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Effects of Contextual and Individual Difference Factors on Perceptions of Victims

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EFFECTS OF CONTEXTUAL AND INDIVIDUAL DIFFERENCE FACTORS ON

PERCEPTIONS OF VICTIMS

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ABSTRACT

Victim blame can have detrimental effects on victims' coping with traumatic

events. The current study examined contextual (i.e., victim-observer ingroup membership

and safety of the environment) and individual difference (i.e., world beliefs, trauma

exposure, and cognitive semantic associations) factors in relation to victim blame.

Ingroup membership predicted greater character praise in females, while outgroup

membership predicted greater praise in males. Victim praise was also greater when the

environment was safe versus dangerous. Stronger beliefs about the manageability of the

world marginally predicted greater victim blame, while stronger benevolent world beliefs

predicted less victim blame and less character derogation. Further, the number of

traumatic event types reported by participants was positively related to character praise

and negatively related to derogation. Histories of exposure to traumas high in betrayal

predicted greater character derogation. Using an implicit semantic priming task to

examine the automatic semantic associations between victim and derogation concepts,

victim-to-derogation priming was related to less victim blame.

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Effects of Contextual and Individual Difference Factors on Perceptions of Victims

Disclosing stressful life events to others can have a positive effect on a victim's ability to cope (Lepore, Ragan, & Jones, 2000; Ullman, 1996); however, negative responses to disclosure are linked to both reduced positive effects and greater negative outcomes (Lepore et al., 2000). For example, victims who received negative responses were more likely to report greater depression, worse mood, and greater anticipated negative consequences, compared to victims who either did not disclose or who received full support after disclosure (Major, Cozzarelli, Sciacchitano, Cooper, Testa, & Mueller, 1990). This research underscores the detrimental effects that victim blame can have on victims. To better understand victim blame, the current study examined contextual (i.e., victim-observer ingroup membership and safety of the environment) and individual difference (i.e., world beliefs, trauma history, and cognitive schema) factors in relation to victim perceptions.

Before reviewing relevant literature on victim blame, we turn first to the challenge of operationalizing victim blame in laboratory tasks. Asking participants too directly about blame may invoke socially desirable responses; however, methods that are too indirect may not actually tap victim blame. One way researchers have addressed this challenge is to vary how directly they assess blame. For example, some studies assess blame directly by asking participants to rate how responsible or deserving the victims were of the negative event that happened (Bell, Kuriloff, & Lottes, 1994; Chaikin & Darley, 1973; Feldman, Ullman, & Dunkel-Schetter, 1998; Fulero & Delara, 1976; Idisis,

Ben-David, & Ben-Nachum, 2007; Shaver, 1970; Thornton, 1984; Westmaas & Silver, 2006). Other studies assess participants' blame indirectly by measuring the likelihood that participants would avoid or offer help to victims during experimental tasks (Dalbert & Yamauchi, 1994; Drout & Gaertner, 1994; Lerner & Agar, 1972; Novak & Lerner, 1968). These latter studies assume that avoiding the victim or offering less experimental help indicates higher levels of blame.

Because inconsistencies in blame-related findings from past research seem related to whether authors assessed blame directly or indirectly, the current study used both direct and indirect measures of blame. The direct measure assessed blame in terms of both behavioral and characterological blame. That is, participants rated the extent to which the victim's behavior was to blame, and the extent to which the victim's character was to blame for the event. The indirect measure assessed character praise and derogation. Specifically, participants indicated whether or not both positive (e.g., intelligent, nice) and negative (e.g., careless, immature) characteristics described the victim. These measures of blame, character praise, and character derogation were examined in relation to contextual factors and individual factors. We extended previous research by examining two factors that have not yet received attention in the literature: 1.) the safety of a victim's environment and 2.) the observer's cognitive semantic associations between victim- and blame-related concepts. The following sections provide a review of theory and research relevant to victim blame to provide a framework for the hypotheses in this study.

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Contextual factors: Victim-observer ingroup membership and environment danger

Ingroup membership and blame. Several theories suggest that victim-observer ingroup membership will have an impact on the likelihood that observers blame victims for their experiences. According to social identity theory (Tajfel & Turner, 1979, 1986), individuals are motivated to classify themselves into groups and will act in ways to maximize their group's own positive distinctiveness, leading to ingroup favoritism: favoring members of one's own group over comparable members of an "outgroup" (for a review, see Hewstone, Rubin, & Willis, 2002; see also Brewer, 1999). Based on the tenets of social identity theory, individuals may be less likely to blame and more likely to praise a victim if that victim is a member of their ingroup. In line with predictions made by social identity theory, defensive attribution theory (DAT; Shaver, 1970; Shaw & Martin, 1973) predicts that similarity between a victim and an observer will be associated with decreased victim blame because individuals are motivated by self-protective desires to avoid both blame and harm related to similar circumstances in the future. Victim-observer dissimilarity will be associated with increased blame in an attempt by the observer to dissociate oneself from the victim. Just world theory (JWT; Lerner, 1965, 1980), on the other hand, predicts that observers who are similar to victims will be *more* likely to blame victims; similar observers blame victims to defend against the possibility that they will experience the same fate.

Drawing on social identity theory and DAT, we predicted that shared ingroup membership between the observer and victim would lead to less victim blame and derogation, and greater victim praise relative to conditions in which the victim is in the observer's outgroup. The ingroup dimension used in this study was college affiliation, a

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dimension not yet studied in relation to victim blame. Specifically, we predicted that

participants would attribute less blame and derogation and more praise to an ingroup

victim who attends the University of Denver compared to an outgroup victim who attends

another university.

Participant gender, another ingroup/outgroup dimension, was also predicted to

affect victim perceptions. Past research has found that, generally, women tend to be

blamed more than men (Idisis et al., 2007), and men tend to blame more than women

(Bell et al., 1994; Kanekar & Kolsawalla, 1981; Selby, Calhoun, & Brock, 1977). Based

on these findings, and because we described a female victim in this study, we predicted a

gender effect: male participants were expected to attribute more blame and derogation

and less praise to the victim compared to female participants.

Safety of the victim's environment and blame. To date, the relative safety of the

environment in which a victimization occurred has not been examined in relation to

victim blame, though relevant theories point to several potential outcomes. For example,

world assumptions theory (WAT; Janoff-Bulman, 1989b, 1992) suggests that observers

may be more likely to place blame on victims when the world around them seems

relatively benevolent or safe, as this would pose a threat to their assumptions that the

world is controllable and good. JWT can be used to make the same prediction: blame is

expected to increase the more an individual's just world beliefs are threatened, as a way

of maintaining these beliefs. The knowledge that a person was victimized in a safe

environment may pose a greater threat to the observer's sense of control and may seem

like more of an injustice; therefore leading to greater blame. A victimization that

occurred in an already dangerous environment may be less threatening to the observer's

own world assumptions, and may therefore lead to less victim-blame. Based on these theories, we predicted that participants who read about a sexual assault in the context of a safe environment would attribute greater blame, less praise, and greater derogation to a victim, compared to participants who read about a sexual assault in the context of a dangerous environment. Further, we tested for interactions between ingroup membership and environmental context for predicting blame, positive words, and negative words; however we had no a priori predictions about the nature of the interaction.

Individual difference factors: World beliefs, trauma exposure, and cognitive schema

World beliefs and blame. Both JWT and WAT posit that people hold certain assumptions about the world (e.g., that the world is just and benevolent) and that these assumptions are threatened by perceived injustices, such as traumatic events. JWT and WAT maintain that people will be motivated to place blame on victims in order to maintain these assumptions. Indeed, beliefs about the controllability of the world have been shown to affect people's perceptions of the justness of traumatic events and the extent to which victims are responsible for these events. For example, high just world beliefs are related to a greater tendency to rationalize or deny others' misfortunes, and derogate victims of unfortunate or traumatic situations (for a review see Furnham, 2003; Furnham & Procter, 1989; Rubin & Peplau, 1973, 1975). The current study included measures of world assumptions in order to further test the predictions made by these theories using measures of victim blame, praise, and derogation in the context of a traumatic event. Specifically, greater world assumptions were predicted to be related to greater blame, less praise, and greater derogation.

