The Role of Psychological Distance in Forgiveness

by

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Author’s Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.
Abstract

My aim in the present research was to expand the literature on how to promote forgiveness by considering the role of psychological distance. Participants responded to interpersonal conflict vignettes in six experiments. In Experiment 1, using a measurement-of-mediation design, I found that participants were more motivated to forgive when the transgression was temporally distant versus near to them. Furthermore, high-level construal mediated the positive effect of temporal distance on forgiveness. Experiment 2a demonstrated that physically distancing a transgression resulted in high-level construal, and Experiment 2b showed that individuals primed with a high-level construal versus a low-level construal were more motivated to forgive their transgressor. Together, Experiments 2a and 2b confirmed a causal chain between physical distance, construal level, and forgiveness. In Experiment 2c, I found that participants were more forgiving when the transgression was physically distant rather than near to them. In Experiment 2d, I replicated the direct effect of physical distance on forgiveness, and ruled out alternative explanations for the effect. In Experiment 3, using a measurement-of-mediation design, I found that reduced memory of event details, lower perceptions of event severity, and lower attributions of blame towards the offender mediated the effect of construal level on forgiveness. Taken together, my research demonstrates that increasing the psychological distance between the transgression and the victim promotes forgiveness due to high-level (versus low-level) construal. Furthermore, construal level has an effect on forgiveness by altering perceptions and judgments that people have about transgressions. My research has implications for literatures on construal level theory and forgiveness.
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CHAPTER 1

INTRODUCTION

People differ in how they respond to transgressions. Often times, they avoid, punish, or seek revenge against their transgressors (McCullough, Worthington, & Rachal, 1997). Such reactions can, however, have negative interpersonal, psychological, and health effects (McCullough, Root, & Cohen, 2006). For example, feeling avoidant and vengeful toward one’s transgressor can prevent the restoration of the relationship (McCullough, Rachal, Sandage, Worthington, Brown, & Hight, 1998), and reduce the victim’s life satisfaction and well-being (McCullough, 2001). Other times, people forgive their transgressors, a response that prompts relationship repair (McCullough, 2001) and is associated with positive effects for victims (e.g., increased physical health, psychological health, and ability to cope with stress; Lawler, Younger, Piferi, Jobe, Edmondson, & Jones, 2005) as well as offenders (e.g., individuals who receive forgiveness are less likely to re-offend and more likely to repent; Wallace, Exline, & Baumeister, 2008).

Not surprisingly, given the benefits, much research has investigated the social psychological determinants of forgiveness (e.g., Fehr, Gelfand, & Nag, 2010). Forgiveness has been shown to depend on both situational and dispositional factors (see Fehr et al., 2010, for a recent comprehensive review). For example, forgiveness is more likely when the offender sincerely apologizes (e.g., McCullough et al., 1998), and when the victim empathizes with (e.g., McCullough et al., 1998), likes (e.g., Bradfield & Aquino, 1999), or is in a close relationship with the offender (e.g., Karremans & Aarts, 2007). Research on dispositional predictors reveals a positive relation with victim agreeableness (e.g., McCullough & Hoyt, 2002), and perspective taking (e.g., Brown, 2003), and a negative
relation with victim neuroticism (e.g., Eaton, Struthers, & Santelli, 2006). More recently, researchers have begun to investigate the cognitive factors that promote forgiveness. For example, McCullough and colleagues (2006) found that people who focused their attention on finding the benefits of an interpersonal transgression were more forgiving of their transgressors than people who focused on the traumatic features of an interpersonal transgression. I extend the work on the cognitive determinants of forgiveness in a novel direction by considering the role of psychological distance. In essence, I examine whether forgiveness can be promoted by psychologically distancing a transgression from the victim’s point of self.

The construal level theory (Trope & Liberman, 2003, 2010) defines psychological distance as the subjective experience that an event (or a target) is close to, or far from, the self. It is associated with how abstractly the event (or target) is construed or mentally represented. As psychological distance between the self and the event (or target) increases, people use higher levels of construal to mentally represent the event (or target). As a result, individuals represent psychologically distant events (or target) by their essential, abstract, and global features (high-level construal), and psychologically near events (or target) by their peripheral, concrete, and local features (low-level construal). Furthermore, high-level mental representations involve broad and global processing, where individuals think in depth and move past the details and severity of the event. In contrast, lower-level mental representations involve narrow and individuating processing, where people think on the surface and focus on facts or whatever information is available.

Drawing on the tenets of the construal level theory and its related research, I reasoned that psychological distance will enhance victim forgiveness. As a transgression becomes
subjectively removed from the self, victims should construe the event at a higher and more abstract level. Accordingly, they should move past the details and severity of the offense, and attribute less blame to the offender. In contrast, when a transgression is psychologically near to the self, victims should construe the event at a lower and more concrete level. Accordingly, they should focus more on the details and severity of the transgression, and attribute more blame to the offender. Thus, forgiveness should be reduced for psychologically near transgressions relative to far, and this should be due to a more concrete and lower level of mental representation of the event.

Note, according to the construal level theory (Trope & Liberman, 2003, 2010), psychological distance can be operationalized as temporal distance (e.g., Burrus & Roese, 2006). Thus, prior research on time and forgiveness is consistent with my hypothesis. Research has demonstrated that victims are more motivated to forgive with the objective passage of time (e.g., McCullough, Fincham, & Tsang, 2003; McCullough, Luna, Berry, Tabak & Bono, 2010), as well as with increases in subjective perception of time (e.g., Cheung & Olson, 2013; Wohl & McGarth, 2007). However, the psychological mechanisms underlying the effect of temporal distance on forgiveness are not well understood (McCullough et al., 2010), as there is minimal research on possible process variables (Wohl & McGarth, 2008; Study 3). I suggest that the effect of time on forgiveness may be interpreted from the perspective of construal level theory (Trope & Liberman, 2003, 2010). Thus, I will make such an interpretation, and broadly examine the role of psychological distance and construal level in promoting forgiveness.

I present the theoretical rationale underlying the present research and the hypotheses that I tested in Chapter 2. Essentially, I first review the concept of forgiveness and past
empirical research examining predictors of forgiveness. I then discuss the need to examine psychological distance in the study of forgiveness, and introduce the reader to construal level theory and its related research. Finally, I integrate the literatures on construal level theory and forgiveness to present the hypotheses tested in the present research.

In Chapter 3, I present the methods and results of six experiments I conducted to test my research hypotheses. In Chapter 4, I discuss the implications of my findings for construal level and forgiveness literatures. I also note some limitations of my research, and discuss some avenues for future research.
Definitions and Benefits of Forgiveness

Forgiveness is a complex construct, making it difficult to define (Wenzel & Okimoto, 2010). In the last few decades, researchers have sought to specify what they mean by the term forgiveness (McCullough et al., 2003). For example, Tangney, Fee, Reinsmith, Boone, and Lee (1999) regarded forgiveness as a cognitive-affective transformation following a transgression where the victim considers the harm done and acknowledges the transgressor’s responsibility, but decides to “cancel the debt” by foregoing the necessity for revenge, punishment, or retribution. This “cancelling of the debt” includes the release of the negative emotions directly associated with the transgression, allowing the victim to forgive the transgressor. Similarly, Aquino, Tripp, and Bies (2001) referred to forgiveness as the internal act of relinquishing anger, resentment, and the desire to seek revenge against an offender. Enright and colleagues (e.g., Enright & Coyle, 1998; Enright, Freedman, & Rique, 1998) defined forgiveness as a “willingness to abandon one’s right to resentment, negative judgment, and indifferent behavior toward one who unjustly hurt the victim, while fostering the undeserved qualities of compassion, generosity, and even love towards him or her” (Enright et al., 1998, pp. 46-47). McCullough, Worthington, and Rachal (1997) conceptualized forgiveness as a constellation of pro-social changes in people’s transgression-related interpersonal motivations toward a transgressor, such that when people forgive a transgressor, they become less motivated by revenge and avoidance, and more motivated by benevolence. In summary, there exist many definitions of forgiveness in the literature. However, these definitions are built on one core feature: “When people forgive, their
responses (i.e., what they feel and think about, what they want to do, or how they actually behave) towards people who have offended them or injured them become less negative and more positive or pro-social” (McCullough & vanOyen Witvliet, 2002, pp. 447).

Forgiveness is associated with numerous beneficial outcomes (Fehr et al, 2010). For example, forgiveness can result in better mental health, operationalized as a reduction in depression, anxiety, and hostile anger characteristic of Type A behavior (for review, see McCullough, Sandage, & Worthington, 1997). Forgiveness can also increase psychological well-being, operationalized as low negative emotion, high positive emotion, high life satisfaction, and low self-reported physical health symptoms (Bono, McCullough, & Root, 2008). Additionally, forgiveness restores a victim’s sense of meaning in life (e.g., Van Tongeren et al., 2015). It can lead to reconciliation between the victim and offender (e.g., Karremans & Van Lange, 2004), and can foster a more generalized pro-social orientation beyond the victim-offender relationship (e.g., Karremans, Van Lange, & Holland, 2005). Forgiveness has also been shown to positively predict relationship satisfaction among married couples (e.g., Fincham, Hall, & Beach, 2006), non-married romantic couples (e.g., Paleari, Regalia, & Fincham, 2005), as well as within families (e.g., Maio, Thomas, Fincham, & Carnelley, 2008). In terms of group outcomes, forgiveness promotes collective action among in-group members through group cohesiveness and the transgressor’s apologetic reactions (e.g., Irwin, Tsang, Carlisle, & Shen, 2014). Within organizational settings, forgiveness can aid in maintaining relationships and fostering continued cooperation to the benefit of long-term organizational goals (e.g., Aquino, Grover, Goldman, & Folger, 2003).
Research Examining Predictors of Forgiveness

The benefits associated with forgiveness have motivated scholars to investigate the dispositional and situational predictors of forgiveness (see Fehr et al., 2010, for a recent comprehensive review). Some of the dispositional variables that have been associated with forgiveness include victim agreeableness (e.g., McCullough & Hoyt, 2002), emotional empathy (e.g., Wade & Worthington, 2003), perspective taking (e.g., Exline, Baumeister, Zell, Kraft, & Witvliet, 2008), self-esteem (e.g., Eaton, Struthers, & Santelli, 2006), trait forgiveness (Mischel & Shoda, 1995), happiness (e.g., Jiang, Yue, Lu, & Yu, 2015), executive functioning (Pronk, Karremans, Overbeek, Vermulst, & Wigboldus, 2010), as well as victim beliefs such as religiosity (e.g., McCullough & Willoughby, 2009). Forgiveness is also fostered when a victim’s regulatory focus (i.e., promotion versus prevention) is congruent with the regulatory focus of a transgressor’s repentance (i.e., promotion versus prevention; Santelli, Struthers, & Eaton, 2009). Research demonstrates a negative association between forgiveness and victim neuroticism (e.g., Eaton et al., 2006), negative mood states (e.g., Skarlicki, Folger, & Tesluk, 1999; Aquino, Bies, & Tripp, 2006), and depression (e.g., Orth, Robins, & Roberts, 2008).

Important situational factors that enhance forgiveness include victim-offender relationship factors such as closeness (e.g., Karremans & Aarts, 2007), commitment (e.g., Finkel, Rusbult, Kumashiro, & Hannon, 2002), and satisfaction (e.g., Fincham, Paleari, & Regalia, 2002). Forgiveness can be induced by offender apology (e.g., McCullough et al., 1998), and offers of restitution (e.g., Carlisle et al., 2012). It can be promoted by compassionate reappraisal coping (e.g., vanOyen Witvliet, Mohr, Hinman, & Knoll, 2015), expressive writing (e.g., Barclay & Saldanha, 2015), and a restored sense of justice (e.g.,
Wenzel & Okimoto, 2014). Perceptions of overall organizational justice (e.g., Bobocel, 2013), independent self-construal (e.g., Bobocel & Zdaniuk, 2010), and leadership style (e.g., Zdaniuk & Bobocel, 2015) also facilitate forgiveness. Forgiveness is inversely related to perceived severity of the transgression (e.g., Boon & Sulsky, 1997), greater attributions of blame (e.g., Aquino et al., 2001), perceived intentionality of the transgressor (e.g., Wohl & Reeder, 2004), state anger (e.g., McCullough et al., 2003), threatened state self-esteem (e.g., Strelan & Zdaniuk, 2015), and victim rumination (e.g., McCullough, Bono, & Root, 2007).

