for dyads in the gratitude conditions higher scores in the RBG group (M = 2.67, SE = .19) in comparison to the control condition (M = 1.94, SE = .19). Supervisor-subordinate dyads in the RBG condition were more willing to break organizational rules, relative to those dyads in the control condition, thus providing support for H4.

Furthermore, the parameters also show that there were mutual effects of supervisors' and subordinates' RBG based on the manipulation check (b = -.31, p < .05). This adds to the support for H4. Although not hypothesized, the parameters show that supervisors' own RBG effects and subordinates' own RBG effects (based on the manipulation check) on dyad rule breaking willingness were similar (b = -.14, p < .05). This suggests that the manipulation had a consistent effect, as anticipated, between dyads.

Discussion

Study 2 replicated and extended the results from Study 1 in several ways. First, at the individual level, Study 2 provides further support for the notion that manipulated RBG feelings can influence rule breaking willingness in supervisors and subordinates for the other party in the relationship.
Second, Study 2 investigated moral disengagement as a moderator of manipulated RBG and rule breaking willingness. A surprising finding was that moral disengagement did not moderate RBG’s effects on rule breaking willingness for supervisors and subordinates. One possible explanation for the lack of a significant interaction is because moral disengagement was measured as a disposition rather than a state. It might be that recalling feelings of RBG triggers a relationship promotion path of regulation irrespective of the moral disengagement of the participants as a disposition, but as a state, moral disengagement might be influenced by positive feelings (e.g., Vincent, et al., 2013), such as gratitude. As a state, moral disengagement may facilitate a relationship-promoting path of regulation through which the effects of the RBG manipulation positively influences rule breaking.

Third, RBG feelings between supervisors and subordinates were found to be positively related within dyads. This finding suggests that RBG feelings are interdependent, thus providing support for H3. It was interesting to see that the overall means within dyads by condition were slightly higher for supervisors compared to their subordinates. This may be explained by the difference in job status and subsequent responsibility. In line with Murray and colleagues (2006), the job status difference may imply that supervisors were more dependent on subordinates for acceptance in the relationship in order to ensure operational functioning. Supervisors may also be in a position to act in rule breaking ways given their position of authority and subsequent access resources. For instance, according to evolutionary models of altruism, Essock-Vitale and McGuire (1985) found in 300 qualitative interviews that helping behaviour in relationships was more likely to flow from people who were older and had more resources. Finally, manipulated RBG was found to have a direct effect on rule breaking willingness in supervisor-subordinate dyads relative to dyads in the control condition, thus providing support for H4. Although it was
not hypothesized, there appears to be a cross-over effect between supervisors' and subordinates' RBG feelings on rule breaking willingness based on the manipulation check. This finding is logical, since manipulated RBG feelings were found to be interdependent and likely affecting dyad behaviour. These mutual effects add to support for H4. The limitations of Study 2 are discussed in the general discuss in the next section.
CHAPTER FIVE:
GENERAL DISCUSSION

This dissertation was designed to investigate whether relationship-based gratitude (RBG) influences organizational rule breaking willingness in workplace relationships, namely those between supervisors and subordinates. The two studies provide support for the notion of the relationship-promoting effects of gratitude feelings on rule breaking willingness. Notably, a manipulation was developed to induce RBG based on Gordon et al. (2012) conceptualization of appreciation in relationships. The manipulation asked people to recall gratitude experiences with their supervisors and subordinates. The manipulation in Study 1 (e.g., asking participants to describe gratitude experience with their supervisors) was slightly adapted in Study 2 (e.g., asking participants to list reasons for their gratitude feelings with supervisors or subordinates). The manipulation was found to be effective across the two studies. Relationship-promoting effects of RBG on rule breaking willingness was also replicated across multiple working population samples (working professionals and existing supervisors and their subordinates) using experimental laboratory and field designs. Furthermore, the current dissertation used a vignette and two-wave data in efforts to reduce concerns about common method bias. The next sections summarize contributions to scholarship.

Gratitude Scholarship

This dissertation extends previous research on gratitude in relationships (Algoe et al., 2012; Gordon et al., 2012) in three ways. First, this is the first study, to the author’s knowledge, that RBG was manipulated in organization-based relationships, namely between subordinates and their supervisors. The findings show that when people recall experiences of felt appreciation and feelings of appreciation toward their supervisors or subordinates, they experienced more RBG toward that person. By manipulating RBG, it appears that these feelings prompt a
relationship-promotion path of regulation and a willingness to break organizational rules with the primary intention to benefit the other party in the relationship. By uncovering this relationship, the present results help to further understand the power of gratitude, a darker side in particular from the perspective of the organization, and relationship-promoting effects in workplace relationships.

