

5-2017

Give Hate a Chance: An Exploration of the Affective State of Interpersonal Hate

Carmen Merrick

University of Arkansas, Fayetteville

Follow this and additional works at: <http://scholarworks.uark.edu/etd>



Part of the [Social Psychology Commons](#)

Recommended Citation

Merrick, Carmen, "Give Hate a Chance: An Exploration of the Affective State of Interpersonal Hate" (2017). *Theses and Dissertations*. 1937.

<http://scholarworks.uark.edu/etd/1937>

This Thesis is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu, ccmiddle@uark.edu.

Give Hate a Chance: An Exploration of the Affective State of Interpersonal Hate

A thesis submitted in partial fulfillment
of the requirements for the degree of
Masters of Arts in Psychology

by

Carmen Merrick
Ouachita Baptist University
Bachelor of Science in Psychology, 2011
University of Texas at Dallas
Master of Science in Applied Cognitive Neuroscience, 2012

May 2017
University of Arkansas

This thesis is approved for recommendation to the Graduate Council.

Dr. Denise Beike
Thesis Director

Dr. Scott Eidelman
Committee Member

Dr. Jenn Veilleux
Committee Member

Abstract

Interpersonal hate, the affective state of one individual experiencing hate toward another, is widely experienced. However, to date there is no experimental evidence of interpersonal hate. This phenomenon was explored, as was its place in the triad of hostile emotions. It was theorized that interpersonal hate would be differentiated from the hostile emotions (contempt, anger, and disgust) by appraisal of violation type and by behavioral response, and that the hostile emotions could be recognized by these characteristics, as well. Specifically, it was hypothesized that interpersonal hate would be incited by autonomy violations and avoidance responses; anger would be incited by autonomy violations and approach responses; disgust would be incited by divinity violations and avoidance responses; and contempt would be incited by community violations and avoidance responses. In Study 1, participants were shown scenarios that depicted violation types of autonomy, community, and divinity, combined with either approach or avoidance responses. Results indicated that participants recognized interpersonal hate when shown depictions of autonomy violations and avoidance responses. However, the expected patterns of appraisal and behavior were not so clearly supported for the hostile emotions. In Study 2, the same scenarios were used, but participants were either shown all avoidance behavior scenarios, or all approach behavior scenarios. Again, interpersonal hate was rated higher in scenarios depicting violations of autonomy and avoidance responses, but the hostile emotions did not reveal expected patterns of results. Support for the hostile emotions was mixed, and suggests that further research and theoretical development in this area is warranted. Across two studies, conducted in two different populations, interpersonal hate was identified by participants by the predicted appraisal of autonomy violation and avoidance behavior. It is concluded that interpersonal hate is an emotion, that it occurs when someone feels a violation to the self that they wish to avoid, and that it behaves in a predictable pattern, similar to other emotions.

Table of Contents

I. Introduction.....	1
A. Inattention to Hate.....	2
B. Appraisal Theory of Emotion.....	5
C. The CAD Triad.....	7
D. What Interpersonal Hate Isn't.....	12
Intergroup Emotion Theory.....	12
Prejudice.....	14
E. Current Theory on Interpersonal Hate.....	15
F. Statement of Problem.....	17
G. Pilot Test.....	18
II. Study 1.....	19
A. Method.....	19
B. Results.....	21
C. Discussion.....	23
III. Study 2.....	25
A. Method.....	25
B. Results.....	26
C. Discussion.....	28
D. Test for Vignette Topic Effects.....	31
IV. General Discussion.....	32
V. Limitations.....	37
VI. Conclusions and Future Directions.....	38

VII. References.....	39
VIII. Tables.....	42
IX. Figures.....	44
X. Appendix A.....	48
XI. Appendix B.....	53

Introduction

Hate: the forbidden emotion. As children, we were told things like, “hate is an ugly word,” or worse, “you don’t hate your sister, you love her.” But when your sister broke your favorite toy, or ruined your favorite shirt, you probably did hate her in that moment. We have been indoctrinated since childhood with the dogma that hate is bad, and hating people makes us bad people. But why has hate earned such a bad reputation?

Perhaps it’s because of all the other unseemly phenomena that share the name. For example, we would never condone “hate crimes” or the behavior of “hate groups.” We find both to be morally repugnant. Yet these terms share the same label as a child proclaiming “I hate vegetables!” While it is easy to see the disparity between these ideas, they share a moniker and thus are linked in our ideology around hate.

Perhaps it is because hate has never truly been differentiated from other negative emotions. Hate is not anger, disgust, contempt, frustration, prejudice, or jealousy. While it may be related to and share characteristics with these emotions, it should be parsed out from them. Just as we would not use “anger” as a synonym for “contempt” because it would change the meaning of the statement, we should not use “hate” as a synonym for these other terms.

Perhaps it is the desensitization of the term hate. As adults, it is not uncommon to hear someone proclaim that they hate someone else, often even in a jocular context. It appears in our day-to-day interactions and our social media forums frequently.

Perhaps it is both the generalization and desensitization of the term hate that has so distorted people’s conceptualization of hate. Hate is a naturally occurring response to aversive stimuli, and thus is a biologically relevant event. Perhaps, instead of telling children, “you don’t

hate,” we should be telling them, “hate is just a feeling, it is no better or worse than any other.” Instead of quelling instinct we should try to understand it. Let’s give hate a chance.

While there is a prolific body of literature on aggression and negative emotions, hate as an interpersonal emotion has been explored little to date. It is often clumped together with prejudice or anger, but I will present a theoretical argument that hate is a discrete emotion, and therefore should be defined and explored. First, I will provide evidence that hate is an emotion, not just a phenomenon with emotion-like components. A theoretical model will be provided of the internal structure of hate, as well as its position in the realm of negative emotions. To do this, hate will be differentiated from prejudice (and thus, “hate crimes”), as well as the triad of hostile emotions (contempt, anger, and disgust). It will also be argued that hate is owed a place among this triad of emotions. Despite the lacking research on interpersonal hate, the literature regarding harm, emotions, and appraisal theory will be used to define and embed hate into our lexicon of emotions.

Inattention to Hate

In a recent survey, 248 emotion researchers were polled and asked to identify which emotions the researchers consider to be distinct (Ekman, 2016). Sixty percent of polled researchers responded and were then presented with a list of 18 emotions including hatred. The most strongly supported emotions were anger, fear, disgust, sadness, and happiness, each supported by at least 76% of the surveyed scientists. Shame, surprise, and embarrassment were supported by 40-50%. The other emotions garnered even less support. Importantly, hate received so little support that it was not included in the results of the study. In fact, the lowest percentage of support reported was for gratitude, which was given six percent support, indicating that hatred

received even less than six percent. Hate was rejected by emotion researchers as unworthy of consideration.

Although hate has been rejected by most emotion researchers, our lab conducted a recent set of unpublished studies to explore interpersonal hate in individuals. These preliminary studies provide a basis for the continuation of the exploration of interpersonal hate. In an initial online survey, 325 undergraduate students were asked a series of questions about their experience with interpersonal hate. When asked, “how many people do you hate?” 42% admitted to experiencing interpersonal hate toward at least one person. Of those, 99.8% indicated hating individuals that they knew personally. Fifty-five percent of participants described an instance of being personally harmed by an individual, while 15% described an individual committing a moral violation. For coding purposes, research assistants were provided with the following definitions for moral violation and personal harm with which to categorize participants’ answers. Personal harm occurs when the participants feels “they have been physically or emotionally hurt.” Moral violation occurs when the participant feels “a law or widely held religious principle has been violated.” While this study provides evidence for interpersonal hate, to test the hypothesis that interpersonal hate is a discrete and frequent emotion similar to anger, different questions were formulated.

In a second preliminary study, 260 undergraduate students took part in an online study. When asked, “Have you ever experienced hate?” 86% of students polled indicated that they had experienced interpersonal hate. This question better encapsulates the experience of interpersonal hate than the question initially posed in the first study, since interpersonal hate is predicted to be experienced as an emotion. It stands to reason that it probably is not an ongoing state, which explains why participants did not admit to experiencing interpersonal hate in the first study. Of

the 86% who had experienced interpersonal hate, 40% indicated that they hated individuals, while 30% indicated that they hated groups. Furthermore, 41% described an instance of personal harm when describing why they hated a group or individual, while only 3% described a moral violation. Participants completed a measure indicating the duration and frequency with which they experienced hate and anger. Participants described both as being brief (lasting around an hour) and frequent (occurring around once a week). This indicates that there is similarity in the experience of hate and anger.

Because both preliminary studies found that the majority of participants who had experienced interpersonal hate described it as an instance of personal harm, a third study was designed to explore whether participants could differentiate instances of personal harm from instances of moral violation, without being prompted by definitions. Ninety-five undergraduate students completed an online survey in which they read scenarios that described either personal harm, moral violation, or a combination of both. After each scenario, participants rated the scenario for how much personal harm the protagonist experienced on a seven-point scale, and then completed a similar measure for how much moral violation the protagonist experienced. Then they were given a list of both positive and negative emotions and asked to indicate how much the protagonist experienced each emotion on a seven-point scale.

Participants rated the scenarios depicting personal harm significantly higher in both personal harm and moral violation relative to the scenarios depicting moral violation, but not significantly higher than the scenarios depicting a combination of personal harm and moral violation. Participants rated scenarios higher in moral violation relative to personal harm in all three scenario types. Participants rated the scenarios depicting personal harm as portraying significantly more hate (the term “interpersonal hate” was not used in the survey) than the other

types of scenarios. However, these were the scenarios rated highest in moral violation, as well as personal harm. The evidence from the third preliminary study suggests that participants do not consider personal harm to be separable from moral violation. Rather, participants see personal harm as a specific type of moral violation that is stronger, and elicits more interpersonal hate than moral violation alone.

In these preliminary studies, evidence was found that up to 86% of people experience interpersonal hate. They experience it with the same duration and frequency as anger, an emotion accepted by 91% of emotion researchers (Ekman, 2016). Furthermore, people recognize hate when is experienced by others, particularly when personal harm occurs. Given this evidence and the lack of literature surrounding interpersonal hate, it is imperative to explore interpersonal hate as an emotion to have a fuller understanding of the human emotional experience.

Appraisal Theory of Emotion

Appraisal theory is commonly implemented as a framework for exploring the relationship between cognition and emotion (Frijda, Kuipers, & ter Schure, 1989; Roseman, Wiest, & Swartz, 1994). Cognition is both a necessary and sufficient condition of emotion (Lazarus, 1991b). However, until the work of Magda Arnold and Richard Lazarus in the 1960s, the type of cognition associated with emotion had not been identified (Scherer, 1999). This theory argued that the role of cognition in emotion was appraisal, and that these appraisals occur prior to the organism experiencing emotion (Arnold, 1960).

While several theorists have proposed different models of appraisal theory, all of them share the central tenet that emotions are elicited based on a person's subjective appraisal of a situation (Scherer, 1999). Though there is some debate about the number and nature of appraisals, four major classes of categories have been determined for the characteristics of

appraisal used to evaluate significance of events; intrinsic characteristics such as agreeableness and novelty, significance in relation to goals, control over the situation or ability to cope, and how the event relates to social and personal norms (Ellsworth & Scherer, 2003). Individuals engage in appraisal, and this leads them to an emotional response, which subsequently influences cognition and emotional feedback.

As an example, in one such appraisal theory of emotion, the components of each of the four major schools of appraisal theorists were brought together in order to converge their differing ideas into a centralized theory (I.J. Roseman, Antoniou, & Jose, 1996). In a survey congruent with standard research practices in appraisal theory, 177 undergraduate students recalled and described instances in which they experienced specific emotions and then answered a series of questions about their appraisal of the experience.

