SORRY, NOT SORRY:

THE EFFECT OF TRANSGRESSORS' POWER ON APOLOGY AND NON-APOLOGY

JOSHUA ROBERT GUILFOYLE

A DISSERTATION SUBMITTED TO

THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

GRADUATE PROGRAM IN PSYCHOLOGY

YORK UNIVERSITY

TORONTO, ONTARIO

August 2020

Abstract

Power is a basic element of social relationships. Anecdotal and empirical accounts suggest power corrupts individuals' behaviour and leads to situations in which apologies would be beneficial. However, the role power plays in promoting or preventing transgressors' motivation to apologize has not been investigated. The purpose of this dissertation was to programmatically explore and test how, why, and when transgressors' power affects their willingness to apologize or not after an interpersonal transgression. Guided by power approach theory (Keltner et al., 2003), five studies ($N = 903$) were designed to explore the basic relationship between power and apology, establish causality, and test a theoretical mechanism and boundary condition. In Study 1, the basic relationship between transgressors' dispositional power and both apology and non-apology were established. Studies 2 and 3 demonstrated the causal relationship between transgressors' power and willingness to apologize, with high-power transgressors reporting less willingness to apologize and being more willing to engage in non-apology than their low-power counterparts. Study 4 manipulated and tested a theoretical mechanism, self-other focus, to explain the causal relationship. Results showed that high-power transgressors who took an other-focus were the most apologetic and engaged in the least amount of non-apology. Study 5 was a cross-cultural study using Japanese and Canadian samples designed to test a moderator of the power-apology relation—transgressors' cultural context. High-power transgressors from a collectivistic culture (i.e., Japan) were more apologetic whereas high-power transgressors from an individualistic culture (i.e., Canada) were less apologetic. Interestingly, low-power transgressors from Japan were the most likely to engage in non-apology. Overall, the research summarized in this dissertation supported theoretical predictions demonstrating a basic and causal relationship between transgressors' power and their apologetic and non-apologetic responses, the explanatory

role of self-other focus, and the moderating influence of transgressors' cultural context. The methods, results, and implications of the findings are discussed and avenues for future research are proposed.

Keywords: power, transgressor, apology, non-apology, self-other focus, culture

Acknowledgements

Foremost, I would like to thank my doctoral supervisor, Dr. C. Ward Struthers. His constant effort, patience, and support in my journey to become a psychologist has been incredible. My experience in graduate school feels like it was less school and more of an apprenticeship, where I received hands-on training in psychological science, theory, and methods from Dr. Struthers. To that end, I also learned and modeled other soft skills from him, such as teaching, supervising students, managing conflicts, organizing professional events, and how to generally conduct myself. He helped mold me into the research professional and person I am today. I am truly lucky to have such an excellent and dedicated mentor. Graduating in 2020 during a global pandemic and shift in educational environments from in-person to online has further highlighted how fortunate I am to have received my graduate training with Dr. Struthers. I will forever be grateful and thankful. This sentiment is similarly echoed to the entire faculty of the social-personality psychology area at York University.

I would also like to thank Dr. Yohsuke Ohtsubo, who hosted me for an extended research stay at Kobe University in Kobe, Japan. The time I spent in Japan under his supervision was one of the most profound experiences I have had both professionally and personally. Dr. Ohtsubo was a gracious host. He ensured my time in his home country was one where I felt safe, welcomed, and productive. He provided great mentorship, particularly with my first foray into cross-cultural research. It was quite evident Dr. Ohtsubo felt a great sense of responsibility in agreeing to host me in Japan, took this role very seriously, and went above and beyond in his duties. He was and continues to be an excellent mentor that I collaborate with. Without him, this dissertation would not have been possible. I am grateful to Dr. Ohtsubo for his dedicated mentorship and time, effort, and hospitality in hosting me in Japan.

I would also like to thank my dissertation committee members. My internal committee members, Drs. Richard Lalonde and Amy Muise provided invaluable feedback and insight on proposals and drafts of this dissertation that strengthened the final version into a product I am proud. I could not have asked for better external committee members in Drs. Michael Wohl, Chris Bell, and Regina Schuller. They provided wonderful feedback and a fruitful discussion on the final product and a plethora of new ideas and avenues for future directions. To all my committee members, thank you for agreeing to, and being a part of, the process. I could not have asked for a better group of individuals to bring me across the finish line.

I would also like to thank my fellow lab mates and graduate students in the social-personality psychology area at York University. My lab mates and colleagues Elizabeth van Monsjou, Arik Shoikhedbrod, and Nikan Eghbali were crucial in the development of this project, including brainstorming, collecting data, proofreading, and most importantly providing social support. As well, the broader social-personality psychology cohort of graduate students at York University were critical to my time in graduate school in their support, encouragement, and more importantly, companionship and friendship. I will always be grateful to have gone through the program with this group, from celebrating our successes and grieving our failures together, they are a beautiful group of people. I look forward to our continued friendship wherever our paths in life may lead.

I would also like to thank the various sources of funding throughout the doctoral program I have been fortunate to receive that helped bring this dissertation to life. These include, but are not limited to, Ontario Graduate Scholarships (OGS), The Social Sciences and Humanities Research Council (SSHRC), Mitacs Globalink, the Japanese Society for the Promotion of Science (JSPS), and internal funding from York University.

Lastly, I would like to thank my family and friends. The lifestyle of a doctoral student is one that can be quite unconventional compared to traditional career paths. I imagine at times it is hard to comprehend what I do or why I do it. Their selfless and unconditional support and encouragement to

achieve my goals were extremely touching and heartfelt. Your happiness toward this moment is one that has eclipsed my own and makes me feel incredibly valued. Thank you to my immediate family members, Lloyd Guilfoyle, Carmela Guilfoyle, and David Guilfoyle. I love you Poppa, Mommy, and Davey.

I believe it "takes a village" to rear an individual from student to research professional and this dissertation is a culmination of that effort. I am deeply thankful to everyone that made up my little village. As a social and personality psychologist, I am of the viewpoint that the most important and meaningful things in life are social relationships. Having completed this experience, I am now more convinced than ever. Thank you all for being there and having me.

Table of Contents

Introduction

Human beings survive and thrive by engaging with others and forming social relationships (Baumeister & Leary, 1995). Although the process of forming, developing, and maintaining relationships provides functional benefits, social life is also fraught with interpersonal transgressions where individuals harm one another. Given the benefits of social bonds, human beings developed ways to mend harm resulting from interpersonal transgressions to maintain their valuable relationships with others. For transgressors – an individual who harms another individual – this included responding with an apology (McCullough, 2008). This strategy has the potential to move both parties beyond the transgression, lead to conflict resolution, and reconcile relationships. However, whereas some transgressors accept responsibility and apologize for their transgressions, others make excuses, deflect blame, and resist or refuse offering an apology (Lazare, 2004; Schumann & Dweck, 2014). In this dissertation, this strategy is referred to as non-apology and has the potential to stall movement beyond the transgression, escalate the conflict, and dissolve relationships (Kato, 2016). A basic element of social relationships is power (Fiske, 1993) with ample anecdotal and empirical evidence linking power to transgressive behaviours in which apologies would be appropriate (Galinsky, Rucker, & Magee, 2015; Hirsh, Galinsky, Zhong, 2011; Keltner, Gruenfeld, & Anderson, 2003; Kipnis, 1972). In the current dissertation, how, why, and when transgressors' power affects their motivation to apologize or not is examined.

Key constructs are operationally defined and a theoretical framework is provided to generate hypotheses, guide the program of research, and empirically test predictions. A series of five studies ($N = 903$) investigates the basic and causal relationship between power and apology

and tests theoretically relevant mediating and moderating variables. Methods and results are presented and implication of the findings are discussed.

Social Power

Social power is a basic element of relationships (Fiske, 1993) and is defined as the ability to modify others' outcomes by providing or withholding valuable resources (Keltner et al., 2003). Being in a position of power or feeling powerful affects individuals' affect, cognition, and behaviour. For example, powerful individuals are more likely to experience positive affect (Berdahl & Martorana, 2006), think abstractly (Smith, Smallman, & Rucker, 2016), and behave selfishly (DeCelles, DeRue, Margolis, & Ceranic, 2012; Handgraaf, Van Dijk, Vermunt, Wilke, & De Dreu, 2008; Kipnis, 1972). Extant literature on transgressors' willingness to apologize (or not) after an interpersonal transgression suggests transgressors are often initially motivated to lay blame elsewhere instead of accepting responsibility and offering an apology (Kim et al., 2009; Lazare, 2004; Schumann, 2014; Schumann & Dweck, 2014; Schumann, 2018; Tavuchis, 1991; Woodyatt & Wenzel, 2013). Therefore, it seems reasonable that power influences whether transgressors will apologize or not after committing an interpersonal transgression.

Apologies & Non-Apologies

Apologies are an effective strategy that transgressors can utilize after committing an interpersonal transgression to repair relationship harm (Lazare, 2004), restore trust (Kim et al., 2009), increase victims' forgiveness (Davis & Gold, 2011; Fehr, Gelfand, & Nag, 2010), and reconcile relationships (Lazare, 2004; Tavuchis, 1991). Fundamentally, an apology is when transgressors accept responsibility and express remorse (De Cremer, 2010). However, apologies can also involve expressions of guilt and regret (Darby & Schlenker, 1982), forbearance (Schumann, 2014), reparations and restitution (Schlenker & Darby, 1981), and seeking

forgiveness (Bassett, Bassett, Lloyd, & Johnson, 2006; Riek, 2010; Sandage, Worthingon., Hight, & Berry, 2000). Another effective strategy following a transgression is to use non-apologetic responding to deflect or mitigate blame. This can include justifying the behaviour, minimizing or denying the transgression, excusing or denying it, victim blaming, and lashing out (Exline et al., 2007; Itoi et al., 1996; Schumann, 2014; Schumann & Dweck, 2014; Woodyatt & Wenzel, 2013).

In their model of trust repair, Kim and colleagues (2009) argue that once an interpersonal transgression has occurred, there are competing motives for both transgressors and victims. Transgressors are motivated to be perceived as trustworthy because it protects them by maintaining a positive image as a valuable relationship partner. Victims are motivated to be distrustful because it protects them from future transgressions by making them vigilant against harmful relationship partners. To bridge this divide, transgressors are often first motivated to demonstrate their innocence over guilt or show their transgressive behaviour is the result of something situational (i.e., I did a bad thing) rather than dispositional (i.e., I'm a bad person). In other words, transgressors are often initially motivated to engage in non-apology to appear innocent or lay blame elsewhere. If not possible or unsuccessful, transgressors are then motivated to show their wrongdoing can be remedied, the damage caused has been fixed, or that they can be trusted again. In other words, they are motivated to offer an apology. Research on apologies is consistent with Kim et al. (2009), demonstrating that transgressors find apologies difficult and their initial reaction is to respond with non-apology (Schumann, 2014; Schumann & Dweck, 2014). For instance, in a study that explored autobiographical narratives of interpersonal conflict, only 30.3% of transgressors reported explicitly apologizing and 14.8% of victims reported receiving an explicit apology from their transgressor (Zechmeister & Romero, 2002).

Other research finds refusing to apologize can lead to enhanced psychological benefits such as self-esteem and feelings of increased power and control (Okimoto, Wenzel, & Hedrick, 2013).

In sum, a review of the psychological literature on apologies suggests that transgressors can respond in an automatic, disinhibited way in the form of non-apologies, or in a controlled, inhibited way in the form of apologizing. Power approach theory (Keltner et al., 2003) provides a useful theoretical lens to understand how, why, and when transgressors' power may affect their motivation to engage in apologetic or non-apologetic defensive responding after an interpersonal transgression.

Power Approach Theory

Keltner and colleagues (2003) developed a theory to understand and predict how feeling powerful or powerless can affect individuals' affective, cognitive, and behavioural processes. They argue that powerful individuals have access to valued resources and can use them without interference to facilitate their goals. This activates the Behavioural Approach System (BAS), a system that motivates approach behaviour toward achieving one's goals. Cognitively, this leads to a self-focus whereby attention is narrowed toward rewards and goals. Activation of the BAS, coupled with self-focus, often leads powerful individuals to act in disinhibited ways. Conversely, powerless individuals are constrained by others as they rely on them for access to valued resources; this activates the Behavioural Inhibition System (BIS), a system attuned to threats, conflict, uncertainty, and punishment. Given those who are powerless are dependent on powerful others, activation of the BIS leads to a cognitive other-focus whereby attention is narrowed toward others and cues of uncertainty and threats. Put simply, people focus on others who they are dependent on and control their outcomes (Fiske, 1993).

Power approach theory has been influential in the field of social psychology. Coupled with simple manipulations of power, the research in this domain has grown exponentially in the last two decades (Galinsky, Rucker, & Magee, 2015). Although there is research examining how powerful victims react after experiencing a transgression (Aquino, Tripp, & Bies, 2006; Karremans & Smith, 2010; Struthers et al., 2019; Zheng, van Dijke, Leunissen, Giurge, & De Cremer, 2016), and the effect of transgressors' power on the effectiveness of offering an apology to victims (Walfisch, Van Dijk, & Kark, 2013), it does not appear there is any research that directly tests the theoretical link between transgressors' power and their motivation to apologize or not. This dissertation seeks to bridge this gap in the psychological literature by uniquely testing how, why, and when transgressors' social power affects their motivation to apologize or not following an interpersonal transgression.

Power Approach & Apology

Previous research suggests a relationship between power and apologizing. For instance, Gonzalez and colleagues (1990) used politeness theory (c.f. Brown & Levinson, 1987) to explore the relationship between proxies of power and apologizing. Politeness theory argues that committing an interpersonal transgression leads to concerns over one's "face" to be viewed as a good, moral person who is socially accepted by others. Politeness concerns arise when individuals commit a transgression because it threatens their face, i.e., only bad, immoral people commit transgressions. To assuage face threats, individuals respond with polite behaviour. The degree of politeness is relative to the severity of the face-threat, which is nested in the power imbalance between victim and transgressor. Specifically, transgressors' power relative to victims' power has implications for the relative degree of face threat one perceives and the corresponding degree of politeness to ameliorate it. Compared to those with power, powerless

transgressors are more mindful of face-threats and are generally more polite to prevent, avoid, or resolve transgressions and conflict, and are therefore more likely to offer an apology.

Using correlates of power (i.e., status, sex), Gonzalez and colleagues (1990) conducted a laboratory experiment to test the effect of power on transgressors' willingness to apologize. They found those with low status made twice as many apologetic statements relative to high status transgressors. They also found women were more apologetic than men, offering 80% more apology statements (e.g., "I'm sorry", "my apologies") and were more likely to act prosocially after the transgression (i.e., offering help). These findings are consistent with other research on gender differences in apologizing, with women reporting they offer apologies at higher rates than men even when controlling for how frequently one commits transgressions (Schumann & Ross, 2010). It appears women have a lower threshold for perceiving offensive behaviours than men which increases the perceived need to offer an apology (Schumann & Ross, 2010).

Given men's physical power relative to women's and their traditional access to power, from a power approach theory perspective another explanation could be that males consciously or unconsciously perceive themselves as more powerful, which activates their BAS, increases their self-focus, and they consequently engage in more non-apology. Conversely, women may be more accustomed to feelings of low-power relative to men which activates the BIS, increases other-focus, and increases perception that their transgressions are more severe and require an apology. These theoretical considerations are consistent with research demonstrating women compared to men show greater other-focus in the form of empathic concern (Eisenberg & Lennon, 1983) and empathic accuracy (Klein & Hodges, 2001). Similarly, right hemispheric neural activity, which is associated with powerlessness (Boksem, Smolders, & De Cremer, 2012) and the BIS (Amodio, Master, Yee, & Taylor, 2008; Amodio, Shah, Sigelman, Brazy, &

Harmon-Jones, 2004), is more active for women compared to men when engaging in other-focused empathy tasks (Rueckert & Naybar, 2008; Schulte-Rüther, Markowitsch, Shah, Fink, & Piefke, 2008). To the extent that gender is related to power, research consistently finds women have heightened neural activation of regions associated with powerlessness, behavioural inhibition, and other-focus. Importantly, research on gender differences in apology also shows when power is controlled, men and women apologize at similar rates suggesting the effect is driven by power and not gender (Holmes, 1989).

In sum, previous research suggests a relationship between variables associated with transgressors' power and apologizing that are theoretically consistent with power approach theory. However, previous research has not directly tested the relationship between transgressors' power and apology, instead opting for proxies of power such as status and gender (e.g., Gonzalez et al., 1990). The primary purpose of this dissertation is to directly test the relation between transgressors' power and willingness to apologize or engage in non-apology. *Hypothesis 1 (H1).* Powerful transgressors will be less motivated to apologize and more motivated to engage in non-apology. Conversely, powerless transgressors should be more motivated to apologize and less motivated to not apologize.

Power Approach, Self-Other Focus, & Perspective-Taking

Power approach theory provides an explanation for why power is thought to influence goal pursuits; namely because power activates a self-focus. Indeed, powerful individuals show decreased perspective-taking and empathy (Galinsky et al., 2006; Gordon & Chen, 2013). Why might self-other focus explain the relationship between transgressors' power and their motivation to apologize? Perspective-taking and empathy are among the strongest predictors of the motivation to apologize (Howell, Turowski, & Buro, 2012). If feeling powerful decreases other-

focus (Galinsky et al., 2006), transgressors with power should be less likely to attend to their victims' needs and how to satisfy them. Similarly, several other lines of research have found the effects of power are moderated by variables that influence self-other focus. For instance, when high-powered individuals are other-focused, the effect of power on behaviour is reversed such that powerful individuals are more prosocial compared to those who feel powerless (Chen et al., 2001; Gordan & Chen, 2013). This is theoretically consistent with the idea that power increases behavioural approach toward desired end states—if powerful individuals' goals are other-focused and prosocial, they have free rein to act in accordance with their goals.