More directly relevant to the present research, scholars have also suggested that forgiveness increases with the objective passage of time. For example, McCullough et al. (2003) found that people’s motivation to forgive their transgressors increased as more time elapsed since the transgressions. They referred to this temporal change in forgiveness as trend forgiveness, which was found to be directly related to victims’ initial responsibility attributions of the transgressors. The researchers stated that “viewing transgressors as responsible for their actions in the earliest days following a transgression helps victims to engage in active attempts to rid themselves of unpleasant negative feelings and motivations regarding the transgressor” (pp. 549).

Furthermore, in two longitudinal studies, McCullough and colleagues (2010) found a logarithmic function between forgiveness and time since the transgression. That is, within three months of a transgression, people become approximately seven times less likely to endorse a negatively-worded item about the transgressor, suggesting that as temporal distance from a transgression increases, forgiveness also increases (for other correlational evidence, see Aquino et al., 2006; McCullough et al., 2003; Worthington et al., 2000).
In experimental research, Wohl and McGarth (2007) examined how the perceived passage of time between the transgression and the present affects victims’ willingness to forgive their transgressors. The researchers manipulated the subjective temporal distance of a transgression by varying a timeline that was anchored from recent past (temporally near) or distant past (temporally distant) to present. Participants were asked to indicate the occurrence of the transgression anywhere between those anchors. As expected, participants who perceived a hypothetical (Studies 1 and 2) or a real transgression (Study 3) to be farther in the past reported more willingness to forgive than those who perceived the transgression as closer to the present. In Study 3, Wohl and McGarth (2007) also found that participants reported greater empathy for their transgressor in the temporally distant (versus near) condition and that empathy mediated the effect on forgiveness.

In a similar vein, Cheung and Olson (2013) examined the effect of subjective temporal distance on forgiveness as a function of whether participants were victims themselves (first-party) or someone close to them was the victim (third-party). The researchers found that participants were relatively unforgiving of third-party transgressions regardless of subjective time. In contrast, participants were more forgiving of first-party transgressions in the temporally distant condition versus in the temporally near condition. Thus, people appeared to be more forgiving of transgressions against themselves than transgressions against close others in the distant condition. Cheung and Olson (2013) reasoned that this was perhaps because when individuals are victims rather than observers of transgressions, they pay attention to the subjective elapsed time in order to facilitate forgiveness as they want to repair their relationship with the transgressor.
Thus, past research has demonstrated a positive effect of temporal distance on forgiveness. The psychological mechanisms underlying the effect of temporal distance on forgiveness are not clear (McCullough et al., 2010), as there is minimal research on possible process variables (e.g., Wohl & McGarth, 2007, Study 3). In the present research, I suggest that the effect of time on forgiveness may be interpreted from the perspective of construal level theory, which incorporates the concept of temporal distance within a broader framework for understanding the effects of psychological distance on people’s construal of events and subsequent reactions. ²

Central Tenets of Construal Level Theory ³

Construal level theory (Trope & Liberman, 2003, 2010) is a prominent theory in social and cognitive psychology that describes how people mentally represent events (or targets). According to the theory, people’s mental representations of events (or targets) differ as a function of the psychological distance between the event (or target) and the self. Psychological distance refers to the subjective experience that an event (or a target) is close to, or far from, the self. There are four psychological distance dimensions: (a) spatial: the physical distance between the event and oneself; (b) temporal: how much time separates the event from oneself; (c) social: the similarity or dissimilarity between a target and oneself; and (d) hypotheticality: how likely the event is to transpire, or how close it is to the perceiver’s reality (Bar-Anan, Liberman, Trope, & Algom, 2007). All four psychological distance dimensions correspond to the distinct ways in which an event or a target can be removed from the self (Stephan, Liberman, & Trope, 2010). People traverse these dimensions by using similar mental construal processes, as all are anchored at the same point of the self, which is here and now. As a result, the dimensions of psychological distance are
inter-connected, such that events that are psychologically distant on one dimension are judged to be distant on other dimensions as well (Yan, 2014).

Construal level theory (Trope & Liberman, 2003, 2010) states that as individuals become removed from the direct experience of an event, information about the event becomes less available, leading people to rely on schematic, prototypical information (Fujita, Henderson, Mar lone, Eng, Trope, & Liberman, 2006). Consequently, research indicates that individuals represent psychologically distant events with abstract, high-level construals and psychologically near events with concrete, low-level construals (Jia, Hirt, & Karpen, 2006).

High-level construals are abstract, schematic, and de-contextualized representations that include superordinate and omit incidental features of the event. They are associated with abstract, broad and global processing (see Liberman & Forster, 2009), in which individuals attend to information as a gestalt (e.g., Mok & Morris, 2012). When processing information abstractly or globally, people extract the gist or the primary facets of information about an event, which provides deeper meaning (Smith & Trope, 2006). Additionally, abstract, global processing increases interpersonal sensitivity (e.g., Schmid Mast, Jonas, & Hall, 2009), defined as correctly assessing another person with regard to their personality, emotions, thoughts, or intentions (Hall & Bernieri, 2001), as well as how appropriately one responds to others (Hall & Andrzejewski, 2009). In contrast, low-level construals are concrete, unstructured, and contextualized representations that include subordinate and incidental features of events. They involve concrete, narrow, and individuating processing, where people think on the surface and focus on concrete details (e.g., Darwent, Fujita, & Warslak, 2010). To illustrate high- and low-level construals, Trope, Liberman, and Wakslak (2007) give an example of two children who are playing catch in a backyard. They state “a low-level
construal of this activity might include such details as the age of the children, the color of the balls, and the temperature outside. In contrast, a high-level construal of this activity might simply be having fun.” (pp. 84).

The effects of psychological distance on construal level have been demonstrated in many studies, across all four dimensions of psychological distance (for review, see Liberman & Trope, 2010). For example, Liberman and Trope (1998) showed that people used more high level, why restatements (e.g., “maintaining a place to live”) than low level, how restatements (e.g., “writing a check”) when target activities (e.g., “paying the rent”) were described to occur in the distant future rather than the near future. Similarly, Fujita, Henderson, Eng, Trope, and Liberman (2006) found that when participants imagined engaging in behaviors at a spatially distant or near location, they identified behaviors (e.g., “locking a door”) in terms of their superordinate end states (e.g., “securing the house”) rather than the subordinate means (“putting a key in the lock”) by which the action is performed. In more recent research, Magee, Milliken, and Lurie (2010) found that position power (which induces social distance) was positively related to the use of language that was more abstract (versus concrete) and positive (versus negative) in their verbatim reactions to the events of September 11, 2011. Of note, the positive valence observed in distant conditions corroborates construal level theory’s prediction that details of an event are less accessible as distance increases. Thus, when events are negative, a high-level construal, which abstracts up from the relevant details, should be less negative. When events are very positive, a high-level construal will abstract up from relevant positive details, and therefore should be less positive (Magee et al., 2010).
In addition to demonstrating the effects of psychological distance on construal level, researchers have also demonstrated corresponding effects of psychological distance on judgment and behavior. For example, Trope and Liberman (2003) reasoned that desirability judgments involve the value of the action’s end state (a high-level construal feature), while feasibility issues involve the means used to reach the end state (a low-level construal feature). As predicted, the researchers found that desirability concerns receive greater weight over feasibility concerns in psychologically distant versus near conditions. For example, as temporal distance from an activity (e.g., attending a guest lecture) increased, the attractiveness of that activity to participants was determined more by its desirability (e.g., how interesting the lecture was) and less on its feasibility (e.g., how convenient the timing of the lecture was). Similarly, Eyal, Liberman, Trope, and Walther (2004) found that participants generated more pros and fewer cons for actions (e.g., introducing a new examination procedure) as temporal distance increased. This is because cons are subordinate to pros when determining whether to pursue an action, and should therefore be more salient in psychologically near conditions, whereas pros should be more salient as psychological distance increases (Trope & Liberman, 2003). Namkoong and Henderson (2014) found that people were less uncertain about the causes of a negative event (a mass shooting) when the event was framed as being temporally distant versus close to them. This was because construing the event more abstractly created a more simplified understanding of the event, which in turn decreased people’s uncertainty about why the event occurred.
My Research: Integrating Psychological Distance, Construal Level, and Forgiveness

Drawing on construal level theory (Trope & Liberman, 2003, 2010), I hypothesized that psychologically distancing a transgression from the victim will induce a high-level (versus low-level) construal, which will in turn foster (versus reduce) motivation to forgive.

H1: Construal level mediates the relation between psychological distance and forgiveness.

I build on previous research on construal level theory that demonstrates that negative events can be perceived as less negative when construed at a higher level (Magee et al., 2010) because concrete details are less accessible (e.g., Jia, Hirt, & Karpen, 2009). I argue that with reduced event details and perceived negativity of events, victims should perceive psychologically distanced transgressions as less severe. In turn, victims should attribute less blame to their transgressors, which in turn will foster forgiveness.

H2: Memory of event details, event severity, and offender blame mediate the relation between construal level and forgiveness.

In line with my reasoning, past forgiveness research has demonstrated a positive relation between severity of a transgression and attributions of offender blame (e.g., Bradfield & Aquino, 1999; Lerner & Miller, 1978; Vidmar & Crinklaw, 1974). This relation is said to exist for two reasons. First, individuals think that there is stability in the social order, and that unpleasant incidents only take place because someone or something is accountable for them (Miller & Vidmar, 1981). Second, severity emphasizes the intentionality of the offenders. Individuals are found responsible for an event if they intentionally committed the actions that resulted in the negative event, and there are no
extenuating circumstances that could exempt them from their action (see Bradfield & Aquino, 1999).

Additionally, prior forgiveness research has demonstrated a negative association between attributions of offender blame and forgiveness cognitions and behaviors (e.g., Aquino et al., 2001; Boon & Sulsky, 1997; Fincham, 2000; McCullough, 2001; Weiner, 1995; Wenzel, Turner, & Okimoto, 2010). It is reasoned that forgiveness becomes easier as the degree of responsibility decreases (e.g., Fincham, 2000; McCullough et al., 2003) because lower attributions of blame for the offender’s behaviors decrease negative affective reactions and increase offender-focused emotional empathy (e.g., Fincham et al., 2002). Weiner (1995) asserts that “perceptions of responsibility and non-responsibility for events and states have respective linkages to emotions of anger and empathy” (p. 21), which determines how to react to offenders.

In summary, a high-level (versus low-level) construal of a transgression will foster forgiveness via reduction in accessibility of event details, lower perceptions of severity, and lower attributions of blame towards the offender. Although my purpose in the present research was to examine whether psychological distance promotes forgiveness via high-level construal, I also provide an initial test of my ideas regarding the relation between construal level and forgiveness in Experiment 3.

**Overview of the Experiments**

To test Hypothesis 1, I used a measurement-of-mediation design (Spencer, Zanna, & Fong, 2005) to examine whether construal level is a possible mediator for the effect of temporal distance on forgiveness (Experiment 1). Measurement-of-mediation designs measure the mediator variable after the manipulation of the independent variable to
demonstrate that the independent variable affects the mediator variable, which in turn affects the dependent variable (Spencer et al., 2005). Thus, I manipulated the temporal distance of a transgression, and assessed construal level and forgiveness towards the offender. If my hypothesized effect occurs with temporal distance, then my findings will add credibility to the idea that psychological distance and construal level play a role in not only explaining the effects of time on forgiveness observed in prior research, but also on forgiveness in general.