Trauma exposure and blame. According to WAT, trauma exposure threatens peoples' assumptions of invulnerability, potentially forcing individuals to revise these assumptions in order to account for the traumatic event (Janoff-Bulman, 1989b, 1992). To date, few studies have examined observers' trauma history as a predictor of victim blame. The studies that have examined this question have generally found observer trauma history to be associated with increased victim blame; both in the case of domestic violence (Corenblum, 1983) and child abuse and rape (Muller, Caldwell & Hunter, 1994). Conversely, one study found that participants who had been raped expressed more empathic responses to a rape victim compared to participants who had not been raped (Barnett, Tetreault, Esper, & Bristow, 1986). A related study found that participants who were instructed to imagine themselves in a victim's position (victim of experimentally induced electric shocks) were less likely to derogate the victim than participants who were instructed to simply watch the victim. Further, those who imagined themselves in the victim's position rated the victim more positively than themselves (Aderman, Brehm, & Katz, 1974). While the conditions in this study do not approximate the experience of trauma on the part of observers, these findings suggest that observers who are able to relate to the circumstances of a victim may not always be motivated to blame victims.

Based on the tenets of WAT and DAT, we predicted that trauma history would be associated with less blame, greater praise, and less derogation. While a priori predictions were not made as to whether certain types of trauma would be related to more or less blame, praise, or derogation, data was collected on trauma type so that this factor could be examined.

Cognitive schema and blame. If, as JWT proposes, observers reason that victims deserve their fate as a means of preserving their assumptions about the world, then observers might become practiced at linking victims with negative characteristics. This linking may result in the formation of a cognitive schema connecting victim concepts to negative character traits. JWT contends that all individuals believe that the world is just, therefore, such semantic associations may be present in all individuals. Alternatively, the strength of this association may vary depending on the degree to which one believes in a just world. Specifically, a strong association between victim and derogatory words may only be present in individuals with a high belief in a just world.

To examine automatic, cognitive associations in the broader violence literatures, previous research has used the lexical decision task (LDT; Bargh, Raymond, Pryor, & Strack, 1995; DePrince, Combs, & Shanahan, in press; Zurbriggen, 2000). In this task, pairs of words and non-words are presented simultaneously, one on top of the other, and participants make key presses to indicate whether they are viewing words or nonwords. Processing of the word pairs is faster when the second word is preceded by a semantically related word. Studies examining the relationship between semantic associations and behavior have primarily found unidirectional patterns of priming (e.g., power→sex, but not sex→power semantic associations; Zurbriggen, 2000) in relation to personality variables (e.g., propensity for aggression). For example, women with a history of multiple interpersonal traumas demonstrated relationship→violence priming (but not violence→relationship priming) in an LDT, whereas women with a single interpersonal trauma or no trauma did not show a priming effect (DePrince et al., in press). Based on the findings from previous LDT studies as well as JWT, we predicted

that participants will demonstrate unidirectional victim→derogation (V→D) priming but not derogation→victim (D→V) priming. This unidirectional pattern is predicted because the concept of "victim" is expected to include an attribution of derogation, but because the concept of "derogation" is broader, the concept "victim" is not expected to be specific enough to "derogation" to activate an automatic association. Further, we predicted that greater just world beliefs would predict increased V→D priming.

Importantly, a semantic association between victim and derogation concepts does not necessarily imply that the association exists because these individuals blame victims. This association could exist because people know that victims are often blamed, and therefore link the concepts because of this knowledge about the world. In order to determine whether semantic associations between victim and derogation concepts are related to victim blame, the current study tested whether semantic "victim-derogation" associations predicted blame. Specifically, we hypothesized that V→D priming would be positively related to blame and derogation, but negatively related to praise.

Current study

This study examined contextual and individual difference factors related to victim blame, praise, and derogation in the context of a traumatic event, and tested two factors that had yet to receive attention in the victim blame literature: the perceived safety of the victim's environment, and automatic semantic associations between victim and derogation concepts. These dimensions were examined in the context of other potentially relevant individual difference factors. Specifically, this study examined how perceptions of victims are influenced by: 1.) the contextual factors of victim-observer ingroup membership as well as the relative safety of the environmental context, and 2.) individual

difference factors such as world beliefs, trauma history and semantic victim-derogation

associations.

Method

Participants

One hundred twelve undergraduate students (94 females; Age $M =20.09$, $SD =$ 1.53) at the University of Denver (DU) volunteered to participate. Participants reported their racial/ethnic identities as follows: 12% Asian/Pacific Islander; 81% Caucasian; 5% Hispanic/Latino; 2% Native American; 1% Biracial; 2% other ethnicity not specified (totals add up to more than 100% because participants could mark more than one category). Participants were compensated with extra credit in a psychology course. All study procedures were reviewed and approved by DU's Institutional Review Board.

Materials: Questionnaires

General Belief in a Just World Scale (GBJWS; Dalbert, Montada, & Schmitt, 1987). The GBJWS is a 6-item measure of just-world beliefs. Sample items include, "I believe that, by and large, people get what they deserve" and "I think basically the world is a just place." Participants rate the statements on a six-point scale with endpoints "strongly disagree" (1) and "strongly agree" (6). Responses to these items were summed to form a composite belief in a just world score. Cronbach's alpha for this sample was .63, which is comparable to an alpha of .68 reported in a scale validation study by Dalbert and Yamauchi (1994).

World Assumptions Scale (WAS; Janoff-Bulman, 1989a). The WAS contains eight four-item subscales as a measure of the degree to which individuals maintain Janoff-Bulman's (1989a) three basic assumptions about the world. For the purposes of

this study, only the five subscales measuring the "benevolence of the world" and "meaningfulness of the world" assumptions were used. The "benevolence of the world" assumption consists of the following subscales: benevolence of the world (e.g., "the world is a good place"), and benevolence of people (e.g., "human nature is basically good"). The "meaningfulness of the world" assumption consists of the following subscales: justice (e.g., "generally, people deserve what they get in this world"), controllability (e.g., "people's misfortunes result from mistakes they have made"), and randomness (e.g., "bad events are distributed to people at random"). These items are measured on a 6-point scale with endpoints "strongly disagree" (1) and "strongly agree" (6). The score for each assumption was obtained by summing the values for each of the four items in each subscale in order to create a "benevolent world" score and a "meaningful world" score. Cronbach's alpha scores for the benevolent world and meaningful world subscales in this sample were .83 and .66 respectively. Janoff-Bulman (1989a) reported reliabilities between .66 and .76 for each of the subscales in a previous sample.

Brief Betrayal Trauma Survey (BBTS; Goldberg & Freyd, 2006). The BBTS is a 12-item questionnaire that assesses trauma type (interpersonal, natural disasters, accidents), the relationship to the perpetrator (if applicable), and age of occurrence (before and after age 18). Participant trauma history was classified in two different ways: 1.) number of traumatic event types experienced both before and after age 18 (possible range: 0 to 24); and 2.) degree of betrayal trauma experienced. Betrayal trauma degree was classified into high (e.g., "you were made to have sexual contact by someone to whom you were close"), low (e.g., "you have been in a major earthquake, fire, flood,

hurricane, or tornado that resulted in significant loss of personal property, serious injury to yourself or a significant other, the death of a significant other, or the fear of your own death"), and no betrayal trauma (i.e., no trauma experience) using the criteria set forth by Freyd (2005).

Short Form of the Marlowe-Crowne Social Desirability Scale (SDS; Reynolds, 1982). The SDS is a 13-item measure of social desirability adapted from the classic Marlowe-Crowne social desirability scale. This measure contains culturally approved behaviors with a low probability of occurrence. Examples of items include: "I'm always willing to admit it when I make a mistake" and "I have never deliberately said anything to hurt anyone's feelings." Items are measured on a true/false scale. Zook & Sipps (1985) conducted item-to-whole scale correlations and found that this short form is a viable alternative to the whole form. This scale was scored so that higher scores indicated greater social desirability. Cronbach's alpha for this sample was .64.

Materials: Sexual Assault Vignette (Campus Safety Task)

Vignette. Participants were asked to read one of four identical vignettes that differed on two dimensions: victim's group membership and environment type. Group membership consisted of either ingroup (victim was described as a student at DU) or outgroup (victim was described as a student at Kempton University, a fictitious university portrayed as real). Environment type consisted of either safe (described as having no physical or sexual assaults that year other than the one being described) or dangerous (described as having many physical and sexual assaults that year including the one described). The vignettes stated that a female undergraduate student (referred to as "MK") was sexually assaulted while she was walking alone on campus around dusk, and

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included details about one condition from both of the ingroup/outgroup and safe/dangerous dimensions. See Appendix A for an example of the vignettes using the ingroup/dangerous environment conditions.