In one study, Chen and colleagues (2001) found that power was moderated by individual differences in self- vs. other-goal orientation on prosocial behaviour. Those who felt powerful and held a communal orientation that values others' needs (i.e., other-focused) were more likely to behave in socially responsible ways relative to those who held an exchange orientation that values self needs (i.e., self-focused). In other work, researchers recruited romantic couples to a laboratory and assigned one partner to a position of high-power (Gordon & Chen, 2013). The high-power partner was tasked with leading a conversation with their low-power partner focused on an ongoing conflict in their relationship and instructed to work toward its resolution. Partners assigned to the high-power condition showed the least amount of empathic accuracy and other-focus overall, but the effect was moderated for high-powered partners who were dispositionally other-focused. Similarly, high-powered victims in a romantic relationship are more likely to forgive their transgressor after an interpersonal transgression, but only when they are other-focused on their partner, such as being attentive to their needs and high in relationship commitment (Karremans & Smith, 2010; Struthers et al., 2019). Power is also found to be associated with interpersonal sensitivity and empathic accuracy for leaders when they are

empathic (Schmid, Mast, Jonas, & Hall, 2009) and maintain a dispositional prosocial orientation (Côté et al., 2011).

Hypothesis 2 (H2). The causal relationship between transgressors' power and their motivation to apologize or not will be mediated by self-other focus. For the current research, self-other focus is operationally defined as taking a self-perspective (i.e., transgressor focuses on him or herself) vs. other-perspective (i.e., transgressor focuses on his or her victim).

Power, Culture, and Apology

Related to self-other focus, one variable that may moderate the relationship between power and apology is transgressors' cultural context. Culture has a profound effect on individuals' affect, cognition, and behaviour (Markus & Kitayama, 1991). Those from an *individualistic* cultural context (e.g., Canada, US, Western Europe, Australia) are more likely to hold an independent self-construal, viewing the self as autonomous, independent, and separate from their social contexts (Markus & Kitayama, 1991). Cognitively, they are more likely to maintain a high degree of self-focus and are more sensitive and prone to emotions that emerge from self-focused needs, goals, and desires such as anger, frustration, and pride (Markus & Kitayama, 1991). They are motivated toward goals that satisfy their independent autonomy (e.g., self-actualization). Conversely, those from a *collectivistic* cultural context (e.g., Japan, China, Korea, Pakistan) are more likely to have an interdependent self-construal where the self is embedded within their social contexts and relationships with others (Markus & Kitayama, 1991). Cognitively, they are more other-focused and are more sensitive and prone to emotions that are based on others and their relationships with them such as sympathy, empathy, shame, and guilt (Markus & Kitayama, 1991). They are more motivated toward goals that satisfy the needs of others and their relationships (i.e., maintaining social harmony; Markus & Kitayama, 1991). The

independent and interdependent self-construals that are prioritized in different cultural contexts have downstream consequences that can affect how individuals from these cultures think, feel, and ultimately, behave in their interactions with others.

Given those with power approach their goals, it is likely that being powerful will lead to different outcomes for individuals from individualistic or collectivistic cultural contexts. Additionally, individualistic and collectivistic cultures have different values associated with both power and apologizing. Individualistic cultures tend to place value on power as freedom from external constraints and the capacity to satisfy one's self-interest goals, whereas collectivistic cultures place value on power with exercising restraint and responsibility, with an emphasis on serving social-responsibility goals (Torelli & Shavitt, 2010). In other words, individualistic cultural contexts seem geared toward focusing on one's self and personal harmony, whereas collectivistic cultural contexts are directed toward focusing on others and social harmony. These different goals can have a large effect on how members of cultural groups behave when they wield power (Chen, Lee-Chai, & Bargh, 2001; Gordon & Chen, 2013; Torelli & Shavitt, 2010). Similarly, different values associated with apologizing also differ as a function of cultural context. Given that apologizing involves giving up one's agency, research has predictably found transgressors from individualistic cultures often find the apology process difficult and resist or refuse offering them (Schumann, 2014; Schumann & Dweck, 2014; Woodyatt & Wenzel, 2013). However, transgressors from collectivist cultures such as Japan offer apologies more readily, in an effort to save face and maintain socially harmonious relationships (Hamilton & Hagiwara, 1992; Itoi, Ohbuchi, & Fukuno, 1996).

Hypothesis 3 (H3). The effect of transgressors' power on apology and non-apology will be moderated by transgressors' cultural context. Specifically, an interaction effect with

transgressors' power and cultural context on apology and non-apology is predicted. Powerful transgressors from a collectivistic cultural context will be more motivated to apologize and less willing to engage in non-apology than those from an individualistic cultural context.

Current Research

The purpose of this dissertation was to test the relationship between transgressors' power and their willingness to apologize or engage in non-apology. Using power approach theory, it is hypothesized that powerful transgressors will be less motivated to apologize and more likely to engage in non-apology than their low-power counterparts. Study 1 was a nonexperimental study to establish the basic association between power and apology. The purpose of Study 2 was to test an extension of this association to determine if the relations between power and apology and non-apology are causal. Study 3 was a conceptual replication of Study 2 using a different experimental manipulation, increased ecological validity, and a behavioural measure of apology. Study 4 was designed to test the theoretical mechanism, self-other focus. Finally, Study 5 was a cross-cultural study designed to test the moderating role of cultural context on transgressors' power and willingness to apologize or not.

Study 1

To initially explore the relationship between transgressors' power and willingness to apologize or engage in non-apology, an exploratory nonexperimental study was conducted. Participants were recruited and asked to complete a questionnaire assessing a variety of psychological constructs, including measures of power (trait), apology (trait, state), and non-apology (state). For the purposes of this dissertation, only these variables are discussed. Next, the extent to which transgressors' power predicted their general tendency to apologize and actual apologetic and non-apologetic behaviour in response to a recalled transgression was tested.

Design & Participants

This was a correlational study. A snowball sampling technique was used to recruit a sample of 203 adults from the broader community (M_{age} = 35.04, SD_{age} = 13.72, range = 18 – 77). The participants were part of a larger study assessing demographic and individual differences related to interpersonal transgressions. The sample had approximately equal numbers of women (51.23%) and men (48.27%; 0.49% other) and was culturally diverse: White (27.09%), South Asian (18.72%), Black (12.81%), Middle Eastern (11.33%), East Asian (9.36%), South East Asian (8.37%), Latin American (4.43%), Mixed (3.94%), Other (2.46%), South American (0.99%), and Aboriginal (0.49%).

Materials

Transgression Stimuli

An episodic recall was used as the transgression stimuli (van Monsjou et al., 2015). Participants were given the following instructions:

> Please take a moment to think about a time in the last six months in which a negative event occurred between you and another person. Think about when you committed a transgression by hurting the other person (physically, psychologically, emotionally, etc.) and the conflict was left unresolved. If you cannot recall such an event in the past six months, then please think about the most recent negative event you can. This other person could be a friend, family member, romantic partner, coworker, acquaintance, stranger, or someone else. The negative event could have been due to something you did or failed to do but it must have had a moderate to a severe impact on the other person. The negative event may relate to, but is not limited to, social issues (e.g., immigration and

refugees), work issues (e.g., team project), or interpersonal issues (e.g., argument with significant other).

Measures

Social Power. Participants social power was measured using two-items: "I feel I have power to affect events in other people's lives" and "I feel I have control over events in other people's lives", measured from 1 (*strongly disagree*) to 7 (*strongly agree*).

Trait Apology. Participants tendency to avoid or resist apologizing was measured using the Proclivity to Apologize Measure (PAM; Howell, Dopko, Turowski, & Buro, 2011). The PAM uses 8-items with examples including "I tend to downplay my wrongdoings to the other person, rather than apologize" and "My continued anger often gets in the way of me apologizing". All items on the PAM were reversed scored, such that scores on the PAM reflect a dispositional tendency to apologize after transgressions, measured from 1 (*strongly disagree*) to 7 (*strongly agree*).

Apology. Apology was measured with 11-items, including "To what extent do you feel apologetic?", "To what extent would you like to tell the other person you are sorry?", "I want to assure the other person I won't do this again", I want to repair the damage I caused", "I want to ask for forgiveness", "I would go out of my way to show I am sorry", " I regret what I did", "I feel terrible", "I am to blame for what happened", "I am responsible for what happened", "How motivated are you to make things better with this person?" All items were measured from 1 (*not at all*) to 7 (*very much so*).

Non-Apology. This variable was measured using 12-items. Two items evaluated each of the following: justifying actions "to what extent did you justify your actions?" and "to what extent did you believe you were justified in your behaviour?", blaming the victim "to what extent

did you blame the other person for your actions?" and "to what extent did you think that the person you wronged 'had it coming' to them?", diminishing responsibility "to what extent did you try to downplay your wrongdoing?" and "to what extent did you try to minimize your role in the wrongdoing?", transgression denial "to what extent did you deny you had done anything wrong?" and "to what extent did you deny your behaviour was a transgression?", lashing out "to what extent did you follow up with further transgressions or misdeeds?" and "to what extent did you lash out when confronted with your wrongdoing?" and excuses "to what extent did you excuse your wrongdoing?" and "to what extent do you think your behaviour is excusable?". Each item was assessed from 1 (*not at all*) to 7 (*very much so*).

Procedure

Participants were recruited by asking students in an undergraduate psychology course to distribute the study to one adult male and one adult female by providing the study URL. Participants in the study were entered into a draw for a $100 gift card to a retailer of their choice for their participation. When they visited the URL, they were told to reduce or eliminate distractions (e.g., turn off TV, put phone away, etc.) and were presented with an informed consent form. After consenting, participants completed demographic information and prescreen measures. For the current research, prescreen measures included social power and trait apology. Following the prescreen, participants were given the transgression stimuli and completed self-report items for their willingness to apologize or engage in non-apology.

Study 1: Results & Discussion

All descriptive statistics and zero-order correlations for variables of interest in this study are presented in Tables 1, 2, and 3. To test if transgressors' power had a relationship

with a tendency to apologize, social power was regressed on trait apology controlling for gender. As predicted, social power was a significant predictor of trait apology, $F(3, 199) = 10.72$, $p < 0.01$, $R^2 = 0.14$, $b = -.32$, $SE = 0.06$[1].

Next, participants who could not recall a time they committed a transgression were dropped from subsequent analyses which focused on state apology and non-apology ($N = 47$). Participants reported transgressions that were rated as moderately severe ($M = 4.17$; $SD = 1.75$) and negative ($M = 4.76$; $SD = 1.63$) and were committed against romantic partners (25.62%), friends (19.21%), coworkers (17.24%), immediate family members (16.26%), strangers (5.91%), relatives (3.94%), bosses (3.94%), and acquaintances (1.48%). To explore the relationship with power and both apology and non-apology, social power was regressed separately on each while controlling for gender. Social power significantly predicted non-apology, $F(3, 152) = 3.75$, $p = .01$, $R^2 = 0.07$, $b = 0.14$, $SE = 0.06$[2], but not apology, $F(3, 152) = 1.46$, $p = .64$, $R^2 < .01$, $b = -.04$, $SE = 0.08$[3].

Study 1 established the basic relationship between transgressors' power and their willingness to engage in apology and non-apology. Dispositional social power predicted trait apology and non-apology behaviour in response to a recalled real-life transgression.

Although hypotheses were generally confirmed, the effects of power on state apology were nonsignificant. This could be due to several factors related to the study design. For instance, all participants recalled a broad range of transgressions and the signal in the noise may be more appropriately detected with increased experimental control, such

---

[1] Controlling for gender did not affect the substantive results. A separate regression equation explored the moderated effect of gender on social power and trait apology that was nonsignificant, $b = .13$, $SE = 0.13$, $p = .30$.

[2] Controlling for gender did not change the substantive results. A separate regression equation explored the moderated effect of gender on social power and non-apology that was nonsignificant, $b = -.15$, $SE = 0.11$, $p = .18$.

[3] Controlling for gender did not change the substantive results. A separate regression equation explored the moderated effect of gender on social power and apology that was nonsignificant, $b = .11$, $SE = 0.17$, $p = .51$.

Table 1
Study 1: Descriptive statistics trait measures

Variable	*M*	*SD*	α	*r*-range
Social Power	3.99	1.41	0.59	0.84 – 0.85
Trait Apology	4.96	1.34	0.88	0.71 – 0.80

Table 2

Study 1: Descriptive statistics state measures

Variable	*M*	*SD*	α	*r*-range
Apology	4.02	1.40	0.91	0.58 – 0.82
Non-Apology	3.56	0.98	0.78	0.22 – 0.68

Table 3

Study 1: Zero-order correlation among variables

Variable	Social Power	Trait Apology	Apology
Social Power	-		
Trait Apology	-.34***	-	
Apology	-.05	.11	-
Non-Apology	.17*	-.35***	-.33***

* *p* < .05

** *p* < .01

*** *p* < .001

as using one transgression scenario or a single laboratory-induced transgression. Given the nonexperimental nature, research design, and mixed results of Study 1, a follow-up study was conducted using an experimental design that (a) tested the casual relation between transgressors' power and apology, and (2) increased experimental control by designing a homogenous transgression scenario.

<div align="center">**Study 2**</div>

Design & Participants

This study was preregistered (https://osf.io/ghb4a/register/564d31db8c5e4a7c9694b2c0). The purpose of the study was to test the causal relationship between transgressors' power and their motivation to apologize and engage in non-apology. The study design was a between-group experiment, in which power was experimentally manipulated. Participants were randomly assigned to either the high- or low-power conditions. An a priori power analysis with 80% power indicated 172 participants as the minimal sample size needed to detect an effect of $d = 0.43$. An effect size of $d = 0.43$ was selected as it is the typical size of a social psychological effect (Richard, Bond, & Stokes-Zoota, 2003). In total, 171 participants were recruited. After data exclusions (detailed below), the final sample was $N = 128$ ($M_{age} = 20.46$, $SD_{age} = 5.17$). A sensitivity power analysis indicated a sample this size would provide 80% power to detect an effect of $d = 0.50$ and 60% power to detect an effect of $d = 0.39$. The majority of the sample was female (76.38%) and culturally diverse: White (33.86%), South Asian (16.53%), Black (13.39%), Middle Eastern (11.81%), East Asian (7.87%), South-East Asian (5.51%), Latin American (4.72%), South American (2.36%), Mixed (2.36%), and Other (1.57%).

Data Exclusions

Participant exclusions included those who (1) did not complete the experimental manipulation correctly ($n = 17$), (2) random responders as determined by the Conscientious Responders Scale ($n = 5$; Marjanovic, Struthers, Cribbie, & Greenglass, 2014), (3) participants who respond in the negative when asked "did you complete this survey on a desktop or laptop computer?" ($n = 3$), (4) participants who respond in the negative when asked "should we include your data in our analyses?" ($n = 15$), and (5) participants whose average apology ($n = 3$) scores exceed 2.5 standard deviations from the group mean in their respective condition.

Materials

Stimuli

Power Manipulation. Participants were randomly assigned to high- and low-power conditions. An episodic recall power paradigm from Galinsky and colleagues (2003) was adapted to manipulate high- and low-power. Participants in the high-power condition were asked to:

> Please recall a particular incident in which you had power over another individual or individuals. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power— what happened, how you felt, etc. (Galinsky et al., 2003).

Those assigned to the low-power condition were asked:

> Please recall a particular incident in which someone else had power over you. By power, we mean a situation in which someone had control over your ability to get something you wanted or was in a position to evaluate you. Please describe this

situation in which you did not have power—what happened, how you felt, etc.

(Galinsky et al., 2003).

This power manipulation paradigm is used extensively in psychological research on power with a variety of adaptations showing it to be effective in psychologically activating a temporary sense of power (Galinsky et al., 2015).

Transgression. Participants were instructed to imagine a scenario in which they were the perpetrator of a transgression, with methods adopted from Woodyatt and Wenzel (2013). Participants were told they would engage in a thought experiment and should imagine themselves in the scenario presented. They were told to "read this passage like a book – try and imagine your surroundings – what you hear, smell, feel, think, and how you would behave". They were then presented with the following vignette:

Imagine that you are in a long-term, committed relationship with your partner. One night you attend a party together. You each individually know a number of people there, so while at first you speak to people as a couple, you eventually socialize separately. As is often the case with such parties, you end up spending the majority of the night apart. Both of you are drinking. You spot your partner quite often throughout the night, sitting closely and talking at length to another person. You continue drinking and start to get drunk. Later in the night an individual who you find extremely attractive, but who dates someone you work with, approaches you and you begin to laugh together and eventually start to dance. You both start kissing. A few hours later the party starts to lose momentum; your partner finds you sitting on a sofa closely with this other person

and tells you they want to go home. You stand up and leave with your partner

(Woodyatt & Wenzel, 2013).

Measures

Social Power. Participants social power was measured using two items, similar to Study 1: "I feel I have power to manage events in other people's lives" and "I feel I have control to manage events in other people's lives". Items were measured from 1 (*very little*) to 7 (*a great deal*).

Trait Apology. Participants dispositional tendency to apologize was measured using the 8-item Proclivity to Apologize Measure (PAM; Howell, Dopko, Turowski, & Buro, 2011) from Study 1. All items were measured from 1 (*strongly disagree*) to 7 (*strongly agree*) and reversed scored.

Random Responders. The Conscientious Responders Scale (CRS; Marjanovic et al., 2014) was used to detect random responders. The CRS is a five-item scale that asks participants to select a specific response option, such as "please answer this question by choosing option number one, 'strongly disagree'". Participants who incorrectly responded to more than three items were identified as random responders and excluded from analyses.

Apology. Participants apology was measured using 10-items measuring various apology components including: acknowledge wrongdoing "to what extent would you acknowledge what you did?", express remorse "to what extent would you feel remorse for what happened?", apologize "to what extent would you feel apologetic?", admit responsibility "to what extent would you admit your role in what happened?", say 'sorry' "to what extent would you tell partner you are sorry?", remedy "to what extent would you try to make things better with your partner?", express guilt "to what extent would you express guilt to your partner?", express regret

"to what extent would you express regret to your partner for your actions?", forbearance "to what extent would you assure your partner you would not do this again?", and motivation to reconcile "how motivated would you be to make things better with your partner?". Items were measured from 1 (*not at all*) to 7 (*very much so*).