To provide further support for Hypothesis 1, I conducted two additional experiments to examine whether a causal chain exists between physical distance, construal level, and forgiveness. As argued by Spencer, Zanna, and Fong (2005), one way to garner support for a proposed psychological process is to demonstrate a causal chain between the independent variable (A), the proposed process variable (B), and the outcome variable (C). In a first experiment, the independent variable is manipulated and the proposed psychological process is assessed. Thus, a causal relation between A and B is demonstrated. In a second experiment, the proposed psychological process is manipulated, and the outcome variable is assessed. Thus, a causal relation between B and C is shown. Together, these two experiments “provide strong evidence for the theoretically proposed psychological process even though they do not test for mediation statistically” (Spencer et al., 2005, p. 846). Therefore, in Experiment 2a, I manipulated the physical distance of a transgression and assessed construal level. In Experiment 2b, I manipulated construal level and assessed motivation to forgive.

Given that I am the first to manipulate physical distance in the context of transgressions, I followed Experiments 2a and 2b with Experiment 2c where I again manipulated the physical distance of the transgression and examined the direct effect on forgiveness. Furthermore, in manipulating the physical distance of the transgression in
Experiments 2a and 2c, I may have varied the perceptions that individuals have about the transgression, thereby influencing forgiveness. Thus, in Experiment 2d, I manipulated the physical distance of a transgression, assessed forgiveness, and ruled out alternative explanations for the effect of physical distance on forgiveness.

If my hypothesized effects are evident across temporal distance and physical distance, then together Experiments 1, 2a, 2b, 2c, and 2d support the idea that psychological distance indeed plays a role in promoting forgiveness via construal level.

Finally, in Experiment 3, I began to explore the psychological process by which higher (versus lower) levels of construal fosters forgiveness. In particular, I tested Hypothesis 2 by examining whether a higher construal level promotes forgiveness by reducing the extent to which individuals remember event details, which in turn should lower their perceptions of event severity and their attributions of blame toward the offender.
CHAPTER 3

SIX EXPERIMENTS THAT TEST THE RESEARCH HYPOTHESES

Experiment 1

Method

Participants and design. One hundred and twelve individuals were recruited from CrowdFlower, an online crowd-sourcing platform soliciting research participants. Participants were required to 1) reside in the US or Canada, 2) be over the age of 18 years, and 3) work full time. Fifteen persons did not qualify for the study as they indicated that they worked part time, and eighteen individuals were determined to be duplicates as they responded to the survey twice. Thus, these data were not analyzed, resulting in a sample size of 79 (47 females; age range was 20-71 years). Participants were given $.50 for their participation. They were randomly assigned to one of two conditions: temporally near or temporally distant.

Procedure. Participants were told that the purpose of the study was to examine people’s thoughts about workplace issues. After consenting to participate, individuals were asked to read a situation (adapted from Struthers, Dupuis, & Eaton, 2005) and imagine that the event happened to them. In the situation, the participant’s co-worker takes credit for a joint project. The event was framed as occurring either one month (temporally near) or two years ago (temporally distant). The situation read as follows:

About [I month ago OR 2 months ago], your boss asked you and your co-worker, Pat, to work on a project. You and Pat were to present the results of the project at the company meeting. You and Pat worked on the project. On the day of the presentation,
you were absent. Pat presented the project anyway. Your boss was thrilled, and Pat took more credit for the project work than s/he should have.

After reading the situation, participants responded to the measures (below). They were debriefed and thanked for participating.

**Measures.**

**Construal level.** Construal level was assessed using a shortened version of the 25-item Behavioral Identification Form, which assesses the level at which individuals represent actions (BIF; Vallacher & Wegner, 1989). The short BIF (Alter, Oppenheimer, & Zemla, 2010) comprises 13 items which require participants to describe an action (e.g., reading) by choosing one of two options. One option presents a concrete (low-level) representation (e.g., following lines of print); the other presents an abstract (high-level) representation (e.g., gaining knowledge). The BIF is commonly used in prior research to demonstrate the effect of psychological distance manipulations on construal level (e.g., Alter et al., 2010; Fujita, Trope, Liberman, & Levin-Sagi, 2006; Smith & Trope, 2006). Following past research, if my manipulation of temporal distance results in high-level (versus low-level) construal as I hypothesized, then participants should report a greater (versus lower) number of abstract action identifications.

**Forgiveness.** Motivation to forgive was assessed using the Benevolence subscale of the Transgression-Related Interpersonal Motivations Inventory (McCullough et al., 2006). The Benevolence subscale comprises six items that measure the desire for good to come to the transgressor (e.g., “I would forgive Pat for what s/he did to me” or “Although Pat hurt me, I would put aside my hurt so that we can resume our relationship”). The items were rated
on a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree), and showed high internal consistency (α = .95). Thus, I created a composite by averaging the items.

**Temporal distance.** To check my manipulation of temporal distance, I assessed participants’ subjective experience of distance; they were asked to indicate when the event felt like it took place, on a 10-point scale ranging from 1 (very recently) to 10 (a long time ago).

**Results and Discussion**

**Preliminary analyses.** I examined the possible effects of participant gender and age in the present and subsequent studies in the dissertation. These variables are theoretically or empirically associated with forgiveness, but were not of primary interest in my studies. Age was examined as it has been positively related to forgiveness in past research (e.g., Darby & Schlenker, 1992; Mullet, Houdbine, Laumonier, & Girard, 1998). Gender has also been associated with forgiveness, such that women are more forgiving than their male counterparts (e.g., Miller, Worthington, & McDaniel, 2008).

No effect of participant gender or age was found across all six experiments. Therefore, these variables are not discussed further. The results presented throughout the dissertation do not control for participant gender or age.

A one-way ANOVA revealed that participants in the temporally distant condition felt that the event took place a longer time ago ($M = 5.61, SD = 2.76$) relative to participants in the temporally near condition ($M = 3.66, SD = 2.24$). $F(1,78) = 11.80, p = .001, \eta^2_p = .13$. Thus, the manipulation of temporal distance successfully induced the subjective experience of distance.
Main analyses.

Forgiveness. A one-way ANOVA revealed that participants were more motivated to forgive their co-worker in the temporally distant condition ($M = 3.45, SD = .77$), compared with the temporally near condition ($M = 3.02, SD = .98$), $F(1,78) = 4.80, p = .032, \eta_p^2 = .06$. This main effect of temporal distance on forgiveness replicates prior research on time and forgiveness (e.g., Wohl & McGarth, 2007), as discussed earlier.

Construal level. A one-way ANOVA revealed that participants in the temporally distant condition reported a greater number of abstract action identifications ($M = 9.29, SD = 2.63$) than participants in the temporally near condition ($M = 7.18, SD = 3.73$), $F(1,78) = 8.50, p = .005, \eta_p^2 = .10$.

Table 1 presents the descriptive statistics and inter-correlations among the study variables. Additionally, Table 2 presents the mean responses by condition to the questions included to assess perceptions of temporal distance, forgiveness, and construal level.
Table 1

*Descriptive Statistics and Inter-correlations among Variables in Experiment 1*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Condition</td>
<td>.04</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perceptions of temporal distance</td>
<td>4.67</td>
<td>2.69</td>
<td>.37**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Forgiveness</td>
<td>3.25</td>
<td>.90</td>
<td>.24*</td>
<td>.50**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Abstract action identifications</td>
<td>8.28</td>
<td>3.36</td>
<td>.32**</td>
<td>.29**</td>
<td>.60**</td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 79. Condition was coded, such that temporally near was assigned -1 and temporally distant was assigned 1. Perceptions of temporal distance were assessed on a 10-point scale with anchors: 1 = recently, 10 = a long time ago. Forgiveness was assessed on a 5-point scale with anchors: 1 = strongly disagree, 5 = strongly agree. Abstract action identification was the sum of abstract choices chosen out of 13 action identifications. *p < .05, **p < .01.*
Table 2

*Means, Standard Deviations, and Significance Tests for Experiment 1*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Temporally near</th>
<th>Temporally distant</th>
<th>F(1,79)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of temporal distance</td>
<td>3.66 2.24</td>
<td>5.61 2.75</td>
<td>11.80</td>
<td>.001</td>
</tr>
<tr>
<td>Forgiveness</td>
<td>3.03 0.97</td>
<td>3.46 0.77</td>
<td>4.80</td>
<td>.032</td>
</tr>
<tr>
<td>Abstract action identifications</td>
<td>7.18 3.73</td>
<td>9.29 2.64</td>
<td>8.50</td>
<td>.005</td>
</tr>
</tbody>
</table>

Note. N = 79 (ns = 38 and 41, respectively). Perceptions of temporal distance were assessed on a 10-point scale with anchors: 1 = recently, 10 = a long time ago. Forgiveness was assessed on a 5-point scale with anchors: 1 = strongly disagree, 5 = strongly agree. Abstract action identification was the sum of abstract choices chosen out of 13 action identifications.
**Mediation analysis.** The SPSS script (PROCESS) developed by Hayes (2013) was used to test construal level as a mediator for the relation between temporal distance (predictor) and forgiveness (outcome; Model 4). The PROCESS macro utilizes regression models to obtain the total, direct (e.g., temporal distance to forgiveness), and indirect effects (e.g., temporal distance to forgiveness through high-level (versus low-level) construal). PROCESS uses a bootstrapping based method (Hayes, 2013). Bootstrapping is a nonparametric re-sampling procedure that does not require the assumption of normality of the sampling distribution. It entails repeatedly sampling from the data set and estimating the indirect effects in each re-sampled data set. In repeating this process thousands of times, an empirical estimate of the sampling distribution is made and is used to construct confidence intervals for the direct effect (see., Young, 2011). For my analyses, the number of bootstraps was set at 5000 with a confidence interval of 95% (percentile bootstrap confidence interval method was selected in PROCESS). If the confidence intervals of the indirect effect did not include zero, then the null hypothesis of non-significance was rejected (Hayes, 2013).

As expected and seen in Figure 1, participants in the temporally distant versus near conditions reported a greater (versus lower) number of abstract action identifications, which mediated the effect of the manipulation on forgiveness: mediated effect of abstraction action identification = .16, SE = .07, 95 % CI [.05, .32]. Thus, Hypothesis 1 was supported.

Experiment 1 provides support for construal level as a mediator for the effect of temporal distance on victims’ motivation to forgive a transgressor.
Abstract action identification
(High-level construal)

Temporally near = 0
Temporally distant = 1

Forgiveness

.32*

.24* (.06)

.57**

Figure 1. Standardized regression coefficients for the relation between temporal distance and forgiveness as mediated by high-level construal in Experiment 1. The standardized regression coefficient between temporal distance and forgiveness, controlling for high-level construal, is in parentheses. The bootstrapped un-standardized indirect effect is .16 and the 95% confidence interval ranges from .05 and .32.

* p < .05, ** p < .01.
**Experiment 2a**

To obtain further meditational support of construal level, I conducted two experiments (Experiments 2a/b) to establish a causal chain between physical distance, construal level, and forgiveness (Spencer et al., 2005). Thus, in Experiment 2a, I manipulated the physical distance of a transgression and assessed construal level.

**Method**

**Participants and design.** One hundred and four (83 females; age range was 17-49 years) undergraduate psychology students participated for course credit. Participants were randomly assigned to one of two conditions: physically near or physically distant.

**Procedure.** Participants were given the same cover story as in Experiment 1. Individuals participated in groups of four, with both conditions running simultaneously. After granting consent, participants read a situation, and were asked to imagine that the event occurred to them.