Second, it has been long established that gratitude serves a prosocial function (e.g., Emmons & Crumpler, 2000; McCullough & Tsang, 2004; Spence et al., 2013), but previous research has tended to study gratitude in connection with prosocial behaviours that are implied to have inherently positive value without consideration of potentially negative effects for some parties. The current research is the first to empirically investigate gratitude’s darker side from the perspective of the organization. In particular, gratitude influenced prosocial rule breaking willingness in contradiction of organizational goals in order to benefit supervisors and subordinates. Indeed, a growing body of literature in the personal relationships domain have demonstrated the critical role of gratitude in maintaining interpersonal bonds (e.g. Algoe, 2012; Gordon et al., 2012). Building on prior research, the results from this dissertation suggest that there are relationship-promoting effects of gratitude in which supervisors and subordinates seek to maintain bonds with one another. However, what is novel from this data is that it appears that people promoted their supervisor-subordinate relationships at the expense of their relationship with the organization. In doing so, supervisors and subordinates made a trade-off between what they thought was best for their supervisor-subordinate relationship and what was best for the organization. The current research provides a new perspective on those relationship promotion behaviours (Rusbult, Drigotas, & Verette, 1994), such that investment behaviours may also include organizational rule breaking for the other party.
Third, the current approach is aligned with work on gratitude in the personal relationships literature (e.g., Algoe, 2012; Gordon et al., 2012) in that a relationship-specific conceptualization of gratitude is explored in supervisor-subordinate relationships. This was done by embedding gratitude in the Risk Regulation Framework as an overarching theory to explain the social function of gratitude in supervisor-subordinate relationships (e.g., motivated by acceptance goals). In doing so, this dissertation provides insight on how gratitude can activate acceptance goals in workplace relationships and influence prosocial behaviours directed toward one's relationship partner.

**Prosocial Rule Breaking Scholarship**

By examining RBG as an antecedent to rule breaking willingness, the current research provides several contributions to the prosocial rule breaking literature. First, contrary to previous approaches on prosocial rule breaking that assume employees break rules to benefit the organization, the two studies in this dissertation found that supervisors and subordinates were willing to break rules for one another in response to manipulated gratitude at the expense of the organization. Furthermore, prosocial rule breaking willingness was positioned to go against the rules of the organization. In doing so, it advances the extant literature's understanding of prosocial rule breaking in a tension-driven context. This is an important note to highlight because prosocial rule breaking has previously been conceptualized as helpful for the organization and therefore *good* behaviour. The current dissertation sheds light on rule breaking from an organizational perspective emphasizing that the rule breaking willingness was for the other party in the relationship rather than to help the organization itself. This is not to suggest that *all* rule breaking is *bad*; rather, the intension is to shed light on rule breaking in the context of a trade-off decision between the helping the other party in the relationship and the organization.
Second, the present research is the first to integrate gratitude with prosocial rule breaking. In doing so, this research adds to the prosocial rule breaking literature, demonstrating that RBG in supervisor-subordinate relationships can be a useful predictor of prosocial rule breaking to benefit another party. Third, the studies in this dissertation investigated rule breaking willingness using two different measures. All measures were based on breaking organizational rules and they were modified to be target specific for supervisors and subordinates. Fourth, while an interaction effect between RBG and moral disengagement on rule breaking willingness was not supported, it appears that moral disengagement was positively related to the dependent variable. Specifically it was found that high moral disengagers were more willing to engage in prosocial rule breaking relative to low moral disengagers.

The Dark Side of Workplace Relationships

The current dissertation extends the scope of relationship-promoting behaviours that gratitude can evoke in supervisor-subordinate relationships to include rule breaking willingness that contradict organizational goals. This is important to highlight because supervisor-subordinate relationship effectiveness is typically studied to be a function of behaviours that are in line with organizational goals (e.g., Gallup, 2013; Stephens et al., 2011). The current research investigates rule breaking in order to benefit one's supervisor or subordinate, and thus more deviant behaviour than what is usually explored in positive workplace relationships. Close relationship scholars Spitzberg and Cupach affirm the importance of exploring these more deviant forms of behaviour. They stated that the goal is “neither to valorize nor demonize the darker aspects of close relationships, but rather, to emphasize the importance of their day-to-day performances in relationships” (1998, p.x). The results from this dissertation add evidence of the
darker aspects of relationships, from the perspective of the organization, in supervisor-
subordinate relationships.

The personal relationships research has used the Risk Regulation Framework as an
overarching lens to understand close relationships and more recently gratitude (Gordon et al.,
2012). Surprisingly, the Risk Regulation Framework is silent on explaining workplace
relationships (Murray et al., 2006). The model tested in this dissertation extends the Risk
Regulation Framework by suggesting that risk regulation dynamics can be applied to supervisor-
subordinate relationships. The results in this dissertation appear to suggest that when people
experience RBG, a relationship-promotion path of behaviour regulation may be prompted and
they may be willing to engage in behaviours that benefit one party at the expense of another.

Methodological Strengths and Limitations

Overall, this dissertation has a number of methodological strengths. A primary
methodological strength of this dissertation is the use of multiple samples through graduate
student recruitment. Specifically, it allowed examination of H1 across working professionals and
existing supervisor-subordinate relationships. In addition to the sample that graduate student
recruitment provided, experimental methods were used to investigate RBG’s effect on rule
breaking willingness. This is particularly important point because prosocial rule breaking, as a
form of employee deviance, may be considered a contentious area of investigation for
organizational field study designs. Furthermore, in Study 2 there was multilevel and two-wave
data. These methodological features are particularly helpful for making causal inferences. This
design combined, with an experimental approach, helped to establish support for the sequential
order of RBG’s relationship-promoting effect on rule breaking willingness.
A second strength of this dissertation is the RBG manipulation that was tested. Although research has studied the role of gratitude in personal relationships and maintenance behaviours, previous approaches have limited our understanding about whether RBG can be manipulated and the implications for behaviours. For example, research appears to be silent on whether gratitude feelings in workplace relationships can be enhanced through interventions (see Lomas et al., 2014). The RBG manipulation in this study was designed as a self-application method using an autobiographical task (Ashton-James, et al., 2009) to induce gratitude feelings based on supervisor-subordinate relationships. Indeed, the self-application of general positive activities is a widely used technique for inducing positive emotions (Meyers, et al., 2013). Notably, the gratitude manipulation in this dissertation was relationship-specific. This allowed investigation of whether relationship-based gratitude in existing relationships can be enhanced by drawing attention to feelings of gratitude in those relationships.