This study found evidence that six of the major dimensions of appraisal theory contributed to eliciting emotions. The first major dimension of appraisal is motive relevance; an appraisal that the situation was motive-consistent resulted in positive emotions and that it was motive-inconsistent results in negative emotions. The second appraisal dimension is goal-orientation; whether the goal of the emotion was to push away the stimulus or bring it closer. This “approach/avoid” motive reflects the desired behavior in response to the stimulus. The third appraisal dimension is the cause of the emotion. Emotions could be differentiated based on an appraisal of cause, whether circumstance-caused, other-caused, or self-caused.

The fourth appraisal dimension is certainty; whether the event’s outcome was known or unknown. The fifth appraisal dimension is control; whether the situation could be controlled by the participant or not. This appraisal is common to almost all appraisal theories. The final appraisal dimension is that of characterological origin. This appraisal acts to determine whether

the situation is the result of some characterological flaw in the offender. In other words, this appraisal determines whether the participant believes that the offender is flawed internally, rather than just participating in undesirable behavior. It should be noted that other appraisals have been identified, including legitimacy (Roseman, 1984), and norm compatibility (Scherer, 1982). However, the purpose of this study was to test the categories of appraisals from competing theories. The appraisals described were the only ones that the researchers were supported in eliciting emotions. (Frijda et al., 1989)

A criticism of appraisal theory is that it fails to account for social factors. Therefore, researchers have begun to reshape emotion theory by introducing a social component. The two-factor theory it was found that participants experienced elevated responses to other people's emotions when aroused (Schachter & Singer, 1962). Further research found that people made assessments based on how emotionally involved they felt a confederate was to the situation (Lazarus, 1991a). Taken together, this suggests that there is a social component to appraisal in which people are accounting for the appraisals of others (Parkinson, 2011). Social appraisal theory seeks to add a social appraisal to current emotion theory based on three observations (Manstead, 2005). First, emotions are a response to a stimulus, and many stimuli that humans encounter are social in nature. Second, many emotions serve a social function. Lastly, we often share emotions with others, which elicits emotional response in others. Interpersonal hate has not been explored under any of the current emotions theories. However, it is hypothesized that interpersonal hate is an emotion, and that it shares characteristics with other negative emotions. This will be explored in the current research.

The CAD Triad

The “CAD Triad” states that there are three hostile emotions (or as they term them, “moral emotions”); contempt, anger, and disgust, that are elicited in response to moral violations of others (Rozin, Lowery, Imada, & Haidt, 1999). These emotions were first proposed as the “hostility triad” (Izard, 1977). Originally, the hostile emotions model included hostility as a member of the cluster. However, findings indicate that anger and hostility elicited identical response patterns, and thus hostility was not included in the CAD triad. According to the triad, contempt, anger and disgust are related but discrete emotions that can be overlaid onto the “Big Three” model of moral violations (Shweder, Much, Mahapatra, & Park, 1997). In the Big Three model, humans are motivated by one of three moral motivators; autonomy, community, and divinity (Shweder et al., 1997).

According to Shweder, autonomy refers to a person’s sense of self. A violation of autonomy includes concepts such as personal harm, deprivation of rights, and justice. Community refers to a person’s place or role in society and their perception of others’ place within it as well. In order to preserve community, a person must feel that there is a meaningful and justifiable hierarchy within society. It relies heavily on the balance between what a person contributes to society and what they are rewarded from it. A violation of community would rely on a person’s sense of duty and dedication to society if they felt the integral balance of it were not preserved. Divinity refers to a person’s sense of sacred law or natural order. It can be, but is not required to be rooted in religious beliefs. A violation of divinity would endanger a person’s sense of spirit or spiritual cleanliness, and would result in degradation, not just to the person but to his or her perception of the human condition (Shweder et al., 1997).

While the CAD triad does not claim to describe interpersonal hate, it is important to differentiate the three emotions in the triad from interpersonal hate. To accomplish this, two things must be explored. First, because each emotion is a response to a situation or stimulus, the elicitor of each should be examined. Secondly, the behavioral tendencies that follow each emotion should be examined. It is often cited that anger instigates people to approach a violator, while contempt and disgust instigate avoidance (Frijda et al., 1989).

Anger is an offense against the self and anyone considered to be an extension of the self (Lazarus, 1991b). It occurs when the threat is to one's own identity. Anger is motivated by autonomy (Rozin et al., 1999). Humans become angry when they feel an offense has been committed against the self, or extension of self in the case of children or close family members. Interestingly, people are more likely to experience anger toward individuals who are disliked or even hated (Averill, 1982).

Anger incites an approach response (Izard, 1977; Ira J. Roseman et al., 1994). While it has been shown that anger incites a desire for more vigorous response such as aggression (Novaco, 1976), such constructs as self-inhibition, societal norms, and accountability often thwart an actual aggressive response (Izard, 1977). In a study in which participants were asked to recall recent episodes when they were made angry, 82% expressed a desire to aggress (non-physically) against the perpetrator, but only 49% actually carried out the aggression. Further, 40% expressed a desire to aggress (physically) against the perpetrator, but only 10% carried out the aggression (Averill, 1982). It is also important to note that in 87% of participants, the participant had a relationship with the perpetrator in some capacity.

Finally, disgust, specifically *social disgust*, or repulsion directed to those who engage in acts that are regarded as degrading or lacking in dignity, is motivated by the individual's sense of

divinity. Disgust is experienced when the individual's sense of cleanliness or dignity has been compromised. This is illustrated by the "Macbeth effect," whereby people will use physical cleanliness as a surrogate for moral purification (Zhong & Liljenquist, 2006). Furthermore, a study using vignettes to incite either anger or disgust in participants found that disgust, and not anger, predicted harsher reaction to purity-violations (Horberg, Keltner, Oveis, & Cohen, 2009).

Disgust incites a clear avoidance response (Frijda et al., 1989; Hutcherson & Gross, 2011; Lazarus, 1991b; Rozin, P., Markwith, M., & McCauley, 1994). One study found that participants who were presented with scenarios in which characters participated in taboo-breaking behavior (relative to personal harm behavior) were more significantly more likely to engage in avoidance behavior than punishment behavior (Gutierrez & Giner-Sorolla, 2007). In contrast, participants were more likely to engage in punishment behavior than avoidance behavior when personal harm occurred. It is likely that the strong avoidance response evoked by disgust is due to the intensity of the emotion. Disgust is elicited by divinity, or a person's sense of spirit, religion, and norms of purity. Violation of these norms violate a person's sense of cleanliness and righteousness.

Contempt, which involves a hierarchical appraisal of incompetence, is motivated by community. This designation refers to the nature of contempt. Generally, humans experience contempt in a downward direction. That is, humans feel contempt toward individuals and groups they feel are morally beneath them (Izard, 1977). Because of this contempt is regarded as the basis for prejudice. Humans tend to be contemptuous when they observe someone in a social position they do not feel is deserved, or that the offending person is not fulfilling their role adequately. This offense is a threat to the cohesion of the larger community, when a person feels that they have observed someone "not pulling his own weight," thus applying strain on the rest

of the community. Contempt elicits less distress and hostility than either anger or disgust, suggesting that it is probably a more ruminative emotion than the others (Izard, 1977).

Contempt differs slightly from the others in that it does not incite either approach or avoidance. While it is typically grouped in with the avoidance emotions, it actually does not have a clear behavioral response (Izard, 1977). It is possible that contempt still has a behavioral tendency toward avoidance, but that the avoidance is not active. This could be because contempt is not a strong enough emotional response to evoke a strong behavioral response. The easiest and most effective response to a situation in which an individual feels contempt may be to simply ignore the perpetrator of the community violation.

It is proposed that interpersonal hate differs from each the hostile emotions, but also it also shares similarities with them. Like anger, I believe that interpersonal hate is an emotional response to an autonomous violation. However, unlike anger, the behavioral tendency of interpersonal hate is not to respond with aggression and approach, but avoidance. In this characteristic, it is more similar to disgust, and to some extent, contempt. Given these characteristics, it is likely that interpersonal hate occupies a necessary and discrete position within the CAD cluster of emotions, as is illustrated in Table 1.

Both of the current models of hostile emotions focus on the nature of the emotions. While they use “approach” and “avoid” as discrete characteristics of the hostility emotions, they do not discuss the alternative to that behavioral tendency. For example, if someone experiences a violation of divinity and avoids the stimulus, disgust has been defined. However, it is likely that a different emotion is elicited when someone experiences a violation of divinity but feels the need to approach.

If there are two emotions connected to all three of the violations; autonomy, community, and divinity, then a new model of hostility emotions is necessary. As is shown in Table 1, there are missing emotions that occupy the model, but are nonetheless experiential and important. This model will be developed further, using current research, as well as new theory. For the purpose of this thesis the new theory will be used to define interpersonal hate, but this theory could potentially add to the model as the research progresses.

What Interpersonal Hate Isn't

Intergroup Emotion Theory

Hate is often thought of in terms of genocide, massacre, and the incitation of groups to violence. While these events are certainly deserving of study, they describe phenomena in which participants are subject to intergroup emotions. While the individuals involved may believe that their negative feelings are part of their individual belief system, those beliefs would likely not be held if the individual were not in the group and influenced by its beliefs and principles. However, interpersonal hate-- occurring when one individual hates another-- has decidedly different characteristics. It is important to explore these differences in order to differentiate intergroup and interpersonal hate.

According to intergroup emotion theory, emotions can be experienced not only at a personal level, but also at the group level (Mackie & Smith, 2015). This is the result of social categorization and social identity, in which the individual identifies characteristics about the group as belonging to the self. This phenomenon helps the individual solidify group membership and belonging (Mackie, Devos, & Smith, 2000). Examples of intergroup emotion theory include the following: group categorization determines emotional experience, individuals feel what they perceive is felt by the group, emotions are determined by group-level appraisal, intergroup

emotions differ from personal emotions, and identification with the group moderates all other evidence (Mackie & Smith, 2015).

Of interest to the current research is the difference between intergroup and interpersonal emotions. Intergroup emotions are experienced and elicited differently than interpersonal emotions (Mackie, Silver, & Smith, 2004). Group emotions do not necessarily occur in response to a discrete event the way individual emotions do, and can be incited without the individual being directly affected (Smith, Seger, & Mackie, 2007). These emotions often differ in intensity depending on circumstance, as well as behavioral response. Furthermore, most individuals identify as members of multiple groups, and intergroup emotions change based on immediate group identification. For example, in one study, individuals were asked to describe their emotions as an individual, but when primed to identify as a group member (student, citizen, etc.) they reported experiencing different emotions based on whatever “collective self” they felt they were representing (Smith et al., 2007). This changed their action potential as well, demonstrating that group level emotions elicit different behavior than individually experienced emotions.

Current literature focuses on hate as an emotion elicited by group excitation. In the triangular theory of hate, researchers refer to Nazi Germany and the hate instigated by propaganda and patriotism (Scherer, 2003). However, this elicitation of hate likely differs from interpersonal hate in duration, intensity, and behavioral response. The social acceptableness of intergroup emotions also differs from those of interpersonal emotions, particularly hate. In the example of Nazi Germany, anything but unadulterated hate and discrimination on the part of Nazi soldiers toward the outgroup was unacceptable. However, if one soldier vehemently hated another for stealing his girlfriend, that feeling would likely be quashed in the interest of group cohesion. The two emotions do not share the same characteristics.