The situation was adapted from one of the transgression scenarios created by Berry, Worthington, Parrott, O’Connor, and Wade (2001) to assess forgiveness of interpersonal transgressions. The situation was different than Experiment 1 to increase the generalizability of my findings. Here, a classmate plagiarized the participant’s work. Participants were told that their classmate was physically near to them, in [Waterloo, Canada], or physically distant from them, in [Sydney, Australia]. This physical distance manipulation was adapted from Fujita and colleagues (e.g., Fujita et al., 2006).

The situation read as follows:

You reside in [Waterloo, Canada]. Your classmate resides in [Waterloo, Canada OR Sydney, Australia]. Together, you and your classmate are taking a class [on campus
OR online] and have a paper due at the end of the week. You have already completed
the paper for the class. Your classmate says s/he is under a lot of time pressure and
asks you to lend him/her your paper for some ideas. You agree, and this person
simply retypes the paper and hands it in. The professor recognizes the paper, [calls
both of you to her office OR has a conference call with both of you], scolds you, and
says you are lucky she does not put you both on academic probation.

After reading the situation, participants responded to the measures, and were
debriefed and thanked for participating.

Measures.

Construal level. Construal level was assessed using the original 25-item version of
the BIF (Vallacher & Wegner, 1989). If my manipulation of physical distance results in high-
level (versus low-level) construal as I hypothesized, participants should report a greater
(versus lower) number of abstract action identifications.

Physical distance. To check my manipulation of physical distance, I assessed
participants’ subjective experience of distance; they rated how far geographically they
perceived their classmate to be from them on a 7-point scale (1 = very close, 7 = very far).

Results and Discussion

Preliminary analysis. Table 3 presents the descriptive statistics and inter-
correlations among variables in the present experiment.
Table 3

Descriptive Statistics and Inter-correlations among Variables in Experiment 2a

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Condition</td>
<td>.02</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perceptions of temporal distance</td>
<td>4.17</td>
<td>2.41</td>
<td>.91**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Abstract action identifications</td>
<td>12.80</td>
<td>5.61</td>
<td>.61**</td>
<td>.52**</td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 104. Condition was coded, such that physically near was assigned -1 and physically distant was assigned 1. Perceptions of physical distance were assessed on a 7-point scale with anchors: 1 = very close, 7 = very far. Abstract action identification was the sum of abstract choices chosen out of 25 action identifications.

** p < .01.
A one-way ANOVA revealed that participants in the physically distant condition perceived their classmate to be farther away ($M = 6.30, SD = .95$) than participants in the physically near condition ($M = 1.96, SD = 1.10$), $F(1,102) = 466.51, p < .001, \eta^2_p = .82$. Thus, my manipulation of physical distance successfully induced the subjective experience of distance.

**Main analysis.** As shown in Figure 2, a one-way ANOVA revealed that participants in the physically distant condition reported a greater number of abstract action identifications ($M = 16.31, SD = 4.06$) than participants in the physically near condition ($M = 9.33, SD = 4.85$), $F(1,102) = 60.20, p < .001, \eta^2_p = .37$.

Experiment 2a revealed that manipulating the physical distance of a transgression induced high-level (versus low-level) construal, a finding that is consistent with prior research on construal level (e.g., Trope & Liberman, 2003, 2010).
Figure 2. Mean number of abstract, action identifications by physical distance manipulation in Experiment 2a. Each error bar represents +/- 1 standard error of the mean. $N = 104$ (near $n = 51$; far $n = 53$).
Experiment 2b

To complete the causal chain design, Experiment 2b examined the effect of construal level on forgiveness. Construal level was induced with a manipulation (to follow) often used in prior research (e.g., Freitas, Gollwitzer, & Trope, 2004; Irmak, Wakslak, Trope, 2014). Note that according to Spencer and colleagues (2005), to argue for a psychological process with the experimental-causal-chain design, one must be able to make a case that the proposed process as it is measured, and as it is manipulated, are the same construct. In my case, researchers have used the BIF (which I used in Experiment 2a) and the why/how manipulation in Experiment 2b interchangeably to measure and manipulate construal level (e.g., Rim, Hansen, & Trope, 2013).

Method

Participants and design. Fifty five (41 females; age range was 18-25 years) undergraduate psychology students participated for course credit. Participants were randomly assigned to one of two conditions: low-level construal or high-level construal.

Procedure. Participants were given the same cover story as in Experiment 1, and sessions were run in the same manner as in Experiment 2a. Individuals completed a written exercise that contained the manipulation (see Freitas et al., 2004). In the low-level construal condition, participants deliberated on how they would engage in the activity of improving and maintaining their physical health. Participants first listed three means by which they could improve and maintain their physical health. Then, they completed a diagram that induced them to think increasingly concretely by illustrating how to perform the activity and the lower-level activities it comprises. In the high-level construal condition, participants deliberated on why they would engage in the same activity. Participants first listed three ways
in which improving and maintaining their physical health would assist them in meeting important life goals. Then, they completed a diagram that allowed them to think increasingly abstractly about the activity by illustrating how they would engage in the activity, and the higher-level goals it served.

After the construal level manipulation, participants read the same transgression as in Experiment 2a, but omitting the information regarding the physical locations of the participant and the classmate. Participants indicated their motivation to forgive, and then were debriefed.

Measure. Participants responded to the following item on a 5-point scale ranging from 1 (definitely not forgive) to 5 (definitely forgive): “To what extent would you forgive the person who borrowed your paper?” Note that I used a single face-valid item. Although single-item measures can be problematic, this item has been used widely in the literature (e.g., Boon & Sulsky, 1997; Darby & Schlenker, 1982).

Results and Discussion

Table 4 presents the descriptive statistics and inter-correlations among experimental variables.

As shown in Figure 3, a one-way ANOVA revealed that participants were more motivated to forgive their classmate in the abstract, high-level construal condition ($M = 3.65$, $SD = 1.36$), compared to the concrete, low-level construal condition ($M = 1.55$, $SD = .57$), $F(1,53) = 58.31, p < .001, \eta_p^2 = .52$.

Experiment 2b indicates that inducing a high-level (versus low-level) construal promotes (versus reduces) victims’ motivation to forgive a transgressor. Together, Experiments 2a and 2b demonstrate a causal chain between physical distance, construal
level, and forgiveness. Thus, Hypothesis 1 is further supported.
Table 4

*Descriptive Statistics and Inter-correlations among Variables in Experiment 2b*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Condition</td>
<td>-.05</td>
<td>1.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Forgiveness</td>
<td>2.55</td>
<td>1.46</td>
<td>.72**</td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 55. Condition was coded, such that low-level construal was assigned -1 and high-level construal was assigned 1. Forgiveness was assessed on a 5-point scale with anchors: 1 = definitely not forgive, 5 = definitely forgive. **p < .01.*
Figure 3. Mean forgiveness by construal level manipulation in Experiment 2b. Each error bar represents +/- 1 standard error of the mean. N = 55 (low-level construal n = 29; high-level construal n = 26).
**Experiment 2c**

In Experiments 2a and 2b, individuals responded to a different transgression than they did in Experiment 1. Thus, I conducted Experiment 2c to replicate the direct effect of psychological distance on forgiveness obtained in Experiment 1 by having participants respond to the transgression used in Experiments 2a and 2b. Note an additional reason for conducting Experiment 2c was to replicate the novel effect of physical distance in promoting forgiveness. Thus, in Experiment 2c, I manipulated the physical distance of the transgression and assessed motivation to forgive.

**Method**

**Participants and design.** Ninety five (63 females; age range was 18-54 years) undergraduate psychology students participated for course credit. Participants were randomly assigned to one of two conditions: physically near or physically distant.

**Procedure.** The procedure was similar to Experiment 2a, with the exception of measures.

**Measures.**

*Forgiveness.* Forgiveness was assessed in the same manner as in Experiment 1 using a 7-point scale, ranging from 1 (not at all) to 7 (very much). The six forgiveness items showed high internal consistency ($\alpha = .94$), thus a composite was created by averaging the items.

*Physical distance.* To check my manipulation of physical distance, I assessed participants’ subjective experience of distance in the same manner as in Experiment 2a.
Results and Discussion

Preliminary analysis. Table 5 presents the descriptive statistics and inter-correlations among variables.
Table 5

*Descriptive Statistics and Inter-correlations among Variables in Experiment 2c*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
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<tbody>
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<td>-.01</td>
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<td></td>
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</tr>
<tr>
<td>2. Perceptions of physical distance</td>
<td>4.38</td>
<td>2.34</td>
<td>.87**</td>
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</tr>
<tr>
<td>3. Forgiveness</td>
<td>-.05</td>
<td>1.01</td>
<td>.71**</td>
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</tbody>
</table>

*Note. N = 95. Condition was coded, such that physically near was assigned -1 and physically distant was assigned 1. Perceptions of physical distance were assessed on a 7-point scale with anchors: 1 = very close, 7 = very far. Forgiveness was assessed on a 7-point scale with anchors: 1 = not at all, 7 = very much.  

**p < .01.*
A one-way ANOVA revealed that participants in the physically distant condition perceived their classmate to be farther away ($M = 6.43, SD = 0.90$) than participants in the physically near condition ($M = 2.37, SD = 1.38$), $F(1,95) = 285.9$, $p < .001$, $\eta_p^2 = .76$. Thus, my manipulation of physical distance successfully induced the subjective experience of distance.

**Main analysis.** As predicted and shown in Figure 4, a one-way ANOVA revealed that participants were more motivated to forgive their classmate when the transgression was physically distant ($M = 4.69, SD = 1.36$) than physically near to them ($M = 2.43, SD = .81$), $F(1,94) = 95.33$, $p < .001$, $\eta_p^2 = .51$.

Experiment 2c replicated the direct effect of psychological distance on forgiveness that I obtained in Experiment 1. Additionally, it provided further examination of the novel use of physical distance in the study of forgiveness.
Figure 4. Mean forgiveness by physical distance manipulation in Experiment 2c. Each error bar represents +/- 1 standard error of the mean. $N = 95$ (near $n = 48$; far $n = 47$).
Experiment 2d

As stated earlier, prior research has not examined the effect of physical distance on forgiveness. Experiments 2a, 2b, and 2c provide converging evidence that physically distancing a transgression from a victim’s point of self promotes forgiveness via high-level (versus low-level) construal. Nevertheless, when manipulating the physical distance of the transgression in Experiments 2a and 2c, I may have inadvertently altered how participants perceived key elements of the situation, which create alternative explanations.

In particular, in Experiments 2a and 2c, participants responded to a vignette in which a classmate plagiarized the participant’s course work. I varied the physical distance between the participant and transgressor. In the distant condition, participants were told that the transgressor resides in a city far away from them, which necessitated stating that the course in question was online. In contrast, in the near condition, the transgressor was said to reside in the same city as participants, and I indicated that the course was on campus. Thus, I confounded the nature of the course (online versus on campus) with my manipulation of physical distance. As a result, it may be that participants in the distant condition perceived the online course, and therefore the offense of plagiarism, as less important, compared to the near condition in which the course was on campus. Indeed, there is a common assumption among undergraduate students that online courses are “best used as an easy way to opt out of unimportant classes” (Soltan, 2015). Moreover, due to infrequent face-to-face interaction, participants may have perceived their relationship with the transgressor as less important in the physically distant versus near condition. Given this problem, I cannot rule out the possibility that participants were more forgiving in the physically distant condition relative to
near because they perceived either the offense or their relationship with the transgressor as less important, rather than because physical distance induced high-level construal.

Therefore, I conducted Experiment 2d to rule out such alternative explanations for the effect of physical distance on forgiveness. As described below, I used a different transgression vignette from Berry et al. (2001) to assess generalizability of the effect. I again manipulated physical distance between the victim and the transgressor, and I measured forgiveness as well as perceptions of the event that may be confounded with the manipulation of distance. My goal was to examine whether such differences in perceptions are viable alternative explanations for the effect of physical distance on forgiveness.