Non-Apology. Participants non-apology was measured with 12-items. Items were created to capture six non-apologetic responses. These included: justifying the transgression "to what extent do you believe your actions were justified?" and "to what extent would you feel justified in how you behaved?", victim blaming "to what extent do you blame the other person for your actions?" and "to what extent would you think that your partner 'had it coming' to them?", diminishing responsibility "To what extent would you think your hurtful actions aren't a big deal?" and "to what extent would you downplay the event or your behaviour?", denial "to what extent would you like to deny you did anything wrong?" and "to what extent do you see your actions as hurtful?" (reverse scored), lash out "to what extent would you engage in similar behaviour again?" and "to what extent would you lash out if your partner confronted you?", and making excuses "to what extent would you excuse what happened?" and "to what extent would you think what happened is excusable?". Items were measured from 1 (*not at all*) to 7 (*very much so*)

Procedure

Participants received course credit in exchange for their participation. After signing up via the University participant pool, participants were given a URL to complete the study materials online. After accessing the online website, participants completed demographic information (e.g., age, gender, etc.) and prescreen items. Following the prescreen, participants were randomly assigned to high- and low-power conditions and completed the power paradigm

manipulation. Following the experimental manipulation, participants completed the transgression stimuli. Participants then completed self-report items for manipulation checks, apology, and non-apology. Finally, participants were thanked and debriefed.

Study 2: Results & Discussion

Preliminary Analyses

Based on positive correlations and acceptable levels of internal consistency among respective variables, items used to create composite variables were averaged. Descriptive statistics and correlations among key variables are found in Tables 4 and 5, respectively.

Next, to determine if random assignment had the desired effect, a one-way AVOVA was conducted on the experimental conditions and individual difference measures of interest. No between-group differences were found for participants' social power ($p = .61$), and trait apology ($p = .54$) suggesting a relatively equal distribution of individual differences across the different experimental conditions.

With respect to the imagined transgression, participants indicated that the transgression would be a negative experience for both themselves ($M = 6.39$, $SD = 1.01$) and the other person ($M = 6.47$, $SD = 1.10$) when asked "how negative do you think this event would be for [you/your partner]". Participants overall rated the transgression as severe ($M = 6.11$, $SD = 1.04$) when asked "how severe do you think this event is?". All items were measured from 1 (*not at all*) to 7 (*very much so*).

To determine if the experimental manipulation of power was effective, coders blind to experimental conditions rated the written responses of participants from 1 *(low-power/no power)* to 7 *(high-power/complete power)*. Coders agreed ($r = .79, p < .001$) those in the high-power

Table 4

Study 2: Descriptive statistics

Variable	*M*	*SD*	α	*r*-range
Social Power	3.04	1.39	0.85	0.93 – 0.93
Trait Apology	5.20	1.25	0.89	0.64 – 0.84
Apology	6.28	0.84	0.90	0.63 – 0.84
Non-Apology	2.13	0.94	0.86	0.56 – 0.73

Table 5
Study 2: Zero-order correlation among key variables

Variable	Social Power	Trait Apology	Apology
Social Power	-		
Trait Apology	-.10	-	
Apology	-.05	.34***	-
Non-Apology	.06	-.32***	-.69***

* *p* < .05
** *p* < .01
*** *p* < .001

condition reported greater power (M = 4.89, SD = 1.12) than those in the low-power condition

(M = 1.69, SD = 0.74), $t(113.29)$ = 19.15, 95% C.I. [2.88, 3.54], p < .001, d = 3.35.

Main Analysis

The purpose of Study 2 was to test if transgressors' power causally affects apology and

non-apology. As predicted, those in the high-power condition showed less apology (M = 6.16,

SD = 0.87) than those in the low-power condition (M = 6.55, SD = 0.51), $t(106.32)$ = 3.07, CI

95% [0.14, 0.63], p = .003, d = 0.54 (Figure 1)[4]. Similarly, those in the high-power condition

were more willing to engage in non-apology (M = 2.27, SD = 0.99) than those with low-power

(M = 1.87, SD = 0.74), $t(120.16)$ = -2.56, p = .012, CI 95% [-0.70, -0.09], d = 0.45 (Figure 2)[5].

Study 2 was an experimental test of the causal relationship between transgressors' power

and their motivation to apologize or respond with non-apology. Participants were randomly

assigned to high- and low-power conditions (Galinsky et al., 2003), imagined themselves

committing a transgression against a partner (Woodyatt & Wenzel, 2013), and their apology and

non-apology was measured. Results confirmed hypotheses that high-power transgressors were

less motivated to apologize and more likely to engage in non-apology compared to transgressors

who felt powerless.

The results of Studies 1 and 2 established the association between transgressors' power

and their willingness to apologize or not. Specifically, Study 1 established a relationship between

transgressors' power and their willingness to apologize that was confirmed as directional in

Study 2. Study 3 was designed as a conceptual replication of Study 2 to investigate the

---

[4] Gender was explored as a moderator between power and apology. A significant interaction effect was found, $F(1, 123)$ = 5.20, p = .02, η_p^2 = .04. The effect was driven by men, such that powerful men were less willing to engage in apology than low-power men and women altogether. See Appendix for exploratory analyses.
[5] Gender was explored as a moderator between power and non-apology. A significant interaction effect was found, $F(1, 123)$ = 6.10, p = .01, η_p^2 = .04. The effect was driven by men, such that powerful men were more willing to engage in non-apology than low-power men and women altogether. See Appendix for exploratory analyses.
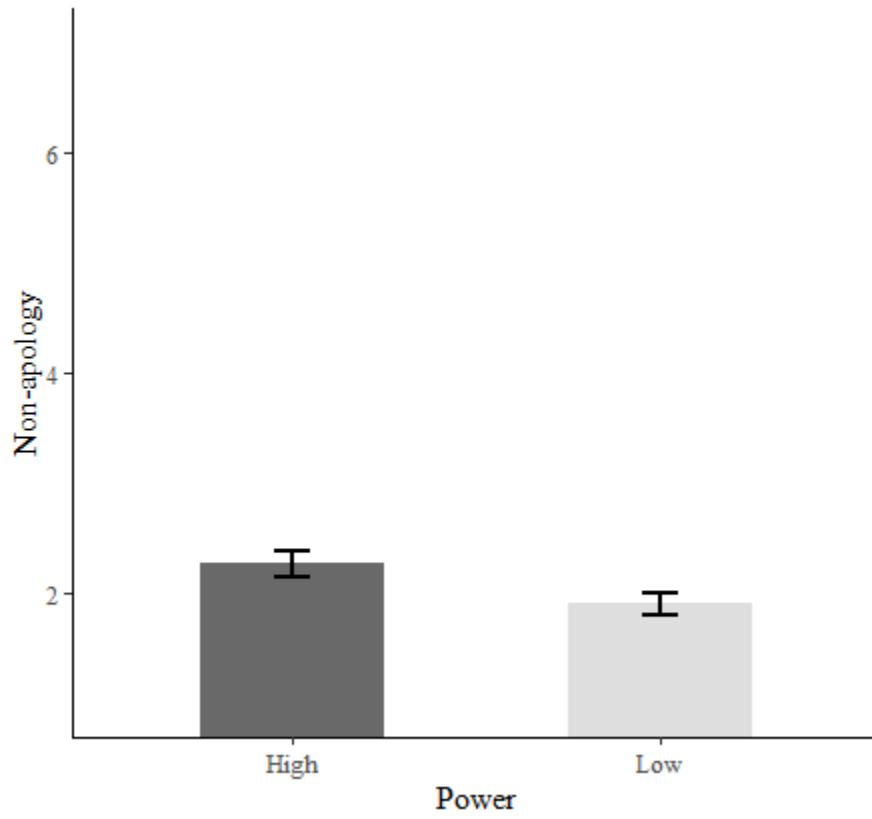
Figure 1
Study 2: Effect of power on apology
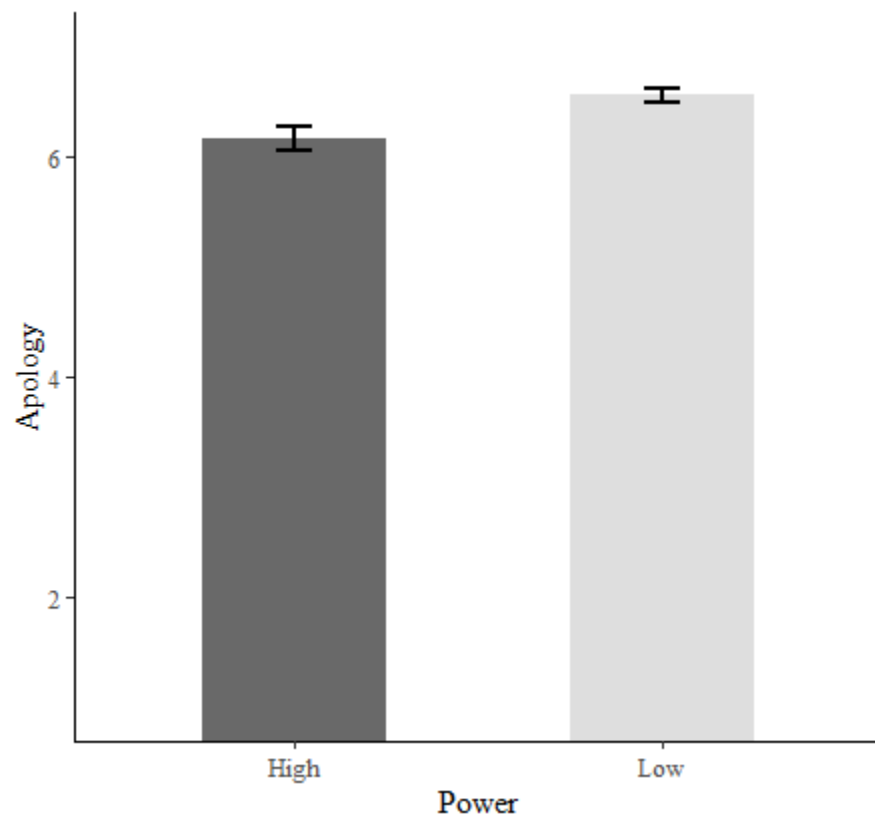
Note. Error bars represent standard error.

Figure 2

Study 2: Effect of power on non-apology

Note. Error bars represent standard error.

robustness of the effect. A high-impact laboratory experiment and behavioural measure of apology was used to increase experimental realism.

Study 3

Design & Participants

The design of Study 3 was a between-group experiment with high- and low-power experimental conditions. Participants were randomly assigned to one of two conditions. Participants were recruited from the University participant pool and received course credit for their participation. An a priori power analysis indicated 110 participants were required using an effect size of $d = 0.54$ (based on results from Study 2) with 80% power. Due to anticipated participant exclusions, recruitment was increased by 15% for a total of 126 participants. Data exclusions were based on the following criteria: (1) those who were identified as random responders based on the CRS ($n = 2$), (2) those who indicated their data should not be used in analyses when asked ($n = 5$), (3) those who incorrectly completed the power manipulation (i.e., didn't follow instructions; $n = 21$), and (4) outliers who were greater than 2 standard deviations from the mean on self-reported apology within their respective condition ($n = 3$). After exclusions, the final sample size was $N = 95$ ($M_{age} = 20.74$, $SD_{age} = 4.39$). A sensitivity power analysis indicated that a sample of this size would provide 80% power to detect an effect of $d = 0.60$ and 60% power to detect an effect of $d = 0.47$. The sample was virtually even with respect to men (50.53%) and women (49.47%) and culturally diverse: South Asian (21.05%), White (20.00%), Middle Eastern (17.89%), Black (13.68%), East Asian (11.58%), South East Asian (7.37%), Mixed (4.21%), South American (2.11%), Aboriginal (1.05%), Other (1.05%).

Materials

Stimuli

Power

In order to experimentally manipulate power, a power paradigm procedure was adopted from Galinsky and colleagues (2003). The paradigm involves two separate power manipulations that are consistent with one another, such that participants who are randomly assigned to high- and low-power groups go through two separate but consistent power manipulations (i.e., high-high, low-low).

Power Manipulation 1. Power was manipulated by giving participants the ability to provide or withhold resources or not. Those randomly assigned to the high-power condition were assigned the role of "ballot-giver" and were given 10 raffle tickets to disperse to their partner at their discretion. Those in the low-power condition were assigned the role ballot-receiver and did not receive any ballots – instead they were told their partner had the power to distribute ballots to them (i.e., giving them as many ballots as they desired up to 10 ballots) or not (i.e., giving them no ballots) at their personal discretion.

Power Manipulation 2. The second power manipulation was the same episodic recall power prime and instructions from Study 2. Those assigned to the high-power condition were asked to recall a time they had power over someone or were in a position to evaluate them. Those assigned to the low-power condition were asked to recall a time when someone else had power over them or they were in a position to be evaluated.

Transgression

Participants were told they would be participating in a team-based Boggle game with a partner. The partner was virtually programmed into the study stimuli. Boggle is a word-search

game where participants are provided a 4x4 grid of letters. The object of the game is to locate as

many words as possible by connecting letters within the grid. Points are accumulated based on

the number of words found and letters used. Players were instructed that they would form a team

with a partner and play against another two-person team. The winning team would be determined

based on the combined score of both team members. Like the virtual partner, the competing team

was fictitious, and all responses were preprogrammed into the computer stimuli.

Following the team game, false feedback was provided to participants indicating that

their partner and they had lost the game due to the participant's poor play. As a result, the

participant's partner lost out on the maximum prize, representing the experimentally induced

transgression. As inducing transgressions for participants in a laboratory setting is challenging

for practical and ethical reasons, similar paradigms have shown their utility in inducing

participant transgressions (Gonzalez et al., 1990; van Monsjou et al., 2015; Struthers et al.,

2019).

Measures

Social Power. Participants' social power was measured using two similarly worded items

from Studies 1 and 2 measured from 1 (*strongly disagree*) to 7 (*strongly agree*).

Trait Apology. Participants' trait apology was measured using the PAM (Howell et al.,

2012) as in Studies 1 and 2. All items were measured from 1 (*strongly disagree*) to 7 (*strongly*

agree) and reversed scored.

Random Responders. Like Study 2, the CRS (Marjanovic et al., 2014) was used to

detect random responders and exclude them from analyses.

Written Apology. Participants were given the opportunity to send their partner a

message after the transgression stimuli. Independent coders blind to the hypotheses and

condition coded the open-ended responses for presence (coded 1) and absence (coded 0) of apologetic statements (e.g., "my apologies", "I'm sorry") with methods adapted from Hornsey et al. (2017) and Schumann (2014). Coders agreed on 95.9% of cases (κ = .89). Discrepancies were resolved by a third coder.

Apology. Participants' willingness to apologize in response to the transgression stimuli was measured using the same 10 items from Study 2. Items were measured from 1 (*not at all*) to 7 (*very much so*).

Non-Apology. Participants' motivation to engage in non-apology was measured with items identical to Study 2 but excluded the two *lashing-out* items given the experimental stimuli (i.e., team-based game with a partner with no opportunity to lash-out). Items were measured from 1 (*not at all*) to 7 (*very much so*).

Procedure

Participants responded to an advertisement for the study via a research participant pool. The advertisement indicated that prizes were potentially available by participating. All participants received course credit for their involvement. Participants came to the lab and were greeted by a male researcher. The researcher provided instructions to the participant and informed them the study was interested in one-way communication and virtual teams. They were told virtual teams are groups of people who work together online and remotely for various projects, but never meet face-to-face, which is becoming increasingly common in our technologically driven world. In order for the researchers to explore how virtual teams interact, they would be placed in a team with a partner and would play Boggle against another dyadic team, all of whom were participants in the study. They were informed that all participants were scattered throughout campus in similar laboratory rooms to and were receiving identical

instructions to mimic virtual teams comprised of remote workers. The researcher then informed participants if they were successful in the team game, they would be asked to participate in the study again at a later date for additional course credit and potential prizes. The potential prize was being entered into a draw for a $200 gift certificate to the University bookstore. The potential prize money would increase each time the participant was successful and came back to a scheduled date to participate in the study again. In addition to the grand prize, participants would also be separately eligible for a ballot draw for a $100 prize. They were informed the University was offering raffle tickets to students as incentive for participating in laboratory studies (as opposed to online studies which are more popular among students). They were also informed, however, that the offering of high-value prizes had led the study to be quite popular among the participant pool. As a result, the researchers had to restrict ballots to only one team member. The researcher explained that as a result, one partner selected at random would be tasked as the ballot-giver and the other as the ballot-receiver. The ballot-giver would assign as many or as little ballots as they wanted to their partner. The ballot-receiver was dependent on the ballot-giver for tickets.

Participants began the first part of the study that included demographic and prescreen information. In the meantime, the researcher informed them they would be in the other laboratory room running a random number generator to determine who would be the ballot-giver and -receiver. After completing the demographic and prescreen items, participants were prompted to retrieve the researcher. The researcher told them to take a seat while they contacted the other researcher who was instructing their partner (in another laboratory on campus). After taking a seat, the researcher went into the main room and verbally informed them they had been assigned as the ballot-giver or -receiver based on their random assignment to the high- or low-

power condition. For ballot-givers, the researcher said "…by the way you were assigned the ballots, so you'll be determining how many ballots to provide to your partner. Because we're short pressed on time as we connect to your partner, I'll leave the ballots on your table and you can decide on how to use them at the end of the study before you leave". The researcher placed ten professionally made raffle tickets on the table. For ballot-receivers, participants were told "…by the way your partner was assigned the ballots, so they will be determining how many ballots to provide to you". The researcher then went back into the main room and audibly picked up a desk telephone and dialed. They spoke loudly for the participant to hear and ostensibly spoke to the other researcher on the phone. There was no phone connection. For every participant, the researcher said the following:

> Hey, how's it going? Awesome. Hahaha. So, the participant is ready to begin here. Are you ready on your end? Oh, late as usual, huh? I guess that's just way you guys run things over there huh!? By the way, [my participant OR your participant] was assigned the ballots. No problem, I'll call you back in a bit.

The researcher then went back into the room with the participant and said the following:

> I just spoke with the other researcher and it seems that their participant showed up late. Now these things can happen when coordinating so we have something prepared for this sort of situation. While we wait would it be ok if I run you through a quick pilot study one of the grad students in our lab asked me to test out?

