2015

Extending an implicit theories approach to the examination of empathy and forgiveness

Jennifer Cecilione
University of Richmond

Extending an Implicit Theories Approach to the Examination of Empathy and Forgiveness

by

Jennifer Cecilione

University of Richmond

Honors Thesis

Submitted to

Department of Psychology

University of Richmond

Richmond, VA

April 20, 2015

Advisor: Dr. Scott T. Allison

Extending an Implicit Theories Approach to the Examination of Empathy and Forgiveness

Jennifer Cecilione

University of Richmond

Abstract

Empathy and forgiveness are two key constructs involved in effective conflict-resolution. Empathy has been defined in terms of its cognitive aspects (i.e. the ability to understand another's emotional reactions to situations without actually feeling the other's emotions) and its affective components (i.e. the ability to vicariously feel the emotions of another without directly experiencing the other's situation) (Davis, 1980; Giammarco & Vernon, 2014). On the other hand, forgiveness has been described as the ability to act in a prosocial manner towards a transgressor (McCullough, Worthington, & Rachal, 1997). Past research has repeatedly shown links between empathy and forgiveness, such that empathy is a precursor to forgiveness. More recent research has suggested that empathy is not always an automatic response and that a belief in the malleability of empathy may help increase empathic effort in challenging situations (Schumann, Dweck, & Zaki, 2014). The present series of studies extended this research and found that theories of empathy (i.e. fixed versus malleable mindsets) do not predict empathic effort in more empathically challenging situations. The strongest predictor of empathic effort in more challenging situations was perceived empathic ability. As previous research suggests, empathy and forgiveness are related constructs; for instance, participants were more likely to forgive a transgressor if they thought they themselves were good empathizers. Because perceived empathic abilities seemed to have a greater effect than theories of empathy, perhaps perceived empathic abilities are more useful in situations in which empathy and forgiveness are especially difficult, but more investigation is needed.

Extending an Implicit Theories Approach to the Examination of Empathy and Forgiveness

Almost a decade ago in 2006, President Barrack Obama claimed that the largest deficit in the United States and across the globe was not one of natural or financial resources, but rather one of empathy. Recent meta-analyses of empathy research suggest that empathy is on a decline. From 1972 to 2009, there has been a 34% decrease in reported cognitive empathy (i.e. the ability to recognize and understand the emotional reactions of others) and a 48% decrease in reported affective empathy (i.e. the ability to feel another's emotional reactions to a situation without directly experiencing the situation) (Schumann et al., 2014).

President Obama is not the only politician raising awareness of the empathy deficit. At a foreign policy conference in late 2014, former U.S. secretary of state Hilary Clinton controversially asserted that America should respect its enemies and try to empathize and understand their perspectives. According to Clinton, this would help America define problems and arrive at solutions, which would enhance the hopes for peace. Even though many media outlets slammed Clinton for her "naïve" and "utopian" remarks, perhaps her comments should not be completely disregarded. Empathy has been linked to prosocial behaviors, such as altruism, conciliatory behavior (McCullough et al., 1997), effective conflict-resolution (Kahn & Kawhorne, 2003; Schumann & Dweck, 2014), and heroism (Allison & Goethals, 2011). Similarly, taking another's perspective has been shown to illuminate new ideas and help undermine established prejudices (Gracia, García & Lila, 2014). Perhaps an understanding of these concepts could be beneficial on the international scale as well.

Another vital component in conflict-resolution is forgiveness. Forgiveness has been loosely defined as a decrease in negative emotions toward an offender (Lawler et al., 2004; Toussaint & Webb, 2005). In interpersonal contexts, forgiveness has been conceptualized as a

three-pronged series of changes in motivation: 1) a decreased desire for retaliation and/or revenge, 2) a decreased desire for distancing, and 3) an increased desire to engage in peacemaking behaviors (McCullough et al., 1997). Because forgiveness is one of the most important factors in resolving conflict (Toussaint & Webb, 2005), its presence in interpersonal interactions is necessary for a functioning society. In addition to potential societal benefits, forgiveness is associated with improved health and negatively correlated with negative affect (e.g. anxiety and depression) at the individual level. That is, the more forgiving an individual tends to be, the less likely that he or she struggles with high blood pressure, anxiety, or depression (Lawler et al., 2005). Schumann and Dweck (2014) also posit that successful conflict-resolution can be a factor promoting individual health in and of itself.

Conceptualizing the Processes of Empathy and Forgiveness

While empathy and forgiveness have been defined separately, they are not two completely distinct constructs. Empathy may be a precursor to forgiveness, such that it affects how an individual perceives and interacts with others. For instance, empathic individuals will often attend to the emotions and cognitions of others during social exchanges; this allows them to view the situation in a more balanced, holistic manner (Toussaint & Webb, 2005). Previous research suggests that empathy is a mediator for the relationship between apologies and forgiveness in interpersonal interactions. For instance, when an offender offers an apology, it incites empathy in the offended party. After feeling this empathy, the offended individual is able to feel forgiveness for the offender. Then, the forgiveness that the offended individual feels enables him or her to engage in behaviors that promote successful resolution of the conflict (i.e. decreased avoidance and increased peacemaking responses) (McCullough et al., 1997).

Although it is generally understood that both forgiveness and empathy are positive constructs that lead to prosocial behavior and thus social harmony (Lawler et al. 2005; McCullough et al., 1997; Schumann et al., 2014), there are differing opinions as to how these constructs, especially empathy, are felt and enacted within individuals. For instance, some researchers posit that empathy is an automatic process, ignited by somatic reactions to stimuli rather than by conscious effort (Sonnby–Borgström, 2002). The discovery of mirror neurons has also supported the hypothesis that empathy is at least a partially automatic process. When passively viewing another individual display emotion, neural circuits (i.e. mirror neurons) associated with those emotions will also fire in participants' brains. Because the participants were able to feel (at a neuronal level) the emotions of the target without being prompted to attend to the target's emotions, it has been suggested that empathy may be an automatic process (i.e. empathy occurs at a neuronal level without effortful control on the part of the empathizer) (Singer & Lamm, 2009).

Conversely, some researchers emphasize that empathy is not felt automatically in every situation. Depending on contextual and individual circumstances, it can be difficult to empathize with another person; empathy sometimes requires conscious will and effort. For example, it is harder to empathize with someone who holds an opposing opinion or is from a racial outgroup (i.e. the target person is of another race) (Schumann et al., 2014).

Given that there exist many circumstances in which it is difficult to empathize with another person and the importance of empathy in problem-solving and prosocial behavior, recent research has explored what factors may promote empathic effort in empathically challenging situations. Schumann et al. (2014) have found evidence to support the relationship between implicit theories of empathy and empathic effort in some of these difficult contexts.

Overview of Implicit Theories

Implicit theories are people's beliefs regarding various characteristics and abilities. People can hold either a *malleable* theory or *fixed* theory about a specific matter. A malleable theory refers to the belief that something can grow or develop over time, often times with concerted practice and effort. For example, a person who holds a malleable theory of intelligence thinks that people can change how smart they are through experience and study. Conversely, a fixed theory refers to the belief that a certain attribute is not able to grow or be developed. A person holding a fixed theory of intelligence contends that everyone is born with a certain capacity for intelligence; regardless of efforts taken to improve, people's levels of intelligence are rather set (Dweck, 2012).

Even though people are not consciously aware of the implicit theories they hold every minute of every day, implicit theories still affect people's thoughts and behaviors. For example, students who hold malleable theories of intelligence tend to outperform their peers who hold fixed theories of intelligence on cognitively challenging tasks. Also, those who hold a malleable theory of personality (i.e. the belief that other people can change their personality traits) are more likely to forgive a romantic partner rather than seek revenge, as compared to those who hold a fixed theory of personality (i.e. the belief that other people cannot change their personality traits). Similarly, those who hold fixed theories of personality, as opposed to malleable theories of personality, tend to attribute another's behavior to their set personality traits instead of considering environmental factors or psychological processes (e.g. someone is being rude to you because they are feeling insecure about themselves). Additionally, these fixed theorists, as opposed to malleable theorists, are more prone to stick to their beliefs when confronted with counter arguments. Furthermore, when people believe that others cannot change their

personality traits, they are more likely to endorse harsher punishments for transgressions (Dweck, 2012).

Implicit theories frequently lead to certain thoughts and behaviors because they motivate individuals to pursue different goals. Malleable theories often drive people to pursue *learning* goals, whereas fixed theories drive people to chase *performance* goals. Learning goals describe instances when people try to improve upon their weaker qualities, presumably because they believe that those qualities can be bettered. On the other hand, performance goals describe situations in which people attempt to display already developed or mastered skills; seemingly, these people do not think they can significantly improve their shortcomings and would rather accentuate the positive qualities they know they already possess (Dweck, 2012). For example, those who hold a malleable, as opposed to fixed, theory of personality are more likely to include an admission of responsibility in their apologies to those they offend. Malleable theorists see the situation as an opportunity to learn and grow, whereas fixed theorists see the situation more as a threat to their self-concept and overall image (Schumann & Dweck, 2014).

Implicit Theories in the Context of Empathy

To study the role implicit theories play in empathic effort, Schumann et al. (2014) devised a series of several studies that tested how participants' beliefs about empathy affected their responses to empathically challenging situations. Essentially, people can hold one of two beliefs about empathy. Some people hold a *fixed* theory of empathy; these individuals think that the amount of empathy any given person has is relatively stable and is not likely to change much, regardless of how much that person may try to empathize with others. Then, other people hold a *malleable* theory of empathy; these people believe that the amount of empathy a person feels can be changed, no matter whom that person is. In pilot studies of diverse samples, Schumann et al.

(2014) found that people do not significantly favor one theory over the other; about half of all people hold a malleable theory of empathy and half hold a fixed theory of empathy. They also found that people generally wish to feel empathy for others, despite their initial theories of empathy (Schumann et al., 2014).

In their first trial, Schumann et al. (2014) tested how influential theories of empathy are in empathically easy situations as compared to empathically challenging ones. First, they assessed participants' (all of whom were college students) initial theories of empathy with a self-report. This measure asked participants to indicate the extent to which they agreed with 6 statements, 3 of which described a malleable theory of empathy (e.g. "No matter who somebody is, they can always change how empathic a person they are") and 3 of which described a fixed theory of empathy (e.g. "A person's level of empathy is something very basic about them, and it can't be changed much"). Then, participants read 8 different scenarios, 5 of which described situations in which it would be difficult to empathize with the target (e.g. when someone different from them was suffering) and 3 of which described situations in which it was easy to empathize with the target (e.g. when someone they knew was suffering) and reported how much effort they would exert in trying to empathize with each target. Participants' theories of empathy only influenced their empathic effort in the more empathically challenging situations as opposed to the situations that were empathically less challenging; malleable theories of empathy were associated with more empathic effort (Schumann et al., 2014).

Schumann et al. (2014)'s second study tested if a malleable theory of empathy would predict empathic effort when the target holds an opposing view on a personally important issue. After completing the measure of theories of empathy, participants (all of whom were Amazon Mechanical Turk, or "mTurk," workers) completed a measure of perceived empathic abilities, on

which they indicated how strong their empathic abilities currently were. Participants stated the degree to which they agreed with 7 assertions; some examples of items included "I am a good listener" and "I'm not good at empathizing with other people". Then, the participants chose from several social and political issues the one that was most personally relevant or important. Participants then imagined having a conversation with someone who held the opposite view as them and ranked how likely they would be to engage in different reactions. Some reactions represented empathic effort (e.g. "Try to understand their perspective on this issue"), while others did not (e.g. "Ignore what they have to say about this issue"). Even after controlling for perceived empathic abilities, a malleable theory of empathy, as compared to a fixed theory of empathy, predicted more empathic effort (Schumann et al., 2014).

Then, Schumann et al. (2014) conducted a third trial to test if theories of empathy predict empathically effortful responses towards someone who holds an opposing viewpoint only on a personally important issue but not a trivial one. First, participants (all of whom were mTurk workers) chose from a series of current political and social issues the one that was most important to them and the one that was least important. Half of the participants completed the empathic effort scale after imagining conversing with someone who held an opposing view on an important issue, while the other half completed the empathic effort scale after imagining conversing with someone who held an opposing view on an unimportant issue. Lastly, participants completed the measure of theories of empathy. Similar to previous findings, a malleable theory of empathy predicted more empathic effort exerted in conversations with someone holding an opposing viewpoint on a personally important issue, but not in conversations with someone holding an opposing viewpoint on a trivial issue. Additionally, because the theories of empathy scale was administered last, this trial ruled out the possibility

that the findings of previous studies were due to priming effects. Hence, a malleable theory of empathy predicts empathic effort, regardless of the participant first being aware that empathy is being tested (Schumann et al., 2014).

In their fourth study, Schumann et al. (2014) tested the same hypothesis of their third trial; however, they induced a particular theory of empathy in their participants instead of measuring existing theories. Participants (all of whom were mTurk workers) read a fabricated article that either detailed a fixed or malleable theory of empathy. Then, they envisioned speaking with someone who held the opposite view as them on either an important issue or an unimportant issue and indicated how likely they would be to exert empathic effort towards the target. Again, malleable theories of empathy only predicted empathic effort when participants imagined having a conversation with someone who disagreed with them about an important issue and not a trivial issue. This trial also suggests that theories of empathy can be induced and that there is a causal relationship between theories of empathy and empathic effort, such that more malleable theories of empathy incite more empathic effort (Schumann et al., 2014).

Then, Schumann et al. (2014) conducted a fifth trial to test if promoting a malleable theory of empathy would result in more empathic effort exerted towards someone of a different race, which is an empathically challenging task. After reading an article describing either a malleable or fixed theory of empathy, participants (all of whom were White female mTurk workers) listened to a personal story of a fictional person named Natasha. Before listening to the story, participants were shown Natasha's picture; half of the participants saw the picture of a Black woman, and half saw a picture of a White woman. While listening to the story, participants had the option of skipping as little or as much of the story as they wanted; the amount of time spent listening to the story was used as a measure of empathic effort. Malleable,

as opposed to fixed, theories of empathy predicted more empathic effort exerted towards the

Black woman than the White woman. Conversely, fixed, as opposed to malleable, theories of

empathy predicted more empathic effort exerted towards the White woman than the Black

woman. These findings suggest that fixed theorists usually pursue performance goals, while

malleable theorists pursue learning goals. It is likely that those persuaded to hold a malleable

theory of empathy saw this trial's empathically challenging situation as a chance to learn and

grow. Conversely, those influenced to hold a fixed theory of empathy may have seen the

situation in which empathy came easy as an opportunity to prominently display their empathic

abilities (Schumann et al., 2014).

