

The Impact of Attributional Processes on Triggered Displaced Aggression

William C. Pedersen¹

Published online: 6 July 2006

The current study examined the role of attributional processes on triggered displaced aggression and specified the conditions wherein affect versus attributions would predict the degree of aggressive responding. Consistent with expectations, attributions for a minor provoking event predicted the degree of aggression towards targets that had violated expectations or where a specific attribution was provided. When no such expectancy violation occurred, only negative affect generated by the provocation predicted aggression. Furthermore, results indicated that initial feelings toward a provoking target impacted aggressive responding by influencing attributions made for a target's provoking action. When faced with a minor provocation, individuals were more likely to spontaneously attribute that event to external causes for people they like (e.g., positive valence targets), thus reducing the subsequent degree of aggressive retaliation. In contrast, for disliked targets, individuals were more likely to attribute provoking behavior to internal causes, resulting in an increase in aggression. The new model provides a theoretical extension to the cognitive-neoassociationistic perspective on aggression (L. Berkowitz, 1989, 1990, 1993).

KEY WORDS: aggression; attributions; affect; consistency; cognitive-neoassociationistic model.

Imagine that you are walking down a hallway and you notice a stranger walking towards you. As the two of you pass each other, the stranger bumps into your shoulder. Your emotional reaction to this event, and your subsequent response, will be influenced by what you think is the cause of stranger's action (viz. your *attribution* for the event). For example, if you believe the stranger bumped your shoulder on purpose just to be obnoxious, you are likely to become angry and aggressive. On the other hand, you might believe that the stranger accidentally

¹ Address all correspondence to William C. Pedersen, Department of Psychology, California State University, Long Beach, 1250 Bellflower Boulevard, Long Beach, California 90840-0901; e-mail: wpederse@csulb.edu.

stumbled on a piece of furniture in the hallway that in turn caused him to bump into your shoulder. If this is the case, you are likely to become mildly annoyed but will quickly put the episode out of your mind and continue walking down the hallway without saying or doing anything to the stranger.

Attribution theory is concerned with how people gather and combine information to construct causal explanations for events (Fiske & Taylor, 1984). An impressive body of work demonstrates that attributions can impact both feelings of anger and aggressive behavior (see Ferguson & Rule, 1983 for a review). The relative importance of attributions in the creation of both anger and aggression, however, is a subject of debate. Some researchers consider attributions as integral, if not necessary, for the experience of anger and subsequent aggression (e.g., Averill, 1982; Clore & Centerbar, 2004; Roseman, 2004). This perspective is challenged by the cognitive-neoassociationistic (CNA) model of Berkowitz (1990, 1993).

The CNA model proposes that an aversive stimulus can lead to anger and aggressive responding through a two-stage process. During the *first* stage, an aversive event will produce negative affect that, in turn, activates associative networks. Almost immediately after this initial reaction, the *second* part of the model becomes relevant. During this stage, higher order cognitive processes come into play as people think about what happened and consider the possible consequences. It is at this point that appraisal and attributional processes become influential. These processes will, in turn, elaborate, intensify, or suppress the initial rudimentary emotional reactions.

Berkowitz (1990, 1993) argues, however, that the second stage of the model does not always occur. That is, from the perspective of the CNA model, the elicitation of anger and aggression do not presuppose the occurrence of attributional processes (Berkowitz & Harmon-Jones, 2004). In fact, Berkowitz states that for attributions to become relevant “The aversively stimulated person may have to be *motivated* to think more extensively and deeper about the various kinds of information they have received” (Berkowitz, 1990, p. 497) (emphasis added). The question of what is needed to “motivate” individuals is, unfortunately, not clearly specified by the CNA model.

The current study highlights the importance of *inconsistent* target information² in determining situations in which attributional (and not merely affective) processes are likely to influence the level of aggressive responding. An example of this would be a good friend who insults you. Your initial positive feelings towards your friend are inconsistent with your friend’s negative behavior towards you. This inconsistent information serves to violate your expectations. A large body of research indicates that inconsistent or unexpected information leads to spontaneous causal thinking (see Weiner, 1985 for a review) and more effortful cognitive

²Inconsistent target information refers to temporally or sequentially inconsistent events. These provide disconfirmed expectations, whereas simultaneously inconsistent attributions do not.

processing relative to consistent or expected information (e.g., Bargh & Thein, 1985; Stern, Marrs, Millar, & Cole, 1984). Behavior that disconfirms a prior expectation also prompts attempts to explain such behavior (e.g., Hastie, 1984; Pyszczynski & Greenberg, 1981). In addition, psychophysiological data using event-related brain potentials (ERPs) has found increased cognitive processing in the context of unexpected information (Bartholow, Fabiani, Gratton, & Batten-court, 2001). From the perspective of the CNA model, therefore, inconsistent target information might provide the “motivation” necessary to engage in higher-order attributional processes.