All participants agreed to participate in the pilot study and the researcher brought them to a new room. They informed the participant they weren't familiar with the purpose of the pilot study since it was a graduate students' and to notify them when they were finished so they could make

a phone call to check if their partner was ready. Participants then completed the second power manipulation, which consisted of the episodic power recall consistent with their assignment to the high- or low-power condition. Following completion of the second power manipulation, the researcher brought them to the original room to participate in the team-based game and complete the second half of the study. The researcher again picked up the phone and dialed and confirmed that their partner was ready to begin. The researcher told participants that they were informed on the phone that their partner, who they would be playing in a dyadic team, had already played two games of Boggle successfully with two different partners and was one win short of being eligible for a $400 grand prize certificate to the University bookstore. The researcher then loaded the experiment for the second half of the study which involved the transgression stimuli and dependent variable measures.

The experimental program ostensibly connected participants to an online game server with their partner where they completed five rounds of Boggle. Each round lasted 60 seconds. Following five rounds, the computer program ostensibly calculated scores from the game and provided feedback. This included false scores for each individual player, clearly indicating the participants' score (40) was lowest compared to their partner (75) and the other teams' members (63 & 62). Additionally, participants received the following message: "Your individual score places you in the 40th percentile range of all Boggle players competing in this study. Your partner, [Mike]'s individual score places him/her in the 90th percentile range of all Boggle players competing in this study".

Following the team loss, participants were given an opportunity to send their partner a message. The computer program provided a textbox where participants wrote their message. Messages were coded for the presence (coded = 1) or absence (coded = 0) of apologetic

statements (e.g., "I'm sorry", "my apologies"). Participants were then asked on a scale from 1 (*not at all*) to 7 (*very much so*) how negative losing the game was. The computer program then ostensibly analyzed their responses and indicated the system detected an above average negative event had been reported. It explained that in accordance with ethical protocols, when negative events are reported the session is disrupted to follow up with a questionnaire of the incident. This was done to avoid suspicion about items asking about the transgression and willingness to apologize or engage in non-apology. After completing these items, participants were thanked and debriefed by the researcher.

Study 3: Results & Discussion

Preliminary Analysis

Relevant items from key variables were averaged to create composite scores (see Tables 6 and 7 for descriptive statistics and zero-order correlations among key variables, respectively) which showed strong positive correlations and acceptable levels of internal consistency.

To ensure that random assignment was effective, between-group differences for those in the high- and low-power conditions were tested for key variables. No statistical differences between the two groups was found for social power ($p = .15$) or trait apology ($p = .13$). To determine the extent to which the power manipulation was effective, participants were asked after the episodic recall "How much power did you have in the situation you just described?" from 1 (*no power*) to 7 (*all the power*). Those in the high-power condition ($M = 5.59$, $SD = 1.51$) reported higher power than those in the low-power condition ($M = 1.77$, $SD = 0.89$), $t(82.50) = -15.24$, 95% C.I. [3.31, 4.31], $p < .001$, $d = 3.02$.

A manipulation check was performed on the experimental transgression to ensure participants perceived they committed an interpersonal transgression against their dyadic partner.

They reported the transgression was moderately negative for them ($M = 3.85$, $SD = 1.73$) and strongly negative for their partner ($M = 5.87$, $SD = 1.50$) when asked "How negative was losing the game [to you / to your partner]?" on a scale from 1 (*not at all*) to 7 (*very much so*). Participants also felt accountable for the transgression ($M = 5.82$, $SD = 1.14$) and that it was important to them to have won the game ($M = 5.82$, $SD = 1.30$).

Main Analysis

In Study 3, the causal relation between transgressors' power and apology and non-apology was tested. First, the effect of transgressors' power on their willingness to apologize was explored. Two separate tests of the self-report and written apology data were conducted. Consistent with the predicted pattern of results, a marginally nonsignificant effect was found for power on apology. Those in the high-power condition ($M = 4.76$, $SD = 1.29$) were less motivated to apologize than those in the low-power condition ($M = 5.24$, $SD = 1.17$), $t(92.70) = -1.88$, 95% C.I. [-0.97, 0.03], $p = 0.06$, $d = .38$ (Figure 3)[6]. Next, the effect of transgressors' power on their behavioural use of apology in written responses was explored. Those in the high-power condition were 3 times less likely (odds ratio = 3.29) to use an apologetic statement in their open-ended message (e.g., "I'm sorry", "my apologies") than those in the low-power condition, $b = 1.19$, $SE = 0.52$, $p = .02$ (Figure 4)[7]. Finally, the effect of transgressors power on their motivation to engage in non-apology was explored. There was no statistical difference between those with high-power ($M = 3.51$, $SD = 0.52$) compared to low-power ($M = 3.48$, $SD = 0.50$), $t(87.52) = 0.30$, $p = .77$, $d = 0.17$[8].

---

[6] Controlling for gender did not affect the substantive results. Gender was explored as a potential moderator of the power and apology (self-report) that was nonsignificant, $F(1, 91) = 0.08$, $p = .78$, $\eta_p^2 < .01$.
[7] Controlling for gender did not change the substantive results. Gender was explored as a potential moderator of power and apology (written statements) that was nonsignificant, $b = 1.59$, $SE = 1.29$, $p = .22$.
[8] Controlling for gender did not affect the substantive results. Gender was explored as a potential moderator of power and non-apology that was nonsignificant, $F(1, 91) = 0.03$, $p = .86$, $\eta_p^2 < .01$.

Table 6

Study 3: Descriptive statistics

Variable	*M*	*SD*	α	*r*-range
Social Power	3.47	1.45	.78	.90 - .91
Trait Apology	4.93	1.15	.89	.62 - .86
Apology	4.98	1.25	.92	.60 - .87
Non-Apology	3.20	0.75	.68	.23 - .71

Table 7

Study 3: Zero-order correlation among key variables

Variable	Social Power	Trait Apology	Apology
1. Social Power	-		
2. Trait Apology	.19	-	
3. Apology	.12	< .01	-
4. Non-Apology	-.03	< .01	-.45***

* *p* < .05
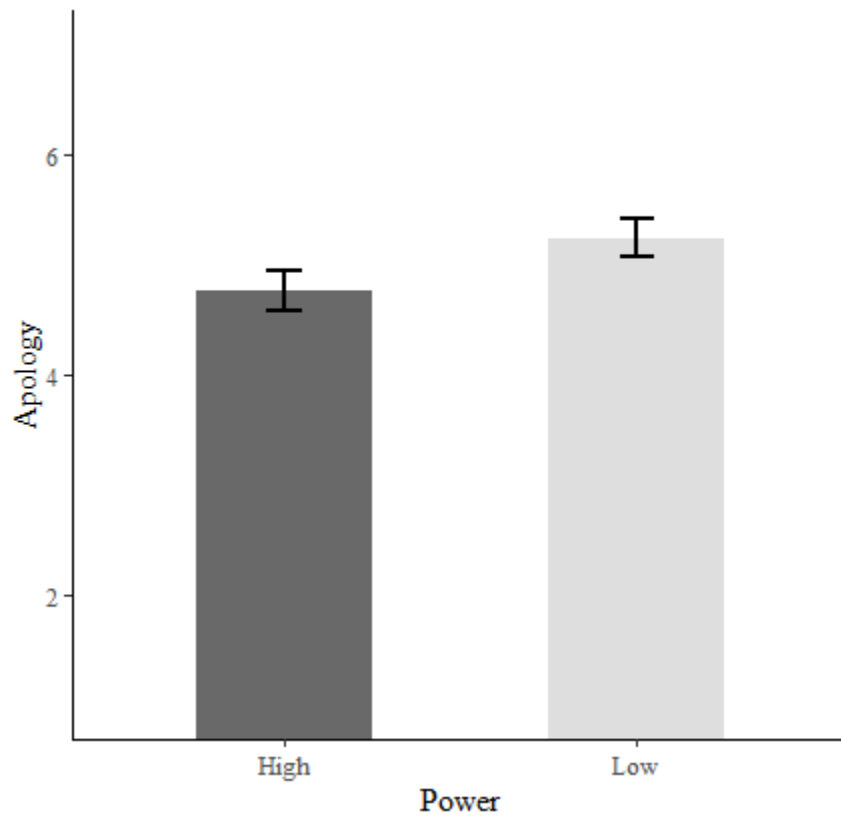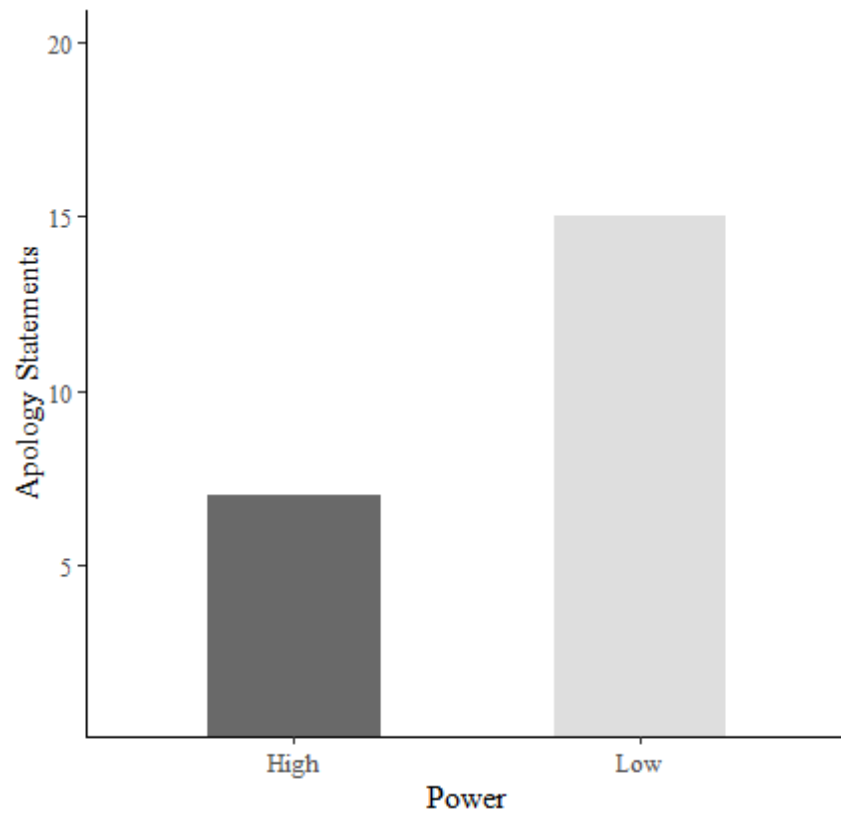** *p* < .01
*** *p* < .001

Figure 3

Study 3: Effect of power on apology (self-report)

Note. Error bars represent standard error

Figure 4

Study 3: Effect of power on apology (written statements)

In sum, Study 3 was a conceptual replication of Study 2. The results replicated the causal effect of transgressors' power on their willingness to apologize. Additionally, Study 3 increased the experimental realism from Study 2 with the use of a laboratory design. It also demonstrated the effect on a behavioural measure of apology, which converged with the self-report data from Studies 1 – 3. Taken together, this demonstrates the robustness of the causal effect of transgressors' power on their willingness to apologize.

Having established the basic and causal relationship of transgressors' power on apology, the next study sought to test an explanation for *why* transgressors' power affects apology. To explore this question, Study 4 used an experimental design to test one theoretical mechanism, namely: self-other focus. Power approach theory highlights self-other focus as a mechanism through which power operates and could explain the association between high- and low-power and the motivation to engage in apology or not.

Study 4

Design & Participants

The design of this study was a 2 (power: high, low) by 2 (focus: self, other) between-group experiment. Participants were randomly assigned to one of the four conditions in an online experiment. An a priori power analysis was conducted to determine how many participants would be needed to obtain 80% power. Based on the average effect size of Studies 2 and 3, $f =$ .23, and 80% power, 151 participants were required. Participants were recruited from the University participant pool and received course credit in exchange for participation. Given anticipated data exclusions described in Studies 2 and 3, recruitment was oversampled by one-third for a total of 228 participants. Data exclusions included random responders ($n = 45$), those who indicated they could not recall a time they committed a transgression either from a position

of high or low-power ($n = 31$), those that indicated their data should not be used in the analysis ($n = 19$), and those who were more than 2 standard deviations beyond their respective group mean on apology ($n = 4$). The final sample size was 129 participants. A sensitivity power analysis indicated that a sample of this size would provide 80% power to detect an effect of $f = 0.24$ and 60% power to detect an effect of $f = 0.20$. Overall, the sample had a mean age of 19.45 ($SD = 3.48$), was 60.47% women and 39.53% men, and was culturally diverse: White (33.33%), East Asian (19.38%), Latin American (16.28%), Aboriginal (7.75%), South Asian (6.98%), Bicultural (6.20%), Black (6.20%), Middle Eastern (3.10%), and Other (0.78%).

Materials

Stimuli

Power & Focus. Participants were asked to recall a time they committed a transgression against another person within the last six months: "Please take a moment to think about a time in the last six months in which an unresolved negative event occurred between you and another person". To manipulate power, participants were asked to think of a situation in which the transgression was over another person they had power over (high-power) or who had power over them (low-power). To manipulate focus, participants were asked to recall the transgression either from their own perspective (self-focus), or the perspective of the victim (other-focus). Participants were instructed to write about the situation and elaborate on the details (e.g., who the person was, their relationship with them, what happened, and how the transgression made them, or the other person feel, etc.).

Measures

Social Power. Two items, similarly worded to those used in Studies 1 – 3 were used to measure social power: "I feel I have control over events in other people's lives" and "I feel I have

the power to manage events in other people's lives". Items were measured from 1 (*strongly disagree*) to 7 (*strongly agree*).

Trait Apology. Trait apology was measured using the same Proclivity to Apologize Measure (PAM; Howell et al., 2011) from Studies 1 – 3. All items were measured from 1 (*strongly disagree*) to 7 (*strongly agree*) and reversed scored such that high scores reflect high trait apology.

Random Responders. The same CRS (Marjanovic et al., 2014) scale from Studies 2 and 3 was used to detect random responders for data exclusions.

Apology. Willingness to apologize was measured using 5-items. Items were designed to capture various apology components, including: acknowledging the offense "If given the opportunity, would you acknowledge what you did to the other person?", admit fault "Would you admit your fault in what happened?", concern "Would you tell the other person you were concerned about what happened?", express guilt "Would you express guilt?", and assurance "Would you assure the other person that this would not happened again?", measured from 1 (*not at all*) to 7 (*very much so*).

Non-Apology. Participants' non-apology was measured using 4-items designed to reflect non-apologetic, defensive responding including: justification "do you feel your actions were justified?", victim-blaming "do you blame the other person for what happened?", "do you feel like he or she 'had it coming'?", and minimizing the transgression "Do you feel like what happened wasn't that big a deal?" from 1 (*not at all*) to 7 (*very much so*).

Procedure

Participants signed up for the study through the University's participant pool and were provided a URL to the study materials. Participants were instructed to minimize distractions

upon accessing the link. They then read and filled out the informed consent form and completed demographic and prescreen items. Next, participants engaged in the experimental manipulation where they recalled a transgression over another person they either had power over (high-power) or had power over them (low-power), from their own perspective (self-focus) or the perspective of their victim (other-focus). Participants then completed self-report items that measured details about the recalled transgression, manipulation checks, apology, and non-apology. Finally, participants were thanked and debriefed.

Study 4: Results & Discussion

Preliminary Analysis

Variables were averaged together to create composite scores, which showed strong positive correlations and acceptable levels of internal consistency. See Table 8 and 9 for descriptive statistics and zero-order correlations, respectively. To ensure that participants randomly assigned to the experimental conditions did not significantly differ on key variables, between-group differences for dispositional power and trait apology were explored. No significant differences were found between the four conditions for social power ($p = .88$) and trait apology ($p = .50$).

Next, the effectiveness of the experimental manipulation was tested. A manipulation check item asked participant "How much power [did you/did this person] have over [this person/you]?". Those in the high-power condition ($M = 4.74$, $SD = 1.75$) reported more power than those in the low-power condition ($M = 3.40$, $SD = 1.74$), $t(126.79) = 4.38$, 95% C.I. [0.74, 1.95], $p < .001$, $d = 0.77$. Similarly, those in the low-power condition reported the individual they had power over them ($M = 5.24$, $SD = 1.60$), compared to the high-power group ($M = 3.56$, $SD = 1.91$), $t(124.27) = -5.41$, 95% C.I. [-2.30, -1.06], $p < .001$, $d = 0.95$, confirming that the

experiment was effective in manipulating power. Next, participants were asked two questions with respect to the focus they took when recalling the transgression from 1 (*strongly disagree*) to 7 (*strongly agree*). For self-focus, items included "I wrote about this incident from my own perspective". Participants in the self-focus condition ($M = 5.94$, $SD = 0.90$) reported greater self-focus than those in the other-focus condition ($M = 5.30$, $SD = 1.29$), $t(125.04) = 3.28$, 95% C.I. [0.25, 1.01], $p < .01$, $d = 0.56$. Similarly, for other-focus items included "I wrote about this incident from the other person's perspective" and "It was easy for me to think about this incident from the other person's perspective". Participants in the other-focus condition ($M = 3.87$, $SD = 1.55$) reported more other-focus perspective relative to those in the self-focus condition ($M = 3.19$, SD = 1.51), $t(121.68) = -2.49$, 95% C.I. [-1.21, -0.14], $p = .04$, $d = 0.44$.

With respect to the recalled transgression, participants reported they were committed against friends (31.78%), family members (25.58%), romantic partners (24.03%), coworkers (7.75%), other (3.88%), bosses (3.10%), strangers (3.10%), and acquaintances (0.77%). Transgressions were rated as moderately severe ($M = 3.87$, $SD = 1.59$) when asked "How severe was this event?" from 1 (*not at all severe*) to 7 (*very severe*). Transgressions were also reported as being negative overall ($M = 4.77$, $SD = 1.51$), had a negative effect on them ($M = 4.71$, $SD = 1.59$), and were perceived to have a negative effect on their victim ($M = 4.58$, $SD = 1.71$). Participants also reported their transgressions were largely not intentional ($M = 1.97$, $SD = 1.54$), but moderately harmed their relationship with the victim $M = 4.32$, $SD = 2.12$.