Schumann et al. (2014) conducted a sixth study to test if a malleable theory of empathy

would result in increased charitable behavior when it was empathically challenging (i.e.

emotionally draining) to help. First, participants (all of whom were college students) read a

fabricated article describing either a malleable or fixed theory of empathy. Then, they read about

different on-campus opportunities to volunteer for a cancer research center. The options for

volunteering varied in the degree to which they required empathic effort: 1) volunteering at a

walkathon, 2) volunteering at a support group, or 3) volunteering at a booth to raise awareness.

In addition to indicating how likely they would be to volunteer at each post, participants reported

how much money they would donate and how likely they would be to read personal stories of

cancer survivors. They then completed measures of empathy. While there was no difference

between the amounts of money participants were willing to donate, those induced to hold a

malleable, as opposed to fixed, theory of empathy were more likely to want to volunteer at the

support group, which was the most empathically challenging of the three volunteer options.

Those induced to hold a malleable theory of empathy also reported more empathy felt for the

cancer survivors and were more likely to read their emotionally charged personal stories. Hence, a malleable theory of empathy may promote altruism more effectively than a fixed theory of empathy (Schumann et al., 2014).

In their last study, Schumann et al. (2014) tested the hypothesis that a malleable, as opposed to fixed, theory of empathy results in more empathic effort because it orients people towards a learning goal and thus inspires them to improve their empathic abilities. First, participants (all of whom were mTurk workers) read an article describing either a malleable or fixed theory of empathy. Then, they completed the "Reading the Mind in the Eyes Test," which is meant to measure empathic abilities. But, half of the participants received positive feedback and half received negative feedback, regardless of their actual performance on the task. Lastly, participants were given the chance to participate in an optional module of empathy training. After receiving negative feedback, those induced to hold a malleable, as opposed to fixed, theory of empathy were more likely to participate in the empathy training; there was no difference between the groups after they received positive feedback. Thus, malleable theories of empathy appear to elicit learning goals and subsequent desire to improve empathic abilities in the face of failure more so than fixed theories of empathy (Schumann et al., 2014).

Connecting Empathy and Forgiveness

As aforementioned, empathy has been found to mediate the relationship between apologies and forgiveness in interpersonal conflict. McCullough et al. (1997) conducted a series of studies that tested the role empathy plays in forgiveness during situations of interpersonal conflict. In their first study, participants (all of whom were college students) recalled a time when they felt another person mistreated them. They described the event, their relationship to the offender, how long ago the event occurred, and how much the offense hurt them. Participants

also completed assessments measuring their perceptions of the offender's apology, how much

affective empathy (i.e. feelings of concern, compassion, and warmth) they presently felt towards

the offender, their attempts at reconciliation with the offender, their attempts at avoiding the

offender, their motivation for retaliation, and their feelings of forgiveness of the offender. The

results suggested that empathy mediates the link between an offender's apology and the

forgiveness felt for the offender. Additionally, forgiveness directly resulted in increased

motivation for prosocial behaviors (i.e. reconciliation attempts) and decreased motivation for

antisocial behaviors (i.e. retaliation and avoidance) (McCullough et al., 1997).

McCullough et al. (1997) conducted a subsequent study to investigate the causal

relationship between empathy and forgiveness (i.e. the presence of empathy makes forgiveness

possible). Participants (all of whom were college students in an introductory psychology course)

were randomly assigned to attend one of two seminars that each consisted of 8 one-hour

sessions. The first seminar focused on espousing empathy as an antecedent to forgiveness. The

second seminar focused only on teaching forgiveness but not empathy. First, participants recalled

a specific offense that they wished to forgive (e.g. "My boyfriend cheated on me" or "My father

left our family"). Participants also completed measures of affective empathy, cognitive empathy,

and forgiveness at the beginning of the seminar, at the end of the seminar, and at a 6-week

follow-up assessment. The seminar that focused on empathy resulted in larger positive changes

in reported forgiveness of offenders as well as higher levels of affective empathy. Thus,

empathy, particularly affective empathy, seems to be an important precursor to forgiveness.

When the offended feels greater affective empathy towards the offender, the warm concern they

feel for the offender takes precedence over any feelings of vengeance they may harbor, allowing

forgiveness and reconciliation to occur (McCullough et al., 1997).

The Present Study

The present study addressed several issues that previous studies had left unanswered. For

instance, Schumann et al. (2014) found that malleable theories of empathy predict increased

empathic effort. Yet, these trials only focused on empathically challenging situations in which

the target was a fairly neutral party; the target had never directly wronged the participant. Hence,

the current study examined the relationship between implicit theories of empathy and empathic

effort exerted towards an offender, which is a more empathically challenging situation than

scenarios tested in Schumann et al. (2014)'s work. Additionally, while empathy has been

suggested to be an important component of the forgiveness process (McCullough et al., 1997),

no research to date has tested the role implicit theories of empathy play in this relationship. Past

research has also focused on empathy mediating the relationship between apologies and

forgiveness in interpersonal relationships (McCullough et al., 1997), but not in situations in

which the offender is unknown. Hence, the current study examined the role empathy and theories

of empathy play in situations in which the offender is a stranger to the participant, since often

times successful conflict-resolution is needed when offenders are people who are not in intimate

relationships with the offended.

Additionally, this study pushed the boundaries of the relationship between implicit

theories of empathy and empathic effort in more empathically challenging contexts than were

studied in Schumann et al. (2014)'s trials. Because it is difficult to empathize with someone who

is perceivably to blame for his or her own circumstance, similar to the concept of *victim-blame*

(Anastasio & Costa, 2004), the current study looked at the role implicit theories of empathy play

during situations in which the participant blames the target for being in his or her predicament in

addition to situations in which the participant has been personally offended by the target. In

testing these relationships, the current study employed methods similar to Schumann et al. (2014), such as utilizing self-reports, inducing theories of empathy with fabricated articles, and employing mTurk workers as well as college students. Unlike McCullough et al. (1997)'s study, the current study was not longitudinal in nature, nor did it involve empathy or forgiveness training.

Studying the extent to which implicit theories of empathy influence forgiveness and empathic effort in increasingly empathically challenging contexts is important for informing the mechanisms of prosocial behavior. Successful conflict-resolution is often vital in situations in which it is extremely difficult to feel empathy or forgive an offender (e.g. legal disputes, congressional hearings, and even international conflicts). If implicit theories of empathy play a role in promoting empathy and forgiveness, they could perhaps enable prosocial behaviors and positive change.

Study 1: Do theories of empathy influence empathic effort when the target is to blame?

Based on prior research illustrating the effects of theories on empathy on empathic effort (Schumann et al., 2014), it was hypothesized that a malleable, as opposed to fixed, theory of empathy would predict increased empathic effort when the target was to blame for his or her situation.

Methods

Participants

For the current trial, participants were recruited from Amazon's Mechanical Turk (mTurk), which is an online service to which researchers post surveys to be completed by mTurk "Workers". All participants for the current study were "Master's Workers" who had demonstrated consistent accuracy in previous studies. Master's Workers were used to increase

the likelihood of participants taking the study seriously and providing honest and high-quality responses. In addition to being a Master's Worker, all participants had to be above the age of 18 and be a resident of the United States to increase the likelihood that they would comprehend the language of the study. A total of 120 participants (56 male; 64 female) participated in the current trial. Two participants' data were deleted, as they failed to answer the question "Choose 1 for this question to prove you're paying attention" correctly, leaving 118 participants (55 male, 63 female). The racial makeup of the participant pool was as follows: 4.2% Hispanic, 5.9% Black, 80.5% White, 0.8% Native American, 0.8% Pacific Islander, 6.8% Asian, and 0.8% Other. The age makeup of the participant pool was as follows: 11% were between the ages of 18 and 25, 33.9% were between the ages of 26 and 35, 33.9% were between the ages of 36 and 50, 20.3% were between the ages of 51 and 65, and 0.8% were 66 years or older. All participants were compensated $0.70 for their participation in the study.

Procedure

Participants voluntarily signed up to participate in the study by clicking on the Qualtrics survey link that was posted to mTurk's home page. All surveys were completed online. The study was advertised as an "Attitudes Survey" to distract from the true aim of the study. Some materials were based off of Schumann et al. (2014)'s work and adapted to the current study, while others were created solely for use in this study. After electronically consenting to participate in the study, participants were asked to choose from three hypothetical people the one they saw as most responsible for their current predicament and deserving of the most blame for being in their particular situation; the three choices were: "1) an individual who is incarcerated, 2) an individual who is addicted to alcohol and/or drug(s), or 3) an individual who is living in poverty and receiving government aid". The survey's skip pattern then directed each participant

to certain measures based on how they answered this first question; this was done so that each participant would be put in a situation that was particularly difficult to empathize with the target individual.

Materials

The following materials are presented in the order in which the participants completed them. They are also all located in the Appendix.

Personal Narrative

Each participant read a personal narrative of the target individual he or she chose in the first question. The narratives were adapted from online blog posts of real people facing incarceration, substance addiction, or poverty. Each narrative was comparable in length and took approximately 2 minutes to read. The narratives detailed the daily struggles of each target individual and were meant to evoke an emotional response in the reader. Gender and race were kept ambiguous in each narrative. The survey page did not allow the participant to advance to the next question until 90 seconds had passed to increase the likelihood that the participants would read the narratives.

Empathically Effortful Responses Scale (Schumann et al., 2014)

This measure was adapted from Schumann et al. (2014)'s scale of empathic effort. In Schumann et al. (2014)'s study, internal reliability was found to be relatively high (Cronbach's α=0.80). The version of this measure that was presented to each participant was dependent upon the target individual the participant chose at the commencement of the study; the three separate versions of this measure were each tailored to the narrative of the target individual. Items on this measure asked the participant on a scale of 1 to 7 (1 being "very unlikely" and 7 being "very likely") how likely they would be to engage in various responses when conversing with the

target individual whose story they read. Some items described instances of empathic effort (e.g. "Try to understand their struggle" or "Try to learn more about this person"), while other items described instances of confrontational or indifferent responses (e.g. "Criticize their choices that led them their current situation" or "Disregard what they feel"). All 18 items were averaged, and each participant was thus assigned a score of empathic effort, with higher numbers indicating more empathic effort reported. Items that were indicative of confrontation or indifference were reverse coded: items 3, 4, 6, 8, 9, 12, 14, 16, and 18. In the current study, the incarceration version of this measure had good internal reliability (α=0.96), as did the substance addiction version (α=0.94) and the poverty/welfare version reliability (α=0.95).

Filler Task

Participants were asked to describe their interpretations of two separate inkblots. The filler task was not analyzed; its purpose was to distract from the true aim of the study.

Theories of Empathy Scale (Schumann et al., 2014)

This scale was used in Schumann et al. (2014)'s study, and the current study did not alter its form or purpose; it consisted of 6 questions to measure participants' implicit theories of empathy (i.e. whether participants held a fixed or malleable theory of empathy). Participants responded to each item by indicating how much they agreed with each statement on a scale of 1 to 7 (1 being "strongly disagree" and 7 being "strongly agree"). Three items described a malleable theory of empathy (e.g. "Anybody can change how empathic a person they are"), and three described a fixed theory of empathy (e.g. "A person's level of empathy is something very basic about them, and it can't be changed much"). The items indicating a malleable theory of empathy (items 4, 5, and 6) were averaged with the indicating a fixed theory of empathy (items 1, 2, and 3 were reverse-coded) to create a score of an initial theory of empathy for each

participant, with higher numbers indicating a more malleable theory of empathy and lower

numbers indicating a more fixed theory of empathy. Internal consistency for this measure was

fairly high (α=0.96) in the current study.

Ten-Item Personality Inventory (TIPI) (Gosling et al., 2003)

The participants then completed the Ten-Item Personality Inventory (TIPI) (Gosling et

al., 2003). This measure was used as a filler task to distract from the true purpose of the study.

The results from this measure were not analyzed.

Perceived Empathic Ability Scale (Schumann et al., 2014)

This scale was used in Schumann et al. (2014)'s study, and the current study did not alter

its form or purpose. The purpose of this measure is to capture participants' perceptions of their

own empathic abilities and to use that information during analyses to test if participants'

perceptions of their own empathic abilities account for the difference in their reported empathic

effort. There were 7 items on this measure, and participants were asked to rate each one on a

scale of 1 to 7 (1 being "strongly disagree" and 7 being "strongly agree") of how much they

agreed with each statement. Statements 1, 3, 4, 6, and 7 described characteristics of empathy

(e.g. "I am a good observer of other people's emotions" and "I am a good listener"). Statements 2

("I'm not good at empathizing with other people") and 5 ("I am poor at understanding other

people's emotions") described instances of poor empathic abilities. Items 2 and 5 were reverse-

coded. Then, all items were averaged with the remaining items to create a composite score of

"perceived empathic ability" for each participant, with higher numbers indicating more perceived

empathic abilities. The internal consistency of this measure was good (α=0.94) in the current

study.

Blame Measures Before and After Reading the Narratives

Participants were then asked to recall which narrative they read at the commencement of the study. They were then presented with 16 questions, 8 of which asked them to recall how they perceived the target individual before reading their narrative and 8 of which asked them to report how they perceived the target individual after having read their narrative. These items measured how the opinions the participants had of individuals who are incarcerated, addicted to substances, or on welfare changed after reading the narrative of the target individual. Some example items include, "People who are incarcerated are at fault for being imprisoned" and "People who are addicted to substances deserve the pain they feel". Participants rated their agreement with each statement on a scale of 1 to 5 (1 being "strongly disagree" and 5 being "strongly agree"), with higher numbers indicating more blame. Items that were not indicative of blame (e.g. "People who are incarcerated are in prison because of circumstances out of their control") were reverse coded. Items 4 and 5 were excluded from analyses, as they did not measure blame. The scores of the first 6 items were averaged to create a variable that captured initial blame for the target individual. The scores of the last 6 questions were averaged to create a variable that captured blame for the target individual after the participants read the narratives. Then, the average score of initial feelings of blame were subtracted from final feelings of blame to create a score of difference in opinions before and after reading the narratives, with more negative numbers reflecting a change of more blame of the target to less blame of the target after reading the narrative. The internal consistency for the incarceration version of the initial beliefs measure was fairly reliable ($\alpha=0.88$). The internal consistency for the incarceration version of the post beliefs measure was fairly reliable ($\alpha=0.75$). The internal consistency for the substance addiction version of the initial beliefs measure was fairly reliable ($\alpha=0.75$). The internal

consistency for the substance addiction version of the post beliefs measure was also fairly

reliable (α=0.77). The internal consistency for the welfare version of the initial beliefs measure

was very reliable (α=0.95), but the internal consistency for the welfare version of the post beliefs

measure was not as reliable (α=0.65).