Blame Measure. This measure assessed the amount of blame attributed to the victim's behavior and character (adapted from Feldman et al., 1998, Janoff-Bulman, 1979, & Thornton, Hogate, Moirs, Pinette, & Presby, 1986). Participants indicated their level of agreement with five behavioral (e.g., "MK acted in a very irresponsible manner") and five characterological (e.g., "MK appears to be the type that allows herself to get into predicaments she cannot handle") blame items. Items were presented on a five point scale with endpoints strongly disagree (1) and strongly agree (5). Cronbach's alpha for the behavioral and characterological blame items was .83 and .84 respectively.

Character Praise and Derogation Measure. Participants were asked to indicate "yes" or "no" as to whether eight positive and eight negative characteristics described the victim in the vignette. Positive words included: careful, polite, intelligent, dependable, mature, nice, warm, conscientious (some words adapted from Correia & Vala, 2003). Negative words included: careless, stupid, foolish, selfish, unconscientious, deceitful, irresponsible, immature, (some words adapted from Correia & Vala, 2003). The degree of praise was determined by summing the number of positive characteristics attributed to the victim and the degree of derogation was determined by summing the number of negative characteristics attributed to the victim.

Materials: Victim-Derogation Lexical Decision Task (LDT)

The stimuli used for the LDT consisted of 99 real and 45 non-words. Real words were neutral (i.e., window, pepper, minute), victim-related, and derogatory character

words (see Appendix B for victim-related and derogatory character words). Non-words were pronounceable pseudowords (e.g., hostilerate, parage, dorility). Victim-related and derogatory words were obtained from words used in previous studies (DePrince et al., in press) and web-based searches. Neutral and non-words were replicated from DePrince et al. (in press) and Zurbriggen (2000). Thirty-six of the neutral words were semantically-related word pairs (i.e., needle-thread; door-window) selected from Meyer, Schvaneveldt, and Ruddy's (1975) list of semantically-related pairs (replicated from DePrince et al., in press).

Words were paired in the following 11 combinations: victim-derogatory (VD); derogatory-victim (DV); victim-neutral (VN); neutral-victim (NV); neutral-derogatory (ND); derogatory-neutral (DN); semantically-related neutral pairs (SEM);[1] unrelated neutral pairs (UR); word-nonword (W-NW); nonword-word (NW-W); and nonword-nonword (NW-NW). Nonword trials were included only to keep participants' attention and were not analyzed.

Derogatory→victim (D→V) and victim→derogatory (V→D) priming was determined by using a formula that calculates facilitation of these word pairs taking into account reaction time for the other word pairs (formula developed by Zurbriggen, 2000). D→V priming was calculated using the following formula: NV-(DVa+DVb)/2-UR2+DN. V→D priming was calculated using the following formula: ND-(VDa+VDb)/2-UR1+VN. These formulas were used to control for potential increases or decreases in reaction time for simply viewing victim and derogatory words; effects that are not a result of viewing these words together. Therefore, the effects of viewing victim words with neutral words and derogatory words with neutral words are subtracted out, as

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well as the baseline reaction time for viewing unrelated neutral word pairs. The resulting value is the speed-up of processing victim and derogatory words together. Positive values indicate a facilitation in reaction time; the larger the value, the greater the facilitation.

Procedure

Participants were tested one at a time in a private room by an undergraduate research assistant or graduate student experimenter. Verbal and written consent information was provided by the experimenter, and participants signed a consent form prior to beginning the study measures. Participants were assigned Campus Safety and LDT task conditions that were counterbalanced across males and females.

Participants first completed the victim-derogation LDT on the computer. In this task, word and non-word pairs appeared on the screen, one pair at a time. Participants were told to indicate as quickly and as accurately as possible whether both of the words they saw were real or if one or both were not real, by making keyboard presses. There was a 1000ms intertrial interval between trials in which a cross fixation appeared in the center of the screen. Words then appeared slightly above and below the location of the fixation point. Two practice blocks preceded the nine experimental blocks. The practice blocks were identical in composition to the experimental trials; however, none of the same words were used in the practice trials as in the experimental trials. Two victim-related and two derogation words were presented in the second practice block so that any initial reaction to seeing these types of words occurred during the practice. After each block (practice and experimental), a screen appeared displaying accuracy and speed for that block.

Each block was composed of the following 24 word pairs: 2 VD, 2 DV, 1 VN, 1 NV, 1 ND, 1 DN, 2 SEM, 2 UR, 6 W-NW, 3 NW-W, and 3 NW-NW. Trials appeared in random order within the block. The correct response for half the trials was "word" and the other half was "non-word." Each word and nonword appeared three times throughout the entire experiment, three blocks apart from one another (LDT design adapted from DePrince et al., in press; Zurbriggen, 2000). Words were randomly assigned to their pair in each trial type except for SEM trials.

After the LDT task, participants completed the Campus Safety Task. Participants were told they were going to read an excerpt from an article recently published in the *Chronicle of Higher Education*. Participants read the vignette they were assigned to read and then completed the blame measure and the character praise and derogation measure. Lastly, participants completed the GBJWS, WAS, BBTS, SDS, and a measure of reactions to research on trauma. Participants were given a large envelope in which to place the packet when they were finished. The experimenter was present in the room while the participant completed the questionnaires, but was seated across the room in order to allow participants privacy. After completing all study-related measures, participants heard the study rationale and received a debriefing form. Participants also received a copy of the *2004-2006 Statistical Summary of Crimes/Offenses (Including Attempts)*, a report published by DU Campus Safety that details annual statistics for reported assaults on the DU campus.

Results

Descriptive Statistics

     Predictor variables. Refer to Table 1 for descriptive statistics for the following predictor variables: gender, just world beliefs, benevolent world beliefs, meaningful world beliefs, number of traumatic event types, betrayal trauma degree, D→V priming, and V→D priming. Prior to conducting analyses, these variables were examined for violations of assumptions; none were noted.

     Priming data were cleaned so that trials in which an incorrect response was given or trials in which the reaction time was below 200ms or greater than 2000ms were deleted (5.9% of trials). Outlying reaction times for priming data were Winsorized to the value 2.5 standard deviations above or below the participant mean (2.9% of trials; DePrince et al., in press; Holland, Hendriks, & Aarts, 2005; Vitevitch, 2007).

     Before treating LDT priming scores as predictors of the dependent measures, we first tested whether there were general D→V or V→D priming effects. One sample t-tests were conducted on the D→V and V→D facilitation scores to determine whether facilitation was greater than zero: scores significantly higher than zero indicate facilitation when target words were viewed together relative to other conditions. Facilitation scores were significantly different from zero for both D→V priming ($t(111) = 7.07$, $p < .001$) and V→D priming ($t(111) = 4.03$, $p < .001$). Contrary to predictions, neither just world scores nor any other predictor variables were significantly related to D→V or V→D priming scores.

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Dependent variables. Table 1 contains means (*SD*) for blame, positive words, and negative words. Prior to calculating these descriptive statistics, outlying responses for blame scores, positive words, and negative words were Winsorized to the value 2.5 standard deviations from the overall participant mean for that measure. Findings were comparable whether the original or Winsorized values were used.

Zero-order correlations. Zero-order correlations among study variables appear in Table 1. Because social desirability scores were not related to any of the dependent variables, they were not included in further analyses.

Effects of contextual factors (i.e., group membership and environment safety) and gender

See Table 2 for means (SDs) of blame, positive words, and negative words by ingroup/outgroup and safe/dangerous environment conditions. In order to examine the effects of the contextual variables of ingroup/outgroup membership and safe/dangerous environment on blame scores, a 2 (group) x 2 (environment) x 2 (gender) ANOVA with blame scores as the dependent variable was conducted; all interactions and main effects were non-significant.

In order to examine the effects of the ingroup/outgroup and safe/dangerous environment conditions on positive words, a 2 (group) x 2 (environment) x 2 (gender) ANOVA with positive words as the dependent variable was conducted. There was a significant main effect of environment ($F(1, 104) = 4.37$, $p = .04$), such that participants in the safe condition assigned more positive words to the victim than participants in the dangerous condition. A significant interaction of group by gender ($F(1, 104) = 6.22$, $p = .01$) revealed that males assigned more positive words than females in the outgroup condition relative to the ingroup condition, where the opposite pattern was observed (see

Figure 1). Effect sizes (Hedges' *d*) for the simple effects in this interaction were as follows: males versus females (ingroup): $d = -.43$; males versus females (outgroup): $d = .83$; ingroup versus outgroup (males): $d = -.93$; ingroup versus outgroup (females): $d = .33$. A significant interaction between group and environment ($F(1, 104) = 4.64, p < .05$) revealed that participants assigned more positive words if they read the safe vignette than the dangerous vignette, if they were in the outgroup condition, relative to the ingroup condition where the opposite pattern was observed (see Figure 2). Effect sizes (Hedges' *d*) for the simple effects in this interaction were as follows: safe versus dangerous (ingroup): $d = .18$; safe versus dangerous (outgroup): $d = .61$; ingroup versus outgroup (safe): $d = -.04$; ingroup versus outgroup (dangerous): $d = .38$. All other effects of the ingroup/outgroup and safe/dangerous environment conditions on positive words were non-significant.