Method

Participants and design. One hundred and four (64 females; age range was 18-29 years) undergraduate psychology students participated for course credit. Participants were randomly assigned to one of two conditions: physically near or physically distant.

Procedure. Participants were given the same cover story as in Experiment 1, and sessions were run in the same manner as in Experiment 2a. Individuals were asked to read another situation from Berry et al. (2001), and to imagine that the event happened to them. The situation was different than the earlier experiments to increase generalizability.

In this situation, a friend failed to drop off an important job application of the participant by the proposed deadline. Participants were told that their friend was physically near to them, in [Toronto, Canada], or physically distant from them, in [Sydney, Australia]. The situation read as follows:

You are currently in [Waterloo, Canada] and would like to apply for an important job in [Toronto, Canada OR Sydney, Australia]. Your friend in [Toronto, Canada OR
Sydney, Australia] offers to drop off the job application for you at the post office by the deadline for submission. Soon after, you get a letter from the potential employer saying that your application could not be considered because it was postmarked after the deadline and they had a very strict policy about this.

Note my manipulation of physical distance may vary participants’ perceptions about the importance of the job. Participants may perceive a job in a city far away from (versus near to) them as less important as they want to remain in a familiar city with loved ones. Additionally, participants may have differed perceptions of their relationship with the transgressor. A friend who is physically far versus near to the victim may be perceived as less important due to infrequent face-to-face interactions. Such changes in perceptions could influence forgiveness, rather than the changes in physical distance. Hence, after reading the vignette, participants responded to items that assessed forgiveness as well as such perceptions. Participants were then debriefed and thanked for participating.

**Measures.**

**Importance of job.** Participants’ ratings of how important they found the job to be were assessed using two items, on 7-point scales ranging from 1 (not at all) to 7 (very much): “How important to you is the job you apply for?” and “How much do you care about the job you apply for?” The two items were significantly inter-correlated ($r = .80, p < .01$), thus a composite was created by averaging the items.

**Importance of relationship with the transgressor.** Participants’ ratings of how important they perceived their relationship with the transgressor to be was assessed using three items, on 7-point scales ranging from 1(not at all) to 7 (very much): “How interpersonally close are you and your friend?,” “How much do you care about your
friendship?,” and “How important is your relationship with your friend?” The three items showed high internal consistency ($\alpha = .86$), thus a composite was created by averaging the items.

**Forgiveness.** Participants’ motivation to forgive was assessed in a similar manner as in Experiment 1. The items were rated on a 7-point scale ranging from 1 (not at all) to 7 (very much). The six forgiveness items showed high internal consistency ($\alpha = .96$), thus a composite was created by averaging the items.

**Physical distance.** To check for my manipulation of physical distance, I assessed participants’ subjective experience of distance in the same manner as in Experiment 2a.

**Results and Discussion**

Table 6 presents the descriptive statistics and inter-correlations among variables in the experiment.

Table 7 presents the mean responses by condition to the questions included to assess perceptions of physical distance, forgiveness, job importance, and importance of relationship with the transgressor.
Table 6

*Descriptive Statistics and Inter-correlations among Variables in Experiment 2d*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Condition</td>
<td>.06</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perceptions of physical</td>
<td>4.70</td>
<td>2.53</td>
<td>.77**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>distance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Forgiveness</td>
<td>4.45</td>
<td>1.56</td>
<td>.76**</td>
<td>.56**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Importance of job</td>
<td>6.00</td>
<td>.97</td>
<td>-.13</td>
<td>.03</td>
<td>-21*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Importance of</td>
<td>5.94</td>
<td>.95</td>
<td>-.18</td>
<td>-.21*</td>
<td>-.09</td>
<td>.40**</td>
<td></td>
</tr>
<tr>
<td>relationship with transgressor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 104.* Condition was coded, such that physically near was assigned -1 and physically distant was assigned 1. Perceptions of physical distance were assessed on a 7-point scale with anchors: 1 = very close, 7 = very far. Forgiveness, importance of job, and importance of relationship with transgressor were assessed on 7-point scales with anchors: 1 = not at all, 7 = very much.

* * p < .05, ** * p < .01.
Table 7  
*Means, Standard Deviations, and Significance Tests for Experiment 2d*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Physically near</th>
<th>Physically far</th>
<th>$F(1,104)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of physical distance</td>
<td>2.85</td>
<td>6.31</td>
<td>145.95</td>
<td>.000</td>
</tr>
<tr>
<td>Forgiveness</td>
<td>3.19</td>
<td>5.57</td>
<td>141.99</td>
<td>.000</td>
</tr>
<tr>
<td>Importance of job</td>
<td>6.13</td>
<td>5.88</td>
<td>1.74</td>
<td>.190</td>
</tr>
<tr>
<td>Importance of relationship with transgressor</td>
<td>6.12</td>
<td>5.77</td>
<td>3.57</td>
<td>.062</td>
</tr>
</tbody>
</table>

*Note. N = 104 (ns = 49 and 55, respectively). Perceptions of physical distance were assessed on a 7-point scale with anchors: 1 = very close, 7 = very far. Forgiveness, importance of job, and importance of relationship with the transgressor were assessed on 7-point scales with anchors: 1 = not at all, 7 = very much.*
Preliminary analysis. A one-way ANOVA revealed that participants in the physically distant condition perceived their classmate to be farther away ($M = 6.31, SD = 1.61$) than participants in the physically near condition ($M = 2.85, SD = 1.24$), $F(1,103) = 145.95, p < .001$, $\eta_p^2 = .59$. Thus, the manipulation of physical distance successfully induced the subjective experience of distance.

Main analyses.

Forgiveness. A one-way ANOVA revealed that participants were more motivated to forgive their friend when the transgression was physically distant ($M = 5.57, SD = .89$) as compared with when it was physically near ($M = 3.19, SD = 1.41$), $F(1,103) = 141.99, p < .001$, $\eta_p^2 = .58$. The present findings replicate those of Experiment 2c.

Ruling out alternative explanations. I conducted several analyses to address the alternative explanations for the condition effect on forgiveness. As seen in Table 1, there was no significant difference by condition on importance of job. However, there was a marginally significant difference by condition on individuals’ perceived importance of relationship with the transgressor: participants in the physically distant condition perceived their transgressor to be less important to them than participants in the near condition. Thus, it is possible that participants were more forgiving in the physically distant versus near condition because they perceived their transgressor to be less important to them.

To demonstrate that my effect of physical distance on forgiveness is significant even after controlling for the marginally significant possible third variable, I conducted an ANCOVA on forgiveness, controlling for the perceived importance of relationship with the transgressor. The condition effect on forgiveness remained statistically significant, $F(1,101) = 140.28, p < .001$, $\eta_p^2 = .58$ (physically distant condition: adjusted $M = 5.59, SE = .14$;
physically near condition: adjusted $M = 3.18, SE = .15$). Thus, the effect of distance on forgiveness was not accounted for by ratings of relationship importance.

In summary, in Experiment 2d I demonstrated that the alternate explanations for the effect of physical distance on forgiveness are not viable.


**Experiment 3**

Together, Experiments 1-2d demonstrate that psychologically distancing a transgression (via time and physical space) from victims fosters forgiveness via high-level (versus low-level) construal. Thus, Hypothesis 1 is supported.

In Experiment 3, I attempted to examine the proposed process for the effect of construal level on forgiveness. As stated in Chapter 2, I reasoned that a high-level (versus low-level) construal will reduce accessibility of event details in memory, which in turn will lower victims’ perceptions of event severity and attributions of offender blame. Thus, using a measurement-of-mediation design (Spencer et al., 2005), in Experiment 3, I manipulated construal level and assessed the process as well as forgiveness.

**Method**

**Participants and design.** Ninety one individuals were recruited from CrowdFlower, using the same restrictions as in Experiment 1. Ten individuals did not complete the manipulation, and 18 completed the survey twice. Thus, these data were not analyzed, and the final sample was 62 (33 females; age range was 24-62 years). Participants were given $.50 for their participation. They were randomly assigned to one of two conditions: low-level construal or high-level construal.

**Procedure.** Participants were given the same cover story as in Experiment 1. After granting consent, participants were presented with 36 common objects and activities (e.g., soda; Henderson, 2013). Individuals in the low-level construal condition had to generate specific examples of these objects and activities (e.g., coke), while those in the high-level construal condition generated categories for the same objects and activities (e.g., food). Past
research has demonstrated that priming people to think about categories (versus exemplars) induces high-level (versus low-level) construal (e.g., Fujita et al., 2006; Henderson, 2013).

After the construal level manipulation, participants read the same transgression as in Experiment 1, but information regarding the time of the event was omitted. Participants indicated their motivation to forgive, and answered items that assessed the extent to which they a) remembered the details of the event, b) perceived the event as severe, and c) attributed blame to the transgressor. Individuals were debriefed and thanked for their participation.

**Measures.**

**Memory of event details.** The extent to which participants remembered event details was assessed using two items, on 5-point scales ranging from 1 (not at all) to 5 (very much): “How vividly do you remember the event?” and “How well do you remember the details of the event?” The two detail items were significantly inter-correlated ($r = .88, p < .01$), thus a composite was created by averaging the items.

**Perceptions of event severity.** Participants’ perceptions of the event’s severity were assessed using a commonly used single item, on a 5-point scale ranging from 1 (not at all) to 5 (very much): “How severe would you rate the event?” (e.g., McCullough et al., 1998)

**Offender blame.** Participants’ ratings of offender blame were assessed using four items, on 5-point scales ranging from 1 (not at all) to 5 (very much): “How much would you blame Pat for the event,” “How much would you think Pat intended to hurt you?,” “How responsible would you find Pat for the event?,” and “How much fault would you find in Pat for the event?” (adapted from Boon & Sulsky, 1997) The four blame items showed high internal consistency ($\alpha = .92$), thus a composite was created by averaging the items.
Forgiveness. Motivation to forgive was assessed in the same manner as in Experiment 1. The six forgiveness items showed high internal consistency ($\alpha = .97$), thus a composite was created by averaging the items.

Results and Discussion

Table 8 presents the descriptive statistics and inter-correlations among variables.

Table 9 presents the mean responses by condition to the questions included to assess forgiveness, memory of event details, perceptions of the event’s severity, and attribution of blame towards the offender.
Table 8

*Description Statistics and Inter-correlations among Variables in Experiment 3*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Condition</td>
<td>.03</td>
<td>1.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Forgiveness</td>
<td>3.25</td>
<td>1.02</td>
<td>.35**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Memory of event details</td>
<td>3.99</td>
<td>.88</td>
<td>-.27*</td>
<td>-.40**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perceptions of event severity</td>
<td>3.40</td>
<td>.98</td>
<td>-.39**</td>
<td>-.63**</td>
<td>.46**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Offender blame</td>
<td>3.31</td>
<td>1.05</td>
<td>-.34**</td>
<td>-.64**</td>
<td>.38**</td>
<td>.69**</td>
<td></td>
</tr>
</tbody>
</table>

*Note. N = 62. Condition was coded, such that low-level construal was assigned -1 and high-level construal was assigned 1. Forgiveness, memory of event details, perceptions of event severity, and offender blame were assessed on 5-point scales with anchors: 1 = not at all, 5 = very much. 
* p < .05,  ** p < .01.*
Table 9

*Means, Standard Deviations, and Significance Tests for Experiment 3*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Low-level construal</th>
<th>High-level construal</th>
<th>F(1,62)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgiveness</td>
<td>2.88 1.00</td>
<td>3.59 0.93</td>
<td>8.58</td>
<td>.005</td>
</tr>
<tr>
<td>Memory of event details</td>
<td>4.23 0.85</td>
<td>3.77 0.86</td>
<td>4.63</td>
<td>.035</td>
</tr>
<tr>
<td>Perceptions of event severity</td>
<td>3.95 0.80</td>
<td>3.20 0.85</td>
<td>12.61</td>
<td>.001</td>
</tr>
<tr>
<td>Offender blame</td>
<td>3.67 0.66</td>
<td>2.97 1.22</td>
<td>7.64</td>
<td>.008</td>
</tr>
</tbody>
</table>

*Note. N = 62 (ns = 30 and 32 above, respectively). All measures were assessed on 5-point scales with anchors: 1 = not at all, 5 = very much.*
Main analyses.