While there are several methodological strengths to this dissertation, there are notable limitations. First, across all studies, the data collection instruments used were self-report data, which could produce a bias in reporting because of common method variance (Podsakoff, et al., 2003). Since the RBG construct used in this study was based on recalling gratitude feelings in relationships, asking participants to report on their experiences was necessary. Along similar lines, for the dependent variable, asking people about whether or not they would be willing to break rules to help their supervisors or subordinates also relied on self-report data from a single source. To help address these methodological challenges, methodological separation was used in Study 1 and different data collection points were used in Study 2. Future research should focus on collecting objective data for rule breaking. In addition, as pointed out, the sample size for Study 2 could be improved. From an experimental design perspective, the sample size met
criteria for experimental manipulation, or the at least 20 observation recommendation to avoid creating a false-positive (Simmons, Nelson, & Simonsohn, 2011). However, as a unit of analysis, 23 dyads did not meet the recommended sample size of 25 dyads in order to meaningfully estimate effect size (Kenny et al., 2006). Finally, the sample in Study 2 was largely from the military. While this concentration provides a glimpse into the military sector, additional research with a more normal sample is needed to bolster the generalizability of the current findings.

**Future Research Directions**

In the management literature, recent empirical work is beginning to focus on gratitude’s positive individual and organizational effects (e.g., Spence et al., 2013). This research, although highly valuable, perpetuates the prevailing view on the positive prosocial consequences of gratitude while ignoring the potential dark side of gratitude's prosocial action tendencies from the perspective of the organization. This program of research may benefit from including factors that moderate gratitude’s relationship with more deviant outcomes, since this can provide a meaningful perspective on the underlying psychological affective, cognitive and behavioural processes. Future research should examine the potential deviant outcomes of RBG and relationship-promoting effects.

Future research may extend the Risk Regulation Framework beyond supervisor-subordinate relationships to relationship-based gratitude between co-workers to address co-worker directed gratitude. Employees may have relationship-based gratitude for a close co-worker and be willing to engage in a wide array of relationship-promoting behaviours. In response, the other co-worker may feel this demonstrated gratitude and be willing to do the same. While this behaviour may be prosocial in intention, it may be deviant, non-transparent, and at the expense of other relationships (Hollinger, Slora, & Terris, 1992).
A surprising finding was that moral disengagement did not moderate RBG's relationship-promoting effects on rule breaking willingness. While the effects of moral disengagement were in the hypothesized direction in Study 2, a significant interaction with RBG on prosocial rule breaking willingness was not found. It appears that the conditions under which participants considered ethical information were not strong enough to evoke high moral disengagers' prosocial rule breaking willingness. The nature of the military sample in Study 2 may also explain the null findings. As an authoritative sector, much like prison services and the broader criminal justice system, the military as a social environment may shape moral disengagement tendencies. For example, Osofsky, Bandura, and Zimbardo (2005) found in an experiment of prison personnel executing the death penalty, that when the prison workers began employment they displayed high levels of moral disengagement. As employment continued, the high levels increased for those workers carrying out the executions. While this may be an extreme example, it may demonstrate that there was not enough variability in the military samples' moral disengagement scores and prosocial rule breaking willingness for RBG to have a significant effect.

Furthermore, while an interaction effect with RBG and moral disengagement was not found, other moral elements might be at play. For instance, the dynamics of moral identity of supervisors and subordinates may be able to explain responses to relationship-based gratitude. According to the theories of moral identity (e.g., Aquino & Reed, 2002), people make sense of their world by grouping people according to moral trait categories (e.g., caring, honest, compassionate). One’s gratefulness could be added to this list. Depending on whether parties perceive moral identity similarity with their supervisor or subordinate (e.g., we are both grateful people, and therefore grateful for each other), it is likely that behavioural responses to RBG will
differ and reflection on those behaviours may be beneficial or detrimental to parties (Mulder & Aquino, 2013). For example, a subordinate may perceive the moral identity of their supervisor (e.g., they are a grateful person) to be important, and this, in turn, may motivate the subordinate to match expected moral behaviour in response to RBG. In contrast, when parties perceive a difference in moral identity (e.g., I am grateful, they are not), this may activate a self-protection path, as triggered by negative emotional processes (Murray et al., 2006). Indeed, parties observing behaviour that is inconsistent with their moral identity (of being a grateful person) may become resentful toward the other member (Watkins, Scheer, Ovnicek, & Kolts, 2006).