Furthermore, when attributional processes become relevant, the *valence of the initial information* about the target is extremely important. For example, when a good friend insults you, your initial positive feelings toward that person are likely to overshadow his/her recent transgression. As such, an aggressive response on your part is unlikely. This reduction in aggressive responding is consistent with work concerning the primacy of first impressions (e.g., Miller & Campbell, 1959; Park, 1986). In addition, when confronted with sequentially inconsistent information, as when a positive target emits a provoking action, this behavior is consistently attributed to situational factors and therefore more easily dismissed (Kulik, 1983).

The dynamic described earlier produces what we have labeled a “buffering effect” of positive target attributes (Pedersen, Bushman, Vasquez, & Miller, 2006). That is, when confronted with the provoking actions of an individual to whom we are positively predisposed, a reduction in aggressive retaliation is likely. Pedersen et al. (2006) hypothesized that this buffering effect might be due to attributional judgments that served to mitigate the impact of a provoking event. For example, you might make an external attribution for your friend’s insulting behavior (e.g., “He is stressed out with work right now.”) which in turn should produce lower levels of aggressive responding (e.g., Dyck & Rule, 1978; Ferguson & Rule, 1983).

The current study makes several predictions. First, *negative affect* will predict the amount of aggression for “consistent” targets whereas *attributions* for a provoking incident will predict aggression for “inconsistent” targets or for targets that provide an attribution (explanation) for their behavior. In the former case, there is no motivation to go beyond the lower order processing described in the first stage of the CNA model. In the latter situation more elaborate cognitive processing should ensue. The current study is the first empirical test of this hypothesis. Furthermore, data supportive of this hypothesis will provide (a) a better understanding of the antecedents which predict aggression and (b) a theoretical extension of the CNA model.

Second, the “buffering effect” of positive target valence will be further explored by (a) attempting to replicate the findings of Pedersen et al. (2006), and (b) investigating a process by which this phenomenon might occur (viz.

attributions that serve to mitigate the impact of a provoking incident and thereby reduce subsequent aggressive responding). Specifically, under conditions wherein no explanation for the target's provoking behavior is provided, participants should be more likely to make a spontaneous *external* attribution for a positive valenced target, and the level of aggression displayed toward these individuals should be similar to targets that provide an external attribution for their negative actions. Participants, however, should be more likely to spontaneously make an *internal* attribution (e.g., "He did it because he is a mean person") when a neutral valenced target commits the same action, thereby producing an elevated aggressive response similar to targets who give an internal attribution for their behavior.

Although the theorizing outlined above is relevant for all instances of aggression, the current study uses a triggered displaced aggression (TDA) paradigm. In both displaced and triggered displaced aggression an initial provocation is delivered but the opportunity for direct retaliation against the provocateur is precluded. In TDA, however, another individual (e.g., another participant in the study) provides a trivial second provocation at a subsequent time (viz. a triggering event). The participant then has the opportunity to aggress against this second individual.

TDA is of theoretical interest because the initial provocation and the subsequent triggering event can synergistically combine to elicit a disjunctively augmented aggressive response towards the target. By *disjunctively augmented* I mean that the aggression directed towards the target exceeds that which is predicted by a tit-for-tat matching rule (Axelrod, 1984).³

METHODS

Participants and Design

Seventy undergraduate students (57 females and 13 males) from the University of Southern California volunteered in exchange for extra course credit in a 2 (target valence: positive/neutral) \times 3 (attribution: external/internal/no-attribution control) \times 2 (DV order: aggression first/attribution first) between-participants design under constant conditions of both an initial provocation and a subsequent trivial second provocation (viz. a triggering event). An additional negative valence/no-attribution/no trigger condition was added to the design to provide an additional

³The TDA paradigm was employed in the current study because much of my prior work has concentrated on factors that impact the magnitude of triggered displaced aggression. An understanding of the role of attributions in this area would therefore prove helpful. The processes described in this paper, however, apply to all instances of aggression (not simply triggered displaced aggression).

instance in which the initial impression of the target (viz. negative) was “inconsistent” with the target’s actions (viz. no trigger).