In order to examine the effects of the ingroup/outgroup and safe/dangerous environment conditions on <u>negative</u> words, a 2 (group) x 2 (environment) x 2 (gender) ANOVA with negative words as the dependent variable was conducted. All interactions and main effects were non-significant.

Effects of individual factors

Three simultaneous multiple regression analyses were conducted to examine the independent contributions of the predictor variables (gender, just world beliefs, benevolent world beliefs, meaningful world beliefs, number of traumatic event types, and betrayal trauma degree) on blame, positive words, and negative words. Refer to Table 3 for betas and t-values for each predictor reported in these models.

The full model predicting blame was significant, ($F(6, 105) = 3.69$, $p < .01$), $R^2 = .17$. Only benevolent world beliefs had a significant direct effect on blame, such that higher benevolent world beliefs predicted less blame. Greater meaningful world beliefs marginally predicted more blame.

The full model predicting positive words was significant, ($F(6,105) = 2.56$, $p < .05$), $R^2 = .13$. The only factor that had a significant direct effect on positive words was number of traumatic event types, such that experiencing more traumatic event types predicted more positive words when controlling for the other variables. Meaningful world beliefs approached conventional significance levels, suggesting that greater meaningful world beliefs may be associated with the assignment of more positive words.

The full model predicting negative words was significant, ($F(6, 105) = 2.30$, $p < .05$), $R^2 = .12$. Benevolent world beliefs, number of traumatic event types, and betrayal trauma degree each had a significant direct effect on negative words: greater benevolent world beliefs and greater number of traumatic event types predicted fewer negative words, while greater betrayal trauma degree predicted more negative words.

Participant betrayal trauma history and positive and negative words. The finding that greater betrayal trauma *degree* (i.e., high, low, or no) predicted a greater number of negative words was surprising. In order to better understand this relationship, we conducted several further analyses. First we examined whether self-blame might explain this relationship (that is, higher levels of self-blame about one's own experiences might lead to blaming others for similar experiences), by entering participants' scores on a self-blame measure into the full regression model. Self-blame did not significantly predict negative words, and greater betrayal trauma degree continued to be a significant predictor

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of negative words. Next, we examined whether the *number* of high betrayal *types* (i.e., assault by a close other, witnessing someone close to you assault a family member) was correlated with the number of negative words assigned; this correlation was not significant ($r(112) = .03, p = .79$).

We then conducted post-hoc analyses to test whether participants assigned significantly more positive than negative words to the victim within each betrayal trauma degree group. See Table 4 for means (*SDs*) of positive and negative words in each of these groups. We examined each betrayal trauma degree group separately in order to test whether participants in each group assigned more positive versus negative words. If more positive than negative words were assigned, we reasoned this might help us interpret the positive relationship between betrayal trauma degree and negative words. Such a pattern would suggest that while derogation increased in relation to betrayal trauma, participants were still more likely to praise than derogate the victim overall. Three paired-sample t-tests compared the number of positive and negative words assigned by participants in the high-, low-, and no-betrayal trauma groups. Both high- and low-betrayal groups assigned significantly more positive than negative words: high ($t(64) = 1.98, p = .05$) and low ($t(31) = 2.26, p = .03$). There were no differences in positive and negative words assigned in the no-betrayal trauma group, ($t(14) = 1.58, p = .14$).

Next, we tested whether there was a significant overall difference between positive and negative words between the three betrayal trauma groups by conducting a 3 (high/low/no betrayal trauma) x 2 (positive/negative words) repeated measures ANOVA; this test was not significant, $F(2, 109) = .16, p = .85$. In order to better understand the relationship between betrayal trauma degree and negative words within each of the high,

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low, and no betrayal trauma groups, two one-way ANOVAs compared high, low, and no betrayal trauma groups on 1.) positive words; and 2.) negative words. Neither the test for positive words ($F(2, 109) = .57$, $p = .57$), nor negative words ($F(2, 109) = 2.27$, $p = .11$) was significant. To assess whether the presence of trauma was more important than the distinction of low versus high betrayal, we ran two post-hoc tests to compare a combined high/low betrayal trauma group and the no trauma group for positive and negative words. Planned comparison weights were assigned as follows: no trauma = -2; low betrayal trauma = 1; high betrayal trauma = 1. The comparison between trauma and no trauma for positive words was not significant, $t(2, 109) = 1.06$, $p = .29$ (equal variances assumed), while the contrast for negative words was significant, $t(2, 31.39) = 2.94$, $p < .01$ (equal variances not assumed).

Victim-derogation semantic associations. D→V priming scores were not related to the dependent measures. V→D priming was significantly negatively related to blame scores such that greater V→D priming was associated with less blame.

Discussion

Effects of contextual factors

Contrary to predictions, a group-by-gender interaction revealed that males reading about the victimization of an outgroup member assigned more positive words to the victim compared to males reading about the victimization of an ingroup member, while females showed the opposite pattern. These findings suggest that the ingroup favoritism effect (e.g., members of the ingroup are favored over comparable members of the outgroup) functions slightly differently across gender when reading about the sexual assault of a female. Specifically, females appear to provide greater praise to an ingroup member, while males give greater praise to an outgroup member.

These data suggest that males are better able to acknowledge good qualities in a victim who is dissimilar; while females are more likely to acknowledge good qualities in a victim who is similar. These findings may reflect differential competition/relationship-building interests across females and males in each of these conditions. For example, females may be more interested in building relationships with ingroup members (see Gilligan, 1982; Goodwin, 1980; and Lever, 1976 for research regarding relationship-building in females), thus praising them more than outgroup members; while males feel more competitive toward ingroup members (see Geary, 1998 for research regarding male-male competition), thus praising them less than outgroup members.

A main effect of environment condition demonstrated that participants in the safe condition assigned a greater number of positive words to the victim than participants in

the dangerous condition. This finding may reflect a should-have-known-better viewpoint in which observers will be less apt to compliment or see the good in victims who are assaulted in a known dangerous setting. Participants may have believed that individuals assaulted in a safe environment could not have known better, and therefore still used good judgment in that environment.

A significant group-by-environment interaction occurred for the assignment of positive words. For participants in the safe environment condition, those who read about an outgroup victim attributed more positive words to the victim than participants who read about an ingroup victim. The opposite pattern occurred in the dangerous environment condition: those who read about an outgroup victim assigned fewer positive words to the victim than those who read about an ingroup victim. These results suggest that while overall more positive words are assigned to the victim in the safe environment condition, ingroup membership leads to more favoritism in a dangerous setting, while outgroup members are favored more in a safe environment.

Perhaps in a dangerous environment, individuals need to rally their resources in order to protect themselves. Acknowledging the good characteristics of a similar victim may help participants believe that they will be protected from derogation should a similar event befall them in the future. The same psychological need is perhaps not necessary in a safe environment. In this case, individuals may be more willing to attribute praise to outgroup members because victimizations that occur at another university are less threatening to the notion that a similar event could happen to oneself. Therefore, ingroup/outgroup membership does not appear to matter overall, but it does matter in the context of the safety of the environment.

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While neither JWT nor WAT make specific predictions about how the relative safety of one's environment will affect victim blame, the finding that more positive words were assigned to the victim in the safe environment than the victim in the dangerous environment may contradict the tenets held by these theories. Specifically, knowledge of a victimization in an otherwise "safe" environment may threaten just world or meaningful world beliefs because one becomes more aware that a similar event could happen to oneself, even if they are taking precautions to avoid similar situations. In this case, one should be expected to attribute fewer positive characteristics to a victim assaulted in a safe environment in order to justify the victimization. For example, people may be less likely to acknowledge victims as good/conscientious/responsible, because this unfortunate event happened to them. On the contrary, these data suggest that individuals victimized in an environment that has a low crime rate will lead observers to perceive the victim more positively. Importantly, none of the world belief measures (just world beliefs, meaningful world beliefs, or benevolent world beliefs) mediated the relationship between environment condition and positive words; therefore, consideration of the relative safeness or dangerousness of the environment may not be affected by one's world beliefs when forming perceptions of victims.