Main Analysis

In Study 4, both power (high, low) and focus (self, other) were experimentally manipulated to test their interaction on transgressors' willingness to apologize or engage in non-apology. Two separate ANCOVA controlling for gender tested the effect of power and focus on

Table 8

Study 4: Descriptive statistics

Variable	*M*	*SD*	α	*r*-range
Social Power	3.62	1.30	.85	.93 – .94
Trait Apology	4.81	1.10	.84	.62 – .74
Apology	3.50	0.51	.84	.71 – .80
Non-Apology	3.74	1.41	.66	.38 – .83

Table 9

Study 4: Zero-order correlation among key variables

Variable	Social Power	Trait Apology	Apology
1. Social Power	-		
2. Trait Apology	-.24*	-	
3. Apology	-.05	.22*	-
4. Non-Apology	.17	-.05	-.55***

* $p < .05$
** $p < .01$
*** $p < .001$

apology and non-apology. As predicted, there was a significant interaction effect between power and focus on apology, $F(1, 124) = 4.55$, $p = .03$, $\eta^2 = 0.04$ (Figure 5)[9]. No significant effect was found for non-apology, $F(1, 125) = 0.30$, $p = .58$, $\eta^2 < 0.01$[10].

Given these results, the significant interaction was probed further by looking at the simple effects of power and focus for apology. First, power at each level of focus was explored. For high-powered transgressors, there was a nonsignificant effect between those in the other-focus condition ($M = 5.12$, $SD = 1.34$) compared to self-focus ($M = 4.67$, $SD = 1.56$), $t(50.44) = -1.20$, 95% C.I. [-1.18, 0.29], $p = .23$, $d = .31$, although the means were in the predicted direction with a small-to-medium effect size.

Next, the simple main effect of low-power at each level of focus was explored. There was a marginally nonsignificant effect for those in the other-focus condition ($M = 4.03$, $SD = 1.70$) relative to self-focus condition ($M = 4.73$, $SD = 1.40$), $t(59.47) = 2.06$, 95% C.I. [0.02, 1.57], $p = .07$, $d = 0.45$. Although the effect size was nearly medium in magnitude, the effect was in the opposite direction than predicted. Those with low-power who took a self-focus were more willing to apologize than those who took an other-focus.

The simple main effects of focus at each level of power were explored next, first looking at other-focus. Those assigned to the high-power condition ($M = 5.11$, $SD = 1.34$) were more likely to apologize than those with low-power ($M = 4.03$, $SD = 1.70$), $t(60.45) = 2.98$, 95% C.I. [0.36, 1.82], $p < .01$, $d = 0.72$. The simple effects of self-focus at each level of power were then explored with no difference between high-power ($M = 4.67$, $SD = 1.56$) and low-power ($M = 4.73$, $SD = 1.40$), $t(52.57) = -0.15$, 95% C.I. [-0.85, 0.74], $p = .88$, $d = 0.04$.

---

[9] Controlling for gender did not affect the substantive results. A separate ANOVA explored a three-way interaction between power, focus, and gender on apology that was nonsignificant, $F(1, 121) = .03$, $p = 0.87$.

[10] Controlling for gender did not affect the substantive results. A separate ANOVA explored a three-way interaction between power, focus, and gender on non-apology that was nonsignificant.

In Study 4, the effect of power and focus on transgressors' willingness to apologize or engage in non-apology was investigated. The theoretical mechanism was manipulated to provide a more precise test of the causal relation among key variables (Pirlott & MacKinnon, 2016; Spencer et al., 2005). Participants were randomly assigned to power (high, low) and focus (self, other) conditions. They wrote about a transgression and imagined how they would respond to the person they harmed if they were present. They also completed self-report items on apology and non-apology. The hypotheses were generally confirmed such that powerful transgressors who took an other-focus were the most apologetic relative to having a self-focus or having low-power.

The results of Study 4, notably, the relationship between power and self-other focus on apologizing, suggests the relation between power and apology and non-apology may be further qualified by transgressors' cultural context given cultural differences in self-other focus. Specifically, those who live in a more collectivistic cultural context tend to hold self-construals that are *interdependent*, whereas those live in a more individualistic cultural context tend to hold self-construals that are *independent* (Markus & Kitayama, 1991). In other words, those from collectivistic cultures tend to be more other-focused whereas those from individualistic cultures tend to be more self-focused. Study 5 was designed to test culture as a theoretically relevant boundary condition on the relationship between power and apology. It was predicted that powerful transgressors who identify with a collectivist cultural context would be more willing to apologize than those with low-power, consistent with the results of Study 4. To test this question, a cross-cultural study in two geographical locations – Japan and Canada – was conducted.

Figure 5
Study 4: Effect of power and focus on apology
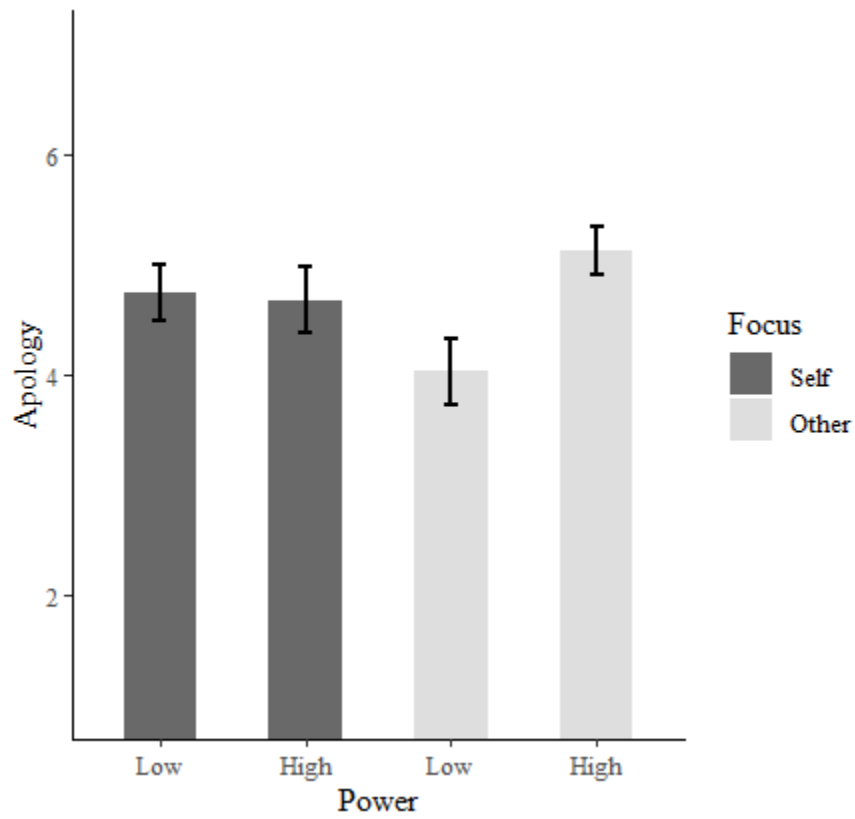
Note. Error bars represent standard error.

Study 5

Design & Participants

The design of Study 5 was a 2 (power: high, low) x 2 (culture: Japan, Canada) between-group experiment. Participants were recruited from their respective countries and randomly assigned to either the high- or low-power conditions. An a priori power analysis was conducted to determine how many participants would be needed to obtain 80% power. Based on the average effect size of Studies 2 – 4, $f = .21$, and 80% power, 180 participants were required per country. Given anticipated data exclusions described in Studies 2 – 4, recruitment was oversampled by 15-25% (per sample). Japanese community members were recruited online from across the entire region of Japan. Participants in Canada were recruited from both the undergraduate participant pool and a snowball sampling technique of an upper level psychology course at York University in Toronto, ON, Canada. A prescreen selection criteria was placed on those from Japan and Canada, such that only those who identified as East Asian (for Japanese participants) and as North American or Western European (for Canadian participants) were eligible to enroll in the study. In total, there were 203 Japanese participants and 233 Canadians participants. An a priori exclusion criteria was used to exclude those taking longer than 2 hours to complete the study, more than double the anticipated study completion time ($n_{japan} = 2$; $n_{canada} = 6$), those identified as random responders ($n_{japan} = 11$; $n_{canada} = 21$), and those who self-selected to not be included in the data analysis ($n_{japan} = 26$; $n_{canada} = 21$). The final sample was 349 participants ($n_{japan} = 164$; $n_{canada} = 185$). A sensitivity power analysis indicated a sample this size would have 80% power to detect an effect size of $f = .15$, and 60% power to detect an effect size of $f = .12$. Japanese participants ranged in age from 19 to 83 with a $M_{age} = 48.87$ ($SD_{age} = 10.63$), whereas the Canadian participants ranged in age from 17 to 63 with a $M_{age} = 25.96$ ($SD_{age} = $

12.74). Japanese participants were virtually even between women (52.44%) and men (46.95%), whereas the Canadian sample had majority women (64.32%).

Materials

All materials for this study were developed in English and then translated into Japanese (except the PAM previously developed in Japanese; Ohtsubo et al., 2015). A bilingual graduate student in psychology from Japan on research exchange in the United States translated the materials from English to Japanese. Materials were then back-translated from Japanese to English by a bilingual Faculty member from Japan (who completed their graduate training in the United States) to ensure their accuracy. The main author (English) and bilingual faculty member (Japanese) reviewed the translated materials together to ensure the items and stimuli were properly translated, accurate, and identical for each sample.

Stimuli

Power Manipulation. Participants were randomly assigned to high- and low-power conditions. As in Studies 2 – 4, a recall power manipulation adopted from Galinsky and colleagues (2003). Participants in the high-power group were asked to:

> Please recall a particular incident in which you had power over another individual or individuals. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power— what happened, how you felt, etc. (Galinsky et al., 2003).

Those assigned to the low-power group were asked:

> Please recall a particular incident in which someone else had power over you. By power, we mean a situation in which someone had control over your ability to get

something you wanted, or was in a position to evaluate you. Please describe this

situation in which you did not have power—what happened, how you felt, etc.

(Galinsky et al., 2003).

Importantly, in both conditions participants were also asked to provide the initials of the person

who they recalled, who they either had power over or who had power over them.

Transgression. The transgression scenario was adapted from Ohtsubo and Yagi (2015).

Participants were assigned to one of two transgression scenario conditions. Two separate

transgression scenarios were used to test the robustness of the effect. The first transgression

condition was a "no show" condition and involved the participant failing to meet a friend at an

agreed upon time, ruining their plans. The second condition was a "stained book" condition and

involved borrowing an irreplaceable book and spilling soda, ruining it. Importantly, each

transgression scenario was tied to the person the participant thought of in the power manipulation

by importing the individuals' initials they provided during the power manipulation. Therefore,

they imagined themselves as a transgressor committing a transgression against a person from

their lives that they either have/had power over, or who has/had power over them. Specifically,

in the no show condition participants were told to read the following:

You promise to see [*initials*] in the morning. However, because you stayed up late

watching an interesting TV program, you overslept. You text [*initials*] and rush to the

agreed upon meeting place. They ended up having to wait for you for over an hour and

their plans are ruined.

In the stained book condition, participants are presented with:

You borrow a book from [*initials*]. The book is out of print and [*initials*] managed to find

it on an internet auction site and bought it for [¥1000 JPY / $10 CDN]. When reading it at

home, you inadvertently spill soda on it. It becomes stained and sticky and is no longer

readable. It is ruined.

Measures

Subjective Socio-Economic Status. Socio-Economic Status (SES) was measured as it is

related to power and social status. Subjective SES was chosen, as opposed to objective SES, as it

has demonstrated its utility as a more meaningful measure of SES than objective SES for

psychological and physical variables (Adler, Epel, Castellazzo, & Ickovics, 2000). To measure

subjective SES, an image of a ladder was used that had 10-steps, each numbered, such that the

lowest step is numbered 1 and the highest step is numbered 10. Participants were asked to

"Think of this ladder as showing where people stand in their communities. At the top of the

ladder are people who are best off – they have the most money, the highest amount of schooling,

and the jobs that bring the most respect. At the bottom are people who are worst off – they have

the least money, little or no education, no jobs or jobs that no one wants or respects. Now think

about your family. Please tell us where you think your family would be on this ladder in their

own community" with procedures adopted from Adler and colleagues (2000).

Sense of Power. Participants sense of power was measured using the 8-item Generalized

Sense of Power Scale (Anderson, John, & Keltner, 2012). Example items include "I can get

him/her/them to listen to what I say" and "I think I have a great deal of power" measured from 1

(*disagree strongly*) to 7 (*agree strongly*),

Japanese Proclivity to Apologize Measure. Trait apology was measured using the

Japanese Proclivity to Apologize Measure (J-PAM; Ohtsubo, Yamaura, & Yagi, 2015). The J-

PAM is a developed Japanese version of the Proclivity to Apologize Measure (PAM; Howell et

al., 2011) used in Studies 1 – 4. All items were reversed scored such that high scores reflect high

trait apology, measured from 1 (*disagree strongly*) to 7 (*agree strongly*).

Random Responders. The CRS (Marjanovic et al., 2014) used in Studies 2 – 4 to detect

random responders was used for data exclusions in Study 5.

Self-Construal Scale. Independent and interdependent self-construals were measured

using the Self-Construal Scale (SCS; Singelis, 1994). The original scale is 24-items, but six

additional items were later added by the original author to improve internal consistency. For the

present research, the improved 30-item scale was used. Independent and interdependent self-

construals refer to how individuals conceptualize the self in relation to separateness and

uniqueness of others (independent) and connectedness and relationship with others

(interdependent). They are not mutually exclusive and are based on previous theorizing by

Markus and Kitayama (1991). Example items include "I enjoy being unique and different from

others in many respects" (independent self-construal) and "Even when I strongly disagree with

group members, I avoid an argument" (interdependent self-construal). Items were measured from

1 (*disagree strongly*) to 7 (*agree strongly*).

Apology. Apology was measured using 12-items that captured various apology

components measured from 1 (*not at all*) to 7 (*very much so*). Items included "I would

acknowledge what I did to this person" (acknowledge the wrongdoing), "I would feel remorse

for what happened" (express remorse), "I would feel apologetic" (apologetic), "I would admit

my role in what happened" (admit responsibility), "I would tell the other person 'I am sorry'"

(say sorry), "I would try to make things better with this person" (remedy), "I would express guilt

to this person" (express guilt), "I would express regret to this person" (express regret), "I would

assure this person I would behave this way again" (assurance), "I would ask this person for

forgiveness" (seek forgiveness), "I would cancel my appointment with a dentist if it is impossible for me to apologize to the person immediately without cancelling" and "I would cancel my plan to go to a concert of my favorite artist if it is impossible for me to apologize to the person immediately without cancelling it" (cost signaling). Apology items were measured from 1 (*disagree strongly*) to 7 (*agree strongly*).

Written Apology. Participants completed a writing task, like that completed in Study 3. Participants were instructed to "Please think back to the offense from a few pages ago. We would now like you to imagine that the person you hurt was here with you right now. What would you say to him or her? Please write down what you would say to him or her below" with a textbox provided below. Procedures were adopted from (Schumann, 2014). Japanese responses were translated to English using Google Translate by the main author and then checked for accuracy by a bilingual Faculty member from Japan who made revisions where appropriate in English based on the Japanese responses. Independent coders blind to hypotheses and condition coded the responses for presence (coded 1) or absence (coded 0) of apology statements (e.g., "I'm sorry", "My apologies"; Hornsey et al., 2017). Coders agreed on 94.5% of cases (κ = .88). Discrepancies were resolved by a third coder.

Non-Apology. Participants' non-apology was measured using 8-items created to capture non-apologetic, defensive responding. Items included "I would feel justified in how I behaved" (justification), "I would blame the other person for how I behaved" (victim blaming), "I would think my actions are a big deal" and "I would downplay the event and my behaviour" (diminish responsibility), "I would deny what I did" and "I would see my actions as hurtful (denial; reverse scored), "I would excuse what I did" and "I would think my behaviour is understandable (excuses).

Procedure

All participants were provided an online Qualtrics URL to access the study materials within a two-week timeframe. After accessing the URL, participants were presented with the study materials. First, participants completed the informed consent form and were asked to minimize distractions by turning off electronic devices. They were also asked to complete the study from either a laptop or desktop computer. Next, participants completed demographic and prescreen items such as subjective SES, sense of power, trait apology, and self-construal.

Participants were then randomly assigned to the high- or low-power manipulation where they recalled an event about an individual, they had power over or who had power over them. Following the power manipulation, they were presented with manipulation check items. Next, participants were randomly assigned to the no show or stained book transgression scenarios. They were asked:

Please imagine that the scenario written on the next page actually happened between you and the person [you have or had power over/who has or had power over you], [*initials*]. Read the following sentences carefully and imagine that you and [*initials*] are in such a situation. Please imagine the situation and how you think, feel, and act.

Participants were asked to imagine that the person that they previously recalled and committed a transgression against was present with them. They were then asked to write what they would say to him/her. Following the written apology, participants completed self-report items measuring apology and non-apology. Finally, participants were debriefed and provided their compensation for participation (i.e., money or course credit).

Study 5: Results & Discussion

Preliminary Analyses

Items were averaged for each measure to create composite variables. See Table 10 and 11 for descriptive statistics and correlations among key variables, respectively. To determine if participants differed when randomly assigned to either the power or transgression-type conditions, between-group tests were conducted on key variables. No between-group differences were found for sense of power ($p = .99$), independent self-construal ($p = .31$), interdependent self-construal ($p = .27$), and trait apology ($p = .91$).

With respect to the imagined transgression, participants found it uncomfortable ($M = 5.53$, $SD = 1.56$) and felt like they were accountable ($M = 6.17$, $SD = 1.31$). There was no difference between the transgression condition (i.e., no-show vs. stained) on whether participants felt uncomfortable or accountable ($ps > 0.05$). Therefore, collapsing across transgression condition there were cultural differences where Japanese participants felt more uncomfortable ($M = 5.81$, $SD = 1.46$) than Canadians ($M = 5.29$, $SD = 1.62$; $p < .01$, $d = 0.34$); but Canadians felt more accountable ($M = 6.31$, $SD = 1.22$) than Japanese ($M = 6.02$, $SD = 1.39$; $p < .05$, $d = 0.23$).