Procedure

Participants were told that they were participating with another (bogus) participant who was located in a separate room and that the two participants would exchange information and provide feedback to each other at various points throughout the study. All participants then received an initial provocation that consisted of insulting and derogatory feedback from the experimenter following participant’s completion of a difficult task. This procedure has been shown to reliably induce negative affect (see Pedersen, Gonzales, & Miller, 2000, Study 1).

Valence Manipulation

Under the guise of helping them form an initial impression of the other participant, participants received six trait adjectives from a personality inventory that ostensibly described the other participant’s character. Trait descriptors were selected using the list compiled by Anderson (1968). The words in the *positive valence* condition (i.e., mature, sincere, pleasant, understanding, reasonable, and self-satisfied) have a mean rating on Anderson’s (1968) 0–6-point scale of 4.83, $SD = 1.13$ (with high scores indicating positivity). Items selected for the *neutral valence* condition (i.e., subtle, satirical, moralistic, headstrong, conventional, and self-satisfied) and the *negative valence* condition (i.e., humorless, superficial, ungrateful, boring, conventional, and self-satisfied) have mean ratings of 2.98 ($SD = 0.69$) and 1.56 ($SD = 0.81$), respectively. Participants were asked to first thoroughly read the personality information from the other participant and then to fill out scales that assess their initial impressions of the other person. Specifically, they were asked to indicate whether the other participant appeared likable, nice, unfriendly, possessed many negative qualities, and seemed to be a good person.

Participants were then told that they would take part in a second task designed to allow both participants to become more familiar with each other. It was explained that one way to get to know a person is to share things that have happened recently in their lives. Each participant was instructed, therefore, to write down one thing that had happened to him or her during the last week and then exchange this information with the other participant. It was stressed that participants could write about any event regardless of content. The only limitation was an instruction to keep the overall amount of information brief, using no more than three sentences. This information was then exchanged with the other (bogus) participant.

Attribution Manipulation

The content of the event disclosed by the other (bogus) participant constituted the manipulation of attribution. In the *external attribution* condition, the other participant wrote the following: “I am very angry and stressed out right now. I just learned that my parents are getting a divorce.” In the *internal attribution* condition, the other participant indicated that “I am very angry and stressed out right now. I am the type of person that does not have a lot of patience for other people from time to time and I just got into a fight with my roommate.” In the *no-attribution* condition, the other participant wrote about a mundane event (i.e., “I went shopping for clothes last Saturday with my two best friends”). Premeasure data indicated that the internal and external attribution conditions did not differ in either positivity or self-disclosure.

Participants were then asked to write down six characteristics they believed were important for an astronaut to possess. Their answers were then exchanged with the (bogus) participant for evaluation. Participants received mildly negative comments from the other participant regarding their answers. This served as the induction of *trigger*. In the additional *negative valence/no-attribution/no trigger control cell* participants received a neutral evaluation of their answers (for details see Vasquez, Denson, Pedersen, Stenstrom, & Miller, 2005).

After returning to the room, the experimenter informed participants that the final task examined how making decisions affects a person’s performance while under *distraction*. The experimenter then indicated that the participant and the other participant would receive different distraction tasks. Participants were told that through (supposed) random assignment they would receive a visual distraction task (viz. watching a video of pleasant nature scenes) whereas the other participant would receive a tactile distraction task (viz. placing their hand in painfully cold water). Participants were then required to place their own hand in the bucket of cold water for 5 s for the purpose of understanding the specific nature of the other participant’s distraction task. The experimenter also informed participants that the other participant was simultaneously previewing the video to be used as the participant’s visual distraction task.

Participants were asked to use a scale to indicate the duration (in seconds) for which the other participant (viz. target) must hold his/her hand in the bucket of cold water as a distraction while performing the final task of the experiment. The scale ranged from 0 s, with a label of *no distraction at all*, to 80 s, with a label of *very strong distraction* and increased in 10-s increments. The water was painfully cold (around 10°C). This measured constituted a physical measure of *aggression*.