Furthermore, this dissertation positions RBG as a form of felt positive regard and acceptance from another person. By perceiving situations of gratitude with one’s supervisor or subordinate in terms of “approval”, it is contended that parties may become committed toward the other person by seeing a piece of themselves in their partner (Wade & Fredrickson, 2006) – and at the extreme end, be willing to do anything for the other person (e.g., Gino & Galinsky, 2012; Sinclair, Ladny, & Lyndon, 2011; Spitzberg & Cupach, 1998; Spitzberg & Cupach, 2014). Although, this has not been the main focus of attention for gratitude researchers, it has been long established that feelings of gratitude in relationships and otherwise evoke strong prosocial action tendencies. The question of how far people are willing to go is an interesting avenue for future research.

**Conclusion**

The current research on gratitude is premised on the understanding that parties seek acceptance in relationships and that relationship-based gratitude is integral to triggering behaviours in those relationships. The findings demonstrate that people who feel grateful toward their supervisor or subordinate are willing to exercise lenience with rule breaking as relationship-
promoting behaviours. This may explain how rule breaking behaviours that go against the organization are perpetuated in working relationships, thus ultimately compromising organizational effectiveness. The findings illustrate that there is more exploration needed to understand and determine how RBG influences rule breaking in workplace relationships.
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When They Reflect on Receiving or Giving? *Psychological Science*, 23(9), 1033-1039.


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K.S. Cameron, J.E. Dutton & R.E. Quinn (Eds.), Positive organizational scholarship (pp. 207-224). San Francisco: Berrett Koehler.


Figure 1. Investigative model depicting Hypotheses 1-4.
Notes. RBG = Relationship-based gratitude; PRBW = Prosocial rule breaking Willingness
Study 1 in **bold**.
Table 1

*Exploratory Factor Analysis Loadings for Subordinate Relationship-Based Gratitude and Prosocial Rule Breaking Willingness*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My supervisor makes sure I felt appreciated.</td>
<td>.81</td>
<td>.16</td>
</tr>
<tr>
<td>2. Sometimes when I am with my supervisor, sometimes s/he will look at me excitedly and tell me how much s/he appreciates me.</td>
<td>.86</td>
<td>.09</td>
</tr>
<tr>
<td>3. My supervisor often tells me the things that s/he really likes about me.</td>
<td>.79</td>
<td>.11</td>
</tr>
<tr>
<td>4. At times my supervisor takes me for granted. (R)</td>
<td>.81</td>
<td>.00</td>
</tr>
<tr>
<td>5. My supervisor often expresses her/his thanks when I do something nice, even if it is really small.</td>
<td>.52</td>
<td>.13</td>
</tr>
<tr>
<td>6. My supervisor doesn’t notice when I do nice things for her/him. (R)</td>
<td>.56</td>
<td>.01</td>
</tr>
<tr>
<td>7. My supervisor makes me feel special.</td>
<td>.81</td>
<td>.00</td>
</tr>
<tr>
<td>8. I tell my supervisor often that s/he is the best.</td>
<td>.75</td>
<td>-.11</td>
</tr>
<tr>
<td>9. I often tell my supervisor how much I appreciate her/him.</td>
<td>.76</td>
<td>-.09</td>
</tr>
<tr>
<td>10. At times I take my supervisor for granted. (R)</td>
<td>.39</td>
<td>-.15</td>
</tr>
<tr>
<td>11. I appreciate my supervisor.</td>
<td>.87</td>
<td>.07</td>
</tr>
<tr>
<td>12. Sometimes I don’t really acknowledge or treat my supervisor like s/he is someone special. (R)</td>
<td>.43</td>
<td>-.15</td>
</tr>
<tr>
<td>13. I make sure my supervisor feels appreciated.</td>
<td>.80</td>
<td>.01</td>
</tr>
<tr>
<td>14. My supervisor sometimes says that I failed to notice the nice things that s/he does for me. (R)</td>
<td>.56</td>
<td>-.00</td>
</tr>
<tr>
<td>15. I acknowledge the things that my supervisor does for me, even the really small things.</td>
<td>.68</td>
<td>-.14</td>
</tr>
<tr>
<td>16. I am sometimes struck with a sense of awe and wonder when I think about my supervisor being in my life.</td>
<td>.60</td>
<td>-.16</td>
</tr>
<tr>
<td>1. In this situation, how likely would you be to violate the policy and place a rush on the order?</td>
<td>-.08</td>
<td>.85</td>
</tr>
<tr>
<td>2. What is the probability that you would violate the policy?</td>
<td>-.06</td>
<td>.78</td>
</tr>
<tr>
<td>3. How appropriate would it be for you to violate the policy and place a rush on the order without approval?</td>
<td>.04</td>
<td>.80</td>
</tr>
<tr>
<td>4. How would you feel about violating the policy and placing a rush on the order without approval?</td>
<td>-.11</td>
<td>.71</td>
</tr>
<tr>
<td>5. I think that violating the policy in this situation would be wrong. (R)</td>
<td>.06</td>
<td>.83</td>
</tr>
<tr>
<td>6. I would feel conflicted about violating the policy. (R)</td>
<td>.07</td>
<td>-.06</td>
</tr>
</tbody>
</table>

Eigenvalue                         8.00               3.35  
Percentage of Variance Explained   36.40               15.24

Notes. Study 1. Preliminary Analysis.
Factor analysis results are based on maximum likelihood estimation.
Only items above .70 are bolded.
Table 2

*One-Way Analysis of Variance for Prosocial Rule Breaking Willingness by Condition*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>6.05</td>
<td>6.05</td>
<td>10.11</td>
<td>.002</td>
</tr>
<tr>
<td>Within Groups</td>
<td>78</td>
<td>46.66</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>52.71</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. Study 1. N = 80
Table 3