Debriefing

Participants were debriefed and told the true purpose of the study and the researcher's

contact information. They were also asked not to discuss the study with anyone else who might

participate in the future. Then, they were given instructions on how to upload their survey ID

onto mTurk to gain credit and compensation for participating.

Results

Because the majority of participants opted to participate in the incarceration version of

the current study (N=89), only data from these participants were considered in subsequent

analyses. In replicating the statistical analyses of Schumann et al. (2014), bivariate relations

among measures were analyzed. When using this statistical analysis, a malleable theory of

empathy was positively correlated with empathic effort (r=0.286, p<0.01). However, after

conducting a hierarchical linear regression, a malleable theory of empathy was no longer a

significant predictor of empathic effort (β=0.07, t=0.79, p=0.43).

As shown in Figure 1, other variables were found to better predict empathic effort. The

more participants blamed the target initially, the less likely they were to exert empathic effort

(β= -0.42, t= -5.37, p<0.001). Additionally, females were more likely to exert empathic effort

towards the target than were males (β= -0.21, t= -0.2.58, p<0.01). The variable that most strongly

predicted empathic effort was perceived empathic abilities; the greater participants rated their

empathic skills, the more likely they were to exert empathic effort towards the target (β=0.47,

t=5.46, *p*<0.001). The model presented in Figure 1 accounts for 51.2% of the variance in

empathic effort exerted towards the target.

　　　Interaction effects were also examined using a hierarchical linear regression analyses.

There was a significant interaction between gender and initial blame (β= -0.93, *t*= -8.76,

p<0.001), such that women who blamed the target less were more likely to exert empathic effort.

There was also an interaction between gender and perceived empathic abilities (β= 0.83, *t*=5.10,

p<0.001), such that women who perceived themselves as having high empathic abilities were

more likely to exert empathic effort towards the target.

　　　In Schumann et al. (2014)'s studies, the empathic effort scale was used to measure a

single construct—empathy. However, being that two types of empathy (i.e. affective and

cognitive) exist, an exploratory factor analysis (EFA) was also run to determine if the empathic

effort scale contained two distinct factors. As shown in Figure 2, the EFA showed that the

empathic effort scale does contain two distinct factors. The negatively worded items that were

reverse-coded (e.g. "Ignore the person") typically loaded onto one factor, whereas positively

worded items (e.g. "Try to understand their perspective regarding their loss of comfort") loaded

onto another.

Discussion

　　　The initial hypothesis that a malleable theory of empathy would predict increased

empathic effort towards a person who was viewed to be responsible for putting him or herself in

an unfortunate situation was not supported after running a more rigorous statistical analysis (i.e.

hierarchical linear regression) and controlling for related factors (i.e. perceived empathic ability,

gender, and initial blame of the target). These other factors explain more of the variance in

empathic effort than does theory of empathy. Particularly, perceived empathic ability most strongly predicted empathic effort.

These findings challenge Schumann et al. (2014)'s conclusion that malleable theories of empathy increase empathic effort in empathically challenging situations. However, this study pushed the boundaries of this relationship beyond the situations that Schumann et al. (2014) tested and focused on situations that addressed important social issues (i.e. incarceration, substance abuse, and welfare) in which the people involved are often seen as to blame and unworthy of another's empathy. Specifically focusing on the issue of incarceration, people who blamed the prisoner more empathized with the prisoner less; hence, blaming someone seems to be a significant barrier to empathy. Placing blame on a person is perhaps a larger obstacle to empathy than are any of the situations analyzed in Schumann et al. (2014)'s work, as the relationship between malleable theories of empathy and empathic effort was not significant in the current study as it was in that of Schumann et al. (2014). Still, after controlling for initial ratings of blame and gender, perceived empathic ability was the strongest predictor of empathic effort. Perhaps in more empathically challenging situations, theories of empathy are no longer effective in promoting empathic effort; perceived empathic ability is the active ingredient in influencing empathy.

There were several limitations to the current study. First, the order of the measures could have influenced the way in which participants responded. For instance, participants first chose from one of three targets (i.e. a person who was incarcerated, a person who was abusing substances, or a person who was receiving welfare benefits) the person who they saw as the most to blame for the situation in which they were. After reading this person's narrative, they completed the empathically effortful responses scale. Measures of theories of empathy and

perceived empathic ability then followed. Because the scale of empathic effort was designed to be challenging, it may have caused participants to provide different responses to the theories of empathy and perceived empathic ability; if a participant found the empathically effortful response scale to be too challenging, it may have caused that participant to rate him or herself especially poorly on the perceived empathic abilities scale and empathy as a particularly fixed construct. Additionally, ratings of blame (of the target) both before and after reading the narrative were collected after all other measures. It is possible that reading the narrative and completing measures of empathy prior to answering questions about blaming the target could have caused participants to answer in biased ways. For example, a participant may have reported equally low ratings of blame (for the pre and post narrative blame scales) if he or she was intensely moved by the target's narrative. The order of these measures makes it virtually impossible to collect a true measure of how much the participant blamed the target prior to reading the target's narrative. But, the measures of blame were collected after the empathy scales so that they would not interfere with reports of empathy by making the construct of empathy salient to the participants. Another limitation of the current study was the length. The substantial length and verbose nature of the current study's measures may have fatigued participants too much by the end of the study to a point at which they were no longer reading or answering questions carefully. A final limitation was that the different narratives were not previously assessed on how much emotion they would elicit in an audience. Ideally, each narrative would have caused similar emotional reactivity in the participants. Moreover, the content of the narratives was primarily geared at eliciting affective empathy as opposed to cognitive empathy. Perhaps malleable theories of empathy have more of an influence over cognitive empathy as opposed to emotional empathy.

Since it has been suggested that empathy is a mediator of the relationship between apologies and forgiveness in interpersonal relationships (McCullough et al., 1997), future research could examine the role theories of empathy might play in these situations. For instance, perhaps a malleable theory of empathy predicts forgiveness in scenarios that involve strangers instead of intimate relationships; the second study explored this question. Moreover, perhaps it is the case that when situations become too empathically challenging, factors other than malleable theories of empathy more greatly influence empathic effort. Because the strongest predictor of empathic effort was perceived empathic ability, the third trial experimentally tested if perceived empathic abilities are a better predictor of empathic effort than is a malleable theory of empathy.

Study 2: Do theories of empathy affect empathic effort and forgiveness towards transgressors?

Since prior research has drawn connections between forgiveness and empathy (McCullough et al., 1997) and between theories of empathy and empathic effort (Schumann et al., 2014), it was hypothesized in Study 2 that inducing a malleable, as opposed to a fixed, theory of empathy would increase forgiveness of and empathic effort exerted towards a transgressor who was previously unknown to the participant. It was also hypothesized that an initial malleable, as opposed to fixed, theory of empathy, would predict greater forgiveness of and empathic effort exerted towards a transgressor. Moreover, it was hypothesized that those with an initial malleable theory of empathy who also read an article explaining a malleable theory of empathy, as opposed to those with an initial fixed theory of empathy who read an article explaining a fixed theory of empathy would report greater forgiveness of and empathic effort exerted towards a transgressor.

Methods

Participants

For the current trial, participants were recruited from Introduction to Psychological

Science (PSYC 100) classes at the University of Richmond, a small liberal arts college in

Richmond, VA. Students signed up to participate in the study by using Sona Systems, which is a

participant management software that allows researchers to advertise studies and for participants

to sign up electronically. PSYC 100 students needed to participate in 12 credits of

upperclassmen's research for course credit. The current trial was worth one credit, and students

were compensated one credit for participating. A total of 72 participants (29 male; 43 female)

were recruited for the current trial. Participants were all between the ages of 18 and 22 years old.

Procedure

The current trial was run in Richmond Hall room 123, which is the computer lab where

PSYC 100 labs are conducted. Trials were held on October 22, 23, 28, 29, and 30 as well as on

November 4 and 5. All trials were held between 4pm and 7pm on any given day. Between 1 and

4 participants attended each trial (i.e. there were no more than 4 participants in thee room at any

given time), and each trial was between 10 and 15 minutes in duration. All materials were

printed out and given to the participants as paper copies; no work was done on the computer. All

materials were given to the participants on the day of the trial, with the exception of the Theories

of Empathy Scale, which was given to the participants during class 3 weeks prior to the

commencement of the study. This was done to distract from the true aim of the study and to

gather the most accurate and candid reports of initial theories of empathy as possible.

Participants voluntarily signed up for timeslots on Richmond's Sona Systems account at

least 24 hours prior to attending the study. Reminder emails were sent out to all participants the

day of the study to ensure their attendance. Before the participants arrived, the researcher placed

consent forms in front of 4 (the number varied based on how many participants signed up for that

particular timeslot) different seats throughout the room. At least one chair separated the

participants from one another. The researcher also created sets of materials that would be given

to each participant; each set of materials included all of the measures (see *Materials* section

below) in the order in which they were to be taken.

Upon entering the lab, participants reported their name to the researcher. The researcher

then granted them course credit on Sona. The participants then sat down in front of a consent

form, read it, and then signed it. The consent form delineated a basic outline of the study (i.e. its

approximate duration and what the participant would be responsible for completing). By signing

the consent form, all participants agreed to the conditions of the study and that they were older

than 18 years. The researcher explained the procedure of the study to the participants, "This

study is all on paper. There is no need to use the computers. First, you will read a short article

and then respond to a series of surveys that I will hand out one at a time. When you are done

with one survey, please look up and I will come by with the next one. Please keep a pile of all

your materials, and I will collect them at the end. You can work at your own pace and take your

time."

Each group of participants was randomly selected before trials began to be given either

the malleable or fixed theory of empathy article, which served as the primary independent

variable. Within each timeslot, all participants read the same article (i.e. either malleable or fixed

theory of empathy). This was done to avoid the possibility of participants looking at the materials

of another participant and seeing a different theory of empathy article. If this happened, then

perhaps the participants would have doubted the legitimacy of the article they were given.

Participants completed the measures in the same order as presented below. The researcher watched closely to see when each participant was done with one survey and promptly delivered the next. The researcher warned each participant when he or she was about to complete the last measure. When participants were done with the last measure, they brought all their materials to the researcher who was seated at the front of the room. They were then each given a small slip of paper that served as the debriefing. This sheet of paper explained the purpose of the study, the hypothesis, and provided the researcher's contact information and the contact information of University of Richmond's Counseling and Psychological Services (CAPS).

Materials

Some materials were based off of Schumann et al. (2014)'s work and adapted to the current study, while others were exact scales used by Rye et al. (2001). The researcher created a few materials solely for use in this study. The following materials are presented in the order in which the participants completed them. They are also located in the Appendix.

Theories of Empathy Scale (Schumann et al., 2014)

See description of this measure from Study 1 above. This measure was presented to participants as the "Implicit Attitudes Scale," so as not to make obvious the true purpose of the study. Internal consistency for this measure is fairly high (α=0.94) in the current study.

Malleable or Fixed Theory of Empathy Article (Schumann et al., 2014)

Two fictional articles that were used in Schumann et al. (2014)'s study were given to participants. Both articles were presented in the same format, supposedly published in The Journal of Personality Psychology, had the same fictional author, Cathy Schneider, and had the same fictional publication date of December 28, 2013. Each article was designed to implicitly induce either a malleable or fixed theory of empathy in the participants. Participants were also

asked to rate how interesting they felt the article was and whether or not it should be used in PSYC 100 classes next semester; this was done to divert the students' attention from the true purpose of the study.

Hypothetical Scenario

The researcher created this measure for use in the current study. The participants were asked to imagine a situation in which they returned to their room after class to find that someone had broken in and stolen some minor items from them. Participants were then asked to rate on a scale of 1 to 5 (1 being "not at all" and 5 being "very strongly") how strongly the would feel the following emotions: anger, frustration, panic, rage, disgust, sadness, anxiety, and hopelessness. They were also asked to detail any other emotions they would feel if someone had actually stolen from them. The purpose of reporting emotional responses was to make the hypothetical scenario more salient to the participants as well as to use emotional reactivity as a moderator variable in further analyses.

Empathically Effortful Responses Scale (Schumann et al., 2014)

This measure was adapted from Schumann et al. (2014)'s scale of empathic effort. In Schumann et al. (2014)'s study, internal reliability was found to be relatively high ($\alpha=0.80$). In the current study, the adapted version of this measure also had good internal reliability ($\alpha=0.89$). Items on this measure asked the participant on a scale of 1 to 7 (1 being "very unlikely" and 7 being "very likely") how likely they would be to engage in various responses when conversing with the person who stole items from their room. Some items described instances of empathic effort (e.g. "Try to understand their perspective on the situation" or "Try to learn more about this person"), while other items described instances of confrontational or indifferent responses (e.g. "Criticize the feelings they have about the current situation" or "Start an argument with them

about them about the situation"). All 16 items were averaged, and each participant was thus

assigned a composite score of empathic effort, with higher numbers indicating more empathic

effort reported. (Items that were indicative of confrontation or indifference were reverse coded:

items 3, 4, 6, 8, 9, 12, and 15).

Forgiveness Scale (*Rye et al., 2001*)

This measure was adapted from Rye et al. (2001) to fit the hypothetical situation

presented in the current study. Rye et al. (2001) found the internal consistency of the measure to

be fairly high ($\alpha =0.87$). As presented in the current study, this measure also had a high internal

consistency of ($\alpha=82$).