Effects of individual difference factors

World beliefs. Different predictor variables significantly related to each of the three different dependent variables, suggesting that these direct and indirect dependent measures tap different ways in which perceptions of victims are manifested. Greater meaningful world beliefs marginally predicted more victim blame when controlling for gender, just world beliefs, benevolent world beliefs, number of traumatic event types, and

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betrayal trauma degree. Conversely, greater benevolent world beliefs predicted both less blame and less negative words when controlling for gender, just world beliefs, meaningful world beliefs, number of traumatic event types, and betrayal trauma degree. The finding that greater meaningful world beliefs marginally predicted greater blame is consistent with predictions made by WAT and JWT. These theories posit that the more a person believes the world is just and controllable, the more they will be motivated to blame victims of traumatic events in order to maintain these beliefs. The results from this study provide evidence for this tendency, as participants with greater meaningful world beliefs were more likely to blame the victim than people with a lesser degree of meaningful world beliefs.

Conversely, the finding that greater benevolent world beliefs predicted less victim blame and derogation is contrary to predictions made by WAT. For the same reason greater meaningful world beliefs were predicted to lead to greater blame, greater benevolent world beliefs were purported to result in more blame as well according to WAT: knowledge of an injustice happening to a person through, seemingly, no fault of their own is threatening to the notion that the world is good and controllable by our actions. Interestingly, the opposite pattern occurred in this study, suggesting that the more individuals believe the world and the people in it are good, the more lenient they will be in judging the deservingness of victims of traumatic events, and the less likely they will be to derogate a victim's character.

Trauma exposure. We found unexpected links between participant trauma history and dependent measures. Consistent with predictions, a greater number of traumatic event types reported by the participant predicted more positive and fewer negative words

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assigned to the victim when controlling for gender, just world beliefs, benevolent world beliefs, meaningful world beliefs, and betrayal trauma degree. Surprisingly, greater betrayal trauma degree predicted the assignment of more negative words, controlling for gender, just world beliefs, benevolent world beliefs, meaningful world beliefs, and number of traumatic event types.

The finding that a greater number of traumatic event types predicted the assignment of more positive and fewer negative words suggests that the experience of a greater number of traumatic events leads people to view other victims more favorably, and the more types of events people experience, the more likely they are to view other victims positively. These findings suggest a sort-of ingroup favoritism effect: an observer who has experienced trauma may be more likely to positively identify with another person who has experienced a trauma, leading them to derogate other victims less and praise them more. This effect will be more pronounced for individuals who have experienced a greater number of traumatic event types.

The finding that higher betrayal trauma degree was related to the assignment of more negative words suggests that the greater extent to which people have been betrayed, the more they derogate a victim of a traumatic event. Importantly, only the experience of high betrayal was related to the assignment of more negative words; the number of betrayal trauma types did not predict the number of negative words assigned. Taken together, these findings suggest that participants who are exposed to more forms of trauma are more likely to attribute positive characteristics to a victim; however, this pattern changes when we look specifically at betrayal characteristics. As the degree of betrayal in trauma exposure increased, so too did the likelihood that the participant would

derogate another victim. While the finding that higher betrayal trauma degree predicted a greater number of negative words was surprising, both the high and low betrayal trauma degree groups assigned significantly more positive words than negative words to the victim. Therefore, even though high betrayal trauma degree predicted a greater level of victim derogation, this group assigned more positive than negative words. This pattern may reflect a sort-of compensation-for-derogation effect in which observers who have experienced a high degree of betrayal trauma highly derogate another victim's character, but compensate for derogation by attributing positive qualities to the victim as well.

The finding that the trauma group assigned more negative words than the no trauma group, as revealed by a post-hoc comparison, suggests that perhaps simply the experience of trauma alone, regardless of betrayal trauma degree, is associated increases in derogation of a victim. An alternative explanation for the finding that derogation increases as betrayal trauma degree increases is that the experience of trauma causes one to think more complexly about a victim's character; people may be more willing to make more character attributions, or they become more sensitive to personality characteristics, or they may be assigning characteristics to the victim based on how they view themselves. However, these data do not provide good support for this alternative explanation because the number of positive words assigned was not significantly different when we compared no-trauma to trauma-exposed groups.

Neither JWT nor WAT help us account for the surprising trauma exposure findings. JWT predicts that observer trauma-exposure should lead to increased victim-blame in order to dissociate oneself from the victim. WAT predicts less blame among observers with trauma exposure because one's notion that the world is meaningful and

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good has been disrupted by the experience of trauma. Higher betrayal trauma degree was associated with greater derogation, a pattern seemingly consistent with JWT, but the number of types of traumatic events predicted less derogation and more praise, a pattern consistent with WAT. These data suggest that the relationship between observer trauma history and victim blame is complicated: this relationship depends both on the number of types of traumatic events and the degree of betrayal trauma the observer experienced.

Victim-derogation semantic associations. Across participants, derogatory words facilitated processing of victim words and vice-versa. This bi-directional facilitation suggests that individuals automatically associate victim and derogatory concepts, and that activation of one concept activates the other. The association of victim and derogatory concepts may be an indication of an automatic victim-blame mechanism: over time, repeated, and perhaps non-conscious, associations of victims of unfortunate events with negative character traits, such as "careless" and "foolish," results in automatic associations between these concepts. Alternatively, this association could indicate the mere knowledge that victims often get derogated for traumatic events.

Greater V→D priming was associated with less blame. The direction of this finding was contrary to predictions: greater priming was hypothesized to predict greater blame. This negative relationship between priming and blame suggests that the more one is primed to activate derogatory character words after seeing victim-related words, the less likely one is to blame a victim of a traumatic event. This effect may reflect a heightened-awareness-of-blame effect such that people who are aware that victims are often blamed for traumatic events are less likely to blame. Perhaps the more one is aware that victim derogation occurs, the less one is inclined to derogate others themselves.

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Limitations

        This study has a number of limitations. First, victim blame, praise and derogation were examined only with respect to a female victim; the same pattern of results may not occur for perceptions of male victims. Interpretation of the significant ingroup/outgroup by gender finding is limited by the fact that participants read only about a female victim. The outgroup victim is dissimilar from male participants along two dimensions: gender and school affiliation; while the ingroup victim is similar to female participants along two dimensions: gender and school affiliation. A previous study found that males are blamed less than females for unfortunate events (Idisis et al., 2007); therefore, a different pattern may emerge when reading about male victims.

        Second, the manipulation of environmental safety may not have been equally strong across the ingroup and outgroup conditions. Participants assigned to the dangerous (or safe) condition may have been more able to imagine a dangerous (or safe) environment at another campus than on the DU campus, regardless of the information given in the vignette. Therefore, the environmental safety condition for those assigned to the ingroup condition is confounded by the participants' own perceptions of safety on their own campus. The effects of ingroup/outgroup membership and environmental safety may be stronger when eliminating this confound.

        A third limitation may be the composition of the study sample. This study was composed solely of female undergraduate students at a private university. Male participants comprised only 16% of the sample. We may have lacked power to observe additional gender effects. Further, this sample was not representative of the general public in qualities including: age, ethnicity and race, education, and socio-economic

status. Patterns of blame, praise and derogation may be different in a sample more reflective of the general public. For example, victim-to-derogation priming predicted less blame on the Campus Safety task, a finding that was predicted to occur in the opposite direction. These results may be a product of having a conscientious sample: university students taking psychology courses may be more aware of the high prevalence of victim blame and/or the damage victim blame can do. The opposite pattern in which victim-to-derogation priming predicts greater blame and derogation may occur in a sample more representative of the population.

Lastly, the examination of participant trauma history was limited in two ways. First, trauma history was measured by self report. There may have been a number of false negatives for people who did not want to disclose experience of trauma. Therefore, the effects of trauma history on blame, praise, and derogation may be stronger than reported in this study. Second, data was not collected on the exact number of times each of the traumatic events occurred for each participant, and was therefore limited to an analysis of the number of traumatic events types one experienced. This classification of trauma history may also have been a conservative measure and the study results may have been stronger if a more detailed account of participant trauma history had been obtained.

Future directions

This study examined contextual and individual difference factors in relation to perceptions of victims of traumatic events. Future studies should further examine how the environmental context such as crime rates and demographics of particular areas relate to victim blame and derogation. Additionally, participant trauma history should be examined in more detail, including whether the number of traumatic incidences or

chronology affects blame. Individual difference factors can be further studied by examining appraisals of one's own experience of trauma such as anger and fear. Further, future studies should expand on the examination of victim-observer ingroup membership using different grouping dimensions, and further examine the relationship between ingroup membership and gender for male victims. Lastly, cognitive victim-blame associations should be further examined using a community sample in order to evaluate whether the positive association between V→D priming and blame observed in this study replicates with a different population, or demonstrates the opposite pattern.