*Means and Standard Deviations of Prosocial Rule Breaking Willingness by Condition*

<table>
<thead>
<tr>
<th>Condition</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship-based Gratitude</td>
<td>40</td>
<td>2.78</td>
<td>.78</td>
</tr>
<tr>
<td>Control</td>
<td>40</td>
<td>2.23</td>
<td>.75</td>
</tr>
</tbody>
</table>

Notes. Study 1. Prosocial rule breaking willingness was rated on a 5-point scale.
## Table 4

*Means, Standard Deviations and Intercorrelations of Study Variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$M$</th>
<th>$SD$</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>1.98</td>
<td>.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>.80</td>
<td>.39</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Condition</td>
<td>.50</td>
<td>.50</td>
<td>.09</td>
<td>-.04</td>
<td></td>
</tr>
<tr>
<td>4. Prosocial rule breaking willingness</td>
<td>2.50</td>
<td>.81</td>
<td>-.02</td>
<td>-.28**</td>
<td>.33**</td>
</tr>
</tbody>
</table>

Notes. Study 1. N = 80; Two-tailed tests.  
Condition (coded as 1 = Relationship-based gratitude; 0 = Control).  
Gender (coded as 1 = Female; 0 = Male).  
**p < .01
Table 5

*Hierarchical Regression Test Predicting Rule Breaking Willingness*

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prosocial Rule Breaking Willingness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.01</td>
<td>-.02</td>
</tr>
<tr>
<td>Gender</td>
<td>-.26**</td>
<td>-.25**</td>
</tr>
<tr>
<td>Condition</td>
<td></td>
<td>.32**</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.07</td>
<td>.17</td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>.04</td>
<td>.14</td>
</tr>
<tr>
<td>$R^2$ change</td>
<td>.07*</td>
<td>.10**</td>
</tr>
<tr>
<td>$F(2,77)$</td>
<td>2.98</td>
<td>9.33</td>
</tr>
</tbody>
</table>

Notes. Study 1.
N = 80; two tailed test, Standardized beta coefficients reported.
Condition (coded as 1 = Relationship-based gratitude; 0 = Control).
Gender (coded as 1 = Female; 0 = Male).
** $p \leq .01$
Table 6

*Means, Standard Deviations and Intercorrelations of Study Variables*

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>33.28</td>
<td>9.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Gender</td>
<td>.23</td>
<td>.43</td>
<td>-.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Job status</td>
<td>.50</td>
<td>.50</td>
<td>.43**</td>
<td>-.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Moral disengagement</td>
<td>2.00</td>
<td>.68</td>
<td>-.03</td>
<td>-.09</td>
<td>.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Condition</td>
<td>.47</td>
<td>.50</td>
<td>-.06</td>
<td>.17</td>
<td>.00</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>6. Prosocial rule breaking willingness</td>
<td>2.15</td>
<td>1.18</td>
<td>-.05</td>
<td>-.13</td>
<td>.13</td>
<td>.34**</td>
<td>.25*</td>
</tr>
</tbody>
</table>

Notes. Study 2. N = 46; One-tailed test.
Condition (coded as 1 = Relationship-based gratitude; 0 = Control).
Gender (coded as 1 = Female; 0 = Male).
Job status (coded as 1 = Supervisor; 0 = Subordinate).
*p < .05 **p < .01
Table 7

*Means and Standard Deviations of Prosocial Rule Breaking Willingness for Supervisors and Subordinates by Condition*

<table>
<thead>
<tr>
<th>Condition</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship-based Gratitude</td>
<td>22</td>
<td>2.47</td>
<td>1.54</td>
</tr>
<tr>
<td>Control</td>
<td>24</td>
<td>1.86</td>
<td>.62</td>
</tr>
</tbody>
</table>

Notes. Study 2. Prosocial rule breaking willingness was rated on a 5-point scale.
Table 8

*One-Way Analysis of Variance for Prosocial Rule Breaking Willingness for Supervisors and Subordinates by Condition*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>4.24</td>
<td>4.25</td>
<td>3.15</td>
<td>.082</td>
</tr>
<tr>
<td>Within Groups</td>
<td>44</td>
<td>59.15</td>
<td>1.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>63.40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. Study 2. N = 46
Table 9

Hierarchical Multiple Regression Test of Moderation for Prosocial Rule Breaking Willingness

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.06</td>
<td>-.04</td>
<td>-.05</td>
</tr>
<tr>
<td>Gender</td>
<td>-.13</td>
<td>-.14</td>
<td>-.13</td>
</tr>
<tr>
<td>Condition</td>
<td></td>
<td>.25*</td>
<td>.06</td>
</tr>
<tr>
<td>Moral Disengagement</td>
<td></td>
<td>.30 **</td>
<td>.22</td>
</tr>
<tr>
<td>Condition x</td>
<td>.06</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>Moral Disengagement x Condition</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R²: .02  \( R² \) change = .16*  \( F(2, 43) = 4.28 \)
Adj. R²: .11*  \( R² \) change = .00  \( F(2, 41) = .15 \)  \( F(1, 40) = \)

Notes. Study 2. N = 46; Two-tailed tests; Standardized betas reported.
Condition coded as (1 = Relationship-based gratitude; 0 = Control).
Gender coded as (1 = Female; 0 = Male).
* \( p < .10 \)  ** \( p < .05 \)
## Table 10