It is probably irreversible that both of these emotional experiences are labeled with the term *hate*. However, to treat them as though they are the same and to force them under one definition and theory denies both the discrete characteristics they possess. To truly understand both intergroup and interpersonal hate, they must be teased apart from one another so that they may both be explored. Because much more attention has been paid to intergroup hate, it is the focus of this research to explore interpersonal hate, its implications, behavioral responses, and elicitations.

Prejudice

Hate research is also commonly thought of in terms of prejudice and discrimination. The literature covering these topics is much more extensive than that on interpersonal hate. However, the term “hate crime” does not accurately refer to the affective state of interpersonal hate. In fact, the term has been so broadly distributed that it actually refers to several phenomena, not all of which even include interpersonal hate (Salter & McGuire, 2015). The term often describes an act of prejudice (Plumm, Terrance, & Austin, 2014).

However, while prejudice may be related to interpersonal hate, it is not an interchangeable term. Prejudice occurs when an individual feels fear, distrust, or moral superiority toward an out-group in comparison to an in-group with which they associate and identify (Brewer, 1999). In order for prejudice to take place an individual must first identify as part of a group, and then acting on the ideology and presuppositions of that group, form negative opinions about an out-group.

There is evidence that contempt is the basis for prejudice (Izard, 1977). Contempt is defined as a “cold emotion” and is the basis for discriminatory behavior. It is possible to harm people through indifference by removing them from society (i.e. racial segregation). By denying

someone a place in society, they are essentially denied the privileges of being human. This kind of hostility may be evident only to those who experience it.

While prejudice is related to interpersonal hate, interpersonal hate can occur without prejudice. Prejudice occurs when an individual feels part of a group. Interpersonal hate can occur when the individual endures harm to the self. Furthermore, prejudice most often occurs when an individual responds to differentiation between groups. Hate most often occurs in response to a singular event inflicted by one individual onto another.

Current Theory on Interpersonal Hate

While interpersonal hate has been largely ignored in emotion research, it has not remained entirely untouched. One theory that stands out is the “Triangular Theory of Hate,” which was born from the “Triangular Theory of Love” (Sternberg, 1986, 2003). This theory claimed to encompass both interpersonal and intergroup hate.

This theory first argues that hate is structurally similar to love. While hate is not the opposite of love, they are related, in that they are both driven by internal narratives about situations. The structure of hate is compared to the “love triangle” which included the following three components: intimacy, passion, and commitment (Sternberg, 1986). In describing these components as they exist for hate, the hostility triad of emotions is repurposed and restructured. According to this theory, hate is a combination of contempt, anger, and disgust.

According to this theory, hate has three similar components that share structure, but not emotional output, with love. The first component is the negation of intimacy, which is expressed through disgust. In this component, a person feels repulsion for the hated individual. This repulsion can be the result of the hated person’s actions, or possibly their group membership. In this component, the individual feels the need to withdraw from the hated group or individual.

The second component of the triangle of hate is passion, which is expressed through anger and fear. According to the theory, when hate is experienced it expresses itself through anger and fear in response to a threat. While anger often leads to approach and fear to avoidance, both are possible behavioral responses when hate is experienced.

The third component of the triangle of hate is commitment, which is expressed through contempt. In this component, the individual devalues the target group or individual, often to the point that they are considered as subhuman and unworthy of empathy or compassion. According to this theory, this component is often the result of propaganda on the part of some larger group.

The triangular theory of hate argues that hate is a combination of anger, disgust, and contempt. However, the theoretical support for this notion is not supported. Throughout the theory, the example of Nazi Germany is used to describe the triangle of hate, including the use of propaganda and brain-washing to the end that people experience mass hate. This example is used to explain the phenomenon that occurs when massacres, genocide and other mass atrocities occur. This theory describes intergroup hate, bordering on mass hysteria.

The application of this theory to interpersonal hate, is lacking, both in body and in insight. Only one statement of each of the three components describes interpersonal hate, and no empirical evidence is offered. Rather, anecdotes and suggestions are used as examples of such emotional expression for each component. Because of this lack of empirical data surrounding interpersonal hate, it is important to continue the study of hate, specifically focusing on interpersonal hate as the target emotion.

As has been shown in preliminary studies, interpersonal hate occurs both frequently and in short duration, just as other emotions occur. It is unlikely, then, that hate requires anger, fear,

contempt, and disgust simultaneously in order to be properly experienced. There is likely another, more fitting, explanation related to the hostility triad of emotions.

Statement of the Problem

While there is a prolific and abundant supply of research on discrete negative emotions, there is a disparity in the literature on interpersonal hate. Interpersonal hate is often used as a passing description in many studies and reviews, but it has not been explored as a discrete emotion. We are quick to assign the term hate to instances of prejudice and anger. However, as has been demonstrated, it is related but different from these emotions. According to the current hypothesis, hate, like anger, is activated by violation of the self, brought on by personal harm. It is most often experienced in response to actions by individuals who have a relationship with the target. Like disgust, it most often predicates an avoidance response.

A thorough and comprehensive examination of interpersonal hate will demonstrate its internal characteristics and its place among the established hostile emotions. Studies will be conducted to explore whether it is possible to parse interpersonal hate responses away from contempt, anger, and disgust, providing evidence that they are four discrete but related emotions.

Given the heavy reliance of the current theory on the triad of hostile emotions, the method used in the hostile emotions research will be utilized for the current research. These studies typically use vignettes and measure participants' responses. However, the current studies will be modified to include a manipulation of behavioral response. The scenarios used will include a violation of autonomy, community or divinity, and an approach or avoid response. Manipulating the behavioral tendency of each scenario will provide evidence that interpersonal

hate is experienced most often when an individual experiences a violation of autonomy and avoids the violator.

Pilot Test

In preparation for the current study, a pilot study was conducted in which the scenarios were tested using the University of Arkansas general psychology undergraduate pool. Nineteen students were offered partial credit toward their course requirement in return for their participation.

After completing an informed consent, participants followed a link to the survey. The survey and informed consent were not linked, so that participant anonymity was preserved. Instructions directed the participants to read each story carefully in anticipation of a quiz to follow each scenario.

Participants read and responded to twelve scenarios. Six of the scenarios were about theft or destruction of property, and six were about sexual violation. Of each set of six, two portrayed violations of autonomy, two of community, and two of divinity. Within the two scenarios of each violation, one portrayed avoidance behavior, and one portrayed approach behavior (see Table 2 for breakdown of scenarios).

After reading each scenario, participants first answered three attention check questions. However, because of the small sample, unless participants missed more than one of the three questions their data was included for analysis. Participants then answered the following question on a seven-point scale, “To what extent do you think [the protagonist] experienced the following emotions regarding the scenario described?” with scores from 1 (*not at all*) to 7 (*an extreme*

amount) followed by an inclusive list of both positive and negative emotions, as utilized in preliminary studies (list available in Appendix).

It was predicted that within both sexual violation scenarios and theft/destruction of property scenarios the scenarios portraying autonomy violations and avoidance responses would score highest in interpersonal hate. Within sexual violation scenarios, the autonomy/avoidance scenario had a significantly higher rating of interpersonal hate than any of the other scenarios. In fact, the sexual violation autonomy/avoidance scenario scored significantly higher in interpersonal hate than the corresponding scenario within the theft/destruction of property scenarios. The same was not true for the theft/destruction of property autonomy/avoidance scenario, which only scored higher in interpersonal hate than two of the other scenarios within the same topic. Results can be viewed in Table 2. Initial results point to sexual violation scenarios as being the best for accurately portraying interpersonal hate, though a larger sample is necessary to make this determination.

Study 1

The purpose of Study 1 was to measure whether interpersonal hate could be differentiated from other negative emotions, specifically contempt, anger, and disgust. It was hypothesized that this could be accomplished by manipulating two variables; violation type (whether the violation was one of autonomy, community, or divinity) and behavioral response (approach or avoid response).

Method

Participants. Participants were recruited from the pool of undergraduate students enrolled in general psychology through Sona. These students received partial credit toward a course requirement for participating in the online study. Two hundred students signed up to participate

in the study. However, five students failed at least five attention check questions and were excluded from analyses (see Materials and Procedure). The remaining sample size included 195 participants. Participants' average age was 19.25 (range 18-39), and included 50 males and 145 females. Eighteen identified as Black, 162 White, 6 Asian, 14 Hispanic, 6 Native American, and 2 Other (participants could choose more than one ethnicity).

Materials and Procedure. Study 1 was conducted entirely online. Participants were randomly assigned to one of two groups. Participants in Group A were given six vignettes depicting sexual violation. The vignettes included two of each of the violation types (autonomy, community, and divinity), one of each depicting an approach response and one avoid response. Group B was given six vignettes that depicted theft/destruction violations, with the same combination of violation and behavioral response as Group A. Vignettes were counterbalanced to portray male and female characters and were presented in randomized order.

After reading each of the vignettes, participants completed a short questionnaire. First, participants completed a subscale of the Difficulties in Emotion Regulation (DERS) scale (Gratz & Roemer, 2004). The next three questions following each vignette were multiple choice and served as attention checks. Participants then answered the following question on a seven-point scale, "To what extent do you think [the protagonist] experiences the following emotions regarding the scenario described?" (with a score of 1 indicating "not at all" and 7 indicating "an extreme amount") followed by a list of both positive and negative emotion and state words, as utilized in preliminary studies (list available in Appendix).

Following the completion of the six vignettes and subsequent questions, participants were prompted to answer a final question about each of the vignettes. Participants were reminded of the details of each vignette, and then asked to answer one follow-up question in which the

participant indicated the extent to which the vignette depicted personal harm and moral violation (See Appendix).

This question was placed at the end of the survey to avoid influence on the rest of the survey, and served in a strictly exploratory capacity for the present researchers. Finally, participants were asked to provide demographic information including sex, age, and ethnicity. They were not required to provide this information.

Results

Study 1 consisted of one between subjects variable referred to as topic (sexual violation or theft/destruction violation), and two within subjects variables, violation type (autonomy, community, and divinity), and behavior response (approach and avoid). The purpose of Study 1 was to compare the pattern of effects for each of the four emotions of interest: interpersonal hate, contempt, anger, and disgust. Therefore, a 3×2 repeated measures analysis of variance was performed for each of the four emotions. The analysis included two main effects, for behavior and for violation type. The two groups (separated by topic type) were collapsed so that one analysis of variance was performed for each emotion. This was done because initial analyses indicated that while topic type was significant in some of the analyses, it was not consistently different for one topic type over another. This will be discussed in further detail following Study 2.

First, a 3×2 analysis of variance was performed for ratings of hate. There was a significant differences among violation types, $F(2,374) = 100.25, p < .001, \eta_p^2 = .35$. A post-hoc Tukey test revealed ratings of hate as significantly higher in autonomy vignettes ($M = 5.24, SE = .1$) compared to community ($M = 4.29, SE = .11$) and divinity vignettes ($M = 3.94, SE = .12$). There was also a significant main effect of behavior, where hate ratings were significantly higher

in avoidance vignettes ($M = 4.76$, $SE = .1$) than approach vignettes ($M = 4.22$, $SE = .11$), $F(1, 187) = 31.55$, $p < .001$, $\eta_p^2 = .14$. There was a significant three-way interaction between behavior, violation type, and topic, suggesting that topic was influential in this analysis, $F(2, 372) = 12.58$, $p < .001$, $\eta_p^2 = .06$. Hate ratings were highest in vignettes portraying autonomy violations, and those portraying avoidance responses, as was predicted by the hypothesis.