Participants then complete a series of both open- and close-ended measures to assess their *attributions* of the triggering event. The open-ended item asked participants to write down the reason(s) the other participant might have given them the specific evaluation they received on the astronaut task (viz. the induction

of trigger). The Causal Dimension Scale (CDS; Russell, 1982) constituted the closed-ended items. The CDS assesses casual attributions using Weiner's (1979) dimensions of locus of causality, stability, and controllability. To assess the *affective reactions* to the triggering event, participants indicated the degree to which they felt irritated, happy, angered or upset, pleased and annoyed regarding the evaluation of their astronaut task (viz. the trigger). The items were averaged to form a composite (Cronbach's $\alpha = .91$).

The order in which participants completed the aggression and attribution items was counterbalanced across all conditions. Subsequent analyses confirmed that the main effect and all interactions involving this order variable were non-significant (all $ps > .50$). The order variable was therefore eliminated for all remaining analyses.

RESULTS

Manipulation Checks

Valence

To assess the effectiveness of the valence manipulation, participants were asked to give their *initial impressions* of the other participant by stating their agreement with five separate items using a 11-point scale which ranged from 1 (*strongly agree*) to 11 (*very strongly disagree*) with a described midpoint of four to expand the portion of the scale used to indicate a negative impression. These five items assessed whether the other participant was likable, nice, unfriendly, possessed many negative qualities, and seemed to be a good person. The items were individually standardized across all participants in all conditions, reverse scored where needed so that higher numbers always indicated a more negative impression of the other participant, and finally averaged to form a composite (Cronbach's $\alpha = .93$). A one-way between-participants ANOVA revealed a significant effect for valence, $F(2, 67) = 26.02$, $p < .001$, and Tukey post hoc tests showed reliable differences among all pairwise comparisons (all $ps < .05$). Positive valence participants had the most favorable impression of the other participant ($M = -0.43$, $SD = 0.80$) followed by neutral valence condition ($M = -0.01$, $SD = 0.54$). As expected, negative valence participants reported the most unfavorable first impression ($M = 1.34$, $SD = 0.60$).

Trigger

To assess the affective reaction to the triggering event, participants answered five items on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

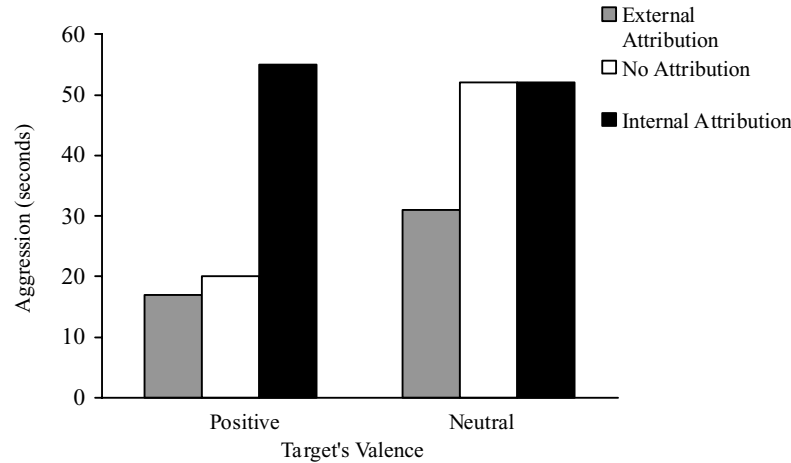


Fig. 1. Impact of target valence and attributions on triggered displaced aggression.

The items included the emotions of irritated, happy, angered or upset, pleased and annoyed. The items were averaged to form a composite after proper reverse scoring (Cronbach's $\alpha = .91$) with higher values corresponding to a more negative emotional reaction. Confirming a successful manipulation of a triggering provocation, participants in the trigger condition indicated a more negative reaction to the evaluation of their NASA task (viz. manipulation of trigger; $M = 5.30$, $SD = 1.10$) compared to those in the no trigger condition ($M = 2.44$, $SD = 1.04$), $t(68) = 7.66$, $p < .001$, $d = 2.59$.

Aggression Measure

A 2 (valence: positive/neutral) $\times 3$ (attribution: internal/external/no-attribution control) ANOVA revealed main effects for both valence, $F(1, 54) = 9.75$, $p < .01$, and attribution, $F(2, 54) = 13.92$, $p < .001$. These main effects were qualified however by a valence by attribution interaction, $F(2, 54) = 4.84$, $p = .012$ (see Fig. 1).