*Descriptive Statistics of Study Variables Within Dyads by Condition*

<table>
<thead>
<tr>
<th>Variables</th>
<th>$M$</th>
<th>$SD$</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationship-based Gratitude</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship (months)</td>
<td>33.18</td>
<td>28.90</td>
<td></td>
</tr>
<tr>
<td>Subordinate (actor)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>28.09</td>
<td>2.58</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.27</td>
<td>.46</td>
<td></td>
</tr>
<tr>
<td>RBG manipulation check</td>
<td>5.86</td>
<td>.51</td>
<td>5.51 - 6.21</td>
</tr>
<tr>
<td>Prosocial rule breaking willingness</td>
<td>2.15</td>
<td>1.54</td>
<td>1.12 - 3.19</td>
</tr>
<tr>
<td>Supervisor (partner)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>37.27</td>
<td>10.99</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.36</td>
<td>.50</td>
<td></td>
</tr>
<tr>
<td>RBG manipulation check</td>
<td>6.01</td>
<td>.65</td>
<td>5.57 - 6.45</td>
</tr>
<tr>
<td>Prosocial rule breaking willingness</td>
<td>2.79</td>
<td>1.55</td>
<td>1.74 - 3.83</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship (months)</td>
<td>59.08</td>
<td>81.13</td>
<td></td>
</tr>
<tr>
<td>Subordinate (actor)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>30.16</td>
<td>6.02</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.25</td>
<td>.45</td>
<td></td>
</tr>
<tr>
<td>RBG manipulation check</td>
<td>5.38</td>
<td>1.01</td>
<td>4.73 - 6.02</td>
</tr>
<tr>
<td>Prosocial rule breaking willingness</td>
<td>1.85</td>
<td>.63</td>
<td>1.45 - 2.25</td>
</tr>
<tr>
<td>Supervisor (partner)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age (years)</td>
<td>37.50</td>
<td>11.88</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.08</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>RBG manipulation check</td>
<td>5.17</td>
<td>.64</td>
<td>4.77 - 5.58</td>
</tr>
<tr>
<td>Prosocial rule breaking willingness</td>
<td>1.88</td>
<td>.18</td>
<td>1.47 - 2.29</td>
</tr>
</tbody>
</table>

**Notes.** Study 2. N = 23 pairs; Only dyads that completed the morning and evening measures were included; Manipulation check = relationship-based gratitude (measured on a 7-point scale); Prosocial rule breaking willingness (measured on a 5-point scale).
### Table 11

*Pearson Correlation Matrix for Study Variables Within Dyads*

<table>
<thead>
<tr>
<th>Condition</th>
<th>Gender subordinate</th>
<th>Gender supervisor</th>
<th>Age subordinate</th>
<th>Age supervisor</th>
<th>RBG subordinate</th>
<th>RBG supervisor</th>
<th>PRBW subordinate</th>
<th>PRBW supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition</td>
<td>.17</td>
<td>.17</td>
<td>-.06</td>
<td>-.06</td>
<td>.42**</td>
<td>.42**</td>
<td>.25*</td>
<td>.25*</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subordinate</td>
<td>-.07</td>
<td>-.04</td>
<td>.00</td>
<td>.15</td>
<td>.17</td>
<td>-.13</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>supervisor</td>
<td>-.00</td>
<td>.04</td>
<td>-.04</td>
<td>.17</td>
<td>.15</td>
<td>.17</td>
<td>-.13</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subordinate</td>
<td>-.07</td>
<td>-.04</td>
<td>.00</td>
<td>.15</td>
<td>.17</td>
<td>-.13</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>supervisor</td>
<td>-.00</td>
<td>.04</td>
<td>-.04</td>
<td>.17</td>
<td>.15</td>
<td>.17</td>
<td>-.13</td>
<td></td>
</tr>
<tr>
<td>RBG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>subordinate</td>
<td>-.65**</td>
<td>.18</td>
<td>-.37**</td>
<td>-.24*</td>
<td>-.16</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>supervisor</td>
<td>-.14</td>
<td>.18</td>
<td>-.24*</td>
<td>-.16</td>
<td>.14</td>
<td>.18</td>
<td></td>
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<tr>
<td>PRBW</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>subordinate</td>
<td>-.65**</td>
<td>.18</td>
<td>-.37**</td>
<td>-.24*</td>
<td>-.16</td>
<td>.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>supervisor</td>
<td>-.14</td>
<td>.18</td>
<td>-.24*</td>
<td>-.16</td>
<td>.14</td>
<td>.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. Study 2. N = 23 pairs; One-tailed test; RBG = relationship-based gratitude manipulation check; PRBW = Prosocial rule breaking willingness. Condition (coded as -1 = Control; 1 = RBG); Gender (coded as -1 = Male; 1 = Female).  
* p < .05 ** p < .01
Table 12

*Actor and Partner Effects for Prosocial Rule Breaking Willingness Between Dyads By Condition*