On the Forgiveness Scale, participants were asked to report on a scale of 1 to 5 (1 being

"strongly disagree" and 5 being "strongly agree") how much they agreed with each of the 15

statements. The statements described either reactions indicating forgiveness of the person who

stole from the participants (e.g. "I would have been able to let go of my anger toward this

person" and "If I encountered this person, I would feel at peace") or resentment and anger

towards of the person who stole from the participants (e.g. "This person's wrongful actions

would keep me from enjoying life" or "I would not be able stop thinking about how I was

wronged by this person"). All 15 items were averaged, and each participant was thus assigned a

composite score of forgiveness, with higher numbers indicating more willingness to forgive

reported. (Items that were indicative of resentment and anger were reverse coded: items 1, 3, 4,

5, 8, 10, 12, and 14).

Filler Task

Participants were asked to rank 10 controversial issues in order of least controversial (1)

to most controversial (10). The 10 items on the list were: relationships/sexual relations, global

warming, legalizing marijuana, illiteracy, stem cell, terrorism, abortion, plastic surgery, death

penalty, and healthcare. The list was generated from the following website: http://visual.ly/10-

most-controversial-topics-2014. The filler task was not analyzed. Its purpose was to distract from

the true aim of the study.

Perceived Empathic Ability Scale (Schumann et al., 2014)

See description of this measure from Study 1 above. The internal consistency of this

measure was adequate ($\alpha=0.78$) in the current study.

Forgiveness Likelihood Scale (*Rye et al., 2001)*

The last measure given to the participants was the Forgiveness Likelihood Scale, which

was not altered in form from Rye et al. (2001)'s study. The purpose of this scale was to measure

how likely participants were to be forgiving in various scenarios; it served as a measure how

forgiving the participants thought they were in everyday life (this will be referred to as "trait

forgiveness" in subsequent sections). The measure was comprised of 10 items that each

described a situation in which the participant was hypothetically wronged by someone else (e.g.

"You tell an acquaintance about a job that you hope to be hired for. Without telling you, the

acquaintance applies and gets the job for him/herself"). Participants were then asked to rate on a

scale of 1 to 5 (1 being "not at all likely" and 5 being "extremely likely") how likely they would

be to forgive this hypothetical person who wronged them. Scores on the 10 items were averaged

to create a composite score of "trait forgiveness," with higher numbers indicated more

willingness to forgive. The internal reliability for this measure was relatively high ($\alpha=0.81$) in

the current study.

Results

Independent samples T tests were conducted to analyze the difference between mean scores on measures of interest. Those who read an article about a malleable theory of empathy (N=36) reported slightly more willingness to forgive a transgressor (*M*= 3.56, *SD*=0.53) than those who read an article about a fixed theory of empathy (N=36) (*M*= 3.35, *SD*=0.44) with a small/medium effect size (*p*>0.05, *d*=0.43). Those who read an article about a malleable theory of empathy (N=36) reported only slightly more empathic effort (*M*= 4.00, *SD*=1.10) than those who read an article about a fixed theory of empathy (N=36) (*M*= 3.95, *SD*=0.94) at a non-significant level (*p*>0.05, *d*=0.04).

Bivariate correlations were also analyzed, and inducing either a fixed or malleable theory of empathy was correlated with forgiveness of the transgressor at a marginally significant level (*r*=0.214, *p*=0.07), while initial theories of empathy were not significantly correlated with any other variable.

Participants who had a score between a 4.5 and 7 on the initial theory of empathy composite measure were coded as 1 (i.e. "Malleable_Initial"), and participants who had a score between a 1 and 4.4 on the initial theory of empathy composite measure were coded as 0 (i.e. "Fixed_Initial"). The article that each participant read (malleable vs. fixed) was then considered. If a participant read a malleable theory of empathy article and also was coded as "Malleable_Initial", then he or she was placed in the new group of "Pure_Malleable" (N=23). If a participant read a fixed theory of empathy article and was also coded as "Fixed_Initial", then he or she was placed in the new group of "Pure_Fixed" (N=12). An independent samples T test showed that those in the Pure Fixed group reported less empathic effort (*M*= 4.344, *SD*=0.82)

than those in the Pure Malleable group (M= 4.35, SD=1.03) at a non-significant level (p>0.05; d=0.01).

Exploratory analyses were conducted using bivariate correlations. Those who read an article about a malleable theory of empathy (N=36) reported slightly more perceived empathic abilities (M= 5.68, SD=0.65) than those who read an article about a fixed theory of empathy (N=36) (M= 5.36, SD=0.78) with a small/medium effect size (p>0.05, d=0.44). Trait forgiveness was positively correlated with forgiveness of the transgressor (r=0.548, p<0.001), even after controlling for perceived empathic abilities (r=0.494, p<0.001). Trait forgiveness was also positively correlated with perceived empathic ability (r=0.30, p<0.05) and with empathic effort (r=0.49, p<0.001). Forgiveness of the transgressor was also positively correlated with perceived empathic ability (r=0.36, p<0.001) as well as with empathic effort (r=0.51, p<0.001). Perceived empathic ability was also positively correlated with empathic effort (r=0.34, p<0.001). The more intense of an emotional reaction a participant had to the hypothetical thief, the less likely he or she was to forgive the transgressor (r= -0.48, p<0.001), exert empathic effort towards the transgressor (r= -0.33, p<0.05) or report trait forgiveness (r= -0.30, p<0.05).

When controlling for the effects of perceived empathic abilities, the relationship between empathic effort and forgiveness was still significant (r=0.446, p<0.001). When controlling for the effects of perceived empathic abilities, the relationship between empathic effort and trait forgiveness was still significant (r=0.430, p<0.001). And, when controlling for the effects of emotional reactivity, the relationship between empathic effort and forgiveness of the transgressor remained significant (r= 0.49, p<0.001). When controlling for trait forgiveness, perceived empathic abilities was still a significant predictor of forgiveness of the transgressor (r=0.249, p<0.05).

Additionally, hierarchical linear regressions were conducted to further analyze the data. Inducing a malleable theory of empathy did not predict forgiveness (β=0.08, t=0.74, p=0.46). Also, neither gender (β=0.08, t=0.66, p=0.51) nor initial theories of empathy (β=0.12, t=1.08, p=0.28) predicted forgiveness either. However, as shown in Figure 3, the less negative emotion participants felt initially, the more likely they were to forgive the transgressor (β= -0.50, t=-4.53, p<0.001). Moreover, the higher one perceived his or her own empathic abilities, the more likely he or she was to forgive the transgressor (β=0.27, t=2.48, p<0.05). The model presented in Figure 3 accounts for 36.2% of the variance in forgiveness of the transgressor.

When empathic effort was entered into a hierarchical linear regression as the dependent variable, neither gender (β=0.10, t=0.84, p=0.41) nor initial theories of empathy (β=0.14, t=1.22, p=0.23) nor inducing a malleable theory of empathy (β=-0.03, t=-0.22, p=0.83) predicted empathic effort exerted towards the transgressor. Yet, the less negative emotion participants felt initially, the more likely they were to exert empathic effort towards the transgressor (β= -0.37, t=-3.19, p<0.01). Moreover, the higher one perceived his or her own empathic abilities, the more likely he or she was to forgive the transgressor (β=0.32, t=2.68, p<0.05). The model presented in Figure 4 accounts for 26.5% of the variance in empathic effort exerted towards the transgressor.

Discussion

The second trial's primary hypothesis that inducing a malleable theory of empathy would result in greater forgiveness of and greater empathic effort exerted towards a transgressor was largely unsupported by the data. When independent samples T tests were used to analyze the data, results were trending in the hypothesized direction but were non-significant. After conducting bivariate correlational analyses, there was a positive relationship between reading an article about a malleable theory of empathy and forgiving a transgressor, albeit at a marginally

significant level. However, after subjecting the data to hierarchical linear regression analyses, initial theories of empathy were no longer significantly related to empathic effort or forgiveness. Hence, it cannot be concluded from the current trial that a malleable theory of empathy causes one to be more inclined to forgive a transgressor. Similarly, inducing a malleable, as opposed to a fixed, theory of empathy, did not have an effect on empathic effort exerted towards or forgiveness of a transgressor, as the results of the independent T test were not statistically significant. Furthermore, the hypothesis that an initial malleable, as opposed to fixed, theory of empathy would predict greater forgiveness of and greater empathic effort exerted towards transgressors was not supported. Also, no interaction effects of the article read and initial theories of empathy were found.

Yet, exploratory analyses yielded some significant findings. Those who were more inclined to forgive the transgressor were also more likely to respond to that transgressor in an empathic manner as well as report higher perceived empathic ability. Similarly, those who reported higher trait forgiveness were also more likely to report greater empathic effort exerted towards the transgressor and higher perceived empathic ability. And akin to the findings of Study 1, perceived empathic abilities were predictive of empathic effort. Still, forgiveness of the transgressor and trait forgiveness were predictive of empathic effort after controlling for the effects of perceived empathic abilities. Moreover, findings from hierarchical linear regression analyses suggest that the less negative emotion a person experiences in the face of a conflict and the higher their perceived empathic abilities, the more likely they were to forgive and empathize with a transgressor.

Taken together, these findings lend support to previous research that suggested empathy and forgiveness are related constructs (McCullough et al., 1997). Yet, implicit theories of

empathy did not greatly influence likeliness to forgive or empathize with a transgressor, as it did in Schumann et al. (2014)'s work. However, this study's aim was to test the boundaries of implicit theories in situations where empathic effort was more difficult. Perhaps it is the case that implicit theories of empathy are not strong enough to influence empathy, which would then influence forgiveness (McCullough et al., 1997), when the transgressor is unknown and unapologetic. Some previous research has found that malleable, as opposed to fixed, personality theorists (i.e. people who believe personality traits can be changed) were *less* likely to forgive a transgressor in an interpersonal situation (Ng & Tong, 2013), while others suggest the opposite to be true (Dweck, 2012). The current study's focus on implicit theories of *empathy* differed from previous focus on implicit *personality* theories, but still did not clarify which implicit theory (if any) can influence empathy and forgiveness in situations where the transgressor is unknown and unapologetic. As Schumann and Dweck (2014) suggested, maybe the transgressor needs to apologize and accept responsibility for a transgression to increase the likelihood of empathy, forgiveness, and eventual conflict-resolution. Perhaps it is also the case that perceived empathic abilities play a more prominent role than do theories of empathy in influencing forgiveness and empathy when the situation is especially challenging.

Study 2 contained several limitations. First, the hypothetical scenario that participants read was the same for every participant. Perhaps some participants were more deeply offended by the idea of someone stealing from their room than others. If someone were more offended by the transgressor, he or she would have been less likely to forgive and empathize regardless of his or her implicit theory of empathy. Having each participant be equally offended at the beginning of the trial would have resulted in less noise when analyzing the relationship between implicit theories of empathy and forgiveness. Additionally, the particular sample used in the current

study could have influenced the results. Participants were all psychology students from a small liberal arts college; the lack of diversity could have skewed the results. Since the university that these participants attend tends to draw from a high socioeconomic stratum, someone stealing some small items from their rooms may not have notably offended the participants. Also, since participants were psychology students completing this study for course credit, they may not have taken the study seriously and rushed to complete it without putting forth their full effort. Moreover, initial theories of empathy were collected in class several weeks prior to the other measures, and there were 7 pieces of missing data because students were absent from class.

Future studies could examine how implicit theories of forgiveness, as oppose to empathy, would impact participants' likeliness to forgive a transgressor. Perhaps a malleable theory of forgiveness would better predict forgiveness than would a malleable theory of empathy. Additionally, future studies could analyze the role of apology in this situation. Perhaps a malleable theory of forgiveness would be a mediator between a transgressor's apology and the likelihood that the offended would forgive. This relationship can also be tested in interpersonal situations as opposed to when the transgressor is unknown. It is important to investigate what facilitates empathy and forgiveness in scenarios where the transgressor is previously unknown, as many real world conflicts involve two parties that have no prior relationship established. Moreover, future studies should examine ways to increase individuals' perceived empathic abilities, as this might enable them to better forgive and empathize with transgressors.

Knowing that implicit theories of empathy do not strongly predict forgiveness is important in informing potential conflict-resolution strategies. It was found that perceived empathic ability was more strongly related to forgiveness and empathic effort than were implicit theories of empathy. Perhaps believing that one is a good empathizer is more important for

conflict-resolution strategies than are implicit theories of empathy. In situations of conflict, it may be best to increase the offended party's confidence in his or her empathic abilities; this may be effective in facilitating forgiveness of the transgressor. Since empathy has been found to be a mediator for forgiveness (McCullough et al., 1997), and thus may be a good target of future conflict-resolution interventions; Study 3 experimentally examined which is the best predictor of empathic effort in empathically challenging situations—perceived empathic abilities or theories of empathy.

Study 3: What is the best predictor of empathic effort?

Since results from studies 1 and 2 suggest that perceived empathic abilities better predict empathic effort in the face of conflict than theories of empathy, Study 3 was designed to experimentally test this hypothesis. Study 3 was also informed by Bandura's social cognitive theory, which posits that that expectancy beliefs and perceived abilities influence motivation, such that people are more likely to engage in tasks they feel competent in rather than those in which they doubt their abilities. A greater belief in one's efficacy for a particular task also increases the chances of persistence when presented with a challenge (Pajares, 1996). Self-determination theory also informed the hypothesis of the current study. Self-determination theory is the notion that people desire to feel autonomous, related to others and competent; if these psychological needs are met, people are more motivated to perform effectively in certain situations. The feedback people receive from their environments also affects how autonomous, related to others and competent they feel, thus affecting their motivation. Similar to Bandura's social cognitive theory, if people feel more competent in a particular task, especially if that belief in competence is corroborated by the environment, people may feel more motivated to perform a certain task (Deci & Ryan, 2012). Thus, in Study 3, it was hypothesized that higher perceived

empathic abilities would more strongly predict empathic effort and forgiveness than would a malleable theory of empathy in an experimental design.

Methods

Participants

For the current trial, participants were recruited from Amazon's Mechanical Turk (mTurk). All participants for the current study were Master's Workers who had demonstrated consistent accuracy in previous studies. In addition to being a Master's Worker, all participants were above the age of 18 and were residents of the United States to increase the likelihood that they would comprehend the language of the study. Moreover, Workers who participated in the first mTurk trial were prohibited from participating in this trial to avoid any biases in their responses. A total of 72 participants participated in the current trial. One participant's data were deleted, because this participant failed to answer the question "Choose 1 for this question to prove you're paying attention" correctly, leaving 71 participants. Nineteen participants were compensated $0.50 for their participation in the study, while the remaining 53 were compensated $1.00. The reward was raised after 2 weeks of data collection to further incentivize participation in hopes that it would increase the response rate.