Next, a 3×2 analysis of variance was performed for ratings of anger. There was a significant effect of violation type, $F(2, 368) = 100.43$, $p < .001$, $\eta_p^2 = .35$. A post-hoc Tukey test revealed that ratings of anger were significantly higher in autonomy vignettes ($M = 6.48$, $SE = .05$) than both community ($M = 5.22$, $SE = .09$) and divinity vignettes ($M = 5.51$, $SE = .09$). There was also a significant main effect of behavior, where anger ratings were significantly higher in approach vignettes ($M = 5.88$, $SE = .07$) than avoidance vignettes ($M = 5.6$, $SE = .07$), $F(1, 184) = 20.11$, $p < .001$, $\eta_p^2 = .10$. There was a significant three-way interaction between behavior, violation type, and topic, suggesting that topic was influential in this analysis, $F(2, 366) = 29.49$, $p < .001$, $\eta_p^2 = .14$. Anger ratings were highest in vignettes portraying autonomy violations, and those portraying approach responses, as was predicted by the hypothesis.

Then, a 3×2 analysis of variance was performed for ratings of disgust. There was a significant effect of violation type, $F(2, 384) = 4.32$, $p = .014$, $\eta_p^2 = .02$. A post-hoc Tukey test revealed ratings of disgust as significantly higher in autonomy vignettes ($M = 5.85$, $SE = .09$) than both community ($M = 5.64$, $SE = .09$) and divinity vignettes ($M = 5.66$, $SE = .09$). There was also a significant main effect of behavior, where disgust ratings were significantly higher in avoidance vignettes ($M = 5.80$, $SE = .08$) than approach vignettes ($M = 5.63$, $SE = .08$), $F(1, 192) = 5.12$, $p = .025$, $\eta_p^2 = .03$. There was a significant three-way interaction between behavior, violation type, and topic, suggesting that topic was influential in this analysis, $F(2, 382) = 4.67$,

$p = .01$, $\eta_p^2 = .024$. Disgust ratings were highest in vignettes portraying autonomy violations, which was not consistent with the hypothesis. However, ratings of disgust were highest in vignettes portraying avoidance responses, which was predicted by the hypothesis.

Lastly, a 3×2 analysis of variance was performed for ratings of contempt. There was no significant effect of violation type. There was a significant main effect of behavior, where contempt ratings were significantly higher in avoidance vignettes ($M = 3.23$, $SE = .14$) than approach vignettes ($M = 3.07$, $SE = .13$), $F(1, 192) = 4.34$, $p = .038$, $\eta_p^2 = .02$. Contempt ratings were not significantly higher for any violation type $F(2, 382) = .323$, which was not consistent with the hypothesis. There was not a significant three-way interaction for topic, behavior, and violation type, $F(2, 372) = 12.58$, $p < .001$, $\eta_p^2 = .06$. However, ratings of contempt were highest in vignettes portraying avoidance responses, which was supported by the hypothesis.

As reported, there were some significant interactions for the analyzed emotions. These will be discussed in greater detail after the results of Study 2.

Discussion

The first goal of Study 1 was to test the prediction about the components of interpersonal hate. It was predicted that interpersonal hate would be elicited by vignettes depicting violations of autonomy, and vignettes depicting avoidance response. This prediction was supported by the results. Interpersonal hate was rated highest in vignettes depicting autonomy violations, and vignettes depicting avoidance responses. This supports the proposed theory that interpersonal hate is experienced when an individual encounters a violation to the self, and seeks to avoid the perpetrator of the harm.

The second goal of Study 1 was to reproduce the theoretical components of the hostile emotions. In this endeavor, Study 1 was marginally successful. Per the theory, it was predicted

that anger should be identified as the emotional response to violations of autonomy and approach responses. This was supported by the results of Study 1, in which anger was rated highest in vignettes depicting autonomy violations, and vignettes depicting approach responses.

It was predicted that disgust would be elicited in by violations of divinity and avoidance responses. However, disgust was rated highest in vignettes depicting autonomy violations and vignettes depicting avoidance responses. While the behavioral response component of disgust was supported, the violation component was not. This was likely due to the design of the study. In other studies of in which researchers attempt to elicit disgust via vignettes, the violations are often much more appalling, often including such offenses as necrophilia and incest (Gutierrez & Giner-Sorolla, 2007; Rozin et al., 1999). For the purpose of this study, I specifically avoided situations that utilized these topics to ensure that all of the vignettes had similar degrees of intensity. But because disgust, anger, and hate are more intense than contempt (Izard, 1977; Novaco, 1976; Rozin et al., 1999), this likely weakened the results.

It was predicted that contempt would be elicited by vignettes depicting violations of community. Though contempt is a cold emotion, and should have neither response type associated with it, it was predicted that participants were more likely to indicate ratings of contempt for avoidance than approach. However, contempt was not significantly different in any of the violation types. It was significantly higher in response to avoidance behavior. Though these results do not support the theory of hostile emotions, they are not surprising. Contempt is a difficult emotion to define. In terms of everyday use, it is not easily differentiated from other mild, negative emotions such as scorn and disdain (Darwin & Prodger, 1998). It is also not an intense emotion (Izard, 1977). These factors likely make it difficult for participants to identify contempt when they experience it, and when they observe it.

Study 2

Study 2 was similar to Study 1, except for manner of manipulating the variables. Specifically, rather than grouping participants by the topic of the vignettes, they were grouped by behavioral response, such that one group of participants saw only approach responses while the other group saw only avoid responses. The $3 \times 2 \times 2$ design was therefore used again, but with the between- versus within- properties altered.

Methods

Participants. Participants were online survey takers recruited using Mechanical Turk who were paid one dollar for participation. Initially, 220 participants signed up to participate in the study. However, due to errors with survey monkey, only 190 participants were included in the analyses. There were 106 male and 84 female participants, with an average age of 35.9 (range 18-69). The sample consisted of 21 Black, 138 White, 13 Hispanic, 26 Asian, and 2 Native American individuals (participants could indicate more than one ethnicity).

Materials and Procedure. Study 2 was conducted online. Participants were randomly assigned to one of two groups. Group A participants were presented with six scenarios depicting avoidance responses. Two of the scenarios depicting each violation type (autonomy, community, and divinity), one of each violation type depicting a sexual violation and one depicting a theft/destruction violation.

The instructions directed the participants to read each story carefully in anticipation of a quiz to follow each scenario. Scenarios were counterbalanced for male and female characters and were presented in randomized order.

After reading each of the scenarios participants filled out a short questionnaire. First, participants completed a subscale of the DERS scale of emotional clarity. Then, participants

answered three attention check questions.

Participants then answered the following question on a seven-point scale, “To what extent do you think [the protagonist] experiences the following emotions regarding the scenario described?” (with a score of 1 indicating “not at all” and 7 indicating “an extreme amount”) followed by a list of both positive and negative emotions and state words.

Finally, participants were asked to provide demographic information including sex, age, and ethnicity. This information was not required.

Results

Study 2 used behavior as a between subjects variable and violation type as a within subjects variable. Like Study 1, the purpose of Study 2 was to compare the pattern of effects for each of the four emotions of interest: interpersonal hate, contempt, anger, and disgust. Therefore, a $3 \times 2 \times 2$ mixed model analysis of variance was performed for each of the four emotions. The analysis included two main effects, for behavior and for violation type.

First, a $3 \times 2 \times 2$ analysis of variance was performed for ratings of hate. There was a significant main effect of violation type $F(2, 366) = 112.92, p < .001, \eta_p^2 = .38$. A post-hoc Tukey test revealed that ratings of hate were significantly higher in autonomy vignettes ($M = 4.77, SE = .11$) than both community ($M = 4.09, SE = .11$) and divinity vignettes ($M = 3.34, SE = .11$). There was a significant main effect of behavior, such that vignettes portraying avoidance responses ($M = 4.42, SE = .14$) had higher ratings of hate than approach vignettes ($M = 3.72, SE = .13$), $F(1, 183) = 13.33, p < .001, \eta_p^2 = .07$. It was also found that there was a significant effect of topic, in which vignettes describing theft/destruction scenarios ($M = 4.34, SE = .11$) had higher hate ratings than vignettes describing sexual violations ($M = 3.80, SE = .10$), $F(1, 366) =$

44.36, $p < .001$, $\eta_p^2 = .20$. Hate ratings were highest in vignettes portraying autonomy violations, and those portraying avoidance responses, as was predicted by the hypothesis.

Next, a $3 \times 2 \times 2$ analysis of variance was performed for ratings of anger. There was a significant main effect of violation type, $F(2,370) = 104.13$, $p < .001$, $\eta_p^2 = .36$. A post-hoc Tukey test revealed that ratings of anger were significantly higher in autonomy vignettes ($M = 6.32$, $SE = .07$) than both community ($M = 5.33$, $SE = .09$) and divinity vignettes ($M = 5.23$, $SE = .10$). There was no significant main effect of behavior, $F(1, 185) = .411$, $p = .522$, though the results trended in the expected direction, with approach responses ($M = 5.67$, $SE = .10$) having a higher rating of anger than avoidance vignettes ($M = 5.58$, $SE = .10$). It was also found that there was a significant effect of topic, in which vignettes describing theft/destruction scenarios ($M = 5.89$, $SE = .07$) had higher anger ratings than vignettes describing sexual violations ($M = 5.36$, $SE = .08$), $F(1, 370) = 69.56$, $p < .001$, $\eta_p^2 = .27$. Anger ratings were highest in vignettes portraying autonomy violations, as was predicted by the hypothesis. However, ratings of anger were not significantly higher in either behavioral response, this did not support the hypothesis.

Then, a $3 \times 2 \times 2$ analysis of variance was performed for ratings of disgust. There was a significant main effect of violation type $F(2,364) = 5.84$, $p = .003$, $\eta_p^2 = .03$. A post-hoc Tukey test revealed that ratings of disgust were significantly higher in autonomy vignettes ($M = 5.84$, $SE = .08$) than both community ($M = 5.57$, $SE = .09$) and divinity vignettes ($M = 5.64$, $SE = .09$). There was no significant main effect of behavior $F(1, 182) = 3.404$, $p = .07$, though the results trended in the expected direction, with avoidance responses ($M = 5.81$, $SE = .10$) having a higher rating of disgust than approach vignettes ($M = 5.55$, $SE = .10$). It was found that there was a significant effect of topic, in which vignettes describing sexual violation ($M = 5.82$, $SE = .08$) had higher disgust ratings than vignettes describing theft/destruction ($M = 5.54$, $SE = .08$), $F(1,$

368) = 12.57, $p < .001$, $\eta_p^2 = .07$. Disgust ratings were highest in vignettes portraying autonomy violations, which was not consistent with the hypothesis. Ratings of disgust were not significantly higher in either behavioral response, which also did not support the hypothesis.

Finally, a $3 \times 2 \times 2$ analysis of variance was performed for ratings of contempt. There was a significant main effect of violation type, $F(2,368) = 27.68$, $p < .001$, $\eta_p^2 = .13$. A post-hoc Tukey test revealed ratings of contempt were significantly higher in autonomy vignettes ($M = 5.51$, $SE = .11$) than both community ($M = 5.28$, $SE = .11$) and divinity vignettes ($M = 4.84$, $SE = .12$). There was a significant main effect of behavior, such that vignettes portraying avoidance responses ($M = 5.65$, $SE = .14$) had higher ratings of contempt than approach vignettes ($M = 4.77$, $SE = .14$), $F(1, 184) = 20.19$, $p < .001$, $\eta_p^2 = .10$. It was also found that there was a significant effect of topic, in which vignettes describing theft/destruction scenarios ($M = 5.41$, $SE = .11$) had higher contempt ratings than vignettes describing sexual violations ($M = 5.01$, $SE = .10$), $F(1, 368) = 27.68$, $p < .001$, $\eta_p^2 = .13$. Contempt ratings were significantly highest in vignettes portraying autonomy violations, which was not consistent with the hypothesis. However, ratings of contempt were highest in vignettes portraying avoidance responses, which was supported by the hypothesis.