Next, whether the experimental manipulation of power was effective was tested. Immediately after completing the power manipulation, participants responded to the following items: "I had power over this individual", "I had power to control outcomes in this individual's life", "I had power to manage events in this individual's life", "I had power over something this individual wanted", "I had power to take away something this individual wanted", "I had the power to reprimand or punish this individual", and "I had power to evaluate or judge this individual" from 1 (*not at all*) to 7 (*very much so*). These items demonstrated strong internal

consistency ($\alpha = .91$). The experimental manipulation was successful as evidenced by a between-group difference for those in the high-power condition ($M = 4.09$, $SD = 1.46$) compared to low-power condition ($M = 2.74$, $SD = 1.42$), $t(344.91) = 8.80$, $p < .01$, $d = 0.94$. As the experimental design randomly assigned participants to two different transgression scenarios, differences in transgression-type was tested for differences for apology and non-apology. There was no interaction or main effect of transgression-type on apology or non-apology ($ps > .05$).

Main Analysis

It was hypothesized there would be an interaction effect between transgressors' power and cultural context on their willingness to apologize and engage in non-apology. Given the difference in mean age between the two samples, age was controlled for in analyses in addition to gender. A 2 (power: high, low) x 2 (culture: Japan, Canada) ANCOVA was conducted to address the main research question. A significant interaction effect for power and culture on apology was found, $F(1, 341) = 4.81$, $p = 0.04$, $\eta_p^2 = 0.01$ (Figure 6)[11]. Also noteworthy was a significant main effect of power, $F(1, 343) = 6.06$, $p = .01$, $\eta_p^2 = 0.02$. Similarly, a significant interaction effect of power by culture on non-apology was found, $F(1, 343) = 4.72$, $p = .03$, $\eta_p^2 = 0.01$ (Figure 7)[12], and a main effect for power $F(1, 343) = 7.01$, $p < .01$, $\eta_p^2 = .02$.

An examination of the written apology data determined that there was no interaction or main effects of power and culture on the presence or absence of apology statements in participants' written responses, OR = 1.44, $b = 0.37$, $p = 0.50$[13]. However, upon further

---

[11] Controlling for gender did not change the substantive results. A separate ANCOVA (controlling for age) explored a three-way interaction between power, culture, and gender on apology that was nonsignificant, $F(1, 338) = 1.17$, $p = 0.28$.

[12] Controlling for gender did not change the substantive results. A separate ANCOVA (controlling for age) explored a three-way interaction between power, culture, and gender on non-apology that was nonsignificant, $F(1, 338) < .01$, $p = 0.87$.

[13] Controlling for gender did not change the substantive results. A separate logistic regression exploring a three-way interaction between power, culture, and gender on apology (written statements) was nonsignificant, $b = -1.08$, $p = .37$, $p = .42$, OR = 0.36.

Table 10

Study 5: Descriptive Statistics

Variable	Japan				Canada			
	M	*SD*	α	*r*-range	*M*	*SD*	α	*r*-range
Sense of Power	3.97	0.79	.82	.53 – .75	4.58	0.90	.81	.54 – .77
Subjective SES	4.57	1.96	-	-	5.54	1.62	-	-
Trait Apology	4.71	0.85	.84	.55 – .78	5.13	1.14	.87	.66 – .83
Independent SC	4.52	0.61	.79	.31 – .64	4.88	0.72	.75	.33 – .63
Interdependent SC	4.26	0.57	.80	.26 – .64	4.88	0.63	.71	.35 – .61
Apology	5.38	1.05	.91	.35 – .85	5.30	1.06	.88	.41 – .85
Non-Apology	3.07	0.86	.62	.28 – .75	2.67	1.00	.78	.48 – .70

Table 11

Study 5: Zero-order correlation among key variables for Japan and Canada

Variable	1	2	3	4	5	6	7
1. Sense of Power	-	**-.14**	-.02	-.09		.36***	-.14
2. Subjective SES	.17*	-	-.06	-.15*	**-.14**	**-.11**	**-.04**
3. Trait Apology	.24**	.08	-	-.06	**-.02**	.29***	**-.45*****
4. Independent SC	-.15	.24**	.06	-	-.08	-.04	.18*
5. Interdependent SC	.12*	.17*	.24**	-.15	-	.36***	-.14
6. Apology	.22**	-.06	.37***	.08	.22**	-	-.57***
7. Non-Apology	-.07	.10	-.38***	.02	-.07	-.49***	-

Note: Bottom diagonal = Japan; upper diagonal = Canada

* $p < .05$

** $p < .01$

*** $p < .001$

inspection of the written responses, there was a main effect for culture on the amount of words written by transgressors, $F(1, 343) = 101.63$, $p < .001$, $\eta_p^2 = 0.23$. Specifically, those from Canada ($M_{words} = 42.44$, $SD_{words} = 29.95$) wrote significantly more words than those from Japan ($M_{words} = 6.66$, $SD_{words} = 6.65$), $t(204.33) = -15.81$, 95% C.I. [-40.24, -31.32], $p < .001$, $d = 1.61$. Two independent coders also rated how sincere transgressors' written responses were from 1 (*not at all sincere*) to 7 (*extremely sincere*), $r = .81$, $p < .01$. When exploring written responses that contained apology statements, those from Canada ($M = 4.84$, $SD = 1.19$) were rated more sincere in their apologies than those from Japan ($M = 2.76$, $SD = 0.88$), $t(132.02) = -12.63$, 95% C.I. [-2.41, -1.76], $p < .01$, $d = 2.02$.

To probe the simple main effects of the self-report data, high-power at each level of culture was explored. There was a between group difference for Japan and Canada, such that high-power transgressors from Japan ($M = 5.60$, $SD = 0.92$) reported greater apology than those from Canada ($M = 5.28$, $SD = 0.95$), $t(159.12) = 2.20$, 95% C.I. [0.03, 0.60], $p = .03$, $d = 0.34$. There was no difference between those from Japan and Canada on non-apology at high-power, $t(165.88) = 1.18$, $p = .24$, $d = 0.18$.

When considering low-power at each level of culture, no significant difference was found between Japan and Canada for apology, $t(176.46) = -0.72$, $p = .47$, $d = -0.11$. However, a significant difference between those from Japan and Canada on non-apology was found, such that transgressors with low-power from Japan were significantly more likely to report non-apology ($M = 3.23$, $SD = 0.77$) than those from Canada ($M = 2.65$, $SD = 0.92$), $t(171.18) = 4.57$, 95% C.I. [.33, .83], $p < .01$, $d = 0.68$.

Next, Japanese culture at each level of power was examined. For Japanese participants, there was a significant difference. Transgressors with high-power ($M = 5.60$, $SD = 0.92$)
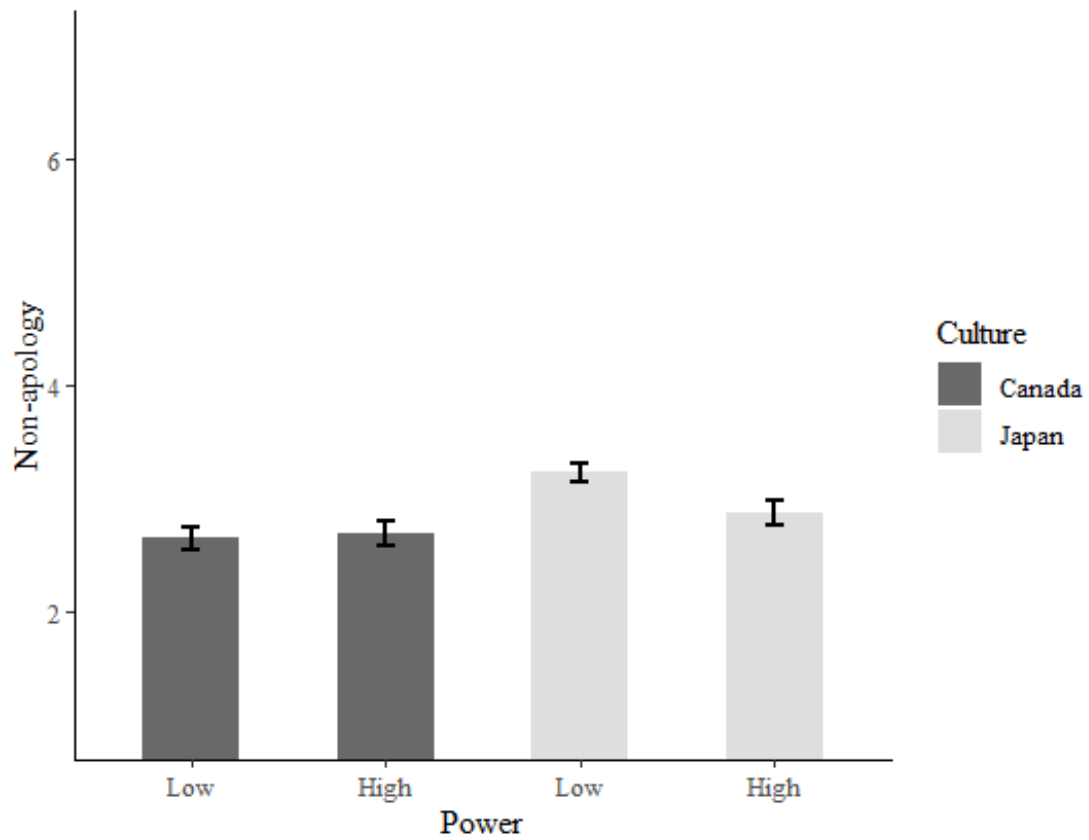
Figure 6

Study 5: Effect of power and culture on apology
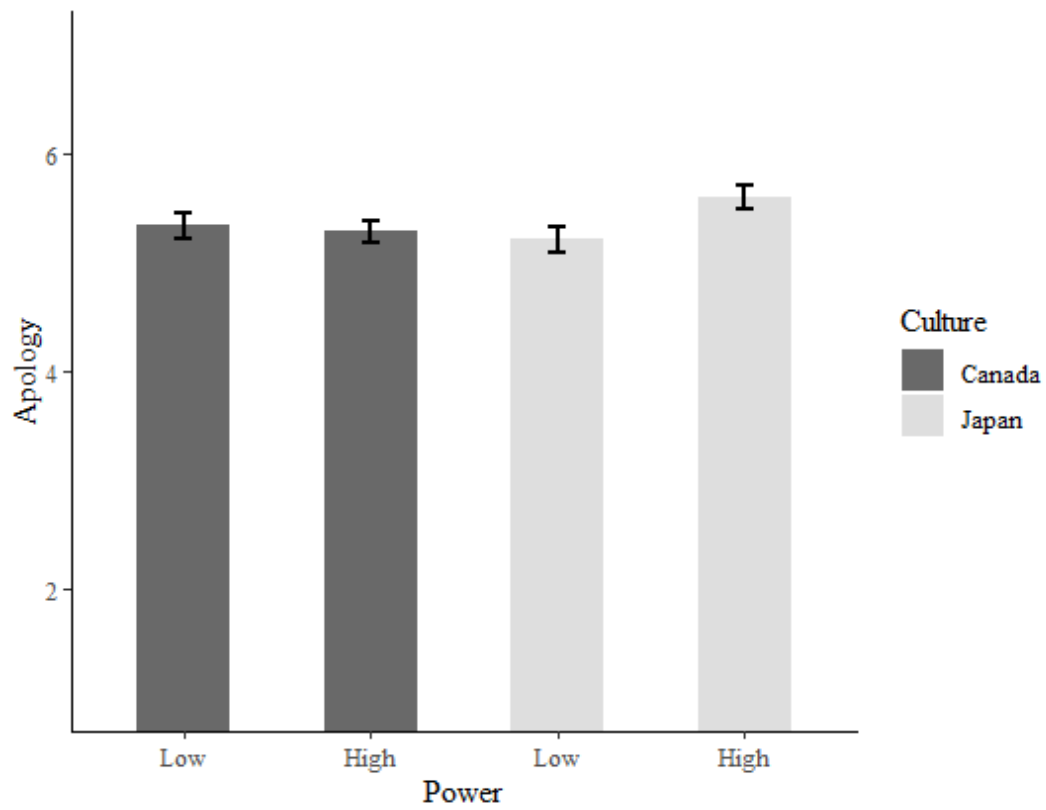
Note. Error bars represent standard error.

Figure 7

Study 5: Effect of power and culture on non-apology

Note. Error bars represent standard error.

compared to those with low-power ($M = 5.21$, $SD = 1.13$), were more willing to apologize t(162) = 2.43, 95% C.I. [0.07, 0.71], $p = .02$, $d = 0.35$. Similarly, there were differences in Japan for non-apology, such that Japanese transgressors with high-power were less willing to engage in non-apology ($M = 2.87$, $SD = 0.92$), than those with low-power ($M = 3.23$, $SD = 0.77$), $t(142.40)$ = 2.68, 95% C.I. [0.12, 0.74], $p < .01$, $d = 0.43$. Finally, Canadian culture at each level of power was explored. For the Canadian participants, there were no differences between high- or low-power for either apology or non-apology.

Study 5 explored the interaction effect between power and culture on transgressors' willingness to apologize or engage in non-apology. Participants from both Japan and Canada were recruited and randomly assigned to high- or low-power conditions and were instructed to recall a time they felt powerful or powerless against another individual. Importantly, they reported the individual's initials which played a critical component in the transgression stimuli – thinking about committing a transgression against the very person they know/knew in real life they have power over, or who has power over them. Following the manipulations, participants responded to measures of apology and non-apology.

In line with hypotheses, interaction effects between power and culture on both apology and non-apology were found. Specifically, with high-power, Japanese transgressors were more likely to engage in apology than Canadian transgressors. Conversely, with low-power, Japanese transgressors were more likely to engage in non-apology than their Canadian counterparts. Although predictions were centered primarily around powerful transgressors, the outcome for low-power Japanese transgressors who engage in more non-apology than their high-power counterparts was counterintuitive.

When exploring the effects of Japanese participants, those with high-power compared to low-power were more likely to apologize and less likely to engage in non-apology, consistent with predictions. However, there was no effect for Canada for either high or low-power participants, although the means of apology and non-apology for the Canadian transgressors were in the predicted direction.

General Discussion

Anecdotes that power corrupts abound. Many have experienced or witnessed powerful people acting in unscrupulous ways, uninhibited or unencumbered by others with their sights set only on satiating their own whims and desires. Such disinhibited behaviour often results in interpersonal transgressions that harms others in the process. In the aftermath of transgressions, there is often little ambiguity as to whether an apology is warranted – and yet, powerful transgressors often resist or refuse to apologize and engage in non-apologetic responding instead. Does power corrupt transgressors' willingness to apologize? Does a self vs. other focus explain why power affects transgressors' willingness to apologize or not? When is the effect of a transgressors' power on apology strengthened or weakened by their cultural context? This dissertation programmatically answered these questions.

In Study 1, the basic relationship between power and apology was demonstrated. Overall, transgressors who felt powerful over others were generally less apologetic. This was partly confirmed in looking at actual apologetic behaviour in response to a real behaviour, which found a trend where powerful individuals were more willing to engage in non-apology than their low-power counterparts.

Study 2 was designed as a more direct test of the relationship between transgressors' power and willingness to apologize or not. A pre-registered experiment was used to establish

causality by manipulating power. Additionally, this study standardized the transgression scenario by having participants imagine a scenario, thereby reducing recall and between-subject error. Results of this study established the causal role of transgressors' power on their willingness to engage in apology and non-apology. Transgressors with high-power were less willing to apologize and more willing to engage in non-apology than those with low-power.

Study 3 was a conceptual replication of Study 2 to replicate the effect and test its robustness. This study was bolstered with experimental control by using a high-impact laboratory design. Experimental realism was increased as participants came to the laboratory and believed they were engaging in a team-based exercise with a real partner. A stronger manipulation of power was used (Galinsky, 2003) and a behavioural measure was used to assess apology (Hornsey et al., 2017; Schumann, 2014). Results replicated the effect of power on apology and demonstrated its robustness, with participants in the high-power condition reporting less willingness to apologize and behaviourally using less apology statements when given the opportunity to send their victim a message.

The purpose of Study 4 was to test one theoretical mechanism of power approach theory: self-other focus. Power approach suggests individuals harm others because they are agentic and approach oriented toward their self-focused wants, needs, and desires without concern for others. To establish the causal mechanism, self-other focus was manipulated by having participants recall a time they committed a transgression either from their perspective (self) or the perspective of their victim (other). Given that powerful individuals are approach-oriented, it was further predicted that having high-power and an other-focus would increase apology relative to having a self-focus or low-power. Indeed, the results suggest that when high-powered transgressors take the victims perspective, they show the greatest willingness to apologize.

Study 5 was designed to test a theoretical boundary condition of the relationship. Given cultural differences in self-other focus and the results of Study 4, Study 5 sought to determine if the effect between power and apology was bounded by transgressors' cultural context. A cross-cultural study in both Japan and Canada was conducted to address this question. As those with power approach their goals, and Japanese culture is collectivistic and other-focused, it was predicted powerful transgressors from Japan would be more apologetic than those without power, and more apologetic than Canadian transgressors all-together. Indeed, an interaction was found between power and culture such that high-powered transgressors from Japan were more apologetic than those with low-power and those from Canada. Interestingly, transgressors from Japan with low-power that took an other-focus were the least likely to offer an apology and the most willing to engage in non-apology.

Overall, this program of research confirmed the hypotheses that (1) powerful transgressors are less likely to apologize for their interpersonal transgressions than those who are powerless, (2) the effect is partially explained by self-other focus; high-power transgressors who take an other-focus are the most apologetic, and (3) the relationship is differentially affected by one's cultural context, such that transgressors from collectivistic cultures that are powerful are *more* apologetic than transgressors with low-power or those from an individualistic culture.

This dissertation supports and augments the research on power approach, culture, and apology in meaningful ways. The results from these studies empirically support predictions made by power approach theory – namely, those that feel powerful will act in ways that align with their goals, whereas those that feel powerless will act in ways that support others' goals (Studies 1 – 3). The power literature is extended by demonstrating the effect of power on selfish behaviour extends to the domain of conflict resolution. Therefore, not only does power increase

individuals' willingness to engage in transgressive behaviours, power also affects how they respond to those they harm in the form of apology and non-apology.