<table>
<thead>
<tr>
<th>APIM Parameters</th>
<th>b</th>
<th>SE</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.66</td>
<td>.19</td>
<td>83.87</td>
<td>13.72</td>
<td>.000</td>
</tr>
<tr>
<td>RBG manipulation check subordinate</td>
<td>-.14</td>
<td>.07</td>
<td>83.00</td>
<td>-1.99</td>
<td>.049</td>
</tr>
<tr>
<td>RBG manipulation check supervisor</td>
<td>-.14</td>
<td>.07</td>
<td>83.01</td>
<td>-1.99</td>
<td>.050</td>
</tr>
<tr>
<td>RBG manipulation check subordinate * RBG manipulation check supervisor</td>
<td>-.31</td>
<td>.13</td>
<td>82.92</td>
<td>-2.25</td>
<td>.027</td>
</tr>
<tr>
<td>Condition dyad (Hypothesis 4)</td>
<td>-.72</td>
<td>.27</td>
<td>83.77</td>
<td>-2.67</td>
<td>.009</td>
</tr>
</tbody>
</table>

Notes. RBG = relationship-based gratitude;
Subordinate = Actor (coded as -1), Supervisor = Partner (coded as -1);
Condition (coded as -1 = Control; 1 = RBG)
APPENDIX A

Measures used in Study 1

RBG Manipulation

We are interested in a positive experience that you have had with your current supervisor. A supervisor is someone who has directly supervised your paid work.

Relationship-based Gratitude Manipulation

**Instructions:** Please recall a time when you felt that your supervisor truly appreciated you for who you are as a person and what you do. In other words, think of a time that you felt like your supervisor was truly grateful and appreciative for you, and in return, you felt truly grateful and appreciative towards your supervisor for who they are and what they do.

In the space below, please tell us about your experience in as much detail as possible.

Neutral Condition

**Instructions:** Please recall your current work station and its proximity to your direct supervisor.

In the space below, please describe where your work station is located relative to your supervisor in as much detail as possible.

*Notes.* The Pilot Study was slightly different in that the instructions asked participants to think of a former or current supervisor.
Relationship-based Gratitude Manipulation Check

**Instructions:** Based on your recollection in the previous section [about your supervisor], please rate the extent to which you experienced the following feelings [WITH THAT SAME SUPERVISOR] in this moment.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree/Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

1. My supervisor made sure I felt appreciated.
2. When I was with my supervisor, sometimes s/he will look at me excitedly and tell me how much s/he appreciated me.
3. My supervisor often told me the things that s/he really liked about me.
4. At times my supervisor took me for granted. (R)
5. My supervisor often expressed her/his thanks when I did something nice, even if it was really small.
6. My supervisor didn’t notice when I did nice things for her/him. (R)
7. My supervisor made me feel special.
8. I told my supervisor often that s/he was the best.
9. I often told my supervisor how much I appreciated her/him.
10. At times I took my supervisor for granted. (R)
11. I appreciated my supervisor.
12. Sometimes I didn’t really acknowledge or treat my supervisor like s/he was someone special. (R)
13. I made sure my supervisor felt appreciated.
14. My supervisor sometimes said that I failed to notice the nice things that s/he did for me. (R)
15. I acknowledged the things that my supervisor did for me, even the really small things.
16. I was sometimes struck with a sense of awe and wonder when I thought about my supervisor being in my life.

*Notes.* R = reverse scored item.
Prosocial Rule Breaking Willingness

Instructions: Please answer the following questions by circling a response.

In this situation, how likely would you be to violate the policy and place a rush on the order?

<table>
<thead>
<tr>
<th>very unlikely</th>
<th>unlikely</th>
<th>neither likely nor unlikely</th>
<th>likely</th>
<th>very likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>25%</td>
<td>50%</td>
<td>75%</td>
<td>100%</td>
</tr>
</tbody>
</table>

1. What is the probability that you would violate the policy? (percentage)

2. How appropriate would it be for you to violate the policy and place a rush on the order without approval?

<table>
<thead>
<tr>
<th>very inappropriate</th>
<th>inappropriate</th>
<th>neither appropriate nor inappropriate</th>
<th>appropriate</th>
<th>very appropriate</th>
</tr>
</thead>
</table>

3. How would you feel about violating the policy and placing a rush on the order without approval?

<table>
<thead>
<tr>
<th>very uncomfortable</th>
<th>uncomfortable</th>
<th>neither comfortable nor uncomfortable</th>
<th>comfortable</th>
<th>very comfortable</th>
</tr>
</thead>
</table>

4. I think that violating the policy in this situation would be wrong. (R)

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>neither agree nor disagree</th>
<th>Agree</th>
<th>strongly agree</th>
</tr>
</thead>
</table>

5. I would feel conflicted about violating the policy. (R)

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>neither agree nor disagree</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
</table>

Notes. R = reversed scored.
APPENDIX B

Measures used in Study 2

Moral Disengagement (Background Questionnaire)

Instructions: Please indicate the extent to which the following statement describes you:

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>disagree</th>
<th>somewhat disagree</th>
<th>neither agree/disagree</th>
<th>somewhat agree</th>
<th>agree</th>
<th>strongly agree</th>
</tr>
</thead>
</table>