Forgiveness. A one-way ANOVA revealed that participants were more motivated to forgive their co-worker in the high-level construal condition ($M = 3.59, SD = 1.00$), compared with the low-level construal condition ($M = 2.87, SD = .93$), $F(1,61) = 8.58, p < .05, \eta^2_p = .13$.

Memory of event details. A one-way ANOVA revealed that participants in the high-level construal condition reported remembering the event details less ($M = 3.76, SD = .86$) than participants in the low-level construal condition ($M = 4.23, SD = .83$), $F(1,61) = 4.63, p < .01, \eta^2_p = .07$.

Perceptions of event severity. A one-way ANOVA revealed that participants in the high-level construal condition perceived the event to be significantly less severe ($M = 3.20, SD = .85$) than participants in the low-level construal condition ($M = 3.95, SD = .80$), $F(1,61) = 12.61, p < .05, \eta^2_p = .17$.

Offender blame. A one-way ANOVA revealed that participants in the high-level construal condition attributed less blame to the offender ($M = 2.97, SD = 1.22$) than participants in the low-level construal condition ($M = 3.67, SD = .67$), $F(1,61) = 7.64, p < .05, \eta^2_p = .11$.

Mediation analysis. The SPSS script (PROCESS; Hayes, 2013) was used to uncover the possible processes that serve as a mediator for the relation between construal level (predictor) and forgiveness (outcome; Model 6). Due to my reasoning, I entered the mediating variables in the following order: memory of event details, perceptions of event severity, and offender blame. As seen in Figure 4, these variables mediated the effect of the
condition on forgiveness: mediated effect = .02, $SE = .02$, 95% CI [.01, .08]. Thus, Hypothesis 2 was supported.

In summary, the results of Experiment 3 suggest that the effect of construal level on forgiveness is due to participants’ reduced memory of event details, which lowers event severity and offender blame.
Figure 5. Standardized regression coefficients for the relationship between construal level and forgiveness as mediated by event detail, event severity, and attributions of offender blame in Experiment 3. The standardized regression coefficient between temporal distance and forgiveness, controlling for mediators, is in parentheses. The bootstrapped un-standardized indirect effect is .02 and the 95% confidence interval ranges from .01 and .08.

* p < .05, ** p < .01.
CHAPTER 4
GENERAL DISCUSSION

My research integrates construal level theory and forgiveness research. In Experiment 1, I build on prior findings on the positive effect of temporal distance on forgiveness (e.g., Wohl & McGarth, 2007) by demonstrating that the effect may be due to high-level (versus low-level) construal. In an effort to further support construal level as a possible psychological process through which psychological distance fosters forgiveness, I then conducted two experiments using an experimental-causal-chain design and another dimension of psychological distance (i.e., physical distance). Consistent with previous construal level theory findings (e.g., Trope & Liberman, 2003, 2010), in Experiment 2a, I found that physically distancing a transgression results in high-level (versus low-level) construal. In Experiment 2b, I found that inducing high-level (versus low-level) construal promotes (versus lowers) a victim’s motivation to forgive a transgressor. Following the logic of an experimental-causal-chain design (Spencer et al., 2005), the findings of Experiments 2a and 2b together are consistent with the idea that physical distance promotes forgiveness via higher construal levels. Thus, Experiments 1 and 2a/b support Hypothesis 1.

In Experiment 2c, I found that physically distancing a transgression from a victim’s point of self fosters forgiveness. In Experiment 2d, I ruled out possible alternate explanations for the effect of physical distance on forgiveness; namely, job importance and the victim’s perceived importance of relationship with the transgressor. Lastly, in Experiment 3, I found that one possible reason why the effect of construal level on forgiveness occurs is because high-level (versus low-level) construal a) reduces the extent to which participants remember
event details, 2) lowers perceptions of event severity, and 3) results in lower attributions of blame towards the offender. Thus, Hypothesis 2 is supported.

**Implications**

**Forgiveness**

As noted in Chapter 2, past correlational research on forgiveness has demonstrated that forgiveness is promoted with the passage of time since the offense (e.g., McCullough et al., 2003; McCullough et al., 2010). Experimental research has also demonstrated that victims are more forgiving when they are induced to perceive the event as having occurred in the distant past compared to the recent past (Cheung & Olson, 2013; Wohl & McGarth, 2007). Despite these findings, the mechanisms underlying the effect of temporal distance on forgiveness have not been systematically examined (McCullough et al., 2010). The present research suggests that these prior findings may be understood from the perspective of construal level theory (Trope & Liberman, 2003, 2010). As an offense is removed from victims’ point of self through the passage of time, or when people are induced to perceive the event as having occurred in the distant past, victims’ construal of the event will become more abstract, high-level, which in turn will foster motivation to forgive.

Using two dimensions of psychological distance – specifically, temporal distance and physical distance – these findings bolster evidence for the underlying role of psychological distance and construal level in forgiveness. My research also provides preliminary support for the cognitive processes through which high-level (versus low-level) construal fosters forgiveness. As such data is correlational, future experimental studies are required to further support the processes by which higher construal levels foster forgiveness.
Additionally, given the extensive amount of research in support of construal level theory, future research may also examine other possible processes through which construal level facilitates forgiveness. For example, victim forgiveness may also be promoted via increased global processing (Liberman & Forster, 2009) and enhanced interpersonal sensitivity (e.g., Schmid Mast et al., 2009), both of which occur at higher levels of mental construal. For example, in thinking about why the event occurred, victims may be more likely to consider mitigating situational factors, experience empathy for the offender, and consider relationship goals as they seek to gain deeper meaning of the event. Processes such as these are known to foster forgiveness. As noted earlier, in one of their studies, Wohl and McGarth (2007, Study 3) found that inducing participants to perceive a transgression as occurring further in the past led to an increase in empathy for the transgressor, which in turn predicted greater willingness to forgive. I suggest that this finding is entirely consistent with construal level theory and the present results. In summary, high-level construal may set into motion several cognitive processes that enable greater forgiveness than is possible under low-level construal where individuals’ reactions are anchored by the concrete details and local processing. Note that these cognitive processes might operate simultaneously.

**Construal Level Theory**

At first glance, my reasoning for the effects of psychological distance on forgiveness appears to contradict findings in construal level research on moral judgments. In particular, Eyal, Liberman, and Trope (2008) found that morally offensive actions (e.g., sexual intercourse between siblings) were judged more harshly in temporally and socially distant (versus near) conditions. In light of these findings, it is possible that victims may be less
forgiving of a transgression that violates moral principles in psychologically distant relative to near conditions.

On reflection, my findings are not necessarily contradictory. First, Eyal et al. (2008) examined transgressions that violate social and culture norms, whereas I examined interpersonal transgressions. Second, Karremans and Aarts (2007) argue that forgiveness is associated with the cognitive representation of interpersonal relationships, thus it arises relatively effortlessly within this context. Therefore, given that psychologically distant events rely on schematic, prototypical information relative to psychologically near events, I predicted, and found, that forgiveness would be fostered by distance in the context of interpersonal transgressions. Third, there is a debate regarding the generalizability of the effect of psychological distance on moral judgments (e.g., Gong & Medin, 2012; Zezelj & Jokic, 2014). For example, in contrast to Eyal et al.’s (2008) findings, Gong and Medin (2012) found that moral judgments were more extreme at low-level construals compared to high-level construals, and when transgressions occurred in the near future rather than the distant future. Thus, at present there is conflicting evidence regarding the effects of psychological distance on moral judgments.

Self-distancing

My findings have implications for theory and research on self-distancing (e.g., Grossman & Kross, 2010; Kross et al., 2014; Mischkowsk, Kross, & Bushman, 2012). Kross and colleagues have demonstrated that individuals make sense of negative experiences differently depending on whether they adopt a self-distanced perspective or a self-immersed perspective when reflecting on a past event. When participants analyze their feelings about a negative experience from a self-distanced perspective, they are less likely to recount the
concrete details of their experience and more likely to reconstruct the experience to provide insight and closure (Kross & Ayduk, 2011). Reconstruction of negative experiences from a self-distanced perspective leads to lower emotional reactivity, such as reduced angry feelings as well as reduced aggressive thoughts and behaviors (Mischkowsk et al., 2012).

According to Kross and colleagues (2014), the concepts of psychological distance and self-distancing are similar. They argue that both concepts allow individuals to transcend egocentric viewpoints, and both result in less concrete and more abstract mental representations. Some issues regarding similarity between the two concepts do arise. First, whereas psychological distance focuses on the distance of any type of stimulus (event, target person) from the self, the concept of self-distancing refers to a focus on the self from a distanced perspective (Kross et al., 2014). Second, it is unclear whether self-distancing is another dimension of psychological distance or if it is captured by the four psychological distance dimensions of construal level theory (e.g., temporal, spatial, social, and hypothetical; Kross et al., 2014).

Irrespective of the need for future research on the preceding issue, existing research on self-distancing has not examined its implications for victim forgiveness. Hence, my findings extend prior research on self-distancing by suggesting that when induced to construe a transgression at a high level by moving the event away from the point of self, victims may be engaging in a process of reconstruction in which they are able to put aside their anger and aggressive thoughts toward the offender, thereby facilitating forgiveness.

**Practical**

My findings suggest that victims can forgive their transgressors by creating an objective distance between themselves and the transgression. This objective distance will in
turn promote psychological distance between the victim and the transgression. For example, individuals can make a transgression feel distant to them by removing themselves from the location in which they were offended or in which the transgression occurred. By creating this objective distance, victims can feel psychologically distant from the transgression, construe the transgression at a higher level (versus a lower level), engage in mental processes induced by the higher construal levels, and forgive the transgressor.

Another practical implication of my findings is that victim forgiveness can be promoted via induction of construal level. Individuals can forgive their transgressors if they either generate categories (versus exemplars) of particular objects or activities, or if they think about why they should pursue a given action. Although my manipulations of high-level construal are unrelated to the transgressions examined, future research may benefit from having participants engage in manipulations that are specific to the scenarios in question.

**Limitations and Future Research**

In this section, I will discuss some limitations to my research and make some recommendations for future research. First, participants in the present experiments responded to hypothetical transgressions, which raise the question of whether they would respond similarly in the context of actual transgressions. Although this feature of the research reduces the external validity of my findings, it allowed me to maximize internal validity. By presenting participants with identical transgressions, I was able to control characteristics of the offence and other contextual factors which would come into play in real transgressions and reduce my ability to draw causal inference. For this reason, such a methodology is common in the study of forgiveness (e.g., Aquino et al., 2006; Gauche & Mullet, 2005; Gerlach, Allemand, Agroskin, Denissen, 2012; Green, Burnette, & Davis, 2008; Karremans
& Smith, 2010; Struthers, Eaton, Santelli, Uchiyama, & Shirvani, 2008; Struthers et al., 2005; Wohl & McGarth, 2007). Nevertheless, future research is needed to examine whether my findings generalize to the context of real transgressions, as well as to different participant populations.