Conclusions

Contextual (including participant-victim ingroup membership and the safety of the victim's environment) as well as individual (including pre-existing beliefs about the controllability and goodness of the world; previous trauma exposure; and victim-derogation priming) factors predicted perceptions of a female sexual assault victim. This study offers insight into victim blame processes. As research progresses in this field, we may be able to identify mechanisms that decrease victim blame. However, a major challenge to decreasing victim blame may be that individual differences seem to matter (e.g., beliefs about the world as well as trauma exposure). That is, while contextual factors can be addressed in how information is presented to victims (e.g., news reports could stress contextual factors that might decrease victim blame), individual differences may be particularly difficult to over-ride as observers respond to victims. The finding that victim-derogation semantic associations were related to less blame suggests the possibility that, among other factors, increasing awareness of blame may help decrease victim blame.

References

Aderman, D., Brehm, S. S., & Katz, L. B. (1974). Empathic observation of an innocent

victim: The just world revisited. *Journal of Personality and Social Psychology,*

29, 342-347.

Bargh, J.A., Raymond, P., Pryor, J.B., & Strack, F. (1995). Attractiveness of the

underling: An automatic power→sex association and its consequences for sexual

harassment and aggression. *Journal of Personality and Social Psychology, 68*,

768-781.

Barnett, M. A., Tetreault, P. A., Esper, J. A., & Bristow, A. R. (1986). Similarity and

empathy: The experience of rape. *Journal of Social Psychology, 126*, 47-49.

Bell, S. T., Kuriloff, P. J., & Lottes, I. (1994). Understanding attributions of blame in

stranger rape and date rape situations: An examination of gender, race,

identification, and students' social perceptions of rape victims. *Journal of Applied*

Social Psychology, 24, 1719-1734.

Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate?

Journal of Social Issues, 55, 429-444.

Chaikin, A. L., & Darley, J. M. (1973). Victim or perpetrator?: Defensive attribution of

responsibility and the need for order and justice. *Journal of Personality and*

Social Psychology, 25(2), 268-275.

Correia, I., & Vala, J. (2003). When will a victim be secondarily victimized? The effect of observer's belief in a just world, victim's innocence and persistence of suffering. *Social Justice Research, 16*(4), 379-400.

Corenblum, B. (1983). Reactions to alcohol-related marital violence: Effects of one's own abuse experience and alcohol problems on causal attributions. *Journal of Studies on Alcohol, 44*, 665-674.

Dalbert, C., Montada, L., & Schmitt, M. (1987). Belief in a just world: Validation correlates of two scales. *Psychologische Beitrage, 29*(4), 596-615.

Dalbert, C., & Yamauchi, L. (1994). Belief in a just world and attitudes toward immigrants and foreign workers: A cultural comparison between Hawaii and Germany. *Journal of Applied Social Psychology, 24*, 1612-1626.

DePrince, A. P., Combs, M. D., & Shanahan, M. (in press). Automatic relationship-harm associations and interpersonal trauma involving close others. *Psychology of Women Quarterly*.

Drout, C. E., & Gaertner, S. L. (1994). Gender differences in reactions to female victims. *Social Behavior and Personality, 22*(3), 267-277.

Feldman, P. J., Ullman, J. B., & Dunkel-Schetter, C. (1998). Women's reactions to rape victims: Motivational processes associated with blame and social support. *Journal of Applied Social Psychology, 28*, 469-503.

Fulero, S., & Delara, C. (1976). Rape victims and attributed responsibility: Defensive attribution approach. *Victimology, 1*, 551-563.

Furnham, A. (2003). Belief in a just world: Research progress over the past decade. *Personality and Individual Differences, 34*, 795-817.

Furnham, A., & Procter, E. (1989). Belief in a just world: Review and critique of the

individual difference literature. *British Journal of Social Psychology, 28,* 365-

384.

Freyd, J.J. (2005). *Suggested categorization of BBTS items into A) three scales (high,*

medium, and low betrayal) or B) two scales (high/more betrayal and low/less

betrayal) Retrieved [*May 28, 2008*] from

http://dynamic.uoregon.edu/~jjf/bbts/categories.html.

Geary, D. C. (1998). Principles and mechanisms of sexual selection. In D. Geary (Ed.),

Male, female: The evolution of human sex differences (15-55). Washington D.C.:

American Psychological Association.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development.*

Cambridge, MA: Harvard University Press.

Goodwin, M. (1980). He-said-she-said: Formal cultural procedures for the construction

of a gossip dispute activity. *American Ethnologist, 7*, 674-694.

Goldberg, L. R., & Freyd, J. J. (2006). Self-reports of potentially traumatic experiences in

an adult community sample: Gender differences and test-retest stabilities of the

items in a Brief Betrayal-Trauma Survey. *Journal of Trauma & Dissociation,*

7(3), 39-63.

Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. *Annual Review of*

Psychology, 53, 575-604.

Holland, R. A., Hendriks, M., & Aarts, H. (2005). Smells like clean spirit: Nonconscious

effects of scent on cognition and behavior. *Psychological Science, 16*, 689-693.

Idisis, Y., Ben-David, S., & Ben-Nachum, E. (2007). Attribution of blame to rape victims among therapists and non-therapists. *Behavioral Sciences and the Law, 25*, 103-120.

Janoff-Bulman, R. (1979). Characterological versus behavioral self-blame: Inquiries into depression and rape. *Journal of Personality and Social Psychology, 37*, 1798-1809.

Janoff-Bulman, R. (1989a). Assumptive worlds and the stress of traumatic events: Applications of the schema construct [Special issue]. *Social Cognition, 7*(2), 113-136.

Janoff-Bulman, R. (1989b). The benefits of illusions, the threat of disillusionment, and the limitations of inaccuracy. *Journal of Social and Clinical Psychology, 8*, 158-175.

Janoff-Bulman, R. (1992). *Shattered Assumptions: Toward a New Psychology of Trauma*. New York: Free Press.

Kanekar, S., & Kolsawalla, M. B. (1981). Factors affecting social responsibility attributed to a rape victim. *Journal of Social Psychology, 8*, 98-107.

Lepore, S. J., Ragan, J. D., & Jones, S. (2000). Talking facilitates cognitive-emotional processes of adaptation to an acute stressor. *Journal of Personality and Social Psychology, 78*(3), 499-508.

Lerner, M. J. (1965). Evaluation of the performance as a function of performer's reward and attractiveness. *Journal of Personality and Social Psychology, 1*, 355-360.

Lerner, M. J. (1980). *The Belief in a Just World: A Fundamental Delusion*. New York: Plenum Press.

Lerner, M. J., & Agar, E. (1972). The consequences of perceived similarity: Attraction

    and rejection, approach and avoidance. *Journal of Experimental Research in*

    Personality, 6, 69-72.

Lever, J. (1976). Sex differences in the games children play. *Social Problems, 23*, 478-

    487.

Major, B., Cozzarelli, C., Sciacchitano, A. M., Cooper, M. L., Testa, M., & Mueller, P.

    M. (1990). Perceived social support, self-efficacy, and adjustment to abortion.

    Journal of Personality and Social Psychology, 59(3), 452-463.

Meyer, D. E., Schvaneveldt, R. W., & Ruddy, M. G. (1975). Loci of contextual effects on

    visual word recognition. In P. M. A. Rabbit & S. Dornic (Eds.), *Attention and*

    performance: V (pp. 98–118). London: Academic Press.

Muller, R. T., Caldwell, R. A., & Hunter, J. E. (1994). Factors predicting the blaming of

    victims of physical child abuse or rape. *Canadian Journal of Behavioural*

    Science, 26, 259-279.

Novak, D. W., & Lerner, M. J. (1968). Rejection as a consequence of perceived

    similarity. *Journal of Personality and Social Psychology, 9*, 147-152.

Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-

    Crowne Social Desirability Scale. Journal of Clinical Psychology, 38, 119-125.

Rosnow, R. L., & Rosenthal, R. (1989). Definition and interpretation of interaction

    effects. *Psychological Bulletin, 105*(1), 143-146.

Rubin, Z., & Peplau, L. A. (1973). Belief in a just world and reactions to another's lot: A

    study of participants in the national draft lottery. *Journal of Social Issues, 29*(4),

    73-93.