Discussion

The goals of Study 2 were the same as those in Study 1. The first goal of Study 2 was to experimentally test the theoretical prediction about the component of interpersonal hate. The results revealed that these predictions were supported. Interpersonal hate was rated highest in vignettes depicting violations of autonomy, suggesting that interpersonal hate is perceived to be experienced when an individual has been harmed personally. Interpersonal hate was also found to be ranked highest in vignettes depicting avoidance.

Secondly, Study 2 was predicted to provide evidence for the theory of hostile emotions by examining the components of each emotion. It was predicted that anger would be rated highest in vignettes depicting violations of autonomy, and vignettes depicting approach behavior. This prediction was partially supported by the results. Anger was rated highest in vignettes depicting violations of autonomy. However, while it was rated higher in approach vignettes, the difference was not significant. This finding may be due to the design of the study. In Study 2, participants saw either exclusively approach or exclusively avoid response types. It is possible that in the avoid condition, participants rated anger higher because there was no approach response with which to compare the avoidance vignettes.

It was predicted that disgust would be rated highest in vignettes depicting violations of divinity, and in vignettes depicting avoidance responses. However, similar to Study 1, this was not supported by the violation component. Rather, disgust was rated higher in vignettes depicting violations of autonomy. Furthermore, while disgust was rated higher in avoidance than approach, the result was not significant. As discussed in Study 1, it is likely the design of the study that prohibited disgust from being rated higher in divinity than autonomy. The lack of intensity in the divinity vignettes probably led to disgust being rated higher in autonomy vignettes. The lack of support for the expected behavioral response is likely the result of the same flaw described above for anger – participants had no alternative response types to compare.

It was predicted that contempt would be rated highest in vignettes depicting violations of community. Though contempt is a cold emotion, and should have neither response type associated with it, it was predicted that participants were more likely to indicate ratings of contempt for avoidance than approach. These predictions were only partially supported by the results. Contempt was rated highest in vignettes depicting violations of autonomy. However,

contempt was rated highest in avoidance vignettes, as predicted. As discussed in Study 1, it was expected that contempt would be hard to differentiate from other emotions.

A third prediction of Study 2 stated that there would not be a significant difference between sexual violation vignettes and theft/destruction vignettes. This prediction was not supported. However, it was found that for disgust, hate that the only difference between the two topics was the intensity of the ratings. The position of the violation type rated highest did not change for vignettes of either topic. In the vignettes portraying sexual violation there was still a significant effect of behavioral response, where the emotions were rated higher in avoidance vignettes relative to approach. However, the difference between ratings in avoidance vignettes and approach vignettes became nonsignificant in the theft vignettes, but the means of the avoidance vignettes was still higher than those of approach. For contempt, the highest ratings by violation was still in the autonomy vignettes for both topics, but the difference was no longer significant between autonomy and community vignettes. There was no difference in the behavioral response. For anger, the violation type order did not change across vignette topic, and the ratings per behavioral response were still nonsignificant as they had been in the original analysis.

Overall, the design of Study 2 created difficulty in identifying the emotions of interest. It seems that it is necessary not only to recognize the components that are part of an emotion, but also to consider what components aren't. Participants in Study 2 were not encouraged to recognize the alternative behavioral response possibilities (e.g., considering an approach response in the avoidance condition), and in fact were discouraged from doing so. By including only one behavioral response for all scenarios in each condition (approach *or* avoid), participants may have been primed against considering any alternative behavioral responses. It appears that

this consideration of alternative behavioral responses is an important part of emotion recognition. Study 2 also suffered from the same limitations as Study 1, in that the violations were not strong enough to allow participants to recognize the situation that would elicit the emotion of disgust.

Tests for Vignette Topic Effects

Originally, both Study 1 and Study 2 were collapsed or analyzed such that vignette topic was not a variable of interest, as reflected in the initial hypothesis. The intention of using two different topics of vignette was to reduce differences caused by topic type. However, because this meant that participants might have different experiences, it was important to determine whether vignette topic was driving the results.

The results of Study 2 revealed that there were significant interactions of vignette topic for some of the analyzed emotions. Because of the unexpected effect of vignette topic in Study 2, it was decided that further analyses should be done to determine if there were consistent interactions across both studies that would suggest that one topic was responsible for the observed effects. In Study 1, this was done by splitting the data by topic so that two analyses of variance were performed for each emotion. In Study 2, this was done by conducting each analysis of variance for each emotion, for each topic's vignettes. The results of these analyses are available in Table 3.

Importantly, none of these comparisons revealed a significant shift in the positions of the variables. The highest ratings of violation type or behavior did not change, though the significance of the variable may have changed. Furthermore, neither topic more consistently influenced the results than the other. Overall, the sexual violation vignettes were closer to the initial analyses than theft/destruction vignettes in five cases, and theft/destruction vignettes were closer in four.

Given these additional analyses, it is concluded that neither topic is responsible for the results of both studies. The patterns tended to be consistent across both topics and both studies, though not always significantly so. This is likely because participants found some stories to be more intense than others, and this happened for both topics. Because these differences seem to be evenly distributed, they are not prioritized for this research.

General Discussion

It has been argued that there are families of emotions that share common characteristics (Ekman, 1992). As discussed previously, the theory of the CAD triad represents one of these families. These emotions, contempt, anger, and disgust, are grouped based on their concern for the integrity of social order (Haidt, 2003; Rozin et al., 1999), and are assumed to differ from one another based on an appraisal of violation type and behavioral response. This assumption is not only the basis of the CAD triad of emotions, but also of the triangular theory of hate (Sternberg, 2003).

However, results from the current research suggest that the assumption of differentiation based on violation type and behavioral response is incomplete. Although disgust was predicted to be rated highest in vignettes depicting divinity violations, it was rated highest in vignettes depicting autonomy violations. Similarly, contempt was rated highest in vignettes portraying autonomy violations when it was predicted that it would be rated highest in vignettes portraying community violations. This variation from established theory suggests that additional appraisals, social factors, physical factors, or levels of intensity are necessary for the emotional experience of both disgust and contempt.

Existing research on disgust utilizes vignettes similar to the present research (Horberg et al., 2009; Rozin et al., 1999; Zhong & Liljenquist, 2006). However, these vignettes often rely

heavily on physical disgust. For example, Rozin et. al (1999) utilized the following scenario as a violation of divinity, “A person is eating a piece of rotten meat” (p. 578). While the CAD triad asserts that disgust, as it is included in the morality emotions, is specifically *social* disgust, the vignettes used to capture social disgust are not exclusively social, but rather a combination of social and physical disgust. It is possible that a physical aversion is a necessary part of social disgust, but if so it should be added to the theory. Another tactic used in disgust research involves vignettes that exploit shock and awe to influence participants. For example, one study utilized a vignette that described a scientist growing a cloned copy of a woman’s arm muscles, which the woman then feeds to her friends (Gutierrez & Giner-Sorolla, 2007). Though participants certainly found this disgusting, this extreme scenario is unrealistic and unnecessary, and brings to light an important issue. There is a lack of standardization in vignette-based research by which the researcher has free reign to create the most likely scenario to support their hypotheses. This method increases the focus on the intended components of vignettes, but does not take precautions to exclude components that might confound results.

The present research sought to correct for this limitation by controlling for vignette topic and intensity. In doing so, the predictions about disgust made by previous research were not upheld. While disgust was rated highest in vignettes portraying avoidance responses, it was not found highest in vignettes portraying violations of divinity. This is likely because the violations of divinity were purposely devoid of physical aspects of disgust and extreme intensity. It seems that one or both of these components are necessary to identify disgust.

In addition to disgust, contempt also failed to hold up the predictions of the hostile emotions. Rather than being rated highest in vignettes depicting community violations, it was rated highest in vignettes depicting autonomy violations. Contempt is a historically difficult

emotion to capture because it does not have a clear evolutionary function (Izard, 1977). It is considered to contribute to a person's concept of outgroups by facilitating dehumanization of those who violate social hierarchy (Haidt, 2003; Izard, 1977; Rozin et al., 1999). However, this description of contempt seems to describe contempt as an appraisal utilized in forming prejudice, rather than a discrete emotion. In fact, contempt is considered an important component of prejudice (Allport, 1966; Brewer, 1999). If contempt is not a discrete emotion, but rather a component of prejudice, then observing contempt would necessitate the existence of an identifiable outgroup, and the formation or expression of prejudice, not just a violation of community.

Another possible explanation for contempt failing to be being elicited by violations of community is that contempt differs in individualist cultures relative to collectivist cultures. While there is no research connecting collectivism to contempt, there is some theoretical evidence for this case. Collectivist cultures revolve around honor (Ahuvia, 2002), and prioritization of in-group goals (Triandis et. al, 1988). People in these cultures are motivated by a sense of duty to their family, community, and culture, and there is honor in performing this duty. This also means that people in collectivist societies expect others to be driven by the same sense of duty and belonging to the group (Triandis et. al, 1988). Contempt exists in this environment because of this emphasis on in-group dominance and individual responsibility to the group. In contrast, individualist cultures prioritize individual goals over the goals of the in-group (Triandis et. al, 1988). Individuals in these cultures are not driven by honor and duty, but rather by realization of personal success. It is possible that honor and the perceived honor of others are integral parts to experiencing the emotion of contempt. Because these characteristics are marginalized in individualist cultures contempt may not be as prevalent.

To date, there is only one publication in which contempt has been examined in both collectivist and individualist cultures. Rozin et. al (1999) looked at violations of community, autonomy, and divinity, in both collectivist (Japanese) and individualist (American) populations. This research found that both cultures responded to violations of community with contempt. However, a closer look at the methodology of this research revealed that in these studies participants were presented with a forced-choice paradigm, and only given three emotion-word choices to label each vignette: anger, contempt, or disgust. While the goal of this research was to determine if participants could differentiate between anger, contempt, and disgust, by only offering a forced-choice paradigm the research could not successfully determine whether participants experienced more than one of these emotions in response to each vignette. Additionally, as previously discussed, these vignettes targeted elicitation of certain emotions, rather than exclusively targeting the intended violation type. Therefore, this research does not clearly establish that contempt can be elicited by community violation alone.

Because the examination of both disgust and contempt failed to hold the predictions of the CAD triad, the theory that these emotions differ from one another by one appraisal is probably too simplistic an explanation. While these emotions may be held together by the integrity of social order, there seem to be more differences than previously believed. Given this conclusion, there is another theory that must be reconsidered. The triangular theory of hate relies almost exclusively on the CAD triad of emotions. This theory suggests that hate is a combinatory emotion that includes all three violation types: autonomy, community, and divinity (Sternberg, 2003). However, the current research demonstrated that interpersonal hate was rated significantly higher in vignettes portraying violations of autonomy, rather than being rated high for all the violation types, as would be predicted by the triangular theory of hate. Interpersonal hate ratings

differed in intensity and patterns of significance from contempt, anger, and disgust, and was demonstrated more consistently than any of the other emotions of interest. Therefore, it does not seem that hate is an emotion consisting of these other emotions, but rather a discrete emotion with identifiable components.

The only emotion from the CAD triad that demonstrated the predicted pattern of results was anger. In both studies, anger was rated highest in vignettes portraying violations of autonomy. In Study 1, anger was also rated highest in vignettes portraying approach, as predicted. This result was not found in Study 2, possibly because of the design of the study. This limitation will be discussed at a later point.