There are two ways to interpret this significant interaction. First, simple effect analyses for attribution were conducted separately for the positive and neutral valence conditions. The level of attribution differentially impacted the degree of aggression under conditions of both positive and neutral valence, $F(2, 54) = 14.12$, $p < .001$ and $F(2, 54) = 4.65$, $p < .025$, respectively. Consistent with expectation, for *positive* valence targets simple comparison analyses (Keppel & Zedeck, 1989) indicate no difference in aggression between the external attribution ($M = 17$ s) and no-attribution conditions ($M = 20$ s), $F(1, 54) = 0.14$, $p > .10$,

$d = 0.16$, whereas significantly more aggression was directed towards targets who gave an internal attribution for the triggering event ($M = 55$ s), $F(1,54) = 28.10$, $p < .001$, $d = 2.27$ (see Fig. 1). Under conditions of *neutral* valence, simple comparison analyses showed no difference in the aggression directed at internal attribution ($M = 52$ s) and no-attribution ($M = 52$ s) targets. In contrast, external attribution targets ($M = 31$ s) received much lower levels of aggression, $F(1,54) = 9.30$, $p < .01$, $d = 1.31$.

A second method by which to interpret the overall interaction is to analyze the simple effects of valence separately for the three attribution conditions. Results indicated a significant simple effect for the *no-attribution control*, $F(1, 54) = 16.20$, $p > .001$, $d = 1.72$, wherein positive valence targets ($M = 20$) received less aggression relative to neutral targets ($M = 52$). Participants also reported marginally less trigger-induced negative affect when the triggering event came from these positive valence targets ($M = 4.62$, $SD = 1.30$) compared to the neutral valence targets ($M = 5.70$, $SD = 1.04$), $t(18) = 2.04$, $p = .056$, $d = 0.87$. Similar results were obtained for the external attribution targets ($M = 17$ and $M = 31$ for the positive and neutral targets, respectively), although the effect was statistically marginal, $F(1, 54) = 3.10$, $p < .10$, $d = 0.75$. There was, however, no difference in the aggression displayed towards positive ($M = 55$) and neutral ($M = 52$) targets when a potential internal attribution was provided for the triggering event.

Correlational Findings (Affect, Attribution, and Aggression)

The correlation between aggression and (a) trigger-induced negative affect and (b) the subscales of the CDS (Russell, 1982) was separately calculated for two types of conditions. The first includes those cases in which the initial impression and the target's action are "*consistent*" (e.g., the positive valence/no trigger and negative valence/yes trigger conditions in Pedersen et al., 2006, Study 2) or conditions wherein there is no strong initial impression of the target. One condition in the current experiment conforms to this situation (i.e., neutral valence/no-attribution/yes trigger). Consistent with expectation, the correlation between affect and aggression was positive and marginally significant for this condition, $r(9) = .57$, $p = .086$. In addition, in contrast with inconsistent targets, these targets showed no reliable correlation between aggression and attributions for the trigger ($p > .10$).

The second condition includes cases wherein the target is either "*inconsistent*" (that is, there is a discrepancy between the valence of the target and the target's subsequent actions) or conditions in which a potential attribution for the triggering event has been provided to participants. The remaining cells in the study fall in this category. As expected, the correlation between trigger-induced negative affect and aggression was not significant for these targets, $r(59) = 0.21$, $p > .10$. In contrast,

a composite of attributions about locus and controllability⁴ were correlated with aggression, $r(59) = .28, p < .05$. Specifically, the more internal and controllable the cause of the trigger was perceived by participants, the higher the subsequent levels of aggressive responding.

“Spontaneous” Attributions Given by Participants in the No-Attribution Control Conditions

Participants filled out an open-ended attribution item that asked them to write down the reason(s) the other participant might have given them the (negative) evaluation on the astronaut task (viz. the induction of trigger). Responses were coded as either an *external* attribution (e.g., “The other participant is experiencing a difficult personal situation that may have influenced his/her harsh evaluation.”), an *internal* attribution (e.g., “He or she is not taking the experiment seriously and just graded me poorly because of that . . .”), and “unclear” as to whether the response constituted an external or an internal attribution. For *positive* valence targets who did not provide an attribution for the triggering event, participants tended to spontaneously attribute the trigger to external reasons ($n = 5$) relative to internal factors ($n = 2$) whereas this trend was reversed for *neutral* valence targets (viz. 1 external and 7 internal attributions). A Fisher’s Exact Test indicated that this differential response rate was significant ($p < .05$).