Procedure

Participants voluntarily signed up to participate in the current study by clicking on the Qualtrics survey link that was posted to mTurk's home page. All surveys were completed online. The study was advertised as a "Survey on Personality Differences" to distract from the true aim of the study. Some materials were based off of the works of Schumann et al. (2014) and Rye et al. (2001) and adapted to the current study, while others were created solely for use in this study.

After electronically consenting to participate in the study, participants were randomly assigned to the perceived empathic abilities (PEA) group (N=40) or the malleable theory of empathy (MTE) group (N=31); the current study was between-subjects in design.

The PEA group first completed the Interpersonal Reactivity Index (IRI) (Davis, 1983). The IRI was chosen to prime participants to the subject of empathy and to encourage them to contemplate their own empathic abilities. Then, the survey stalled and displayed the message "Please wait while the system tabulate your responses". After 5 seconds, the survey displayed the message, "Your responses on the Interpersonal Reactivity Index indicate that you have above average empathic abilities!". All participants in the PEA group were shown this message, regardless of their actual responses on the IRI. The intent was to increase the participants' confidence in their empathic abilities and to cause them to believe they were good at empathizing with others (i.e. to increase their perceived empathic abilities). The participants then read a vignette of an incarcerated inmate and completed Empathically Effortful Responses Scale as well as the Forgiveness Likelihood Scale. Finally, the participants were debriefed and compensated.

On the other hand, the MTE group first read a fictional article meant to induce a malleable theory of empathy. They were then asked to indicate whether or not it was appropriate for high school students; this was meant to give reason for the participants reading the article. Then, the participants read the same story about the inmate and completed the same measures as the PEA group (i.e. the Empathically Effortful Responses Scale and the Forgiveness Likelihood Scale). Lastly, the participants were debriefed and compensated.

Materials

The following materials are presented in the order in which the participants completed them. They are also all located in the Appendix.

Interpersonal Reactivity Index (Davis, 1983)

The IRI measures empathy, defining empathy as an interpersonal activity in which one person reacts to the experiences of another. The original IRI is comprised of 4 subscales, each using a 5-point Likert scale, on which participants rate the statements between 1 ("does not describe me well at all") to 5 ("describes me perfectly"). The perspective-taking subscale measures how often a participant takes another's psychological point of view; a sample statement is "I sometimes try to understand my friends better by imagining how things look from their perspective". The fantasy subscale measures how often participants put themselves in the position of fictional characters in stories; a sample statement is "I really get involved with the feelings of the characters in a novel". The empathic concern subscale measures how often and strongly participants feel sympathy for others; a sample question is "I often have tender, concerned feelings for people less fortunate than me". Lastly, the personal distress subscale measures how often participants feel upset during tense or uneasy social interactions; a sample statement is "I sometimes feel helpless when I am in the middle of a very emotional situation". For the current study, 14 statements were chosen at random to shorten the measure. None of the data from the IRI were utilized in the current study. The purpose of the IRI in the present study was to encourage participants to contemplate their own empathic abilities. The uniform positive feedback on the IRI served to increase the perceived empathic abilities of the participants.

Malleable Theory of Empathy Article (Schumann et al., 2014)

Participants in the MTE group read a fictional article that was used in Schumann et al. (2014)'s study to induce a malleable theory of empathy. Some sample excerpts include, "Follow-up interviews with the participants when they were adults revealed that most attributed their empathic growth to believing that empathy can be changed" and "The conclusion is clear: the results from the Child and Youth Engagement Study indicate that empathy is changeable, and that understanding that it can sometimes be difficult to change is an important step to developing one's empathy". The article's author was listed as Kasey Schneider and its publication date as December 28, 2013. Participants were asked to read the article and then rate it on its appropriateness for high school students.

Personal Narrative

Each participant read a personal narrative of a prison inmate. This narrative was chosen from the 3 presented in the first mTurk trial (over the story of the person receiving welfare or the person addicted to substances), as participants rated the inmate as most to blame for being in their current predicament (N=89) as compared to the other two stories (substance abuse: N=24, welfare: N=3). Ostensibly, the inmate was the most difficult person with which to empathize. The narrative detailed the daily struggles of an inmate and was meant to evoke emotion in the reader. Some examples of emotion-provoking statements include, "You have to learn to deal with the loss of loved ones, loneliness, sleep deprivation, hunger, and the gnawing uncertainty of the future" and "Suicide and attempted suicides are common methods of escape". Gender and race were kept ambiguous in the narrative. The survey page would not allow the participant to advance to the next question until 90 seconds had passed to increase the likelihood that the participants would read the narratives.

Empathically Effortful Responses Scale (Schumann et al., 2014)

This measure was adapted from Schumann et al. (2014)'s scale of empathic effort. In Schumann et al. (2014)'s study, internal reliability was found to be relatively high (α=0.80). The version of this measure that was presented to each participant was tailored to address specific details of the inmate's story. Items on this measure asked the participant on a scale of 1 to 7 (1 being "very unlikely" and 7 being "very likely") how likely they would be to engage in various responses when conversing with the inmate whose story they read. Some items described instances of empathic effort (e.g. "Try to understand their struggle" or "Try to learn more about this person"), while other items described instances of confrontational or indifferent responses (e.g. "Criticize their choices that led them their current situation" or "Disregard what they feel"). All 18 items were averaged, and each participant was thus assigned a score of empathic effort, with higher numbers indicating more empathic effort. (Items that were indicative of confrontation or indifference were reverse coded: items 3, 4, 6, 8, 9, 12, 14, 16, and 18). In the current study, this measure also had good internal reliability (α=0.96).

Forgiveness Likelihood Scale (*Rye et al., 2001)*

See description of this measure from Study 2 above. The internal reliability for this measure was relatively high (α=0.92) in the current study.

Debriefing

Participants were debriefed and told the true purpose of the study and the researcher's contact information. They were also asked not to discuss the study with anyone else who might participate in the future. Then, they were given instructions on how to upload their survey ID onto mTurk to gain credit and compensation for participating.

Results

An independent samples T test was used to analyze the effect of perceived empathic abilities versus a malleable theory of empathy on both forgiveness and empathic effort. Those induced to hold a malleable theory of empathy reported slightly greater empathic effort (*M*=5.5, *SD*=0.90) than did those induced to believe they had above average empathic abilities (*M*=5.20, *SD*=1.23) at a non-significant level (*p*=0.25). Those induced to hold a malleable theory of empathy reported slightly greater likeliness to forgive (*M*=2.10, *SD*=0.80) than did those induced to believe they had above average empathic abilities (*M*=2.01, *SD*=0.82) at a non-significant level (*p*=0.80).

Discussion

The hypothesis that inducing perceived empathic abilities would more strongly predict empathic effort and forgiveness than would inducing a malleable theory of empathy was not supported. The mean scores of empathic effort and forgiveness were nearly identical between the PEA group and the MTE group.

These findings are surprising; given that trials 1 and 2 of the current study yielded results that suggested perceived empathic abilities better predict empathic effort and forgiveness than theories of empathy. However, perhaps one explanation for these unexpected results could be that inducing perceived empathic abilities is not as effective in predicting empathic effort and forgiveness, as are *innate* perceived empathic abilities. It might be the case that telling someone they are a good empathizer does not result in a change in their empathic effort or forgiveness because they do not genuinely believe their empathic skills are advanced. Maybe it is easier to induce a theory of empathy than it is to change someone's perceptions of his or her own empathic abilities, which could be another explanation of the unexpected findings.

Some limitations of the current trial may also have affected the results. For instance, there was not a control group incorporated into this trial's design. If there were a control group that did not receive feedback about their empathic abilities and also did not read an article about a malleable theory of empathy, it would have been possible to compare the effects of these two manipulations against no manipulation at all. Perhaps inducing a malleable theory of empathy or telling people they are good empathizers is more likely to increase empathic effort and forgiveness than doing nothing. Additionally, as aforementioned, the way in which empathic abilities were induced may not have been effective in changing participants' true beliefs of themselves. For example, if someone thought he was awful at empathizing with others, the feedback on the IRI probably would not have swayed his self-perceptions much. Moreover, a limitation inherent with mTurk is that the participants were not supervised while completing the study; hence, it is impossible to definitively claim that they carefully read each component of the survey and completed it with care.

Because the findings of the current trial suggest that increasing someone's perceived empathic abilities is not as simple as providing positive feedback on a short personality measure, it is important that other methods of increasing perceived empathic abilities be explored. Future research could examine alternative ways to increase people's perceived empathic abilities; maybe some types of praise are better at increasing people's perceived empathic abilities than others. For instance, praising someone's efforts to empathize may be more helpful than praising someone's innate abilities to empathize. Furthermore, researchers could also look at other mechanisms that could potentially foster perceived empathic abilities, such as motivational seminars or speakers. It would also be beneficial to test the impact character education programs in schools could have on increasing students' perceived empathic abilities; these programs

should also be assessed based on the developmental level of the students. It may also be that younger children are more likely to change their perceptions of their empathic abilities as compared to adolescents or adults; this could have implications for early intervention strategies.

Conclusions

Extending the work of Schumann et al. (2014), the current study sought to examine how far the relationship between theories of empathy and empathic effort can be pushed. While Schumann et al. (2014) found that theories of empathy predict empathy only in situations that are empathically challenging as opposed to those that are empathically easy, the current study's findings suggest that this relationship does not hold true in situations that are too empathically challenging. The influences of implicit theories of empathy have a limit; theories of empathy do not appear to predict empathic effort when the target is to blame for his or her situation or forgiveness of transgressors. In more challenging situations, a genuine belief in one's own abilities seems to better predict empathic effort and forgiveness. Perceived empathic abilities more strongly predicted empathic effort and forgiveness towards targets who were to blame and towards transgressors in the current study. Arbitrators can possibly use this information in promoting empathy between two quarrelling parties by increasing each party's beliefs in their own respective empathic abilities; perhaps this would result in more effective conflict-resolution strategies. The findings of the current study can also be applied in character education programs in school systems. For instance, it might be beneficial to increase the self-efficacy of children with regards to their perceived empathic abilities. If this is done at a young enough age, it might influence their self-concept later in life and help them empathize with others as adolescents and adults.

Moreover, as previous research suggests, empathy and forgiveness were found to be related constructs in the current study; participants were more likely to forgive a transgressor if they thought of themselves as good empathizers. Empathy is an important construct in conflict-resolution and may lead to more prosocial behaviors. Given that perceived empathic abilities appears to be a vital ingredient in promoting empathy when empathy is not automatically felt, future research should explore ways to effectively increase individuals' perceived empathic abilities so that they can be more empathic in challenging situations in which empathy is needed most.

References

Allison, S. T., & Goethals, G. R. (2011). *Heroes: What they do and why we need them.* New York: Oxford University Press.

Anastasio, P. A., & Costa, D. M. (2004). Twice hurt: How newspaper coverage may reduce empathy and engender blame for female victims of crime. *Sex roles*, *51*(9-10), 535-542.

Davis, M. H. (1980). A multidimensional approach to individual differences in empathy.

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of personality and social psychology*,*44*(1), 113.

Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. In R. M. Ryan (Ed.),*Oxford handbook of human motivation* (pp. 85-107). Oxford, UK: Oxford University Press.

Dweck, C. (2012). Implicit theories. In P. Van Lange, A. Kruglanski, & E. Higgins (Eds.), *Handbook of theories of social psychology.* (pp. 43-62). London: SAGE Publications Ltd. doi: http://dx.doi.org/10.4135/9781446249222.n28

Eisenberg, N., & Lennon, R. (1983). Sex differences in empathy and related capacities. *Psychological Bulletin*, *94*(1), 100.

Giammarco, E. A., & Vernon, P. A. (2014). Vengeance and the Dark Triad: The role of empathy and perspective taking in trait forgivingness. *Personality and individual differences*, *67*, 23-29.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in personality*, *37*(6), 504-528.

Gracia, E., García, F., & Lila, M. (2014). Male Police Officers' Law Enforcement Preferences In Cases of Intimate Partner Violence Versus Non-Intimate Interpersonal Violence Do Sexist Attitudes and Empathy Matter?. *Criminal justice and behavior*, 0093854814541655.

Kahn, W. J., & Lawhorne, C. V. (2003). Empathy: The Critical Factor in Conflict-Resolution and a Culture of Civility.

Lawler, K. A., Younger, J. W., Piferi, R. L., Jobe, R. L., Edmondson, K. A., & Jones, W. H. (2005). The unique effects of forgiveness on health: An exploration of pathways. *Journal of behavioral medicine*, *28*(2), 157-167.

Macaskill, A., Maltby, J., & Day, L. (2002). Forgiveness of self and others and emotional empathy. *The Journal of social psychology*, *142*(5), 663-665.

McCullough, M. E., Worthington Jr, E. L., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of personality and social psychology*,*73*(2), 321.

Ng, A. S., & Tong, E. M. (2013). The relation between implicit theories of personality and forgiveness. *Personal Relationships*, *20*(3), 479-494.

Pajares, F. (1996). Self-efficacy beliefs in academic settings. *Review of educational research*, *66*(4), 543-578.

Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German.*Journal of research in Personality*, *41*(1), 203-212.

Rye, M. S., Loiacono, D. M., Folck, C. D., Olszewski, B. T., Heim, T. A., & Madia, B. P. (2001). Evaluation of the psychometric properties of two forgiveness scales. *Current Psychology*, *20*(3), 260-277.

Schumann, K., & Dweck, C. S. (2014). Who accepts responsibility for their

transgressions?. *Personality and Social Psychology Bulletin*, 0146167214552789.

Schumann, K., Zaki, J., & Dweck, C. S. (2014). Addressing the empathy deficit: Beliefs about

the malleability of empathy predict effortful responses when empathy is

challenging. *Journal of personality and social psychology*, *107*(3), 475.

Singer, T., & Lamm, C. (2009). The social neuroscience of empathy. *Annals of the New York

Academy of Sciences*, *1156*(1), 81-96.

Sonnby–Borgström, M. (2002). Automatic mimicry reactions as related to differences in

emotional empathy. *Scandinavian journal of psychology*, *43*(5), 433-443.

Toussaint, L., & Webb, J. R. (2005). Gender differences in the relationship between empathy and

forgiveness. *The Journal of social psychology*, *145*(6), 673-685.