This research also confirms the literature on power approach theory by demonstrating the effect of power on apology is partially explained by the theoretical mechanism, self-other focus (Study 4). Powerful transgressors appear to resist apologies because of a focus on themselves and their goals, in this case their goal of protecting the self by directing blame elsewhere, mitigating responsibility, and downplaying their behaviour. More broadly, this research confirms that powerful individuals are focused on approaching their personal goals, whatever they may be. Consistent with individual difference research demonstrating the role of social goals (e.g., communal vs. exchange orientation; Chen et al., 2001) in steering the effect of power, this research confirmed that powerful individuals who take an other-focus are the most apologetic. The current research extends this work by experimentally manipulating self-other focus, demonstrating the indirect causal role of self-other focus on power approach.

Although those who are powerful may want to avoid the process of an apology, the silver-lining to this effect is powerful transgressors' approach motivation can be channeled into prosocial apology by inducing them to be more other-focused. This is consistent with previous research exploring the synergistic effects of power and perspective-taking (Galinsky, Magee, Rus, Rothman, & Todd, 2014). Analogous to a car, power acts as the gas pedal (i.e., approach motivation) where focus acts like the steering wheel, directing individuals to their (behavioural) destinations. In this case, power throttles transgressors forward and steers them toward others' needs of receiving an apology.

This research also confirms the literature on power approach and the theoretically relevant boundary condition of cultural context. By conducting a cross-cultural study and

recruiting participants from different cultural contexts (Study 5), it confirmed culture is an important boundary condition of power approach. This is consistent with other research showing that those from collectivistic cultures have different values associated with power and how they behave when they wield it (Torelli & Shavitt, 2010). Those from collectivistic cultures value power as the ability to help and benefit others, whereas those from individualistic cultures value power as the means to advance personal interests (Torelli & Shavitt, 2010). This research extends the literature by demonstrating the moderated effect of power and culture extends to transgressors' willingness to apologize or not. Collectivistic cultures that tilt toward being other-focused are more likely to have powerful transgressors who take responsibility and apologize. Individualistic cultures that tilt toward being self-focused are more likely to have powerful transgressors who avoid apologizing and/or engage in non-apology. Within the context of promoting apologies, in cultures that are other-focused the adage "with great power comes great responsibility" seems to ring true, whereas in cultures that are self-focused, "power tends to corrupt" seems to hold.

This research extends previous literature on apologies by providing a more nuanced understanding of the role of culture on the willingness to apologize. Although those from a collectivistic cultural context offered apologies more readily compared to those from an individualistic cultural context, this effect was qualified by the power of the transgressor. These findings suggest powerless transgressors from Japan are more likely to feel tempted to engage in non-apologetic defensive responding instead of apologizing. One possible explanation for this finding is that Japan tends to be more of a face-saving culture (Ting-Toomey et al., 1991). When Japanese transgressors are focused on others they may be more concerned with saving face by engaging in impression management techniques and may adopt a strategy of non-apology (e.g.,

make excuses, justify the transgression) to be viewed as less blameworthy. Taken together, this work found low-power transgressors that took a self-focus were inclined to be more apologetic and engage in less non-apology than those who took an other-focus, both experimentally (Study 4) and culturally (Study 5). As power approach theory suggests low-power individuals are more other-focused, it seems reasonable to expect a compound effect if low-power individuals are induced to be other focused or are from cultural context that tends to be more other-focused. However, the opposite was found. This is one potential avenue for future research – why do those with low-power who take an other-focus trend toward less apology and more non-apology following an interpersonal transgression?

This research also confirms and extends the research on outcomes related to power and gender. Given traditional and sociocultural associations between power and gender, exploratory analyses were conducted to test gender as a moderator. Studies 1 and 3 – 5 confirmed previous research that when power is controlled for, men and women apologize at similar rates suggesting the effect is driven by power and not gender (Holmes, 1989). However, Study 2 demonstrated an interaction effect between power and gender on apologizing, with the effect driven by men (see Appendix). Specifically, high-power men that transgress are less likely to engage in apology and more likely to engage in non-apology than low-power men and women regardless of high- or low-power. Why did gender only interact with power in Study 2? One likely explanation is that Study 2 used a transgression stimuli that involved committing an act of romantic infidelity. Therefore, gender may interact with power in contexts where gender roles are particularly salient, resistant to change, or socially and culturally reinforced such as in romantic relationships (Lee et al., 2010; Sanchez et al., 2012). Future research should explore the interaction effects of

power and gender in more varied contexts, particularly contexts where gender-based structural power and dependency exists.

Given that power affects self-regulation (Ent et al., 2012) and increasing evidence that the apology process is a self-regulatory process (Guilfoyle et al., 2019; Howell et al., 2011), this research suggests more broadly that psychological factors that increase or decrease self-regulation will impact transgressors' willingness to apologize or not. Future research should explore the effect of other psychologically relevant constructs that affect individuals' self-regulation, such as mindfulness (Brown & Ryan, 2003), deindividuation (Diener, 1979), and negative affect (Leith & Baumeister, 1996; Sell, 2011) to more fully understand the self-regulatory nature of apology.

In sum, this research makes contributions to the literature of power approach theory, conflict resolution, and culture. It demonstrates that power approach theory is a useful theoretical framework for understanding and predicting transgressors' willingness to engage in apology and non-apology. Given a robust extant literature of power approach theory including mediators, mechanisms, and outcomes (Galinsky et al., 2015), using this theoretical framework can help conflict resolution scholars understand and predict the social motivations of transgressors post-transgression and devise ways to promote apologies and prevent non-apology in a greater effort to support reconciliation and cooperation.

This work also provides a more complete understanding for how individuals interact and resolve conflict. It suggests that all things being equal, in an individualistic cultural context, powerful transgressors will be less likely to apologize because they are more self-focused. However, it also suggests if transgressors can be made more other-focused, they may be more likely to apologize overall. This suggests that successfully nudging individuals to be more other-

focused or creating environments that are more other-focused may be one avenue to promote apologies from powerful transgressors.

This work also contributes to the extant literature of culture by providing a more nuanced understanding of the interpersonal role of power on cross-cultural differences in apology and non-apology. Previous work has generally found those from collectivistic cultural contexts apologize more readily (Hamilton & Hagiwara, 1992; Itoi, Ohbuchi, & Fukuno, 1996). However, this research demonstrates the relationship between culture, apology, and non-apology is more complex than previously suggested with power playing an important cross-cultural role. Overall, the omnipresent nature of power in social relationships needs to be considered by conflict resolution scholars for a robust understanding of the factors impacting the interpersonal phenomena of apology and non-apology.

Limitations & Future Directions

Although this research confirms and extends the literature on power approach, culture, and apology, it is not without limitations. For instance, in Study 1 social power failed to predict state apology, instead finding relationships with trait apology and state non-apology. One possible explanation for this null effect may be that trait social power does not always generalize to specific instances of apology, but rather affects apologizing more generally (i.e., on the trait level). Likely a better test would be to ask participants how much social power they had over their victims that they recalled (e.g., Study 4). Future research exploring power and interpersonal conflict should use transgression stimuli that nests the transgression within the power dynamic of the parties involved.

Although this program of research demonstrates a clear relationship between transgressors' power, apology, and non-apology, greater effort should be made to tease these

constructs apart from related psychological constructs to understand their unique effects. For instance, how may transgressors' social status affect apology and non-apology differently or similarly to power? Does social status moderate the effects of power on apology and non-apology (e.g., high-power, low status)?

This may help shed light on the counterintuitive effects found in Studies 4 and 5, where low-power, self-focused transgressors are more apologetic and less non-apologetic than their other-focused counterparts. Given the theoretical and empirical evidence that low-power individuals are more other-focused (Galinsky et al., 2015; Keltner et al., 2003), it seems reasonable to expect a compound effect when they are further prompted to be more other-focused, where the opposite was found. One plausible explanation to account for this finding is that those with low-power are limited in their available post-transgression response options relative to those with high-power. By taking a self-focus, low-power transgressors shift attention away from others' needs and toward their own self-focused needs – continued access to valued resources via those with high-power. For utilitarian purposes, low-power, self-focused transgressors may be engaging in more impression management and consequently more apology. Future research should explore if powerless transgressors who engage in behavioral apology also feel more apologetic as well. For instance, research on forgiveness has distinguished between two types: decisional forgiveness, a behavioural intention statement that one grants forgiveness, and emotional forgiveness, the replacement of unforgiving emotions with positive other-oriented emotions (Baumeister et al., 1998; Lichtenfeld, 2015; Worthington, 1999). Victims may grant "hollow forgiveness" when they engage in decisional forgiveness (e.g., offering forgiveness) but not emotional forgiveness (e.g., feeling vengeful). It may be the case that for apology, like forgiveness, there is a decisional apology (e.g., saying "I'm sorry") and an emotional apology

(e.g., feeling regret, remorse, and guilt). Low-power, self-focused transgressors may be engaging in "hollow" apology, offering decisional apology but not emotional apology given their constraints to facilitate their own self-focused needs. Conversely, high-power other-focused transgressors, who are the most apologetic, may be engaging in "true" apology, where their decisional and emotional apology are in alignment.

Additionally, this research would benefit with increased construct validation and psychometric scale development for the dependent variables of interest. To date, there are no psychometrically developed scales of state apology and non-apology. This is particularly true for non-apology that was operationally defined as an amalgam of several related, but likely distinct, defensive responses. Future research should approach this process from transgressors' perspective and explore the factor structure of apology and non-apology, explore convergent and discriminant validity, and develop psychometrically valid and reliable measurement tools. This is most pressing for non-apology due to the paucity of extant literature on the topic. For instance, is non-apology a byproduct of related psychological constructs such as moral disengagement (Bandura, 1991) or the "psychological immune system" (Gilbert et al., 1998)? Or is non-apology a unique psychological process in response to committing an interpersonal transgression that involves affective, cognitive, and behavioral components similar to the apology process?

This program of research also produced effect sizes that were small-to-medium in magnitude. Given practical and ethical considerations of inducing power and making participants transgressors, the effect sizes in this dissertation are likely artificially deflated (Baumeister, 2020). All studies had participants recall or imagine a time they were in a position of high- or low-power and committed a transgression, save for Study 3 where the experimentally rigged transgression was unintentional. These experiences as a high- or low-power transgressor likely

pale in comparison to the experience of being in a position of power (or not) and intentionally harming someone in the real-world. Importantly, the pattern of results is consistent across studies and in line with theoretical predictions. Future research could implement more potent power manipulations and transgression stimuli for a better understanding of the casual processes associated with apology and non-apology both inside and outside the laboratory.

Conclusion

This dissertation was guided by power approach theory to programmatically test the relationship between transgressors' social power and their willingness to apologize or not. Hypotheses were generally supported suggesting power is an important factor in determining why some transgressors apologize following interpersonal transgressions whereas others do not. This research helps to provide a more nuanced understanding of transgressors' social motivation processes following a transgression which may provide insights into facilitating how transgressors repair relationships when they harm others. This work would be useful, and can be applied to, interpersonal, intergroup, international, and public relations, negotiation settings, and situations where power dynamics and hierarchies are highly accessible and salient such as romantic relationships, military, or other organizational settings such as business, government, or competitive sport.

References

Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, White women. *Health Psychology*, *19*(6), 586–592. https://doi.org/10.1037//0278-6133.19.6.586

Amodio, D. M., Master, S. L., Yee, C. M., & Taylor, S. E. (2008). Neurocognitive components of the behavioural inhibition and activation systems: Implications for theories of self-regulation. *Psychophysiology*, *45*(1), 11-19.

Amodio, D. M., Shah, J. Y., Sigelman, J., Brazy, P. C., & Harmon-Jones, E. (2004). Implicit regulatory focus associated with asymmetrical frontal cortical activity. *Journal of Experimental Social Psychology*, *40*(2), 225–232. https://doi.org/10.1016/S0022-1031(03)00100-8

Anderson, C., John, O. P., & Keltner, D. (2012). The personal sense of power. *Journal of Personality*, *80*(2), 313–344. https://doi.org/10.1111/j.1467-6494.2011.00734.x

Aquino, K., Tripp, T. M., & Bies, R. J. (2006). Getting even or moving on? Power, procedural justice, and types of offense as predictors of revenge, forgiveness, reconciliation, and avoidance in organizations. *Journal of Applied Psychology*, *91*(3), 653–668. https://doi.org/10.1037/0021-9010.91.3.653

Arndt, J., Greenberg, J., Simon, L., Pyszczynski, T., & Solomon, S. (1998). Terror management and self-awareness: Evidence that mortality salience provokes avoidance of the self-focused state. *Personality and Social Psychology Bulletin*, *24*(11), 1216-1227.

Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J.

    L. Gewirtz (Eds.), *Handbook of moral behavior and development: Theory, research, and*

    applications (Vol. 1, pp. 71–129). Hillsdale, NJ: Lawrence, Erlbaum Associates, Inc.

Bassett, R. L., Bassett, K. M., Lloyd, M. W., & Johnson, J. L. (2006). Seeking forgiveness:

    Considering the role of moral emotions. *Journal of Psychology and Theology*, *34*(2),

    111–124.

Baumeister, R. (2020, February 1). Do effect sizes in psychology laboratory experiments mean

    anything in reality?. https://doi.org/10.31234/osf.io/mpw4t

Baumeister, R. F., Exline, J. J., & Sommer, K. L. (1998). The victim role, grudge theory, and

    two dimensions of forgiveness. *Dimensions of forgiveness: Psychological research and*

    theological perspectives, 79-104.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal

    attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–

    529. https://doi.org/10.1037/0033-2909.117.3.497

Berdahl, J. L., & Martorana, P. (2006). Effects of power on emotion and expression during a

    controversial group discussion. *European Journal of Social Psychology*, *36*(4), 497–509.

    https://doi.org/10.1002/ejsp.354

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in

    psychological well-being. *Journal of Personality and Social Psychology*, *84*(4), 822–848.

    https://doi.org/10.1037/0022-3514.84.4.822

Campbell, W. K., Bonacci, A. M., Shelton, J., Exline, J. J., & Bushman, B. J. (2004). Psychological entitlement: Interpersonal consequences and validation of a self-report measure. *Journal of Personality Assessment*, *83*(1), 29–45. https://doi.org/10.1207/s15327752jpa8301_04

Carver, C. S., & White, T. L. (1994). Behavioural inhibition, behavioural activation, and affective responses to impending reward and punishment: The BIS/BAS Scales. *Journal of Personality and Social Psychology*, *67*(2), 319–333. https://doi.org/10.1037/0022-3514.67.2.319

Chen, S., Lee-Chai, A. Y., & Bargh, J. A. (2001). Relationship orientation as a moderator of the effects of social power. *Journal of Personality and Social Psychology*, *80*(2), 173.

Côté, S., Kraus, M. W., Cheng, B. H., Oveis, C., van der Löwe, I., Lian, H., & Keltner, D. (2011). Social power facilitates the effect of prosocial orientation on empathic accuracy. *Journal of Personality and Social Psychology*, *101*(2), 217–232. https://doi.org/10.1037/a0023171

Darby, B. W., & Schlenker, B. R. (1982). Children's reactions to apologies. *Journal of Personality and Social Psychology*, *43*(4), 742–753. https://doi.org/10.1037/0022-3514.43.4.742

Davis, J. R., & Gold, G. J. (2011). An examination of emotional empathy, attributions of stability, and the link between perceived remorse and forgiveness. *Personality and Individual Differences*, *50*(3), 392–397. https://doi.org/10.1016/j.paid.2010.10.031

De Cremer, D. (2010). To pay or to apologize? On the psychology of dealing with unfair offers in a dictator game. *Journal of Economic Psychology*, *31*(6), 843–848. https://doi.org/10.1016/j.joep.2010.05.006

DeCelles, K. A., DeRue, D. S., Margolis, J. D., & Ceranic, T. L. (2012). Does power corrupt or enable? When and why power facilitates self-interested behaviour. *Journal of Applied Psychology*, *97*(3), 681–689. https://doi.org/10.1037/a0026811

Diener, E. (1979). Deindividuation, self-awareness, and disinhibition. *Journal of Personality and Social Psychology, 37*(7), 1160–1171. https://doi.org/10.1037/0022-3514.37.7.1160

Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin*, *94*(1), 100–131. https://doi.org/10.1037/0033-2909.94.1.100

Ent, M. R., Baumeister, R. F., & Vonasch, A. J. (2012). Power, leadership, and self-regulation. *Social and Personality Psychology Compass*, *6*(8), 619–630. https://doi.org/10.1111/j.1751-9004.2012.00446.x

Exline, J. J., Deshea, L., & Holeman, V. T. (2007). Is apology worth the risk? Predictors, outcomes, and ways to avoid regret. *Journal of Social and Clinical Psychology*, *26*(4), 479–504. https://doi.org/10.1521/jscp.2007.26.4.479

Fehr, R., Gelfand, M. J., & Nag, M. (2010). The road to forgiveness: A meta-analytic synthesis of its situational and dispositional correlates. *Psychological Bulletin*, *136*(5), 894–914. https://doi.org/10.1037/a0019993

Fiske, S. T. (1993). Controlling other people: The impact of power on stereotyping. *American Psychologist*, *48*(6), 621–628. https://doi.org/10.1037//0003-066X.48.6.621

Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, *85*(3), 453–466. https://doi.org/10.1037/0022-3514.85.3.453

Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science*, *17*(12), 1068–1074.

Galinsky, A. D., Magee, J. C., Rus, D., Rothman, N. B., & Todd, A. R. (2014). Acceleration with steering: The synergistic benefits of combining power and perspective-taking. *Social Psychological and Personality Science*, *5*(6), 627–635. https://doi.org/10.1177/1948550613519685

Galinsky, A. D., Rucker, D. D., & Magee, J. C. (2015). Power: Past findings, present considerations, and future directions. In M. Mikulincer, P. R. Shaver, J. A. Simpson, & J. F. Dovidio (Eds.), *APA handbook of personality and social psychology, Volume 3: Interpersonal relations.* (pp. 421–460). Retrieved from http://content.apa.org/books/14344-016

Gilbert, D. T., Pinel, E. C., Wilson, T. D., Blumberg, S. J., & Wheatley, T. P. (1998). Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, *75*(3), 617.