Anger and interpersonal hate were predicted to be most similar to one another, with both predicted to be elicited by violations of autonomy. Because this prediction was novel, it was of particular interest that these emotions could be differentiated from one another in these studies. Interpersonal hate has not been examined outside of its relationship to anger. In fact, hate has been used as a term in describing anger (Izard, 1977). This may be because interpersonal hate is sometimes considered to be amplified anger. However, where anger is defined by a desire to resolve conflict or lash out through approach (Novaco, 1976; Rozin et al., 1999), the current research demonstrates that interpersonal hate includes a desire to avoid a harmful person. This differentiation between anger and interpersonal hate indicates that these emotions are discrete from one another and serve different purposes. Future research should explore this relationship further.

As previously discussed, interpersonal hate was rated highest in vignettes portraying autonomy violation, and in vignettes portraying avoidance responses. This supports the newly developed theory that interpersonal hate occurs when a person experiences a violation to the self,

and desires to avoid the violator. It provides resolution to the individual by removing a harmful stimulus.

Limitations

Both studies in this research operationalize emotions using a vignette-based paradigm. This limits the real-world implication of these findings. Furthermore, these vignettes depict a third-party perspective, requiring the participants to recognize the emotional experience of another person. Though participants are instructed to answer the questions based on the protagonists' experiences, it still limits the implications of this research because the participants did not experience the emotions themselves. To address this limitation, additional studies should elicit the intended emotions in participants, and then measure their responses.

Another limitation of the current research was the measurement of behavioral response. Though participants may find it feasible that a protagonist behaved in a certain way in response to a stimulus, that does not mean that the participants would also behave that way in a real-world situation. Though the desire for behavior and behavioral tendencies might be present, the actual behavior may never take place. This limitation could be addressed in future studies by measuring participants' desire to behave in a certain way, their perception of the appropriateness of that action, and the likelihood that they would behave in accordance with those measures.

Finally, the design of Study 2 created difficulty in identifying the emotions of interest. It seems that it is necessary not only to be able to recognize the components that are part of an emotion, but also to recognize what components aren't. Participants in Study 2 were not encouraged to recognize the alternative response possibilities (e.g. considering an approach response in the avoidance condition), and in fact were discouraged from doing so. It appears that this consideration of alternatives is an important part of emotion recognition.

Conclusions and Future Directions

Across both studies, interpersonal hate was rated highest in violations of autonomy, as were disgust and anger. However, interpersonal hate ratings tended to be lower than ratings of anger and disgust. These findings suggest that interpersonal hate is perhaps reserved for more intense violations, whereas anger and disgust are more easily elicited. This conclusion should be explored in greater depth in future research.

This research provides evidence that interpersonal hate is a discrete emotion with a unique pattern of appraisal and behavioral response. It is not a combination of contempt, anger, and disgust, and it is not amplified anger. This research also demonstrates that the current theory about the differentiation of the CAD triad of emotions is incomplete. Further research should continue to explore the components of interpersonal hate, and determine how those components differ from other emotions including intergroup hate. Future study should also explore the CAD triad, and identify the other appraisals and components that differentiate contempt, anger, and disgust from one another.

References

- Ahuvia, A. C. (2002). Individualism/collectivism and cultures of happiness: A theoretical conjecture on the relationship between consumption, culture and subjective well-being at the national level. *Journal of Happiness Studies*, 3, 23–36. <http://doi.org/10.1023/a:1015682121103>
- Allport, G. W. (1966). The religious context of prejudice. *Journal for the scientific study of religion*, 5(3), 447-457.
- Arnold, M. B. (1960). *Emotion and personality*. New York, NY: Columbia University Press.
- Averill, J. R. (1982). Studies on Anger and Aggression Implications for Theories of Emotion. *American Psychologist*, 1145–1160.
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love our outgroup hate? *Journal of Social Issues*, 55(3), 429–444. <http://doi.org/10.1111/0022-4537.00126>
- Ekman, P. (2016). What Scientists Who Study Emotion Agree About, (d). <http://doi.org/10.1177/1745691615596992>
- Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, 57(2), 212–228. <http://doi.org/10.1037/0022-3514.57.2.212>
- Gutierrez, R., & Giner-Sorolla, R. (2007). Anger, disgust, and presumption of harm as reactions to taboo-breaking behaviors. *Emotion (Washington, D.C.)*, 7(4), 853–868. <http://doi.org/10.1037/1528-3542.7.4.853>
- Haidt, J. (2003). The moral emotions. In *Handbook of affective sciences* (pp. 852–870).
- Horberg, E. J., Keltner, D., Oveis, C., & Cohen, A. B. (2009). Disgust and the Moralization of Purity, 97(6), 963–976. <http://doi.org/10.1037/a0017423>
- Hutcherson, C. A., & Gross, J. J. (2011). The moral emotions: a social-functional account of anger, disgust, and contempt. *Journal of Personality and Social Psychology*, 100(4), 719–737. <http://doi.org/10.1037/a0022408>
- Izard, C. E. (1977). *Human Emotions* (1st ed.). New York: Plenum Press.
- Lazarus, R. S. (1991a). Cognition and motivation in emotion. *The American Psychologist*, 46(4), 352–367. <http://doi.org/10.1037/0003-066X.46.4.352>
- Lazarus, R. S. (1991b). *Emotion and Adaptation* (1st ed.). New York: Oxford University Press.
- Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive

- action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, 79(4), 602–616. <http://doi.org/10.1037//0022-3514.79.4.602>
- Mackie, D. M., Silver, L. A., & Smith, E. R. (2004). Intergroup Emotions: Emotion as an Intergroup Phenomenon. In *The Social Life of Emotions* (pp. 227–245).
- Mackie, D. M., & Smith, E. R. (2015). INTERGROUP EMOTIONS. In M. Mikulincer & P. R. Shaver (Eds.), *APA Handbook of Personality and Social Psychology* (Vol. 2, pp. 263–293). American Psychological Association.
- Manstead, T. (2005). The Social Dimension of Emotion. *The Psychologist*, 18(8), 484–487.
- Novaco, R. W. (1976). The functions and regulation of the arousal of anger. *American Journal of Psychiatry*, 133(10), 1124–1128. <http://doi.org/10.1176/ajp.133.10.1124>
- Parkinson, B. (2011). How social is the social psychology of emotion? *British Journal of Social Psychology*, 50(3), 405–413. <http://doi.org/10.1111/j.2044-8309.2011.02034.x>
- Plumm, K. M., Terrance, C. a., & Austin, A. (2014). Not All Hate Crimes are Created Equal: An Examination of the Roles of Ambiguity and Expectations in Perceptions of Hate Crimes. *Current Psychology*, 33, 321–364. <http://doi.org/10.1007/s12144-014-9215-8>
- Roseman, I. J., Antoniou, A. A., & Jose, P. E. (1996). Appraisal Determinants of Emotions : Constructing a More Accurate and Comprehensive Theory Appraisal Determinants of Emotions : Constructing a More Accurate and Comprehensive Theory. *Cognition & Emotion*, 10(3), 241–277. <http://doi.org/10.1080/026999396380240>
- Roseman, I. J., Wiest, C., & Swartz, T. S. (1994). Phenomenology, behaviors, and goals differentiate discrete emotions. *Journal of Personality and Social Psychology*, 67(2), 206–221. <http://doi.org/10.1037/0022-3514.67.2.206>
- Rozin, P., Markwith, M., & McCauley, C. (1994). Sensitivity to indirect contacts with other persons: AIDS aversion as a composite of aversion to strangers, infection, moral taint, and misfortune. *Journal of Abnormal Psychology*, 103(3), 495–504. <http://doi.org/10.1037/0021-843X.103.3.495>
- Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: a mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology*, 76(4), 574–586. <http://doi.org/10.1037/0022-3514.76.4.574>
- Salter, M., & McGuire, K. (2015). Issues and Challenges in the Application of Husserlian Phenomenology to the Lived Experience of Hate Crime and Its Legal Aftermath: An Enlightenment Prejudice Against Prejudice? *Journal of Interpersonal Violence*, 30(10), 1782–1802. <http://doi.org/10.1177/0886260514548582>

- Schachter, S., & Singer, J. E. (1962). Cognitive, social, and physiological determinants of emotional state. *Psychological Review*, *65*(5), 379–399. <http://doi.org/10.1037/h0046234>
- Scherer, K. R. (1999). Appraisal Theory Chapter.pdf. In T. Dalgleish & M. Power (Eds.), *Handbook of Cognition and Emotion* (pp. 637–663). John Wiley & Sons.
- Scherer, K. R. (2003). The moral emotions, 852–870.
- Shweder, R. A., Much, N. C., Mahapatra, M., & Park, L. (1997). The “Big Three” of Morality (Autonomy, Community, Divinity) and the “Big Three” Explanations of Suffering. In *Morality and Health* (pp. 119–169). New York: Routledge.
- Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can Emotions Be Truly Group Level ? Evidence Regarding Four Conceptual Criteria. *Journal of Personality and Social Psychology*, *93*(3), 431–446. <http://doi.org/10.1037/0022-3514.93.3.431>
- Sternberg, R. J. (1986). A triangular theory of love. *Psychological Review*, *93*(2), 119–135. <http://doi.org/10.1037/0033-295X.93.2.119>
- Sternberg, R. J. (2003). A Duplex Theory of Hate : Development and Application to Terrorism , Massacres , and Genocide, *7*(3), 299–328. <http://doi.org/10.1037/1089-2680.7.3.299>
- Zhong, C.-B., & Liljenquist, K. (2006). Washing Away Your Sins : Threatened, *313*(September), 1451–1452.

Table 1

Hate in the CAD Triad

Violation Type	Behavioral Tendency	
	Approach	Avoid
Autonomy	Anger	Hate
Community		Contempt
Divinity		Disgust

Note. This table demonstrates the theoretical position of interpersonal hate within the CAD triad of emotions as described by Rozin et al. (1999).

Table 2

Pilot Study Scenarios

Violation Type	Violation Topic	Behavior	Hate Rating Mean (out of 7)
Autonomy	Sexual Violation	Avoid	5.61
		Approach	3.94*
Community	Sexual Violation	Avoid	3.61**
		Approach	3.67*
Divinity	Sexual Violation	Avoid	3.94*
		Approach	2.72**
Autonomy	Theft/Destruction	Avoid	4.78
		Approach	5.06
Community	Theft/Destruction	Avoid	4.83
		Approach	3.5*
Divinity	Theft/Destruction	Avoid	3.5*
		Approach	4.5

Note. Table 2 indicates the scenarios used in the pilot study, which were then utilized for Study 1. This table also summarizes the pattern of significant results by comparing means of hate ratings across scenarios. Hate was rated significantly higher in the autonomy-avoidance scenarios than over half of other scenario types.