Rubin, Z., & Peplau, L. A. (1975). Who believes in a just world? *Journal of Social Issues, 31*(3), 65-90.

Selby, J. W., Calhoun, L. G., & Brock, T. A. (1977). Sex differences in the social perception of rape victims. *Personality and Social Psychology Bulletin, 3*, 412-415.

Shaver, K. G. (1970). Defensive attribution: Effects of severity and relevance on the responsibility assigned for an accident. *Journal of Personality and Social Psychology, 14*, 101-113.

Shaw, J. I., & Martin, J. A. (1973, April). *Personal and situational determinants of attribution of responsibility for an accident.* Paper presented at the meeting of the Western Psychological Association, Anaheim, CA.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations*. Monterey, CA: Brooks-Cole.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of inter-group behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relations*. Chicago: Nelson-Hall.

Thornton, B. (1984). Defensive attribution of responsibility: Evidence for an arousal-based motivational bias. *Journal of Experimental Social Psychology, 46*, 721-734.

Thornton, B., Hogate, L., Moirs, K., Pinette, M., & Presby, W. (1986). Physiological evidence of an arousal-based motivational bias in the defensive attribution of responsibility. *Journal of Experimental Social Psychology, 22*, 148-162.

Ullman, S. E. (1996). Correlates and consequences of adult sexual assault disclosure. *Journal of Interpersonal Violence, 11*(4), 554-571.

Vitevitch, M. S. (2007). The spread of the phonological neighborhood influences spoken work recognition. *Memory & Cognition, 35*, 166-175.

Westmaas, J. L., & Silver, R. C. (2006). The role of perceived similarity in supportive responses to victims of negative life events. *Personality and Social Psychology Bulletin, 32*, 1537-1546.

Zook, A., & Sipps, G. J. (1985). Cross-validation of a short form of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology, 41*, 236-238.

Zurbriggen, E. L. (2000). Social motives and cognitive power-sex associations: Predictors of aggressive sexual behavior. *Journal of Personality and Social Psychology, 78*, 559-581.

Footnotes

[1]Semantically related neutral word pairs (SEM) were included because this study followed the method used in DePrince et al. (in press) and Zurbriggen (2000); as in DePrince et al. (in press) these trials were not analyzed.

Table 1 (Half A)

Zero-order Correlations and Descriptive Statistics for Study Measures.

		Gender	Just world	Benev world	Mean world	# trauma types	Betray trauma
Predictor variables	Gender						
	Just world	.14					
	Benevolent world	.18	.20*				
	Meaningful world	-.03	.40***	.20*			
	# trauma types	-.04	.09	-.16	-.06		
	Betrayal trauma	.001	.10	-.08	-.04	-.65***	
	Social desirability	.14	.01	.17	.20*	-.02	-.07
	D→V priming	.03	.12	-.01	-.06	.11	.06
	V→D priming	.16	-.07	-.06	-.10	-.02	-.06
Dependent variables	Blame	-.14	.03	-.35***	.12	.08	.12
	Positive words	-.04	-.04	-.06	.11	.28***	.06
	Negative words	-.03	.09	-.17	.07	-.01	.19*
	Mean (SD) unless otherwise noted	84% Female	19.18 (4.35)	33.88 (6.05)	39.18 (6.46)	3.74 (3.18)	1.45 (.72)

*** = $p < .001$ (2-tailed)
** = $p < .01$ (2-tailed)
* = $p < .05$ (2-tailed)
Note: Gender was dummy coded as 0 = Male, 1 = Female.

Table 1 (Half B)

Zero-order Correlations and Descriptive Statistics for Study Measures.

		Social desire	D→V priming	V→D priming	Blame	Pos words	Neg words
Predictor variables	Gender						
	Just world						
	Benevolent world						
	Meaningful world						
	# trauma types						
	Betrayal trauma						
	Social desirability						
	D→V priming	.03					
	V→D priming	.10	-.08				
Dependent variables	Blame	.03	.02	-.19*			
	Positive words	.02	-.02	-.01	.09		
	Negative words	-.05	-.05	-.02	.52***	-.06	
	Mean (SD) unless otherwise noted	5.11 (2.62)	82.84 (124.02)	51.56 (135.45)	18.19 (6.89)	2.10 (2.31)	1.24 (1.47)

*** = *p* < .001 (2-tailed)
** = *p* < .01 (2-tailed)
* = *p* < .05 (2-tailed)
Note: Gender was dummy coded as 0 = Male, 1 = Female.

Table 2

Mean (SD) for blame, positive words, and negative words for group condition-by-gender, environment condition-by-gender, and group condition-by-environment condition

Group	Gender	N	Blame	Positive words	Negative words
Ingroup	M	10	21.20 (6.86)	1.40 (1.65)	1.70 (1.70)
	F	46	18.02 (6.43)	2.45 (2.53)	1.09 (1.44)
Outgroup	M	8	19.38 (7.84)	3.49 (2.65)	.88 (1.46)
	F	48	17.52 (7.20)	1.69 (2.04)	1.36 (1.46)
Environment					
Safe	M	9	21.67 (6.48)	2.99 (2.76)	1.33 (1.80)
	F	47	17.83 (7.00)	2.46 (2.51)	1.24 (1.44)
Dangerous	M	9	19.11 (7.93)	1.67 (1.73)	1.33 (1.50)
	F	47	17.70 (6.67)	1.66 (2.05)	1.22 (1.47)
Group	Environment				
Ingroup	Safe	28	17.96 (6.43)	2.49 (2.78)	1.11 (1.47)
	Dangerous	28	19.21 (6.75)	2.04 (2.03)	1.29 (1.52)
Outgroup	Safe	28	18.93 (7.63)	2.60 (2.31)	1.40 (1.51)
	Dangerous	28	16.64 (6.78)	1.28 (1.91)	1.18 (1.42)

Table 3

Regression coefficients for models predicting blame, positive words, and negative words

Model	Variable	*B*	*SE B*	*t*
Model predicting blame	Gender	-1.41	1.71	-.83
	Just world beliefs	.05	.16	.33
	Benevolent world beliefs	-.43	.11	-3.99***
	Meaningful world beliefs	.19	.11	1.82^
	Number of traumatic event types	-.13	.26	-.51
	Betrayal trauma degree	1.31	1.11	1.18
Model predicting positive words	Gender	.01	.59	.02
	Just world beliefs	-.07	.06	-1.21
	Benevolent world beliefs	-.01	.04	-.16
	Meaningful world beliefs	.06	.04	1.74^
	Number of traumatic event types	.30	.09	3.45***
	Betrayal trauma degree	-.60	.38	-1.56
Model predicting negative words	Gender	-.04	.38	-.11
	Just world beliefs	.03	.04	.94
	Benevolent world beliefs	-.05	.02	-2.29*
	Meaningful world beliefs	.02	.02	.71
	Number of traumatic event types	-.12	.06	-2.13*
	Betrayal trauma degree	.67	.25	2.75**

^$p<.10$, * $p<.05$, **$p<.01$, ***$p<.001$

Table 4

Mean (SD) number of positive and negative words for high-, low-, and no-betrayal trauma groups

| Betrayal trauma degree	N	Positive words	Negative words
High	65	2.15 (2.3)	1.42 (1.56)
Low	32	2.28 (2.42)	1.22 (1.42)
No	15	1.53 (2.15)	.53 (.83)