Second, I did not investigate potential boundary conditions of the effect of psychological distance on forgiveness. For example, my transgressions involved an offender who was said to be a friend, classmate, or co-worker of the victim. It is not clear whether the effect of psychological distance on forgiveness will hold for transgressions with different victim-offender relationships. To elaborate, perhaps the results may differ as a function of the nature and quality of the offender-victim relationship. If there is a history of transgressions, then it is possible that victims could be less forgiving in psychologically distant relative to near conditions. Future studies should examine such possibilities.

Finally, although I induced psychological distance in two ways (temporal distance and physical space), I did not examine the effects of all of the possible psychological distance dimensions. Moreover, there are various ways to operationalize the different distance dimensions. Depending on the distance dimension in consideration, and how it is operationalized, the effects on forgiveness may not be uniform. For example, in past research on temporal distance and forgiveness (e.g., Cheung & Olson, 2013; McCullough et al, 2010; Wohl & McGarth, 2007), as well as in Experiment 1, researchers examined the effect of actual or perceived time since a past event had occurred. Liberman, Trope, and Stephan (2007) argue that temporal distance can also be induced by imagining the event in the future. However, there is reason to believe that future temporal distance would reduce motivation to forgive rather than promote it, due to other processes that may come into play. For example,
Burns, Caruso, and Bartels (2012, Study 3) asked participants to imagine a situation in which a wife gave her husband the wrong medication, which resulted in his death—the event was said to have occurred one month ago or that it will occur next month. Burns et al. (2012) found that compared to individuals who evaluated the wife’s action in the past, those who evaluated her action in the future perceived it as more intentional, expressed stronger negative affect, and endorsed more severe punishment. These findings suggest that forgiveness for a future transgression could be hindered relative to a transgression that has occurred in the present or recent past.

Similarly, according to construal level theory (Trope & Liberman, 2003, 2010), one way in which psychological distance can be induced is to vary the interpersonal similarity between participants and a target (thus manipulating the social distance dimension). Targets similar to participants are conceptualized as socially near, whereas those who are dissimilar are socially distant (Liviatan, Trope, & Liberman, 2008). In the context of interpersonal transgressions, social distance may hinder forgiveness. For example, researchers have demonstrated that people are more likely to avoid and punish offenders whom they perceive as more dissimilar (e.g., Bradfield & Aquino, 1999; Kim, Shapiro, Aquino, Lim, & Bennett, 2008), presumably because people dislike dissimilar others to a greater extent than similar others (e.g., Byrne, 1971).

Alternatively, researchers have induced social distance via manipulation of social power (e.g., Magee et al., 2008). If social distance is induced by increasing victim power relative to the offender, then forgiveness may be promoted. This idea is consistent with findings by Karremans and Smith (2010) who demonstrated that in strongly committed relationships, individuals were more forgiving of their transgressors when they experienced
high power relative to low power. Karremans and Smith (2010) reasoned that this was because high (versus low) power leads individuals in strongly committed relationships to focus on the goal of maintaining their relationships with others. Although not tested by the researchers, it is possible then that manipulation of victim power induced high-level construal of the transgression, which made relationship goals more accessible, and in turn promoted forgiveness.

Thus, depending on how psychological distance is induced, it is possible that the effects on forgiveness may differ from those reported here. Different operationalizations of psychological distance may make different knowledge structures and cognitive processes accessible at high-level construal, which have the effect of increasing or decreasing forgiveness.

**Summary and Conclusion**

Forgiveness is associated with many psychological benefits for the victim as well as the offender. Thus, it is important to study factors that promote forgiveness. In the present research, I expand the literature on forgiveness by considering the role of psychological distance. My experiments demonstrate that psychologically distancing a transgression from a victim’s point of self increases construal level, which in turn promotes forgiveness. Additionally, I obtained preliminary support for the process by which construal level fosters forgiveness; specifically, remembering event details less, lowering perceptions of event severity, and blaming the offender less. All in all, my research highlights the role of cognitive processes in the study of forgiveness. In particular, how we mentally represent a transgression can affect our reactions to it. This is because construal level sets into motion a number of sense-making processes and motivations.
References


Henderson, M. D. (2013). When seeing the forest reduces the need for trees: The role of construal level in attraction to choice. *Journal of Experimental Social Psychology, 49*, 676-683. doi: 10.1016/j.jesp.2013.03.001


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1586–1603. doi: 10.1037/0022-3514.75.6.1586


There exist many definitions of forgiveness in the literature. However, these definitions are built on one core feature: “When people forgive, their responses (i.e., what they feel and think about, what they want to do, or how they actually behave) towards people who have offended them or injured them become less negative and more positive—or pro-social” (McCullough & van Oyen Witvliet, 2002, pp. 447). Given that forgiveness refers to many responses - thoughts, motivations, emotions, or behaviors (McCullough & van Oyen Witvliet, 2002) - I used forgiveness and motive to forgive interchangeably throughout my dissertation.

As stated in the Introduction (Chapter 1), the overall purpose of my research was to examine the effects of psychological distance on victim forgiveness. Nevertheless, my findings will help explain the established and robust effect of time on forgiveness.

Part of this section appears in Rizvi and Bobocel (2014).

I recruited only full time employees in Experiments 1 and 3. I chose full-time employees as a selection criterion as I wanted individuals to have had the relevant work experience to imagine the hypothetical vignettes. In hindsight, part-time employees would have been able to imagine the vignette just as well.
APPENDIX A: Vignette used in Experiment 1

Instructions:

Please read the event below and image it happened to you.

Vignette:

(Temporally near condition)

About 1 month ago your boss asked you and your co-worker, Pat, to work on a project. You and Pat were to present the results of the project at the company meeting. You and Pat worked on the project. On the day of the presentation, you were absent. Pat presented the project anyway. Your boss was thrilled, and Pat took more credit for the project work than s/he should have.

(Temporally distant condition)

About 2 years ago your boss asked you and your co-worker, Pat, to work on a project. You and Pat were to present the results of the project at the company meeting. You and Pat worked on the project. On the day of the presentation, you were absent. Pat presented the project anyway. Your boss was thrilled, and Pat took more credit for the project work than s/he should have.
APPENDIX B: Vignette used in Experiments 2a and 2c

Instructions:

Please read the situation below and imagine that it has happened to you.

Vignette:

(Physically near condition)

You reside in Waterloo, Canada. Your classmate resides in Waterloo, Canada.

Together, you and your classmate are taking a class on campus and have a paper due at the end of the week. You have already completed the paper for the class. Your classmate says s/he is under a lot of time pressure and asks you to lend him/her your paper for some ideas. You agree, and this person simply retypes the paper and hands it in. The professor recognizes the paper, calls both of you to her office, scolds you, and says you are lucky she does not put you both on academic probation.

(Physically distant condition)

You reside in Waterloo, Canada. Your classmate resides in Sydney, Australia.

Together, you and your classmate are taking a class online and have a paper due at the end of the week. You have already completed the paper for the class. Your classmate says s/he is under a lot of time pressure and asks you to lend him/her your paper for some ideas. You agree, and this person simply retypes the paper and hands it in. The professor recognizes the paper, has a conference call with both of you, scolds you, and says you are lucky she does not put you both on academic probation.
APPENDIX C: Vignette used in Experiment 2b

Instructions:

Please read the situation below and imagine that it has happened to you.

Vignette:

You and your classmate are taking a class and have a paper due at the end of the week. You have already completed the paper for the class. Your classmate says s/he is under a lot of time pressure and asks you to lend him/her your paper for some ideas. You agree, and this person simply retypes the paper and hands it in. The professor recognizes the paper, scolds you, and says you are lucky she does not put you both on academic probation.
APPENDIX D: Vignette used in Experiment 2d

Instructions:

Please read the situation below and imagine that it has happened to you.

Vignette:

(Physically near condition)

You are currently in Waterloo, Canada and would like to apply for an important job in Toronto, Canada.

Your friend in Toronto, Canada offers to drop off the job application for you at the post office by the deadline for submission. Soon after, you get a letter from the potential employer saying that your application could not be considered because it was postmarked after the deadline and they had a very strict policy about this.

(Physically distant condition)

You are currently in Waterloo, Canada and would like to apply for an important job in Sydney, Australia.

Your friend in Sydney, Australia offers to drop off the job application for you at the post office by the deadline for submission. Soon after, you get a letter from the potential employer saying that your application could not be considered because it was postmarked after the deadline and they had a very strict policy about this.
APPENDIX E: Vignette used in Experiment 3

Instructions:

We would like you to read the event below and imagine that it happened to you.

Vignette:

Your boss asked you and your co-worker, Pat, to work on a project. You and Pat were to present the results of the project at the company meeting. You and Pat worked on the project. On the day of the presentation, you were absent. Pat presented the project, anyway. Your boss was thrilled, and Pat took more credit for the project work than should have.
APPENDIX F: High-level Construal Manipulation used in Experiment 2b

Instructions:

As an introduction to this thought exercise, please read the following passage that describes why a person might want to participate in a psychology experiment.

Passage:

For everything we do, there always is a reason why we do it. Moreover, we often can trace the causes of our behavior back to broad life-goals that we have. For example, you currently are participating in a psychology experiment. Why are you doing this? Perhaps to satisfy a course requirement. Why are you satisfying the course requirement? Perhaps to pass a psychology course. Why pass the course? Perhaps because you want to earn a college degree. Why earn a college degree? Maybe because you want to find a good job, or because you want to educate yourself. And perhaps you wish to educate yourself or find a good job because you feel that doing so can bring you happiness in life.

Research suggests that engaging in thought exercise like the one above, in which one thinks about how one do actions relate to one’s ultimate life goals, can improve people’s life satisfaction. Today’s thought exercise is intended to focus your attention on why you do the things you do. For this thought exercise, please consider the following activity: “improving and maintaining one’s physical health”.

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Task:

List three ways in which improving and maintaining your physical health could help you meet important life goals.

1. __________________________________________________________
   __________________________________________________________

In reference to the first goal you listed, how much will improving and maintaining your health help this important goal? Circle the appropriate number.

1  2  3  4  5
A little Very, very much

2. __________________________________________________________
   __________________________________________________________

In reference to the second goal you listed, how much will improving and maintaining your health help this important goal?

1  2  3  4  5
A little Very, very much

3. __________________________________________________________
   __________________________________________________________

In reference to the third goal you listed, how much will improving and maintaining your health help this important goal?

1  2  3  4  5
A little Very, very much
Complete the diagram showing how improving and maintaining your health could help you meet your important life goals. Start from the bottom up.

- Improve and Maintain Health

Why?

Why?

Why?

Why?
APPENDIX G: Low-level Construal Manipulation used in Experiment 2b

Instructions:

As an introduction to this thought exercise, please read the following passage that describes how you might find happiness in life.

Passage:

For everything we do, there always is a process of how we do it. Moreover, we often can follow our broad life-goals down to our very specific behaviors. For example, like most people, you probably hope to find happiness in life. How can you do this? Perhaps finding a good job, or being educated, can help. How can you do these things? Perhaps by earning a college degree. How do you earn a college degree? By satisfying course requirements. How do you satisfy course requirements? In some cases, such as today, you participate in a psychology experiment.

Research suggests that engaging in thought exercises like the one above, in which one thinks about how one’s ultimate life goals can be expressed through specific actions, can improve people’s life satisfaction. Today’s thought exercise is intended to focus your attention on how you do the things you do. For this thought exercise, please consider the following activity: “improving and maintaining one’s physical health”.
Task:

List three means by which you could improve and maintain your health.

1.  

In reference to the first mean you listed, how much will engaging in this activity improve and maintain your health? Circle the appropriate number.

1 2 3 4 5
A little Very, very much

2.  

In reference to the second mean you listed, how much will engaging in this activity improve and maintain your health?

1 2 3 4 5
A little Very, very much

3.  

In reference to the third mean you listed, how much will engaging in this activity improve and maintain your health?