Table 3

Summary of Main Effects and Three-Way Interactions

Emotion		Study 1	Study 1 Sex	Study 1 Theft	Study 2	Study 2 Sex	Study 2 Theft
Hate	Main effect violation	ACD**	ACD**	ACD**	ACD**	ACD**	ACD**
	Main effect behavior	Av**	Av**	Ap	Av**	Av**	Av
	Three-way interaction	Yes			Yes		
Anger	Main effect violation	ADC*	ADC**	ACD**	ACD**	ADC**	ACD**
	Main effect behavior	Ap**	Ap	Ap**	Ap	Av	Ap
	Three-way interaction	Yes			No		
Disgust	Main effect violation	ADC*	ACD*	ADC	ADC*	ACD	ADC**
	Main effect behavior	Av*	Av*	Ap	Av	Av**	Av
	Three-way interaction	Yes			No		
Contempt	Main effect violation	ACD	ACD**	DAC	ACD**	ACD**	ACD**
	Main effect behavior	Av*	Av**	Av	Av**	Av**	Av*
	Three-way interaction	No			Yes		

Note. This Table represents the results of violation type and behavior for both the collapsed model (labeled Study 1 and Study 2) and for each Topic, and the $3 \times 2 \times 2$ (Violation Type [autonomy, community, divinity] \times Behavior [approach, avoid] \times Topic [sexual violation, theft/destruction]) three-way interactions for the mixed model analysis of variance for each emotion. For the main effect of violation, the order of the letters *A*, *C*, and *D* (autonomy, community, and divinity) indicates the order in which the emotions were ranked, from highest to lowest. The main effect of behavior is indicated either by *Av* (avoid) or *Ap* (approach). * $p < .05$, ** $p < .001$

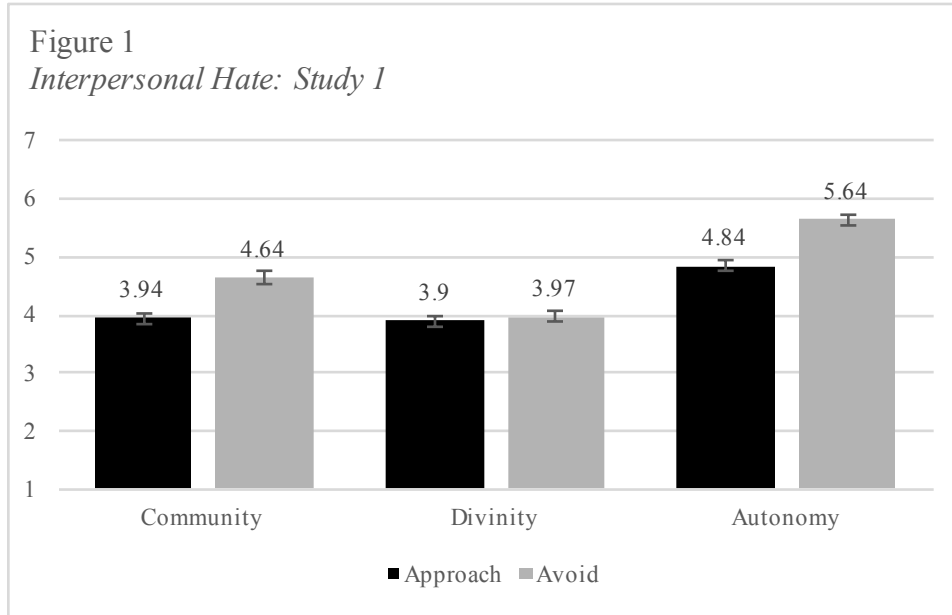


Figure 1. Mean values represent participants' ratings of hate for appraisals of behavior and of violation type in Study 1.

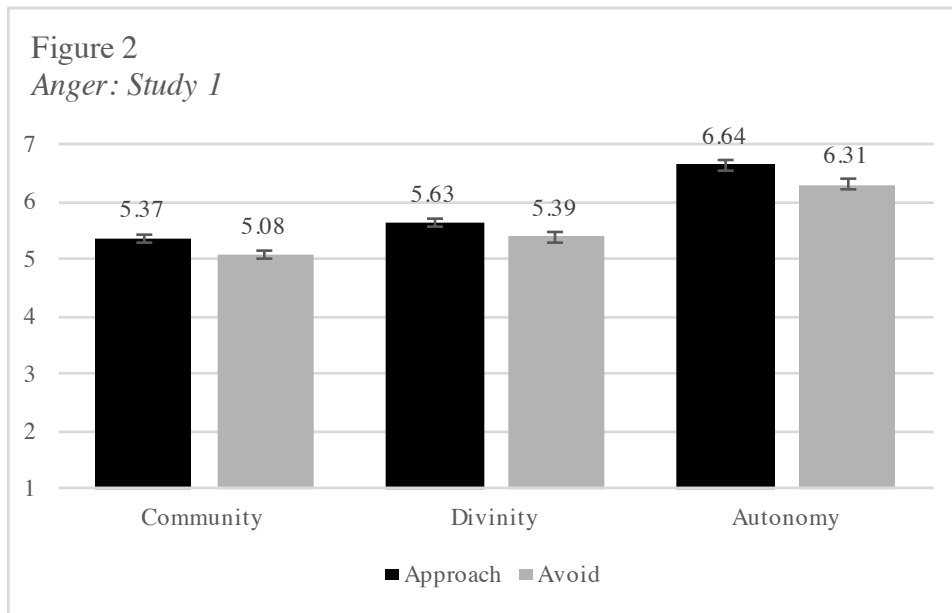


Figure 2. Mean values represent participants' ratings of anger for appraisals of behavior and of violation type in Study 1.

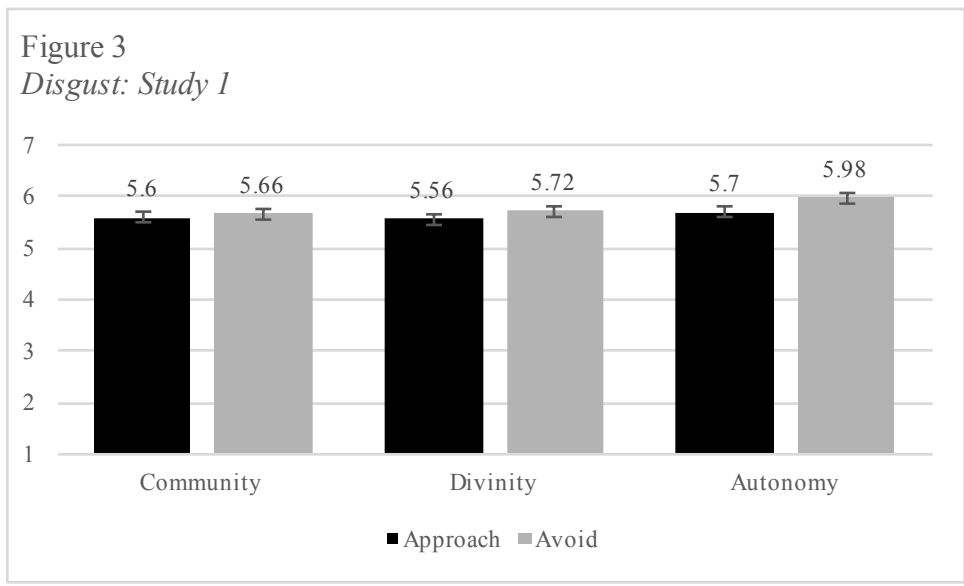


Figure 3. Mean values represent participants' ratings of disgust for appraisals of behavior and of violation type in Study 1.

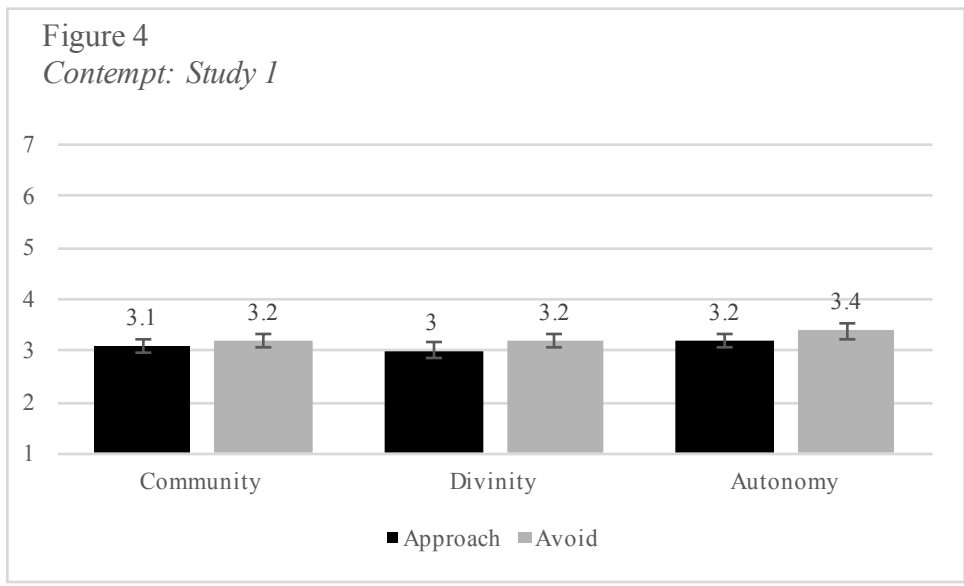


Figure 4. Mean values represent participants' ratings of contempt for appraisals of behavior and of violation type in Study 1.

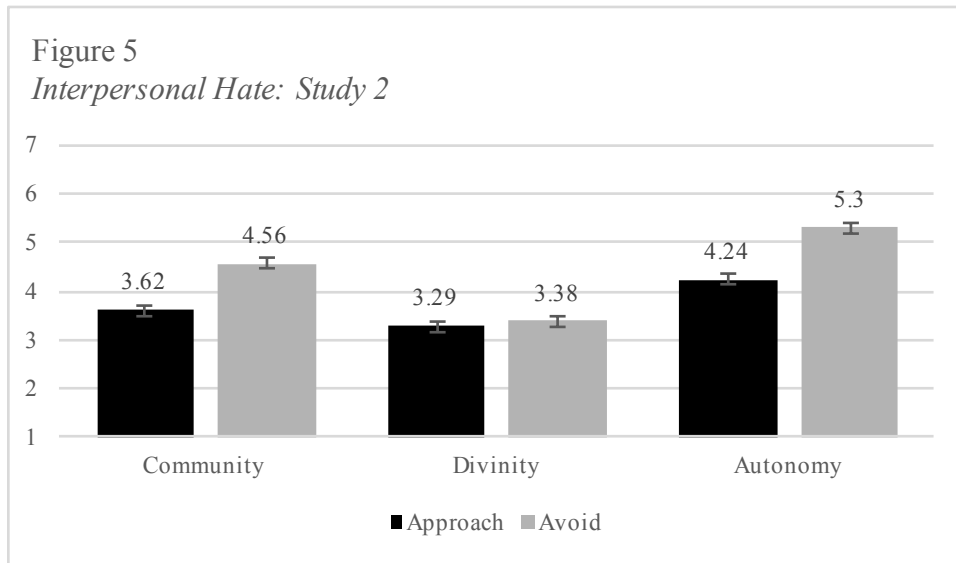


Figure 5. Mean values represent participants' ratings of hate for appraisals of behavior and of violation type in Study 2.

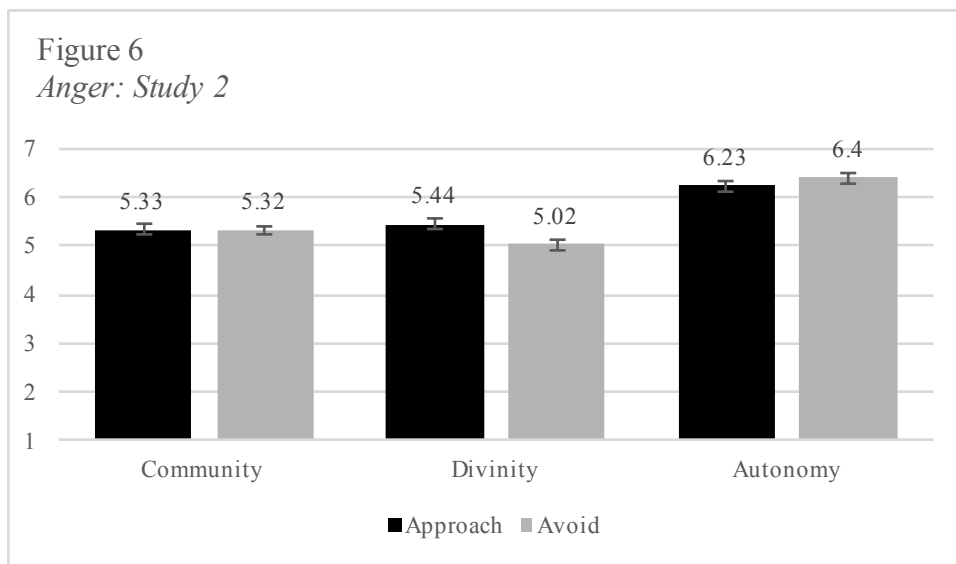


Figure 6. Mean values represent participants' ratings of anger for appraisals of behavior and of violation type in Study 2.