Furthermore, the attribution provided by participants for the triggering event also impacted the corresponding level of aggressive responding toward those target individuals. Specifically, participants in the positive valence condition who gave an external attribution for the trigger were much less aggressive ($M = 12$ s) than those who believed the triggering event was caused by internal factors ($M = 40$ s), $t(5) = 4.47, p < .01, d = 3.15$. Neutral valence participants also exhibited this same pattern (i.e., $M = 40$ s for external attributions and $M = 54$ s for internal attributions), but the effect was not reliable, $t(6) = 0.74, p > .10, d = 0.53$. These findings correspond to the impact of experimentally manipulated attributions in that an internal attribution for the triggering event produced more aggression than an external attribution, both for positive and neutral targets (see Fig. 1).

⁴The CDS (Russell, 1982) contains items corresponding to Weiner’s (1979) casual attribution dimensions of (a) locus of causality, (b) stability, and (c) controllability. Correlations were calculated among these three factors. Results indicated that the dimensions of *locus* and *controllability* were highly correlated, $r(69) = .35, p < .01$. Although contrary to the theorizing of Weiner (1979, 1986) who argued for the orthogonality of these three dimensions, the current findings are consistent with the work of Vallerand and Richer (1988) and Folkes (1984) who reported similar significant correlations between the locus and controllability dimensions when using the CDS.

DISCUSSION

Pedersen et al. (2006) hypothesized that attributional processes play a key role in determining levels of aggression in the context of inconsistent target information. The current study tested this assumption by directly manipulating attributions. Consistent with expectation, when faced with a minor triggering event from a liked person (a situation in which target attributes and behavior were inconsistent), the degree of retaliatory aggressive responding mirrored that directed towards positive valenced targets for which an external attribution had been provided (see Fig. 1). In contrast, when individuals receive a minor provocation from targets towards whom they do not have positive feelings (e.g., neutral valence targets) and for whom no inconsistency existed between target attributes and behavior, they tended to aggress in a manner consistent with situations in which an internal attribution was presented. As such, attributions that serve to suppress aggressive responding appear differentially prevalent for positive valence (compared to the neutral valence) targets. This hypothesis was supported by the interaction in Fig. 1. Additional data suggests that what might underlie this effect are spontaneous attributions for the target's behavior. Although interesting, this data must be viewed with caution due to a small sample size and the lack of more detailed information from participants concerning their attributions.

In addition, negative affect from the triggering event predicted aggression only for "consistent" targets. In contrast, attributions of locus and controllability were correlated with aggression for targets who presented "inconsistent" information or for whom attributions were presented. These findings do not imply that attributions and affect are irrelevant for cases of consistent and inconsistent targets, respectively. The data only indicate the circumstances in which these antecedents significantly predicted aggression and where they did not.

The current study makes several important contributions to the aggression literature. First, it enhances our understanding of when (a) *attributions* or (b) *affect* are more important in determining aggressive behavior. Second, it expands the CNA model of aggression by highlighting the importance of inconsistent (expectancy-disconfirming) target information. Third, it implicates a mechanism (viz. attributions) by which target characteristics can impact aggression. Fourth, it defines a boundary condition wherein initial positive feelings toward a target no longer serve to reduce aggressive responding (i.e., when an internal attribution is provided for an individual's provoking behavior). Finally, the findings are supportive of the position of the CNA model that attributions are not always necessary for the elicitation of anger and aggression. These findings have important consequences for our understanding of the antecedents and mechanisms that underlie aggressive behavior.

ACKNOWLEDGMENT

I thank Norman Miller for his helpful comments and suggestions concerning this manuscript.