Figures
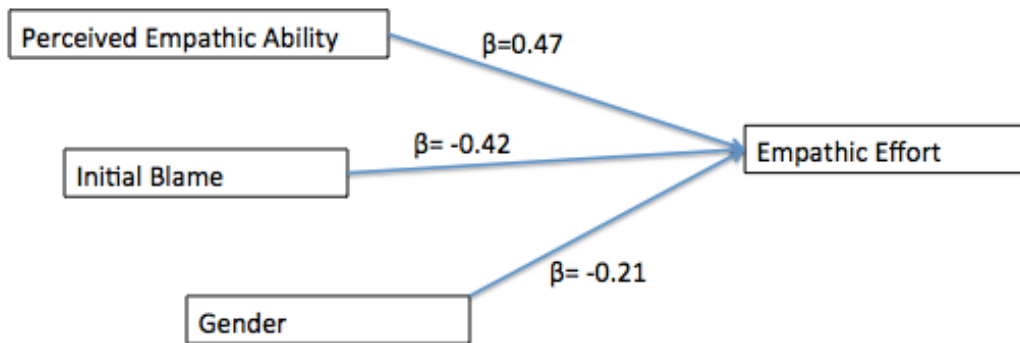
Figure 1. Based on hierarchical linear regression analysis, higher perceived empathic abilities, lower initial blame of the target, and being a female predicted empathic effort exerted towards the target. This model accounts for 51.2% of the variance in empathic efforts scores.
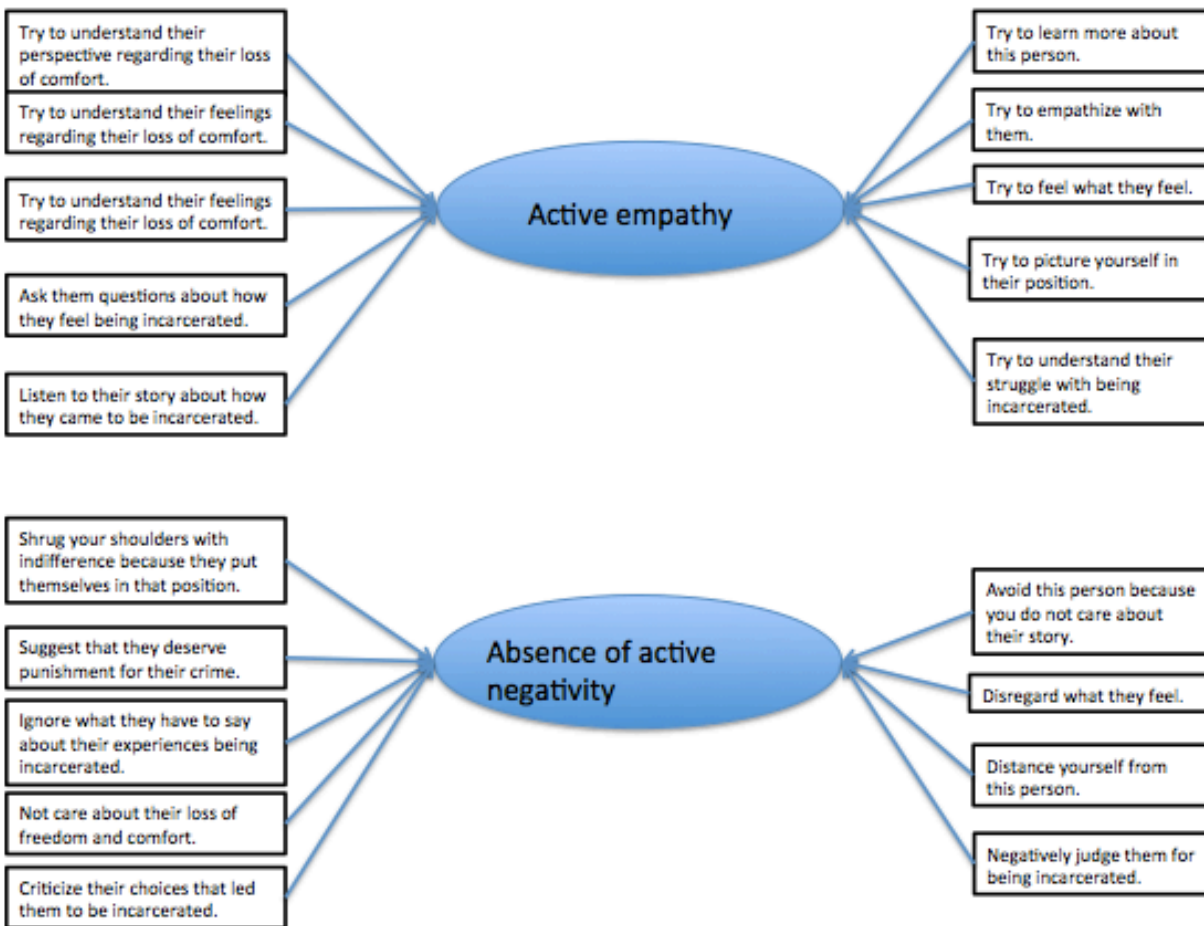
Figure 2. The empathic effort scale contains two distinct factors. The negatively worded items that were reverse-coded loaded onto one factor, whereas positively worded loaded onto another.

Figure 3. Based on hierarchical linear regression analysis, higher perceived empathic abilities and lower initial emotional reactivity predicted more forgiveness of the target. This model accounts for 36.2% of the variance in forgiveness scores.

Figure 4. Based on hierarchical linear regression analysis, higher perceived empathic ability and lower initial emotional reactivity predicted higher empathic effort exerted towards the target. This model accounts for 26.5% of the variance in empathic efforts scores.

Appendix

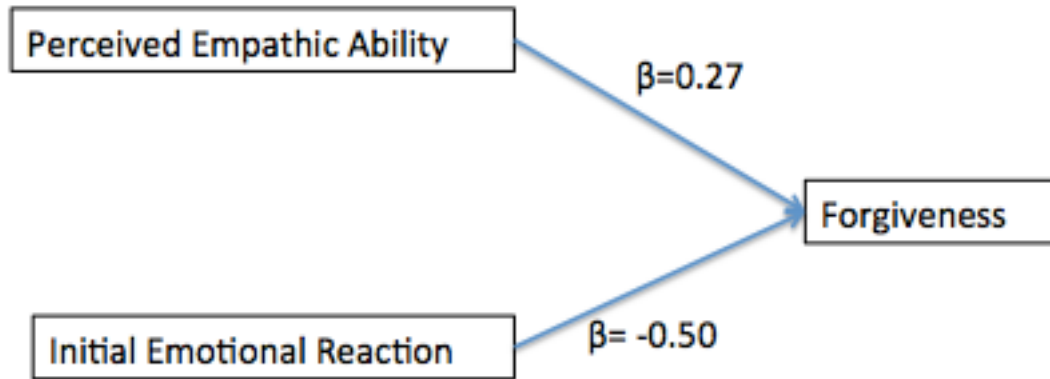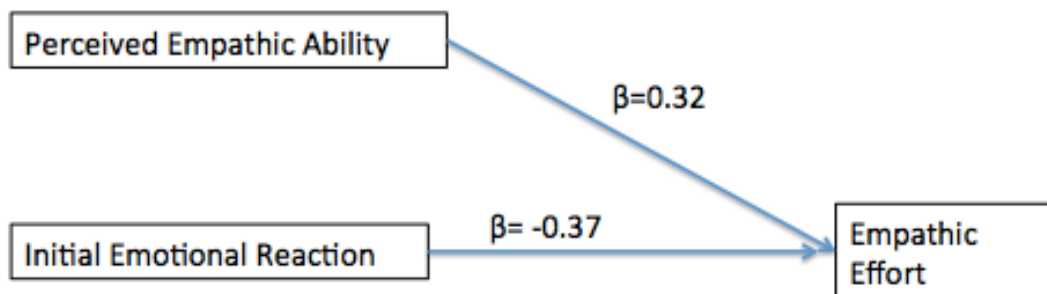### *Study One Materials*

Incarceration Prompt

Read the following personal account of someone who is incarcerated:

The first few weeks of incarceration are the most difficult for an inmate. You have to learn to deal with the loss of loved ones, loneliness, sleep deprivation, hunger, and the gnawing uncertainty of the future. You must, in some way, learn to live in a very unfriendly place. You don't know your many neighbors, although you realize some are very dangerous people.

You realize that extortionists, gang recruiters, gangsters, murderers, and rapists are watching your every move, looking for the opportunity to take advantage of you. They will test you to see how far they can go and if you have the "heart" to fight. Prison is a cesspool where usually only the worst scum floats to the top. A lot of inmates seek protection from the predators from other stronger inmates or just check into "PC" (protective custody). I've seen many inmates who are unable to mentally handle prison life. Suicide and attempted suicides are common methods of escape.

Prison is designed to keep you constantly uncomfortable. What exactly does comfort mean? Freedom from pain, trouble, or anxiety; feeling at ease? It's easy to take all the little things that make you comfortable for granted when you are in the "free world". That said, "sometimes you don't realize what you have until its gone", is so true. Have you ever been for days without seeing any type of sunlight or the sky? Can you even fathom what it would be like to spend years with no type of affectionate, physical contact? Not even a hug! What about a colorless home of concrete and steel, every seat, table, and even toilet nothing but cold, hard steel, no cushions, pillows, or back rest? This is a harsh reality for many people.

A comfort is being able to eat when and what you want; not being told when and what to eat. You never have the option for seconds regardless of how horrible the food taste. Privacy is another comfort most people don't think about. Who doesn't enjoy and need some peace and quiet occasionally? What do you think it would be like to not have even one second of alone time? Literally, always having eyes on you . . . to sit on the toilet, or shower in an open room with 30-50+ other people, no stalls? Can you imagine how humiliating it is getting caught on the toilet during count time? What about the daily, repeated strip searches?

A comfort is 6 to 8 hours of undisturbed sleep in a nice, soft bed with fluffly pillows, a heavy blanket. Uncomfortable is a steel bunk with a thin mat, waking up every 15 or 20 minutes because some part of your body is aching or asleep. Try having a loud speaker next to your bed with someone constantly yelling: "pill call", "kitchen workers turn out", "chow time", "count time", "In and Out", and so on . . . over and over. . . waking up at 3AM and having to walk a few hundred yards to eat breakfast.

Adapted from http://www.prisonechoes.com/

Substance Abuse Prompt

Read the following personal account of someone who is addicted to substance(s):

I am trying to stop using. Well, in fact, I have been trying for several years now. I have been to prison 17 times and each time I come out, clean, I still go and use and get a "habit" again. Why do I do this? The simple answer is that I feel nothing else I have ever experienced compares in the slightest, nothing in my life seems worth stopping for, there is no light at the end of the tunnel, it's just too hard to stop.

Imagine feeling good about yourself, life seems good too, then when you wake up all that has changed, life is garbage again until you have your "gear". When you do stop, you start using medication to help you quit, and all you think about is how to get money to "score" - even though you don't need to, you don't feel ill, you just want it. Life is empty without it, there is nothing to replace it with, nothing to look forward to. You look at yourself in the mirror and realize how ugly you look and it just seems like such a long road to put it all right again. You just think "screw it" and carry on with the using.

I have lost everything due to my addiction, or my own lack of restraint, I'm not allowed to see my son of four. My family can't even look at me anymore. I walk with my head down at all times - my life just seems worthless without the pursuit of money for gear by stealing. I wake up each day and think I don't want this life anymore - out stealing and scoring, I look at the medication that is supposed to help me quit - a way to change and stop and I just want to have a hit of "gear." I am here now typing this having taken two 8 mg tablets of that medication and all I can think is why did I take them? Now I can't do my gear for at least 16 hours - as one of those pills blocks the effects of the gear. I am going crazy just sitting here trying to be normal, I don't think I know how anymore. I'd rather go out and risk my liberty for some money for gear. The gear gives you a feeling of everything is OK, nothing is that bad and everything can wait until tomorrow. Without it life is garbage.

Adapted from http://www.mhhe.com/socscience/psychology/faces/bigvid.swf

Welfare Prompt

Read the following personal account of someone who is receiving welfare benefits:

Well, financially, for this month, with my bills, my telephone bill has been cut off because I haven't got the finances to pay it. I've got my gas bill outstanding at the moment, my electricity bill outstanding. You have to use your brain nowadays to think *how can I pay that, when can I pay*? Sometimes people are running you down, and you are rushing, going from head to toes to get the money to pay the people. It's embarrassing. Nobody will hire me. I don't have my high school diploma, so my options are limited. And I don't have enough money to go back to school. I know the solution to my money problem-get a job-but I just can't. I feel trapped.

Childcare. Childcare is a mortgage. I first got pregnant at 15, and the children's father is not around anymore. I love my kids, but it's hard taking care of them. I use food stamps and it isn't enough to buy food for a month and now, with prices at the grocery store higher than it was back then, even moreso. I stretch the money, but I still will not have enough food for a month. We go to food banks, but that is humiliating. We just get handed shriveled up rotten food and shoved out the door. It's not healthy either. I'm worried about my kids' health. They always complaining that they hungry or their tummy aches. Can you imagine not being able to help your own child when they look at you with them big hungry eyes and plead for a hot meal?

When my kids get sick I get real worried. Medicaid is not as nice as it sounds. It's really hard to find good doctors that will see you when you need. And then when I do get to go to a doctor with my kids, we have to take a cab to get there because I don't have a car. Then the cab fare is always really expensive, so that money's got to come out of something else.

I don't get no clothes allowance. I have to do that all by myself. I try to shop at Good Will and other stores like it as much as I can, but I just don't have enough money. I really don't have that many clothes. It's hard to find a job when you can't look nice and wear nice clothes. And with my kids growing so fast, I feel like I can't keep up with getting clothes for them. They don't get to wear clothes that fit them.

It is heartbreaking to think about it because I could have more friends coming around, have more of a social life, which I don't – it's at a standstill. I don't want anyone coming over my place; it's embarrassing. Then for the children – their social lives – their friends don't come here. They like to go out and explore, but it's not safe...people gettin shot at all the time. When I do have the finances I do take them out. It's hard though. We can't just go to the movies and out to dinner like others can. We don't have enough money to live. I'm scared we won't make it.

Adapted from http://www.poverty.ac.uk/sites/default/files/video-transcripts/renee2-well-were-not-rich-transcript.pdf, The Stop

Empathically Effortful Responses Scales (Schumann et al., 2014)

Incarceration: Using the scale below, please rate how likely you would be to do each of the following if you met the person who wrote the story you just read.