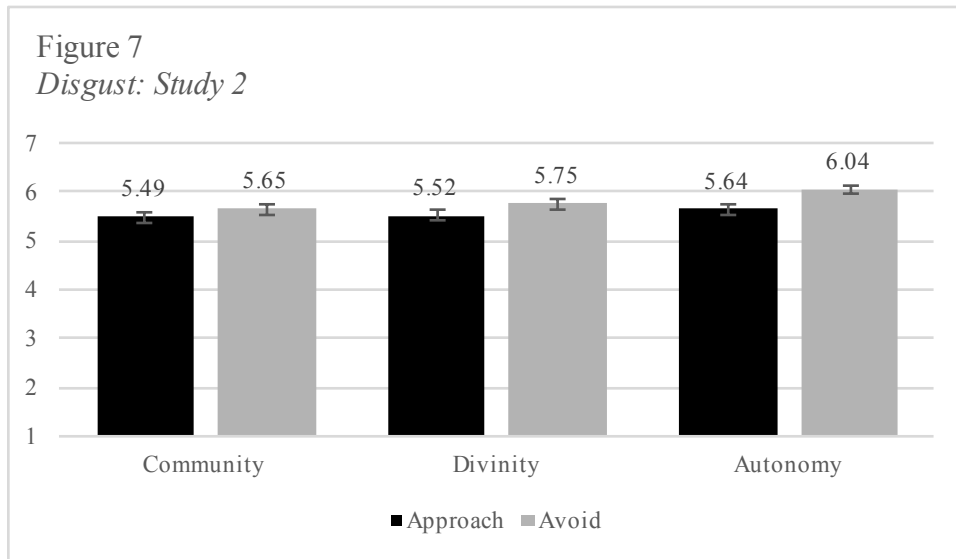


Figure 7. Mean values represent participants' ratings of disgust for appraisals of behavior and of violation type in Study 2.

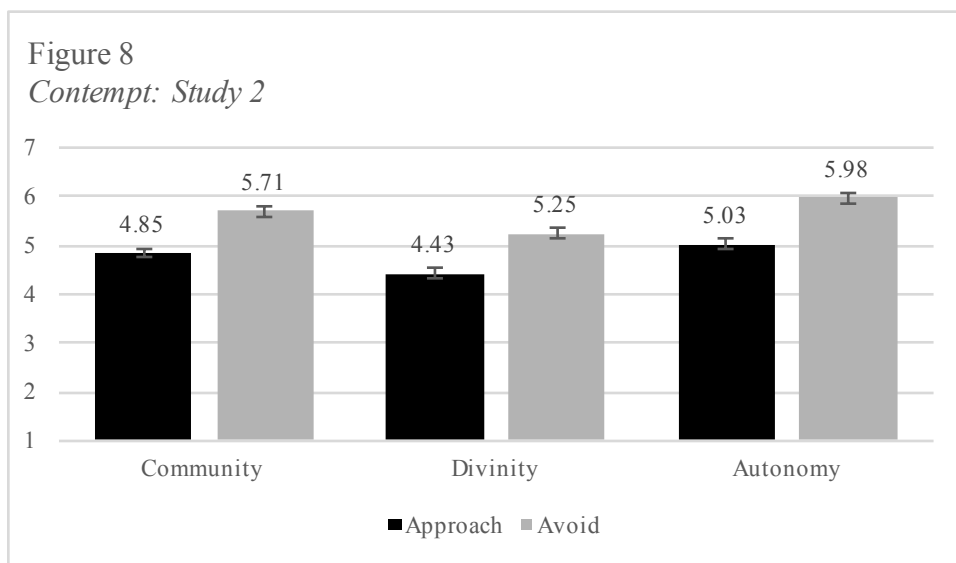


Figure 8. Mean values represent participants' ratings of contempt for appraisals of behavior and of violation type in Study 2.

Appendix A

Examples of Scenarios

The following scenarios and subsequent corresponding questions are examples of those used in the pilot study, from which the current research will be constructed. Scenarios will be presented in random order, as will the list of emotions to which participants respond, as they were in the pilot study. Each scenario is labeled to indicate which combination of violation and behavioral response it portrays. For example, “Sex/Autonomy/Avoid” indicates a scenario in which the protagonist feels that a sexual violation against the self has occurred, and in which the protagonist avoids confronting the violator.

Scenario 1: Theft/Autonomy/Avoid

Marguerite works on a team of designers at a graphic design firm in Houston. During a team meeting, Marguerite proposed an idea for a project that the team found very impressive. When Marguerite went to take the idea to her manager, she found out that her coworker, Vivian, stole her idea and had already suggested it to the manager. When she walked up, Marguerite heard the manager praising Vivian for the idea.

Marguerite feels that Vivian has personally harmed her by stealing her idea.

Marguerite starts to avoid Vivian, and avoids group interactions in which she knows Vivian will participate.

1. T/F: Marguerite does not know who stole her idea.
2. T/F: Marguerite feels that Vivian has personally harmed her by stealing her idea.
3. T/F: Marguerite confronts Vivian for stealing her idea.

Given what you have learned about Marguerite, indicate on the scale below to what extent Marguerite is experiencing each emotion toward Vivian.

4. _____ Jealousy
5. _____ Contempt
6. _____ Fear
7. _____ Anger
8. _____ Love
9. _____ Hate
10. _____ Like
11. _____ Dislike
12. _____ Sadness
13. _____ Guilt
14. _____ Respect
15. _____ Happiness
16. _____ Acceptance
17. _____ Disgust

Scenario 2: Theft/Community/Approach

Evergreen is a small community located in central Maine. The residents of Evergreen have worked together to grow a community garden. The produce from the garden is to be used at the upcoming town festival. One night Myra, one of the community members responsible for the garden, catches Nadine stealing the produce to take to a different festival in a neighboring town.

Myra feels that Nadine has committed an offense against the Evergreen community by stealing the produce that they all worked to grow.

Myra confronts Nadine, and tells the rest of the gardeners about the offense.

1. T/F: Nadine stole the produce from the community garden.

2. T/F: Myra feels that Nadine has harmed the Evergreen community by her actions.
3. T/F: Myra confronts Nadine about stealing the produce.

Given what you have learned about Myra, indicate on the scale below to what extent Myra is experiencing each emotion toward Nadine.

4. _____ Contentment
5. _____ Contempt
6. _____ Fear
7. _____ Anger
8. _____ Love
9. _____ Hate
10. _____ Like
11. _____ Dislike
12. _____ Sadness
13. _____ Excitement
14. _____ Respect
15. _____ Happiness
16. _____ Interest
17. _____ Disgust

Scenario 3: Sex/Divinity/Approach

Sydni and her family are devout Muslims who observe the laws and commands of their religion. One day Sydni walked into her house to find her teenage son, Aide, masturbating and looking at pornography. Aide knows that both masturbating and viewing pornography are considered sinful.

Sydni feels that Aide has committed a transgression against their religion.

Sydni confronts Aide, and tells him he should repent.

1. T/F: Sydni catches her son having sex.
2. T/F: Sydni feels that Aide has committed a transgression against their religion.
3. T/F: Sydni confronts Aide.

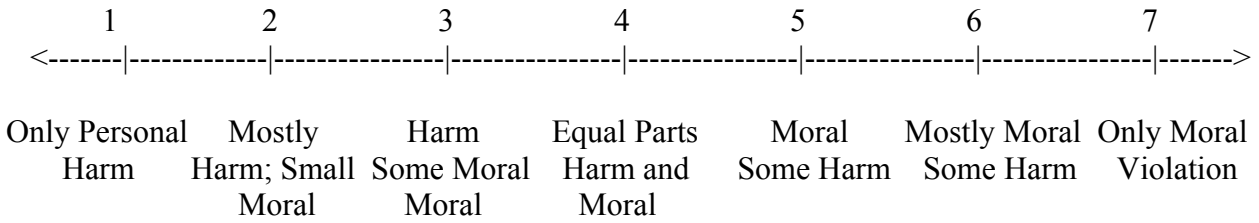
Given what you have learned about Sydni, indicate on the scale below to what extent Sydni is experiencing each emotion toward Aide.

4. _____ Contentment
5. _____ Contempt
6. _____ Fear
7. _____ Anger
8. _____ Love
9. _____ Hate
10. _____ Like
11. _____ Dislike
12. _____ Sadness
13. _____ Excitement
14. _____ Respect
15. _____ Happiness
16. _____ Interest
17. _____ Disgust

18.

Example Summary Question from Study 1

Camille walks in to find her husband, Ernesto, cheating on her. Camille leaves and refuses to talk to Ernesto. To what extent does the scenario about Camille and Ernesto portray personal harm and/or moral violation? Indicate on the scale below.



Appendix B

Study 1 IRB Approval



Office of Research Compliance
Institutional Review Board

August 4, 2016

MEMORANDUM

TO: Carmen Merrick
Holly Cole
Nicole Brandon
Denise Beike

FROM: Ro Windwalker
IRB Coordinator

RE: PROJECT MODIFICATION

IRB Protocol #: 16-04-688

Protocol Title: *Interpretations of Scenarios*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 08/03/2016 Expiration Date: 04/18/2017

Your request to modify the referenced protocol has been approved by the IRB. **This protocol is currently approved for 530 total participants.** If you wish to make any further modifications in the approved protocol, including enrolling more than this number, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

Please note that this approval does not extend the Approved Project Period. Should you wish to extend your project beyond the current expiration date, you must submit a request for continuation using the UAF IRB form "Continuing Review for IRB Approved Projects." The request should be sent to the IRB Coordinator, 109 MLKG Building.

For protocols requiring FULL IRB review, please submit your request at least one month prior to the current expiration date. (High-risk protocols may require even more time for approval.) For protocols requiring an EXPEDITED or EXEMPT review, submit your request at least two weeks prior to the current expiration date. Failure to obtain approval for a continuation *on or prior to* the currently approved expiration date will result in termination of the protocol and you will be required to submit a new protocol to the IRB before continuing the project. Data collected past the protocol expiration date may need to be eliminated from the dataset should you wish to publish. Only data collected under a currently approved protocol can be certified by the IRB for any purpose.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

Study 2 IRB Approval



Office of Research Compliance
Institutional Review Board

October 19, 2016

MEMORANDUM

TO: Carmen Merrick
Denise Beike

FROM: Ro Windwalker
IRB Coordinator

RE: New Protocol Approval

IRB Protocol #: 16-09-118

Protocol Title: *Exercise in Empathy*

Review Type: EXEMPT EXPEDITED FULL IRB

Approved Project Period: Start Date: 10/19/2016 Expiration Date: 10/18/2017

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (<https://vpred.uark.edu/units/rscp/index.php>). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 400 participants. If you wish to make any modifications in the approved protocol, including enrolling more than this number, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.