Figure Caption

Figure 1. Interaction between group condition and gender for predicting the number of positive words attributed to the victim in the passage.
Figure 2. Interaction between group condition and environment condition for predicting the number of positive words attributed to the victim in the passage.
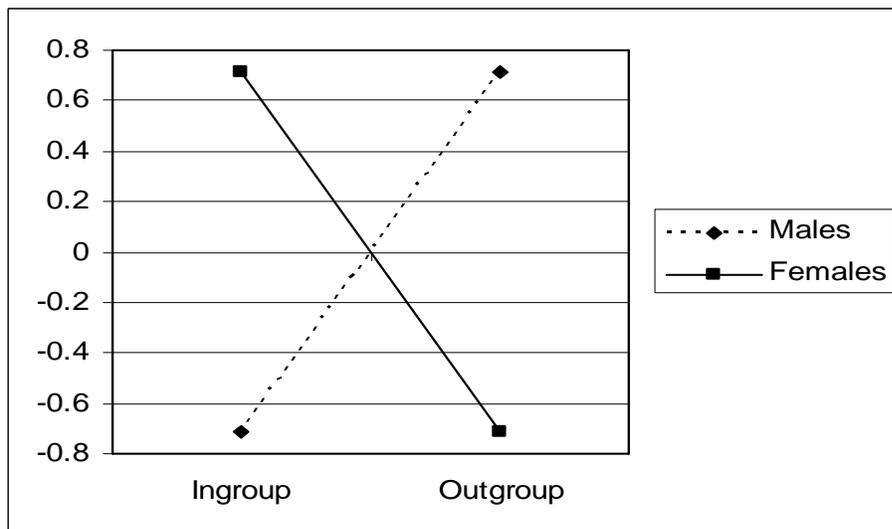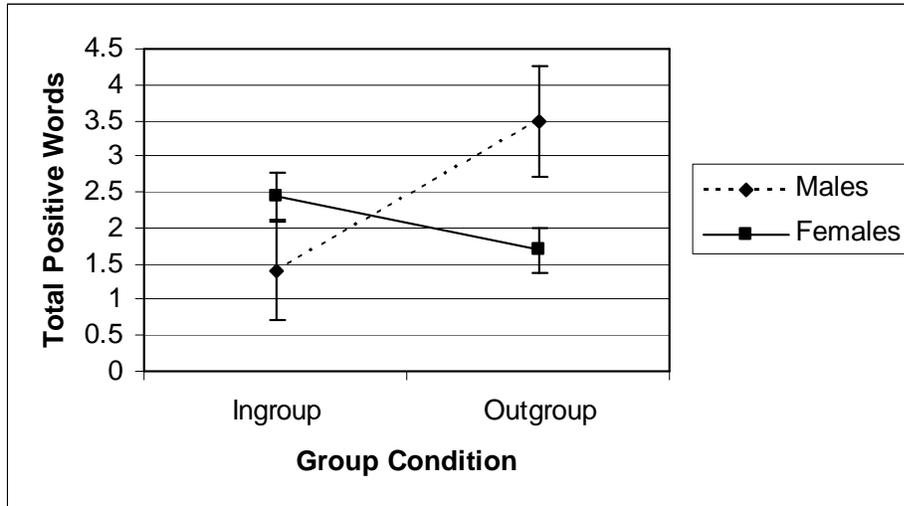
Note: Lower panel represents the cell means from the upper panel corrected to remove the influence of the main effects. The Y axis represents residual effects: the effects left over after subtracting each main effect (row & column effects) and the grand mean from the group mean (Rosnow & Rosenthal, 1989).
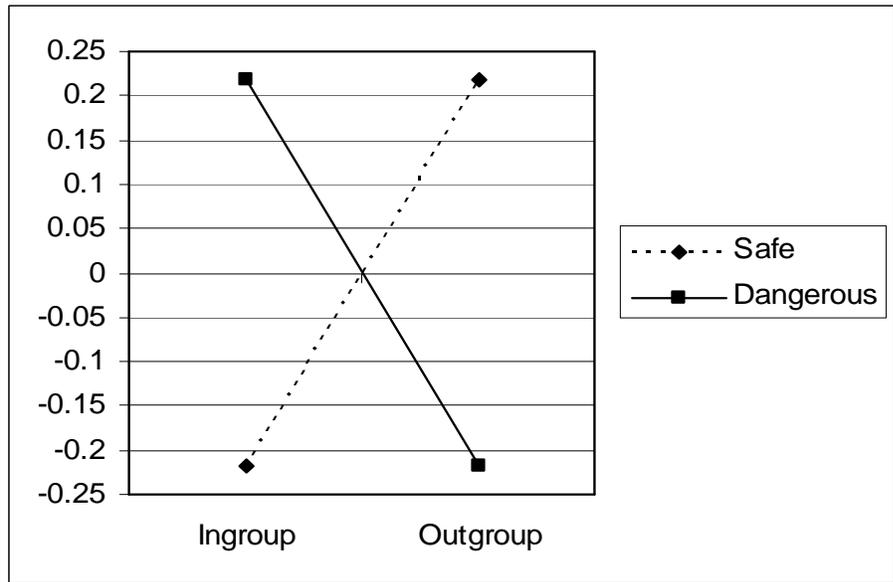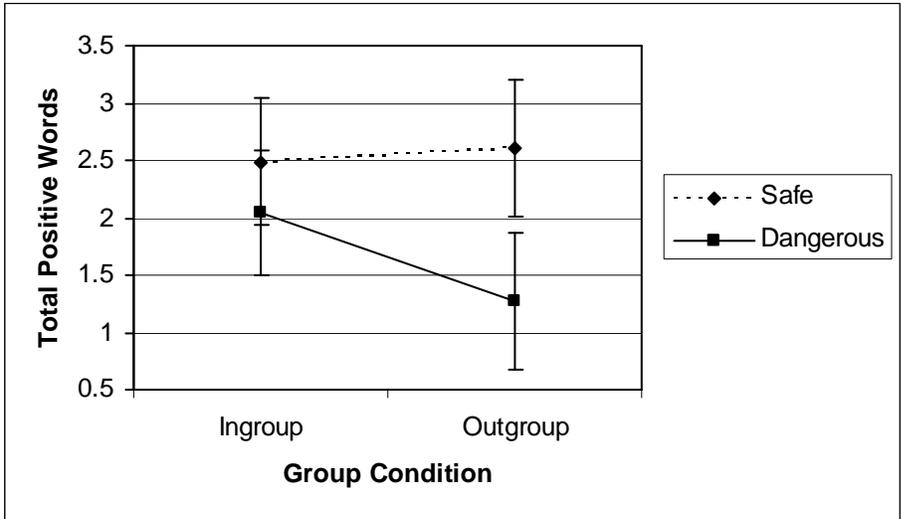
Note: Lower panel represents the cell means from the upper panel corrected to remove the influence of the main effects. The Y axis represents residual effects: the effects left over after subtracting each main effect (row & column effects) and the grand mean from the group mean (Rosnow & Rosenthal, 1989).

Appendix A

Example vignette used in the Campus Safety Task using the ingroup/dangerous

environment conditions.

The following is an excerpt from an article published in a recent issue of the *Chronicle of Higher Education*:

First Week of Classes: Particularly Dangerous
By Taylor Green

During the first week of classes in the new academic year, students are at increased risk for physical and sexual assault. In our last issue, we began a three-part series examining assault on university campuses. The first part of the series, in last month's issue, discussed programs and assaults at major state universities. Today, the second part discusses the situation at mid-sized liberal arts institutes. In next month's issue, the series focuses on three specific programs that have been found to be helpful.

For this issue's examination into assaults at mid-sized liberal arts universities, we visited the University of Denver (DU). DU is a private, urban university with a strong reputation for academic excellence and sports teams that compete in the NCAA's Division I, the highest level in collegiate athletics. DU resides in a city with a total population of 2 million including the surrounding suburbs, and is less than an hour away from mountains and outdoor activities.

DU staff consult with local community agencies who have expertise on the topic of assault. For example, the Denver Center for Crime Victims (DCCV) states that students are at a greater risk of assault during the first week of classes than at any other time of year because students tend to let their guard down as the new year is beginning. The assaults that occur during this week typically account for more than half of the assaults that happen during the whole year.

For the first time this year, the crime prevention officer on DU's campus presented crime prevention and safety information at the Freshman and Transfer Student Orientation. In addition to orientation, DCCV suggests that students be informed about the assault risk in the first week of class at other times of the year, such as through student programs, mailings, and emails.

The DCCV often receives calls from victims who do not want to report the crime to the police or campus safety. Therefore, in order to obtain a more accurate account of the number of assaults that actually occur on or around campus, incidents reported to the DCCV are tracked as well as incidents reported to campus safety and the police department.

In total, 16 male and 20 female students reported being physically assaulted, and nine female students reported being sexually assaulted on or around the DU campus the first week of classes this year. This number was a significant increase from the total number of incidents reported last year from each of these offices.

One of the students who was sexually assaulted that particular week was a female DU student who we will call "MK." MK was sexually assaulted and raped near her residence hall. The incident happened around dusk, while she was walking across campus, coming back from a class. Police are still investigating the incident.

Appendix B

Victim-related and derogatory character words used in the LDT.

Victim Words	Derogatory Character Words
Anguish	Careless
Cry	Dense
Despair	Dumb
Disaster	Foolish
Distress	Forgetful
Excruciating	Idiotic
Fearful	Inadequate
Horror	Inattentive
Painful	Incapable
Prey	Naïve
Scream	Neglectful
Soreness	Negligent
Sorrow	Oblivious
Sufferer	Stupid
Terrified	Unconscientious
Upset	Uncontrolled
Victim	Unthinking
Wronged	Unwise