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely

1. Try to understand their perspective regarding their loss of comfort.
2. Try to understand their feelings regarding their loss of comfort.
3. Shrug your shoulders with indifference because they put themselves in that position.
4. Suggest that they deserve punishment for their crime.
5. Ask them questions about how they feel being incarcerated.
6. Ignore what they have to say about their experiences being incarcerated.
7. Listen to their story about how they came to be incarcerated.
8. Not care about their loss of freedom and comfort.
9. Criticize their choices that led them to be incarcerated.
10. Try to learn more about this person.
11. Try to empathize with them.
12. Avoid this person because you do not care about their story.
13. Try to feel what they feel.

14. Disregard what they feel.
15. Try to picture yourself in their position.
16. Distance yourself from this person.
17. Try to understand their struggle with being incarcerated.
18. Negatively judge them for being incarcerated.
19. Choose "Very Unlikely" for this response to prove you're paying attention.

Substance Addiction: Using the scale below, please rate how likely you would be to do each of the following if you met the person who wrote the story you just read.

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely

1. Try to understand their perspective regarding their addiction.
2. Try to understand their feelings regarding their addiction.
3. Shrug your shoulders with indifference because they put themselves in that position.
4. Suggest that they are wrong for using substances.
5. Ask them questions about how they feel about being addicted to substances.
6. Ignore what they have to say about their experiences with addiction.
7. Listen to their story about how they came to be addicted to substances.
8. Not care about their struggle with addiction.
9. Criticize their choices that led them to be addicted to substances.
10. Try to learn more about this person.
11. Try to empathize with this person.
12. Avoid this person because you do not care about their story.
13. Try to feel what they feel.
14. Disregard what they feel.
15. Try to picture yourself in their position.
16. Distance yourself from this person
17. Try to understand their struggle with addiction.
18. Negatively judge this person for being addicted to substances.
19. Choose "Very Unlikely" for this response to prove you're paying attention.

Welfare: Using the scale below, please rate how likely you would be to do each of the following if you met the person who wrote the story you just read.

Very Unlikely	Unlikely	Somewhat Unlikely	Undecided	Somewhat Likely	Likely	Very Likely

1. Try to understand their perspective regarding their current financial position.
2. Try to understand their feelings regarding their current financial position.
3. Shrug your shoulders with indifference because they put themselves in that position.
4. Suggest they are lazy for not having a job.
5. Ask them questions about how they feel about living on such a tight budget.

6. Ignore what they have to say about their experiences living on welfare.
7. Listen to their story about how they came to be in their current financial position.
8. Not care about their struggle with their current financial position.
9. Criticize their choices that led them to need welfare.
10. Try to learn more about this person.
11. Try to empathize with them.
12. Avoid this person because you do not care about their story.
13. Try to feel what they feel.
14. Disregard what they feel.
15. Try to picture yourself in their position.
16. Distance yourself from this person.
17. Try to understand their struggle with their current financial situation.
18. Negatively judge their need for welfare.
19. Choose "Very Unlikely" for this response to prove you're paying attention.

Theories of Empathy Scale (Schumann et al., 2014)

For the purposes of this scale, please note that the definition of <u>empathy</u> is: *the ability to understand and share the feelings of another. (*<u>Empathic</u> is defined *as involving, characterized by, or based on empathy*.)

Using the scale below, please indicate your agreement with each of the following statements.

<div style="text-align:center">

1   2   3   4   5   6   7
Strongly disagree   *Strongly agree*

</div>

1. A person's level of empathy is something very basic about them, and it can't be changed much. _____
2. Whether a person is empathic or not is deeply ingrained in their personality. It cannot be changed very much. _____

3. People can't really change how much empathy they tend to feel for others. Some people are very empathic and some aren't and they can't change that much. _____
4. No matter who somebody is, they can always change how empathic a person they are. _____
5. People can always change how much empathy they generally feel for others. _____
6. Anybody can change how empathic a person they are. _____

Ten-Item Personality Inventory (TIPI) (Gosling et al., 2003)

Here are a number of personality traits that may or may not apply to you. **Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement**. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

1	2	3	4	5	6	7
Disagree strongly			*Neither agree nor disagree*		*Agree strongly*	

I see myself as:

1. _____ Extraverted, enthusiastic.
2. _____ Critical, quarrelsome.
3. _____ Dependable, self-disciplined.
4. _____ Anxious, easily upset.
5. _____ Open to new experiences, complex.
6. _____ Reserved, quiet.
7. _____ Sympathetic, warm.
8. _____ Disorganized, careless.
9. _____ Calm, emotionally stable.
10. _____ Conventional, uncreative.

Perceived Empathic Abilities Scale (Schumann et al., 2014)

Please answer each question as honestly as possible, using the scale provided.

1	2	3	4	5	6	7
Strongly disagree						**Strongly agree**

1. I am a good observer of other people's emotions. _____
2. I'm not good at empathizing with other people. _____
3. I have strong empathic abilities. _____
4. I am skilled at empathizing with other people. _____
5. I am poor at understanding other people's emotions. _____
6. I am good at taking other people's perspectives. _____
7. I am a good listener. _____

Measures to Assess Attitudes Towards Targets

Incarceration: Think back to your opinions BEFORE having read the personal story. How did you feel about people who are incarcerated? Use the scale below to indicate your opinions PRIOR to having read the story:

Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree

1. People become incarcerated because of their own personal mistakes.
2. People become incarcerated because of circumstances out of their control.
3. People who are incarcerated deserve to be in prison/jail.
4. I identify with people who are incarcerated.
5. I feel empathy for people who are incarcerated.
6. People who are incarcerated are to blame for being imprisoned.
7. People who are incarcerated are responsible for being imprisoned.
8. People who are incarcerated are at fault for being imprisoned.

Incarceration: AFTER having read the personal story, how do you NOW feel about people who are incarcerated? Use the scale below to indicate your opinions AFTER having read the story:

Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree

1. People become incarcerated because of their own personal mistakes.
2. People become incarcerated because of circumstances out of their control.
3. People who are incarcerated deserve to be in prison/jail.
4. I identify with people who are incarcerated.
5. I feel empathy for people who are incarcerated.
6. People who are incarcerated are to blame for being imprisoned.
7. People who are incarcerated are responsible for being imprisoned.
8. People who are incarcerated are at fault for being imprisoned.

Substance addiction: Think back to your opinions BEFORE having read the personal story. How did you feel about people who are addicted to substances? Use the scale below to indicate your opinions PRIOR to having read the story:

Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree

1. People who are addicted to substances are addicted because they choose to use those substances.
2. People are addicted to substances are addicted because of circumstances out of their control.
3. People who are addicted to substances deserve the pain they endure.
4. I identify with people who are addicted to substances.
5. I feel empathy for people who are addicted to substances.
6. People who are addicted to substances are to blame for being addicted to those substances.
7. People who are addicted to substances are responsible for being addicted to those substances.
8. People who are addicted to substances are at fault for being addicted.

Substance addiction: AFTER having read the personal story, how do you NOW feel about people who are addicted to substances? Use the scale below to indicate your opinions AFTER having read the story:

Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree

1. People who are addicted to substances are addicted because they choose to use those substances.
2. People are addicted to substances are addicted because of circumstances out of their control.
3. People who are addicted to substances deserve the pain they endure.
4. I identify with people who are addicted to substances.
5. I feel empathy for people who are addicted to substances.
6. People who are addicted to substances are to blame for being addicted to those substances.
7. People who are addicted to substances are responsible for being addicted to those substances.
8. People who are addicted to substances are at fault for being addicted.

Welfare: Think back to your opinions BEFORE having read the personal story. How do you feel about people who receive welfare benefits? Use the scale below to indicate your opinions PRIOR to having read the story:

Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree

1. People receive welfare benefits because they are too lazy to work themselves.
2. People receive welfare benefits because of circumstances out of their control.
3. People who receive welfare benefits deserve the benefits they receive.
4. I identify with people who people who receive welfare benefits.
5. I feel empathy for people who receive welfare benefits.
6. People who receive welfare benefits are to blame for being poor.
7. People who receive welfare benefits are responsible for being poor.
8. People who receive welfare benefits are at fault for being poor.

Welfare: AFTER having read the personal story, how did you NOW feel about people who receive welfare benefits? Use the scale below to indicate your opinions AFTER having read the story:

Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly Agree

1. People receive welfare benefits because they are too lazy to work themselves.
2. People receive welfare benefits because of circumstances out of their control.
3. People who receive welfare benefits deserve the benefits they receive.
4. I identify with people who people who receive welfare benefits.
5. I feel empathy for people who receive welfare benefits.
6. People who receive welfare benefits are to blame for being poor.
7. People who receive welfare benefits are responsible for being poor.
8. People who receive welfare benefits are at fault for being poor.

Study Two Materials

Fixed Theory of Empathy Manipulation Article (Schumann et al., 2014)

The following is an excerpt from a recently published study in *The Journal of Personality Psychology*. Please read it and then rank how interesting it is (on a scale of 1-10, 1 being the least interesting and 10 being the most interesting). Then, indicate whether or not you think it should be included in the Introduction to Psychological Science labs next year.

Fixed Theory of Empathy

by Cathy Schneider
Published: December 28, 2013

Empathy, Like Plaster, Is Pretty Stable Over Time

Recently, I bumped into someone I went to high school with over 10 years ago. As with all post-high school encounters, I couldn't help but compare the person in front of me to the person I remembered. Mary was one of those unsympathetic types who didn't really ever put herself in other people's shoes or understand how other people felt. Can you imagine my lack of surprise to find that she is now a mortgage lender who sometimes repossesses the homes of struggling homeowners? Meeting such a similar person now, I wondered, why hadn't Mary changed—why hadn't she grown out of her non-empathic persona?

Does Empathy Change?

To find out what the experts say about whether empathy can change, I went to the Empathy Research Laboratory (ERL) at Harvard University. For more than 25 years, the ERL has been following over 800 individuals. The researchers have been collecting elaborate data on them since childhood, including school records, many observations at home and in the laboratory, and in-depth interviews with the individuals, their family members, and close friends.

In a recent article published in the *Journal of Personality Research*, Dr. Daniel Lawrence, the Director of ERL, reported the findings of their research. Dr. Lawrence concluded that "Empathy is rather fixed and develops consistently along the same path over time. Empathy might start out flexible, but after the early years, it appears to solidify into a cohesive empathy profile." Dr. Lawrence shows that of the 800 individuals followed over 25 years, very few people's overall empathy changed significantly from what it was at the beginning of the study. Why? As Dr. Lawrence explains, "In most of us, by a very young age, our empathy profile has set like plaster and cannot soften again. Even if we want to change our empathy and shape how much empathy we feel for others, we are not usually successful. Empathy becomes pretty hard, like a rock."

Can External Influences Change Empathy?

To better understand why empathy does not change, I spoke to eminent psychologists and neuroscientists all across the country. Surprisingly, I found good consensus that all through one's life, regardless of one's experiences, one's empathy stays relatively constant.

How have these fields come to such agreement about the in- ability of empathy to be changed? Actually, this conclusion was reached long ago. The classic Child and Youth Engagement Study convinced the field of psychology that empathy does indeed stay stable over time. In 1965 Henry Giroux established one of the most ambitious and exciting intervention programs ever conceived. It was designed to serve the needs of low-empathy youngsters who had previously demonstrated bullying behavior or were judged by schools, police, or welfare agencies to be "at risk" of becoming bullies. Bullying was the focus of the study, because it is a common and serious problem that is strongly predicted by a lack of empathy for others. The youngsters were 250 boys from working-class families in a densely populated area of Massachusetts. They entered the program at ages ranging from 5 to 11 and then continued in it for an average of five years.

The main research question of the intervention program was whether these children could learn to become more empathic toward others, and, as a result, stop bullying other children. Among other things, during the five years of the program, each child was paired with a social worker who visited him twice a month. The social workers taught these children about putting themselves in other children's shoes, trying to see things from other children's points of view, and feeling what other children are feeling.

Although the boys benefitted from the program in many other ways (e.g., by becoming more successful students in school), the results regarding empathy were disappointing. Compared to the youngsters who were also bullies or "at risk" but were *not* in the program, those who had the intervention were equally likely to be labeled as bullies in their high schools. In fact, many of the children in the program were still identified by families and friends as being non-empathic individuals.

Follow-up interviews with the participants when they were adults revealed that most had fond memories of the people and experiences. Some of the participants expressed gratitude for the steady involvement of their social worker in their lives. Others recalled specific lessons they were taught about empathy, even though the participants were not helped by the intervention. Said one participant: "It was a terrific program. I learned so many great things that really helped me. On the other hand, the program taught me about putting myself in other people's shoes, but I just don't seem to have that kind of sensitivity for other people's feelings."

The conclusion is clear: the results from the Child and Youth Engagement Study indicate that empathy may be learnable early on, but later it is not changeable, even if one tries to develop it.

Lessons Learned

So what about my old classmate, Mary? I guess it's no surprise that her level of empathy hadn't changed over time. Even if she had tried to learn to feel empathy for others, she probably would have been unsuccessful because it is just a part of who she is.

1. How interesting did you find the article you just read? Please circle your response on the scale below:

Incredibly boring	Boring	Fairly boring	Somewhat boring	Neutral	Barely interesting	Somewhat interesting	Interesting	Very Interesting	Extremely Interesting
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

2. Should we include this in the Introduction to Psychological Science Lab curriculum next year? Please circle your response

YES   NO

Malleable Theory of Empathy Manipulation Article (Schumann et al., 2014)

The following is an excerpt from a recently published study in *The Journal of Personality Psychology*. Please read it and then rank how interesting it is (on a scale of 1-10, 1 being the least interesting and 10 being the most interesting). Then, indicate whether or not you think it should be included in the Introduction to Psychological Science labs next year.

Malleable Theory of Empathy

by Cathy Schneider
Published: December 28, 2013

Empathy Is Changeable and Can Be Developed

Recently, I bumped into someone I went to high school with over 10 years ago. As with all post-high school encounters, I couldn't help but compare the person in front of me to the person I remembered. Mary was one of those unsympathetic types who didn't really ever put herself in other people's shoes or understand how other people felt. Can you imagine my surprise to find that she is now a social worker with a family and an active role in community service? Meeting such a different person now, I wondered how Mary had changed so much.