Gonzalez, M. H., Pedersen, J. H., Manning, D. J., & Wetter, D. W. (1990). Pardon my gaffe: Effects of sex, status, and consequence severity on accounts. *Journal of Personality and Social Psychology*, *58*(4), 610–621. https://doi.org/10.1037/0022-3514.58.4.610

Gordon, A. M., & Chen, S. (2013). Does power help or hurt? The moderating role of self–other focus on power and perspective-taking in romantic relationships. *Personality and Social Psychology Bulletin*, *39*(8), 1097-1110.

Handgraaf, M. J. J., Van Dijk, E., Vermunt, R. C., Wilke, H. A. M., & De Dreu, C. K. W. (2008). Less power or powerless? Egocentric empathy gaps and the irony of having little versus no power in social decision making. *Journal of Personality and Social Psychology*, *95*(5), 1136–1149. http://dx.doi.org.ezproxy.library.yorku.ca/10.1037/0022-3514.95.5.1136

Holmes, J. (1989). Sex differences and apologies: One aspect of communicative competence. *Applied Linguistics*, *10*(2), 194–213.

Hornsey, M. J., Schumann, K., Bain, P. G., Blumen, S., Chen, S. X., Gomez, A., ... & Wohl, M. J. (2017). Conservatives are more reluctant to give and receive apologies than liberals. *Social Psychological and Personality Science*, *8*(7), 827-835.

Howell, A. J., Dopko, R. L., Turowski, J. B., & Buro, K. (2011). The disposition to apologize. *Personality and Individual Differences*, *51*(4), 509–514. https://doi.org/10.1016/j.paid.2011.05.009

Howell, A. J., Turowski, J. B., & Buro, K. (2012). Guilt, empathy, and apology. *Personality and Individual Differences*, *53*(7), 917–922. https://doi.org/10.1016/j.paid.2012.06.021

Itoi, R., Ohbuchi, K.-I., & Fukuno, M. (1996). A cross-cultural study of preference of accounts: Relationship closeness, harm severity, and motives of account making. *Journal of Applied Social Psychology*, *26*(10), 913–934. https://doi.org/10.1111/j.1559-1816.1996.tb01117.x

Karremans, J. C., & Smith, P. K. (2010). Having the power to forgive: When the experience of power increases interpersonal forgiveness. *Personality and Social Psychology Bulletin*, *36*(8), 1010–1023. https://doi.org/10.1177/0146167210376761

Kato, T. (2016). Effects of partner forgiveness on romantic break-ups in dating relationships: A longitudinal study. *Personality and Individual Differences, 95,* 185–189. http://dx.doi.org/10.1016/j.paid.2016.02.050

Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, *110*(2), 265–284. https://doi.org/10.1037/0033-295X.110.2.265

Kim, P. H., Dirks, K. T., & Cooper, C. D. (2009). The repair of trust: A dynamic bilateral perspective and multilevel conceptualization. *Academy of Management Review*, *34*(3), 401–422.

Kipnis, D. (1972). Does power corrupt? *Journal of Personality and Social Psychology*, *24*(1), 33–41. https://doi.org/10.1037/h0033390

Klein, K. J. K., & Hodges, S. D. (2001). Gender differences, motivation, and empathic accuracy: When it pays to understand. *Personality and Social Psychology Bulletin*, *27*(6), 720–730. https://doi.org/10.1177/0146167201276007

Lazare, A. (2004). *On Apology*. Oxford; New York: Oxford University Press.

Lee, T. L., Fiske, S. T., Glick, P., & Chen, Z. (2010). Ambivalent sexism in close relationships: (Hostile) power and (benevolent) romance shape relationship ideals. *Sex Roles*, *62*(7-8), 583-601.

Leith, K. P., & Baumeister, R. F. (1996). Why do bad moods increase self-defeating behaviour? Emotion, risk tasking, and self-regulation. *Journal of Personality and Social Psychology, 71*(6), 1250–1267. https://doi.org/10.1037/0022-3514.71.6.1250

Lichtenfeld S., Buechner V.L., Maier M.A., Fernández-Capo, M. (2015). Forgive and forget: Differences between decisional and emotional Forgiveness. *PLOS ONE, 10*(5). https://doi.org/10.1371/journal.pone.0125561

Marjanovic, Z., Struthers, C. W., Cribbie, R., & Greenglass, E. R. (2014). The Conscientious Responders Scale: A new tool for discriminating between conscientious and random responders. *SAGE Open*, *4*(3), 2158244014545964.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224.

McCullough, M. (2008). *Beyond Revenge: The Evolution of the Forgiveness Instinct*. John Wiley & Sons.

Ohtsubo, Y., & Yagi, A. (2015). Relationship value promotes costly apology-making: Testing the valuable relationships hypothesis from the perpetrator's perspective. *Evolution and Human Behaviour*, *36*(3), 232–239.

Ohtsubo, Y., Yamaura, K., & Yagi, A. (2015). Development of Japanese measures of reconciliatory tendencies: The Japanese Trait Forgivingness Scale and the Japanese Proclivity to Apologize Measure. *Japanese Journal of Social Psychology*, *31* (2), 135-142.

Okimoto, T. G., Wenzel, M., & Hedrick, K. (2013). Refusing to apologize can have psychological benefits (and we issue no mea culpa for this research finding). *European Journal of Social Psychology*, *43*(1), 22–31. https://doi.org/10.1002/ejsp.1901

Richard, F. D., Bond, C. F., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively Described. *Review of General Psychology*, *7*(4), 331–363. https://doi.org/10.1037/1089-2680.7.4.331

Riek, B. M. (2010). Transgressions, guilt, and forgiveness: A model of seeking forgiveness. *Journal of Psychology and Theology*, *38*(4), 246.

Rueckert, L., & Naybar, N. (2008). Gender differences in empathy: The role of the right hemisphere. *Brain and Cognition*, *67*(2), 162–167. https://doi.org/10.1016/j.bandc.2008.01.002

Sanchez, D. T., Fetterolf, J. C., & Rudman, L. A. (2012). Eroticizing inequality in the United States: The consequences and determinants of traditional gender role adherence in intimate relationships. *Journal of Sex Research*, *49*(2-3), 168-183.

Sandage, S. J., Worthingon Jr, E. L., Hight, T. L., & Berry, J. W. (2000). Seeking forgiveness: Theoretical context and an initial empirical study. *Journal of Psychology and Theology*, *28*(1), 21.

Schlenker, B. R., & Darby, B. W. (1981). The use of apologies in social predicaments. *Social Psychology Quarterly*, *44*(3), 271. https://doi.org/10.2307/3033840

Schmid Mast, M., Jonas, K., & Hall, J. A. (2009). Give a person power and he or she will show interpersonal sensitivity: The phenomenon and its why and when. *Journal of Personality and Social Psychology*, *97*(5), 835–850. https://doi.org/10.1037/a0016234

Schulte-Rüther, M., Markowitsch, H. J., Shah, N. J., Fink, G. R., & Piefke, M. (2008). Gender differences in brain networks supporting empathy. *NeuroImage*, *42*(1), 393–403. https://doi.org/10.1016/j.neuroimage.2008.04.180

Schumann, K. (2014). An affirmed self and a better apology: The effect of self-affirmation on transgressors' responses to victims. *Journal of Experimental Social Psychology*, *54*, 89–96. https://doi.org/10.1016/j.jesp.2014.04.013

Schumann, K., & Dweck, C. S. (2014). Who accepts responsibility for their transgressions? *Personality and Social Psychology Bulletin*, *40*(12), 1598–1610. https://doi.org/10.1177/0146167214552789

Schumann, K., & Ross, M. (2010). Why women apologize more than men: Gender differences in thresholds for perceiving offensive behaviour. *Psychological Science*, *21*(11), 1649–1655. https://doi.org/10.1177/0956797610384150

Schumann, K. (2018). The psychology of offering an apology: Understanding the barriers to apologizing and how to overcome them. *Current Directions in Psychological Science*, *27*(2), 74–78. https://doi.org/10.1177/0963721417741709

Sell, A. N. (2011). The recalibrational theory and violent anger. *Aggression and Violent Behaviour*, *16*(5), 381-389.

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, *20*(5), 580–591.

Smith, P. K., Smallman, R., & Rucker, D. D. (2016). Power and categorization: Power increases the number and abstractness of categories. *Social Psychological and Personality Science*, *7*(3), 281–289. https://doi.org/10.1177/1948550615619760

Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, *89*(6), 845–851. https://doi.org/10.1037/0022-3514.89.6.845

Struthers, C. W., Khoury, C. H., Phills, C. E., van Monsjou, E., Guilfoyle, J. R., Nash, K., . . . Summers, C. (2019). The effects of social power and apology on victims' posttransgression responses. *Journal of Experimental Psychology: Applied, 25*(1), 100-116. http://dx.doi.org/10.1037/xap0000188

Tavuchis, N. (1991). *Mea Culpa: A Sociology of Apology and Reconciliation*. Stanford University Press.

Ting-Toomey, S., Gao, G., Trubisky, P., Yang, Z., Soo Kim, H., Lin, S., & Nishida, T. (1991). Culture, face maintenance, and styles of handling interpersonal conflict: A study in five cultures. *International Journal of Conflict Management*, *2*(4), 275 - 296. https://doi.org/10.1108/eb022702

Torelli, C. J., & Shavitt, S. (2010). Culture and concepts of power. *Journal of Personality and Social Psychology*, *99*(4), 703–723. https://doi.org/10.1037/a0019973

van Monsjou, E., Struthers, C. W., Khoury, C., Guilfoyle, J. R., Young, R., Hodara, O., & Muller, R. T. (2015). The effects of adult attachment style on post-transgression response. *Personal Relationships*, *22*(4), 762-780. https://doi.org/10.1111/pere.12106

Walfisch, T., Van Dijk, D., & Kark, R. (2013). Do you really expect me to apologize? The impact of status and gender on the effectiveness of an apology in the workplace. *Journal of Applied Social Psychology*, *43*(7), 1446–1458. https://doi.org/10.1111/jasp.12101

Woodyatt, L., & Wenzel, M. (2013). The psychological immune response in the face of transgressions: Pseudo self-forgiveness and threat to belonging. *Journal of Experimental Social Psychology*, *49*(6), 951–958. https://doi.org/10.1016/j.jesp.2013.05.016

Worthington EL. Forgiveness and reconciliation: Theory and application. New York, NY: Routledge; 2006.

Zechmeister, J. S., & Romero, C. (2002). Victim and offender accounts of interpersonal conflict: Autobiographical narratives of forgiveness and unforgiveness. *Journal of Personality and Social Psychology*, *82*(4), 675–686. https://doi.org/10.1037/0022-3514.82.4.675

Zheng, X., van Dijke, M., Leunissen, J. M., Giurge, L. M., & De Cremer, D. (2016). When saying sorry may not help: Transgressor power moderates the effect of an apology on forgiveness in the workplace. *Human Relations*, *69*(6), 1387–1418. http://dx.doi.org/10.1177/0018726715611236

Appendix

Study 2: Exploratory Analyses of Gender as a Moderator of Power and Apology

Given the traditional and cultural associations between social power and gender, exploratory analyses were conducted in all studies to determine if gender moderated the relationship between power and apology. Studies 1 and 3 – 5 tests of moderation were nonsignificant suggesting no interaction effects between power and gender.

The exception was Study 2. The purpose of Study 2 was to test the main effect of transgressors' power on apology and non-apology. Exploratory analyses found the effects of power interacted with gender to produce differential effects on both and apology and non-apology. Two separate 2 (power: high, low) x 2 (gender: men, women) ANOVA were conducted. A significant interaction effect of power and gender was found for both, apology, $F(1, 123) = 5.20$, $p = 0.02$, $\eta_p^2 = 0.04$ (Figure A1), and non-apology, $F(1, 123) = 6.10$, $p = .01$, $\eta_p^2 = 0.04$ (Figure A2).

The simple main effects were then explored. High-power at each level of gender demonstrated a between-group difference for men and women $t(21.43) = -2.50$, 95% C.I. [-1.21, -.11], $p = .02$, $d = 0.78$. High-power transgressors who identify as women ($M = 6.31$, $SD = 0.82$) were more apologetic than high-power transgressors who identify as men ($M = 5.65$, $SD = 0.92$). Similarly, there was a between-group difference for high-power transgressors at each level of gender for non-apology, $t(19.91) = 2.40$, 95% C.I. [0.10, 1.40], $p = .03$, $d = 0.79$. High-power transgressors that are men ($M = 2.84$, $SD = 1.10$) were more willing to engage in non-apology than high-powered transgressors that are women ($M = 2.09$, $SD = 0.90$). When considering low-power at each level of gender, no significant difference was found between men and women for apology, $t(22.68) = 0.19$, $p = .85$, $d = 0.05$ and non-apology, $t(20.40) = -0.68$, $p = .50$, $d = -.21$.
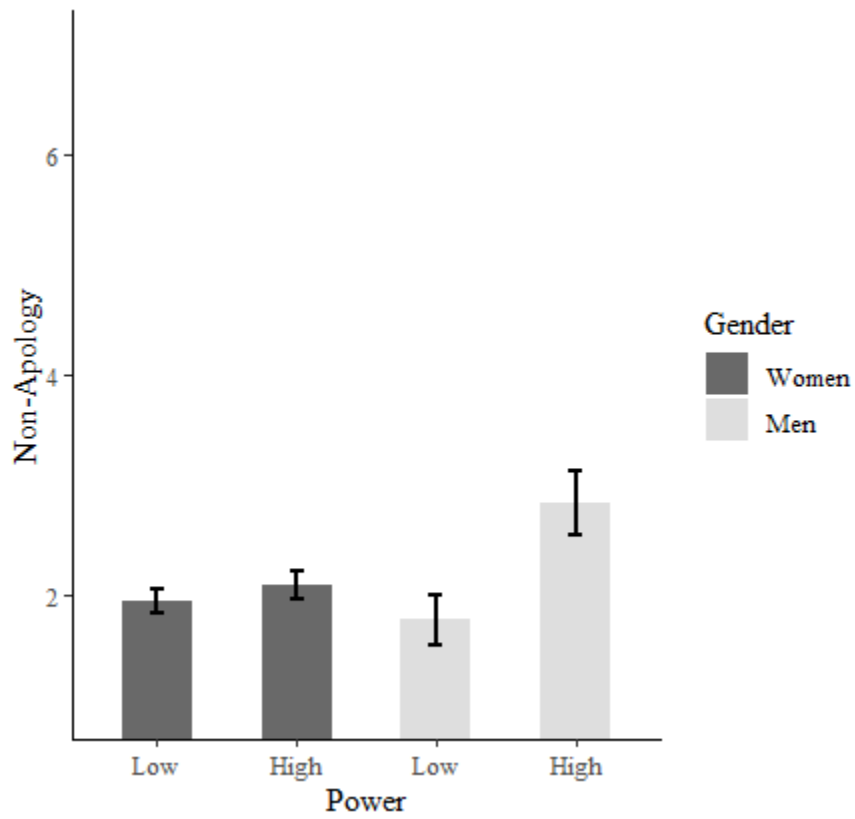
Next, men were explored at each level of power. For men, those with high-power (M = 5.65, SD = 0.92) were significantly less likely to apologize than men with low-power (M = 6.54, SD = 0.52), $t(22.42)$ = -3.24, C.I. 95% [-1.45, -0.32], d = 1.18. Similarly, men with high-power (M = 2.84, SD = 1.10) were significantly more likely than men with low-power (M = 1.78, SD = 0.82) to engage in non-apology $t(25.81)$ = 2.94, C.I. 95% [0.32, 1.80], $p < .01$, d = 1.08. Women at each level of power showed no effect for apology $t(87.09)$ = -1.42, C.I. 95% [-.48, 0.08], p = .16, d = -.28, and non-apology, $t(95.18)$ = 0.84, C.I. 95% [-0.19, 0.48], p = 0.40, d = .17. The key difference between Study 2 and all other studies it that the transgression stimuli was an act of romantic infidelity. These issues are expanded on in the general discussion.

Figure A1

Study 2: Effect of power and gender on apology
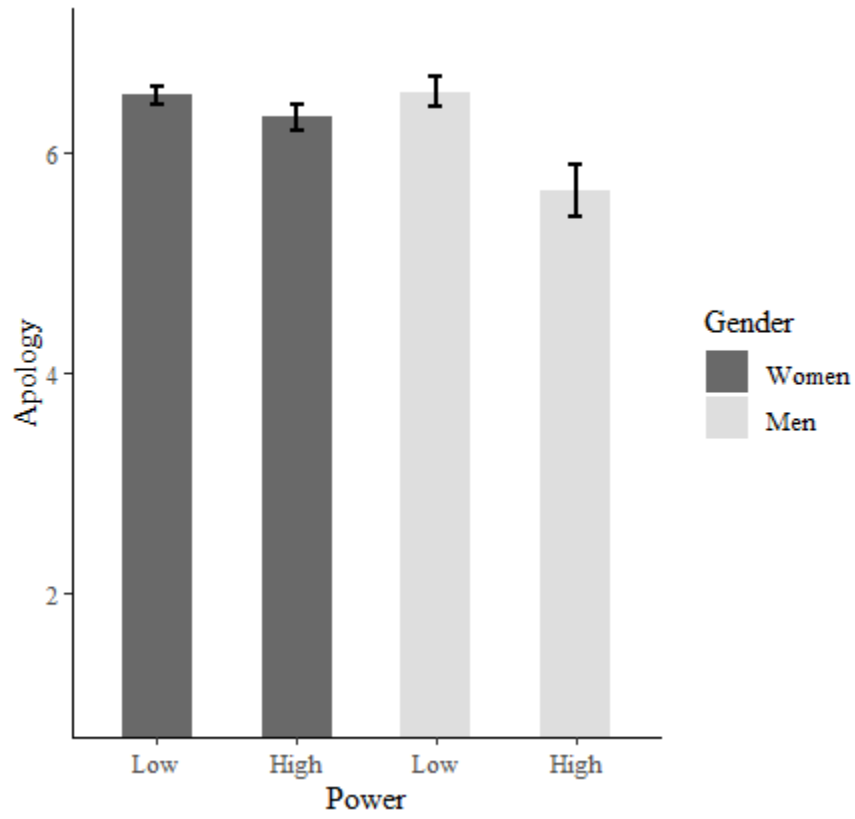
Note. Error bars represent standard error

Figure A2
Study 2: Effect of power and gender on non-apology

Note. Error bars represent standard error.