1. **It is okay to spread rumors to defend those you care about.**
2. It is alright to lie to keep your friends out of trouble.*
3. Playing dirty is sometimes necessary in order to achieve noble ends.
4. **Taking something without the owner’s permission is okay as long as you’re just borrowing it.**
5. It’s okay to gloss over certain facts to make your point.*
6. When you’re negotiating for something you want, not telling the whole story is just part of the game.
7. **Considering the ways people grossly misrepresent themselves, it’s hardly a sin to inflate your own credentials a bit.**
8. Compared to other illegal things people do, taking something small from a store without paying for it isn’t worth worrying about.*
9. Damaging property is no big deal when you consider that others are assaulting people.
10. **People shouldn’t be held accountable for doing questionable things when they were just doing what an authority figure told them to do.**
11. People cannot be blamed for misbehaving if their friends pressured them to do it.
12. You can’t blame people for breaking the rules if that’s what they were taught to do by their leaders.
13. **People can’t be blamed for doing things that are technically wrong when all their friends are doing it too.**
14. It’s okay to tell a lie if the group agrees that it’s the best way to handle the situation.
15. In contexts where everyone cheats, there’s no reason not to.
16. **Taking personal credit for ideas that were not your own is no big deal.**
17. Walking away from a store with some extra change doesn’t cause any harm.
18. It is OK to tell small lies when negotiating because no one gets hurt.
19. **Some people have to be treated roughly because they lack feelings that can be hurt.**
20. It’s okay to treat badly somebody who behaves like scum.*
21. Violent criminals don’t deserve to be treated like normal human beings.
22. **People who get mistreated have usually done something to bring it on themselves.**
23. If a business makes a billing mistake in your favor, it’s okay not to tell them about it because it was their fault.*
24. If people have their privacy violated, it’s probably because they have not taken adequate precautions to protect it.

Notes. Items in bold comprise the final 8-item measure. Items marked with * comprise the 16-item measure.
Relationship-based Gratitude Manipulation (Morning Measure)

**Relationship-based Gratitude Manipulation**

**Instructions:** Please recall a time when you felt that your supervisor (or subordinate) truly appreciated you for who you are as a person and what you do. In other words, in this experience you felt like your supervisor (or subordinate) was truly grateful and appreciative for you, and in return, you felt truly grateful and appreciative towards your supervisor (or subordinate) for who they are and what they do.

Describe 5 reasons you felt appreciated by your supervisor (or subordinate).

Describe 5 reasons why you feel appreciative toward your supervisor (or subordinate).

**Neutral Condition**

**Instructions:** Please recall your current work station.

Please list 5 features that describe your work station.
Relationship-based Gratitude Manipulation Check (Morning Measure)

Instructions: Please indicate to what extent you feel the following in this moment.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree/Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

1. My supervisor makes sure I feel appreciated.
2. My supervisor makes me feel special.
3. I appreciate my supervisor.
4. I make sure my supervisor feels appreciated.
Prosocial Rule Breaking (Evening Measure)

**Instructions:** Please indicate the extent to which you agree with the following statements in the moment.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree/Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

1. When my supervisor (or subordinate) needs my help, I disobey organizational policies to help him/her.
2. I break organizational rules if my supervisor (or subordinate) needs help with their duties.
3. I assist my supervisor (or subordinate) with their work by breaking organizational rules.
4. I help out my supervisor (or subordinate), even if it means disregarding organizational policies.
APPENDIX C

Ethics Approval

Certificate of Completion

This document certifies that

Jennifer Harrison

has completed the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics (TCPS 2: CORE)

Date of Issue: 29 November, 2013
To: Professor Marie-Helene Budworth, School of Human Resources Management, Faculty of Liberal Arts & Professional Studies, budworth@yorku.ca

From: Alison M. Collins-Mrakas, Sr. Manager and Policy Advisor, Research Ethics (on behalf of Duff Waring, Chair, Human Participants Review Committee)

Date: Thursday, February 20, 2014

Re: Ethics Approval

Feelings and behaviours in supervisor-subordinate relationships

I am writing to inform you that the Human Participants Review Sub-Committee has reviewed and approved the above project.

Should you have any questions, please feel free to contact me at: 416-736-5914 or via email at: acollins@yorku.ca.

Yours sincerely,

Alison M. Collins-Mrakas M.Sc., LLM
Sr. Manager and Policy Advisor, Office of Research Ethics
To: Ms. Jennifer Harrison, Graduate Student of School of Human Resource Management, Faculty of Liberal Arts & Professional Studies, jharriso@yorku.ca

From: Alison M. Collins-Mrakas, Sr. Manager and Policy Advisor, Research Ethics (on behalf of Duff Waring, Chair, Human Participants Review Committee)

Date: Wednesday, April 16, 2014

Re: Ethics Approval

Feelings and Behaviours in Supervisor-Subordinate Relationships

I am writing to inform you that the Human Participants Review Sub-Committee has reviewed and approved the above project.

Should you have any questions, please feel free to contact me at: 416-736-5914 or via email at: acollins@yorku.ca.

Yours sincerely,

Alison M. Collins-Mrakas M.Sc., LLM
Sr. Manager and Policy Advisor,
Office of Research Ethics
Oklahoma State University Institutional Review Board

Date: Friday, May 09, 2014
IRB Application No BU1421
Proposal Title: Feelings and Behaviors in Supervisor-subordinate Relationships

Reviewed and Processed as: Exempt

Status Recommended by Reviewer(s): Approved  Protocol Expires: 5/8/2017

Principal Investigator(s):
Thomas Stone
1502 S. Boulder Ave. Apt. 16i
Tulsa, OK 741194038

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,

Sheila Kennison, Chair
Institutional Review Board