REFERENCES

- Anderson, N. H. (1968). Likableness ratings of 555 personality-trait words. *Journal of Personality and Social Psychology*, 9, 272–279.
- Averill, J. R. (1982). *Anger and aggression: An essay on emotion*. New York: Springer-Verlag.
- Axelrod, R. (1984). *The evolution of cooperation*. New York: Basic Books.
- Bargh, J. A., & Thein, R. D. (1985). Individual construct accessibility, person memory, and the recall-judgment link: The case of information overload. *Journal of Personality and Social Psychology*, 49, 1129–1146.
- Bartholow, B. D., Fabiani, M., Gratton, G., & Battencourt, B. A. (2001). A psychophysiological examination of cognitive processing of and affective responses to social expectancy violation. *Psychological Science*, 12, 197–204.
- Berkowitz, L. (1989). Frustration-aggression hypothesis: Examination and reformulation. *Psychological Bulletin*, 106, 59–73.
- Berkowitz, L. (1990). On the formation and regulation of anger and aggression: A cognitive-neoassociationistic analysis. *American Psychologist*, 45, 494–503.
- Berkowitz, L. (1993). *Aggression: Its causes, consequences, and control*. New York: McGraw-Hill.
- Berkowitz, L., & Harmon-Jones, E. (2004). Toward an understanding of the determinants of anger. *Emotion*, 4, 107–130.
- Clore, G. L., & Centerbar, D. B. (2004). Analyzing anger: How to make people mad. *Emotion*, 4, 139–144.
- Dyck, R. J., & Rule, B. G. (1978). Effect on retaliation of causal attributions concerning attack. *Journal of Personality and Social Psychology*, 36, 521–529.
- Ferguson, T. J., & Rule, B. G. (1983). An attributional perspective on anger and aggression. In R. G. Geen & E. I. Donnerstein (Eds.), *Aggression: Theoretical and empirical reviews*, Vol. 1 (pp. 41–74). New York: Academic Press.
- Fiske, S. T., & Taylor, S. E. (1984). *Social cognition*. London: Addison-Wesley.
- Folkes, V. S. (1984). Consumer reactions to product failure: An attributional approach. *Journal of Consumer Research*, 10, 398–409.
- Hastie, R. (1984). Causes and effects of causal attribution. *Journal of Personality and Social Psychology*, 46, 44–56.
- Keppel, G., & Zedeck, S. (1989). *Data analysis for research designs: Analysis of variance and multiple regression/correlation approaches*. New York: W.H. Freeman.
- Kulik, J. A. (1983). Confirmatory attribution and the perpetuation of social beliefs. *Journal of Personality and Social Psychology*, 44, 1171–1181.
- Miller, N., & Campbell, D. T. (1959). Recency and primacy in persuasion as a function of the timing of speeches and measurements. *Journal of Abnormal and Social Psychology*, 59, 1–9.
- Park, B. (1986). A method for studying the development of impressions of real people. *Journal of Personality and Social Psychology*, 51, 907–917.
- Pedersen, W. C., Bushman, B. J., Vasquez, E. A., & Miller, N. (2006). *The moderating effect of target attributes on triggered displaced aggression*. Manuscript under review.
- Pedersen, W. C., Gonzales, C., & Miller, N. (2000). The moderating effect of trivial triggering provocation on displaced aggression. *Journal of Personality and Social Psychology*, 78, 913–927.
- Pyszczynski, T. A., & Greenberg, J. (1981). Role of disconfirmed expectancies in the investigation of attributional processing. *Journal of Personality and Social Psychology*, 40, 31–38.
- Roseman, I. J. (2004). Appraisals, rather than unpleasantness or muscle movements, are the primary determinants of specific emotions. *Emotion*, 4, 145–150.

- Russell, D. (1982). The Causal Dimension Scale: A measure of how individuals perceive causes. *Journal of Personality and Social Psychology*, 42, 1137–1145.
- Stern, L. D., Marrs, S., Millar, M. G., & Cole, E. (1984). Processing time and the recall of inconsistent and consistent behaviors of individuals and groups. *Journal of Personality and Social Psychology*, 47, 253–262.
- Vallerand, R. J., & Richer, F. (1988). On the use of the Causal Dimension Scale in a field setting: A test with confirmatory factor analysis in success and failure situations. *Journal of Personality and Social Psychology*, 54, 704–712.
- Vasquez, E. A., Denson, T. F., Pedersen, W. C., Stenstrom, D. M., & Miller, N. (2005). The Moderating Effect of Trigger Intensity on Triggered Displaced Aggression. *Journal of Experimental Social Psychology*, 41, 61–67.
- Weiner, B. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology*, 71, 3–25.
- Weiner, B. (1985). “Spontaneous” causal reasoning. *Psychological Bulletin*, 97, 74–84.