1 2 3 4 5
A little Very, very much
Complete the diagram showing how you can improve and maintain your health. Start from the top down.
APPENDIX H: High-level Construal Manipulation used in Experiment 3

Instructions:

For this first section, we have a simple task that we have created to get a sense of how your mind works. During this task, we will present several objects. For each object, we're going to present two options. One of the options is going to be an example of the object. The other option is going to be a group that the object belongs to.

For example, we might show you the object "dog" and present two options: "a poodle" and "animals".

What we want you to do for this task is correctly identify which option refers to a group that the object belongs to. We want you to do this as accurately as you can. So, for example, if we showed you "dog", you should pick "animals" instead of "a poodle", because dogs are included in the group of "animals".

Remember, pick the option that you think refers to a group that the object belongs to.

Task:

1. Which of the following is a group that “soda” belongs to?
   o Liquids
   o A bottle of Mountain Dew

2. Which of the following is a group that “computer” belongs to?
   o An IPAD
   o Machines

3. Which of the following is a group that “newspaper” belongs to?
   o The New York Times
   o Reading material

4. Which of the following is a group that “professor” belongs to?
   o Intellectuals
   o Noam Chomsky

5. Which of the following is a group that “pasta” belongs to?
   o Food
   o Linguini

6. Which of the following is a group that “book” belongs to?
   o Harry Potter
   o School supplies
7. Which of the following is a group that “sport” belongs to?
   o Basketball
   o Recreation

8. Which of the following is a group that “table” belongs to?
   o Furniture
   o A coffee table

9. Which of the following is a group that “shoes” belongs to?
   o Fashion accessories
   o A pair of Nike Air Jordan

10. Which of the following is a group that “movie” belongs to?
    o Star Wars
    o Entertainment

11. Which of the following is a group that “pen” belongs to?
    o A BIC ballpoint
    o Stationary

12. Which of the following is a group that “senator” belongs to?
    o Politicians
    o John McCain

13. Which of the following is a group that “beer” belongs to?
    o Heineken
    o Alcohol

14. Which of the following is a group that “phone” belongs to?
    o An IPHONE
    o Communication devices

15. Which of the following is a group that “soap” belongs to?
    o A bar of IRISH SPRING
    o Hygiene products

16. Which of the following is a group that “fruit” belongs to?
    o Food
    o A banana

17. Which of the following is a group that “coin” belongs to?
    o A quarter
    o Currency
18. Which of the following is a group that “restaurant” belongs to?
   o Applebee’s
   o Businesses

19. Which of the following is a group that “tree” belongs to?
   o Living organism
   o Oak

20. Which of the following is a group that “game” belongs to?
   o Monopoly
   o Entertainment

21. Which of the following is a group that “painting” belongs to?
   o The Mona Lisa
   o Artwork

22. Which of the following is a group that “bag” belongs to?
   o A Gucci handbag
   o Clothing

23. Which of the following is a group that “water” belongs to?
   o Liquids
   o A bottle of Aquafina

24. Which of the following is a group that “college” belongs to?
   o Harvard
   o Schools

25. Which of the following is a group that “dance” belongs to?
   o Ballet
   o Movement

26. Which of the following is a group that “candy” belongs to?
   o Junk food
   o A Snickers bar

27. Which of the following is a group that “guitar” belongs to?
   o A Gibson
   o Musical instrument

28. Which of the following is a group that “mountain” belongs to?
   o Mount Everest
   o Nature
29. Which of the following is a group that “finger” belongs to?
   - A body part
   - Thumb

30. Which of the following is a group that “soap opera” belongs to?
   - Television programs
   - The Young and the Restless

31. Which of the following is a group that “river” belongs to?
   - The Mississippi River
   - Body of water

32. Which of the following is a group that “math” belongs to?
   - Geometry
   - School subjects

33. Which of the following is a group that “king” belongs to?
   - King Solomon
   - Royalty

34. Which of the following is a group that “whale” belongs to?
   - Mammals
   - Moby Dick

35. Which of the following is a group that “singer” belongs to?
   - Whitney Houston
   - Entertainer

36. Which of the following is a group that “car” belongs to?
   - A Porsche
   - Transportation
APPENDIX I: Low-level Construal Manipulation used in Experiment 3

Instructions:

For this first section, we have a simple task that we have created to get a sense of how your mind works. During this task, we will present several objects. For each object, we're going to present two options. One of the options is going to be an example of the object. The other option is going to be a group that the object belongs to.

For example, we might show you the object "dog" and present two options: "a poodle" and "animals"

What we want you to do for this task is correctly identify which option refers to an example of the object. We want you to do this as accurately as you can. So, for example, if we showed you "dog", you should pick "a poodle" instead of "animals", because a poodle is an example of a dog.

Remember, pick the option that you think refers to an example of the object.

Task:

1. Which of the following is an example of “soda”?
   - Liquids
   - A bottle of Mountain Dew

2. Which of the following is an example of “computer”?
   - An IPAD
   - Machines

3. Which of the following is an example of “newspaper”?
   - The New York Times
   - Reading material

4. Which of the following is an example of “professor”?
   - Intellectuals
   - Noam Chomsky

5. Which of the following is an example of “pasta”?
   - Food
   - Linguini

6. Which of the following is an example of “book”?
   - Harry Potter
   - School supplies
7. Which of the following is an example of “sport”?
   o Basketball
   o Recreation

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   o Furniture
   o A coffee table

9. Which of the following is an example of “shoes”?
   o Fashion accessories
   o A pair of Nike Air Jordan

10. Which of the following is an example of “movie”?
    o Star Wars
    o Entertainment

11. Which of the following is an example of “pen”?
    o A BIC ballpoint
    o Stationary

12. Which of the following is an example of “senator”?
    o Politicians
    o John McCain

13. Which of the following is an example of “beer”?
    o Heineken
    o Alcohol

14. Which of the following is an example of “phone”?
    o An IPHONE
    o Communication devices

15. Which of the following is an example of “soap”?
    o A bar of IRISH SPRING
    o Hygiene products

16. Which of the following is an example of “fruit”?
    o Food
    o A banana

17. Which of the following is an example of “coin”?
    o A quarter
    o Currency
18. Which of the following is an example of “restaurant”?
   - Applebee’s
   - Businesses

19. Which of the following is an example of “tree”?
   - Living organism
   - Oak

20. Which of the following is an example of “game”?
   - Monopoly
   - Entertainment

21. Which of the following is an example of “painting”?
   - The Mona Lisa
   - Artwork

22. Which of the following is an example of “bag”?
   - A Gucci handbag
   - Clothing

23. Which of the following is an example of “water”?
   - Liquids
   - A bottle of Aquafina

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   - Harvard
   - Schools

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   - Ballet
   - Movement

26. Which of the following is an example of “candy”?
   - Junk food
   - A Snickers bar

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   - A Gibson
   - Musical instrument

28. Which of the following is an example of “mountain”?
   - Mount Everest
   - Nature
29. Which of the following is an example of “finger”?
   o A body part
   o Thumb

30. Which of the following is an example of “soap opera”?
   o Television programs
   o The Young and the Restless

31. Which of the following is an example of “river”?
   o The Mississippi River
   o Body of water

32. Which of the following is an example of “math”?
   o Geometry
   o School subjects

33. Which of the following is an example of “king”?
   o King Solomon
   o Royalty

34. Which of the following is an example of “whale”?
   o Mammals
   o Moby Dick

35. Which of the following is an example of “singer”?
   o Whitney Houston
   o Entertainer

36. Which of the following is an example of “car”?
   o A Porsche
   o Transportation
APPENDIX J: Behavioral Identification Form used in Experiment 1

Instructions:

Any behavior can be described in many ways. Below you will find several behaviors listed. After each behavior will be two different ways in which the behavior might be described. For example:

Behavior: Attending class
a. sitting in a chair
b. looking at a teacher

Your task is to choose the identification, \textit{a} or \textit{b}, that best describes the behavior for you. That is, mark the description that you \textit{personally believe} is more appropriate for each pair.

Task:

1. Making a list
   a. Getting organized
   b. Writing things down

2. Reading
   a. Following lines of print
   b. Gaining knowledge

3. Washing clothes
   a. Removing odors from clothes
   b. Putting clothes into the machine

4. Picking an apple
   a. Getting something to eat
   b. Pulling an apple off a branch

5. Chopping down a tree
   a. Wielding an axe
   b. Getting firewood

6. Painting a room
   a. Applying brush strokes
   b. Making the room look fresh

7. Paying the rent
   a. Maintaining a place to live
   b. Writing a check
8. Caring for houseplants
   a. Watering plants
   b. Making the room look nice

9. Locking a door
   a. Putting a key in the lock
   b. Securing the house

10. Tooth brushing
    a. Preventing tooth decay
    b. Moving a brush around in one's mouth

11. Taking a test
    a. Answering questions
    b. Showing one's knowledge

12. Greeting someone
    a. Saying hello
    b. Showing friendliness

13. Having a cavity filled
    a. Protecting your teeth
    b. Going to the dentist
APPENDIX K: Behavioral Identification Form used in Experiment 2a

Instructions:

Any behavior can be described in many ways. Below you will find several behaviors listed. After each behavior will be two different ways in which the behavior might be described.

For example:

Behavior: Attending class

- Sitting in a chair
- Looking at a teacher

Your task is to choose the identification (sitting in a chair vs. looking at a teacher) that best describes the behavior for you. In other words, mark the description that you personally believe is more appropriate for each pair.

Task:

1. Make a list
   - Getting organized
   - Writing things down

2. Reading
   - Following lines of print
   - Gaining knowledge

3. Joining the army
   - Helping the Nation’s defense
   - Signing up

4. Washing clothes
   - Removing odors from clothes
   - Putting clothes into the machine

5. Picking an apple
   - Getting something to eat
   - Pulling an apple off a branch
6. Chopping down a tree
   - Wielding an axe
   - Getting firewood

7. Measuring a room for carpeting
   - Getting ready to remodel
   - Using a yard stick

8. Cleaning the house
   - Showing one’s cleanliness
   - Vacuuming the floor

9. Painting a room
   - Applying brush strokes
   - Making the room look fresh

10. Paying the rent
    - Maintaining a place to live
    - Writing a cheque

11. Caring for houseplants
    - Watering plants
    - Making the room look nice

12. Locking a door
    - Putting a key in the lock
    - Securing the house

13. Voting
    - Influencing the election
    - Marking the ballot

14. Climbing a tree
    - Getting a good view
    - Holding on branches
15. Filling out a personality test
   - Answering questions
   - Revealing what you are like

16. Tooth-brushing
   - Preventing tooth decay
   - Moving a brush around in one’s mouth

17. Taking a test
   - Answering questions
   - Showing one’s knowledge

18. Greeting someone
   - Saying hello
   - Showing friendliness

19. Resisting Temptation
   - Saying no
   - Showing moral courage

20. Eating
   - Getting nutrition
   - Chewing and swallowing

21. Growing a garden
   - Planting seeds
   - Getting fresh vegetables

22. Travelling by car
   - Following a map
   - Seeing countryside

23. Having a cavity filled
   - Protecting your teeth
   - Going to the dentist
24. Talking to a child

- Teaching a child something
- Using simple words

25. Pushing a door bell

- Moving a finger
- Seeing if someone is at home
APPENDIX L: Benevolence Subscale used in Experiments 1 and 3

Instructions:

The following questions pertain to the event you read today. We would like you to consider how you might think and act towards Pat today. Indicate your level of agreement to the following statements:

Items:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>I would forgive Pat for what Pat did to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Even though Pat’s actions hurt me, I would have goodwill for Pat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would want Pat and I to bury the hatchet and move forward with the relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Despite what Pat did, I would want us to have a positive relationship again</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Although Pat hurt me, I would put the hurt aside so we could resume our relationship</td>
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<tr>
<td>I would give up my hurt and resentment towards Pat</td>
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