Does Empathy Change?

To find out what the experts say about whether empathy can change, I went to the Empathy Research Laboratory (ERL) at Harvard University. For more than 25 years, the ERL has been following over 800 individuals. The researchers have been collect- ing elaborate data on them since childhood, including school records, many observations at home and in the laboratory, and in-depth interviews with the individuals, their family members, and close friends.

In a recent article published in the *Journal of Personality Research*, Dr. Daniel Lawrence, the Director of ERL, reported the findings of their research. Dr. Lawrence concluded that "Empathy is changeable and can be influenced over time. Empathy is not stable over one's lifetime. It can be developed and cultivated." Dr. Lawrence shows that of the 800 individuals followed over 25 years, very few people's overall empathy levels stayed the same as it was at the beginning of the study. Why? As Dr. Lawrence explains, "People learn and grow throughout life. Empathy is no different. It too can change. It is not always easy, but if they want to, people can shape how much empathy they feel for others. No one's empathy is hard like a rock."

How Does Empathy Change?

To better understand how empathy changes, I spoke to eminent psychologists and neuroscientists all across the country. Surprisingly, I found good consensus that all through life, people can change their own levels of empathy. How have these fields come to such agreement about the ability of empathy to be changed? Actually, this conclusion was reached long ago. The classic Child and Youth Engagement Study convinced the field of psychology that empathy can indeed be changed.

In 1965, Henry Giroux established one of the most ambitious and exciting intervention programs ever conceived. It was designed to serve the needs of low-empathy youngsters who had previously demonstrated bullying behavior or were judged by schools, police, or welfare agencies to be "at risk" of becoming bullies. Bullying was the focus of the study, because it is a common and serious problem that is strongly predicted by a lack of empathy for others. The youngsters were 250 boys from working-class families in a densely populated area of Massachusetts. They entered the program at ages ranging from 5 to 11 and then continued in it for an average of five years.

The main research question of the intervention program was whether these children could learn to become more empathic toward others, and, as a result, stop bullying other children. Among other things, during the five years of the program, each child was paired with a social worker who visited him twice a month. The social workers taught these children about putting themselves in other children's shoes, trying to see things from other children's points of view, and feeling what other children are feeling.

The results of the intervention were rewarding. Compared to the youngsters who were also bullies or "at risk" but were *not* in the program, those who had the intervention showed dramatic differences. Among the youngsters who were not in the program, over 60% were labeled as bullies in their high schools. In contrast, only 17% of the youngsters who were in the program were labeled as bullies in their high schools. In fact, many of the children in the program were identified by families and friends as now being highly empathic individuals.

What had changed their levels of empathy? Follow-up inter- views with the participants when they were adults revealed that most attributed their empathic growth to believing that empathy *can* be changed. Said one participant: "Every time I struggled with feeling empathy for someone or seeing their perspective, I remembered what I learned during the program. That's OK, empathy can be changed. If I don't feel empathy naturally, it doesn't mean that I'm incapable of feeling it."

The conclusion is clear: the results from the Child and Youth Engagement Study indicate that empathy is changeable, and that understanding that it can sometimes be difficult to change is an important step to developing one's empathy.

Lessons Learned

So what about my old classmate, Mary? Well, I guess she worked at developing feelings of empathy over the years. Now, as a social worker, she can pass on the message to others: people can change how much empathy they feel for others.

1. How interesting did you find the article you just read? Please circle your response on the scale below:

Incredibly boring	Boring	Fairly boring	Somewhat boring	Neutral	Barely interesting	Somewhat interesting	Interesting	Very Interesting	Extremely Interesting
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

2. Should we include this in the Introduction to Psychological Science Lab curriculum next year? Please circle your response

YES   NO

Hypothetical Scenario

Picture this scenario:
It is a typical weekday. You just got out of class and go back to your room. Something is not right. The door is unlocked, and it looks like someone has been in your room. It could not have been your roommate, because they are out of town. You notice a few minor items are missing from your room. You look and look, but they are gone. Someone has broken into your room and stolen from you.

Please indicate how strongly you feel each of the following emotions:

1. **Anger**:

Not at all	A little bit	Somewhat	Strongly	Very Strongly
1	2	3	4	5

2. **Frustration**:

Not at all	A little bit	Somewhat	Strongly	Very Strongly
1	2	3	4	5

3. **Panic**:

Not at all	A little bit	Somewhat	Strongly	Very Strongly
1	2	3	4	5

4. **Rage**:

Not at all	A little bit	Somewhat	Strongly	Very Strongly
1	2	3	4	5

5. **Sadness:**

Not at all	A little bit	Somewhat	Strongly	Very Strongly
1	2	3	4	5

6. **Anxiety**:

Not at all	A little bit	Somewhat	Strongly	Very Strongly
1	2	3	4	5

7. **Hopelessness**:

Not at all	A little bit	Somewhat	Strongly	Very Strongly
1	2	3	4	5

8. **Disgust**:

Not at all	A little bit	Somewhat	Strongly	Very Strongly
1	2	3	4	5

9. What other emotions do you feel? Please list them below, along with a ranking of how strongly you feel each one.

Empathically Effortful Response Scale (Schumann et al., 2014)

Imagine that you are now face-to-face with the person to whom you wrote your letter. You give this person the letter, and this person reads it. You and this person then engage in a discussion about the event in question. **Using the scale below, please indicate how likely you would be to do each of the following when talking to the person to whom you wrote your letter about the event you detailed in your letter:**

1. Try to understand their perspective on what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

2. Try to understand their feelings regarding what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

3. Try to convince them to change their perspective to match your own.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

4. Start an argument with them about what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

5. Ask them questions about why they feel the way they do about what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

6. Ignore what they have to say about what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

7. Listen to their reasoning for why they feel the way they do about what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

8. Firmly defend your argument's legitimacy regarding what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

9. Criticize the feelings they have about what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

10. Try to learn more about this person.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

11. Try to empathize with this person.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

12. End the discussion because you are unwilling to listen to their feelings.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

13. Try to understand why they did what they did.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

14. Try to picture yourself in their position.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

15. Distance yourself from this person.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

16. Try to feel what they feel with regards to what happened.

1	2	3	4	5	6	7
Very unlikely	Unlikely	Somewhat unlikely	Unsure	Somewhat likely	Likely	Very likely

Forgiveness Scale (Rye et al., 2001)

Think of the person stole those items your room. If this scenario had actually happened to you, indicate the degree to which you would agree or disagree with the following statements.

1. I would not be able stop thinking about how I was wronged by this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

2. I would wish for good things to happen to this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

3. I would spend time thinking about ways to get back at this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

4. I would feel resentful toward this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

5. I would avoid certain people and/or places because they remind me of this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

6. I would pray for this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

7. If I encountered this person, I would feel at peace.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

8. This person's wrongful actions would keep me from enjoying life.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

9. I would have been able to let go of my anger toward this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

10. I would become depressed when I think of how I was mistreated by this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

11. I would think that many of the emotional wounds related to this person's wrongful actions would have healed.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

12. I would feel hatred whenever I think about this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

13. I would have compassion for this person.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

14. I would think my life is ruined because of this person's wrongful actions.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

15. I would hope that this person is treated fairly by others in the future.

5	4	3	2	1
Strongly Agree	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

Filler Task

The following have been rated the "most controversial issues of 2014". Please rank them in order of most controversial (10) to least controversial (1)

1. Relationships and Sexual Relations _____
2. Global Warming _____
3. Legalizing Marijuana _____
4. Illiteracy _____
5. Stem Cell _____
6. Terrorism _____
7. Abortion _____
8. Plastic Surgery _____
9. Death Penalty _____
10. Healthcare _____

Forgiveness Likelihood Scale (Rye et al., 2001)

Imagine the scenarios below happened to you. Based on the information provided, consider the likelihood that you would choose to forgive the person. Then, circle the response that is most true for you.

1. You share something embarrassing about yourself to a friend who promises to keep the information confidential. However, the friend breaks his/her promise and proceeds to tell several people. What is the likelihood that you would choose to forgive your friend?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

2. One of your friends starts a nasty rumor about you that is not true. As a result, people begin treating you worse than they have in the past. What is the likelihood that you would choose to forgive your friend?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

3. Your significant other has just broken up with you, leaving you hurt and confused. You learn that the reason for the break up is that your significant other started dating a good friend of yours. What is the likelihood that you would choose to forgive your significant other?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

4. A family member humiliates you in front of others by sharing a story about you that you did not want anyone to know. What is the likelihood that you would choose to forgive the family member?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

5. Your significant other has a "one night stand" and becomes sexually involved with someone else. What is the likelihood that you would choose to forgive your significant other?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

6. Your friend has been talking about you behind your back. When you confront this person, he/she denies it, even though you know that he/she is lying. What is the likelihood that you would choose to forgive your friend?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

7. A friend borrows your most valued possession, and then loses it. The friend refuses to replace it. What is the likelihood that you would choose to forgive your friend?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

8. You tell an acquaintance about a job that you hope to be hired for. Without telling you, the acquaintance applies and gets the job for him/herself. What is the likelihood that you would choose to forgive your acquaintance?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

9. A stranger breaks into your house and steals a substantial sum of money from you. What is the likelihood that you would choose to forgive the stranger?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

10. You accept someone's offer to attend a formal dance. However, this person breaks their commitment to take you and goes to the event with someone who they find more attractive. What is the likelihood that you would choose to forgive this person?

5	4	3	2	1
Extremely Likely	*Fairly Likely*	*Somewhat Likely*	*Slightly Likely*	*Not at all Likely*

Study Three Materials

Malleable Theory of Empathy Manipulation Article (Schumann et al., 2014)

by Jennifer Schneider Published: December 28, 2013

Empathy Is Changeable and Can Be Developed

Recently, I bumped into someone I went to high school with over 10 years ago. As with all post-high school encounters, I couldn't help but compare the person in front of me to the person I remembered. Mary was one of those unsympathetic types who didn't really ever put herself in other people's shoes or understand how other people felt. Can you imagine my surprise to find that she is now a social worker with a family and an active role in community service? Meeting such a different person now, I wondered how Mary had changed so much.

Does Empathy Change?

To find out what the experts say about whether empathy can change, I went to the Empathy Research Laboratory (ERL) at Harvard University. For more than 25 years, the ERL has been following over 800 individuals. The researchers have been collect- ing elaborate data on them since childhood, including school records, many observations at home and in the laboratory, and in-depth interviews with the individuals, their family members, and close friends.

In a recent article published in the *Journal of Personality Research*, Dr. Daniel Lawrence, the Director of ERL, reported the findings of their research. Dr. Lawrence concluded that "Empathy is changeable and can be influenced over time. Empathy is not stable over one's lifetime. It can be developed and cultivated." Dr. Lawrence shows that of the 800 individuals followed over 25 years, very few people's overall empathy levels stayed the same as it was at the beginning of the study. Why? As Dr. Lawrence explains, "People learn and grow throughout life. Empathy is no different. It too can change. It is not always easy, but if they want to, people can shape how much empathy they feel for others. No one's empathy is hard like a rock."

How Does Empathy Change?

To better understand how empathy changes, I spoke to eminent psychologists and neuroscientists all across the country. Surprisingly, I found good consensus that all through life, people can change their own levels of empathy. How have these fields come to such agreement about the ability of empathy to be changed? Actually, this conclusion was reached long ago. The classic Child and Youth Engagement Study convinced the field of psychology that empathy can indeed be changed.

In 1965, Henry Giroux established one of the most ambitious and exciting intervention programs ever conceived. It was designed to serve the needs of low-empathy youngsters who had previously demonstrated bullying behavior or were judged by schools, police, or welfare agencies to be "at risk" of becoming bullies. Bullying was the focus of the study, because it is a common and serious problem that is strongly predicted by a lack of empathy for others. The youngsters were 250 boys from working-class families in a densely populated area of Massachusetts. They entered the program at ages ranging from 5 to 11 and then continued in it for an average of five years.

The main research question of the intervention program was whether these children could learn to become more empathic toward others, and, as a result, stop bullying other children. Among other things, during the five years of the program, each child was paired with a social worker who visited him twice a month. The social workers taught these children about putting themselves in other children's shoes, trying to see things from other children's points of view, and feeling what other children are feeling.

The results of the intervention were rewarding. Compared to the youngsters who were also bullies or "at risk" but were *not* in the program, those who had the intervention showed dramatic differences. Among the youngsters who were not in the program, over 60% were labeled as bullies in their high schools. In contrast, only 17% of the youngsters who were in the program were labeled as bullies in their high schools. In fact, many of the children in the program were identified by families and friends as now being highly empathic individuals.

What had changed their levels of empathy? Follow-up inter- views with the participants when they were adults revealed that most attributed their empathic growth to believing that empathy *can* be changed. Said one participant: "Every time I struggled with feeling empathy for someone or seeing their perspective, I remembered what I learned during the program. That's OK, empathy can be changed. If I don't feel empathy naturally, it doesn't mean that I'm incapable of feeling it."

The conclusion is clear: the results from the Child and Youth Engagement Study indicate that empathy is changeable, and that understanding that it can sometimes be difficult to change is an important step to developing one's empathy.

Lessons Learned

So what about my old classmate, Mary? Well, I guess she worked at developing feelings of empathy over the years. Now, as a social worker, she can pass on the message to others: people can change how much empathy they feel for others.

Interpersonal Reactivity Index (Davis, 1983)

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate response on the scale. Answer as honestly as you can.

Does not describe me well	Does not really describe me	Unsure	Describes me somewhat well	Describes me perfectly

1. I often have tender, concerned feelings for people less fortunate than me.
2. I sometimes find it difficult to see things from the "other guy's" point of view.
3. Sometimes I don't feel very sorry for other people when they are having problems.
4. I really get involved with the feelings of the characters in a novel.
5. I am usually objective when I watch a movie or play, and I don't often get completely caught up in it.
6. I try to look at everybody's side of a disagreement before I make a decision.
7. When I see someone being taken advantage of, I feel kind of protective towards them.
8. I sometimes try to understand my friends better by imagining how things look from their perspective.
9. Becoming extremely involved in a good book or movie is somewhat rare for me.
10. When I see someone get hurt, I tend to remain calm.
11. Other people's misfortunes do not usually disturb me a great deal.
12. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.
13. I believe that there are two sides to every question and try to look at them both.
14. Before criticizing somebody, I try to imagine how I would feel if I were in their place.