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Acting Righteously:

The Influence of Attitude, Moral Responsibility, and Emotional Involvement

Joseph de Rivera, Elena Gerstmann, and Lisa Maisels

Clark University

Many people feel that nuclear weapons are potential sources of injustice. Even if used to prevent an attack or to retaliate they would kill thousands, indiscriminately and undeservedly. Yet the Senate of the United States has refused to ratify the Comprehensive Test Ban Treaty, the Department of Energy is restarting tritium production, and a congressional committee has called for an immediate start on the designing of new nuclear warhead (Defense Monitor, 1999).

While some citizens believe the United States should continue to maintain its nuclear superiority, polling data repeatedly shows that a majority favor nuclear disarmament (Kay, 1998). Given their majority status, why do the many citizens who are opposed to nuclear weapons fail to press for nuclear disarmament? Why is it hard for peace organizations to mobilize individuals to demand nuclear disarmament, or to make it an issue in election campaigns? One reason involves a relationship between perceived efficacy and justice. If people believed that they could convince the government to move towards nuclear disarmament then many might demand disarmament in order to avoid the possibility of hundreds of thousands of innocent deaths. However, most people doubt that they can influence governmental policy and prevent nuclear war. Hence, to engage in any individual action advocating nuclear disarmament implies the possibility that nuclear war might really occur. This requires relinquishing the belief

that the person is living in a just world (Lerner, 1980). When people feel powerless to influence the government in order to prevent a nuclear war, it is easier to maintain a belief in a just world by assuming that nuclear war is so unthinkable that it will not occur. Hence, individual action for disarmament is not perceived as necessary. This is but one example of the gap between moral reasoning (nuclear war is bad) and moral action (to prevent it). As Bandura (1999) emphasizes, understanding moral agency requires us to link moral reasoning to moral engagement and action.

What leads some persons to face injustice, become morally engaged and act? In a previous study (de Rivera, Gerstmann, & Maisels, 1994) we demonstrated that when we made a nuclear test ban salient and provided conditions that facilitated writing to congressional representatives, some persons became emotionally engaged and wrote letters. This occurred without a specific victim with whom they could empathize and in the absence of normative pressure. In the analysis of Reykowski, (this volume) they were motivated by axiological rather than allocentric or normocentric motives, and we argued that it would be fruitful to distinguish between such prosocial righteous behavior (involving impersonal justice) and prosocial behavior that involved personal helping.

We found, as did Montada and Schneider (1989), that righteous behavior was predicted by anger rather than by the sympathy or personal distress which is often involved in helping individual persons (Batson, Early, & Salvarani, 1999, Batson, Fultz, & Schoenrade, 1987; Eisenberg, 1989). That is, the tendency to write was predicted by the extent of moral outrage that was reported rather than by either sympathy or fear. We argued that the emotion of anger was particularly suited to facilitate righteous behavior because the structure of that emotion is characterized by an "instruction" to remove any challenge to what a person asserts ought to exist (See de Rivera, 1977). We presumed that the material reminded persons about the possibility of

nuclear war and posed a challenge as to what ought to exist. Those persons who had become angry had accepted the responsibility of writing as a way of removing this moral challenge. However, we lacked evidence that the anger of the writers was related to their acceptance of moral responsibility.

A number of empirical studies support the idea that righteous behavior is a function of personal responsibility. For example, Schwartz (1977) showed that donating blood depends as much on an acceptance of personal responsibility as on attitudes towards donating, and Tyler and McGraw (1983) showed that anti-nuclear war activism is as strongly related to a sense of moral responsibility as to feelings of citizen-efficacy. Theoretically, the importance of responsibility may be due to the fact that the acceptance of responsibility is an aspect of a person's identity, and Blasi and Oresick's (1985) analysis of self-consistency suggests that morally responsible action occurs as an expression of this sense of identity. They argue that when a person has made a personal commitment to a set of values that person's identity is at stake if action (or lack of action) is inconsistent with those values. However, persons may or may not be aware that their actions are inconsistent with their values (Batson et.al., 1999), and we must ask if a general acceptance of responsibility will lead persons to accept responsibility in particular situations. Reylowski (this volume) suggests that emotional involvement only leads to prosocial action when a person accepts responsibility. Might the inverse also be true? Might a person's general sense of moral responsibility only lead to action when the person is emotionally involved? In the case of righteous behavior, axiologically motivated, will this usually involve anger?

In the study reported below, we attempted to arouse emotion in one group of subjects and have another group be passive bystanders. While our experimental manipulation was not

completely successful, we were able to show that the arousal of anger was related to moral responsibility and was an important predictor of action.

To investigate the effects of emotional involvement we wanted to create ideal conditions for a person to act on his or her beliefs with minimal social pressure. We wanted the possibility of action to be clear and yet for it to involve some real cost. Our earlier work had established that most students had not previously written a political letter and found it to be a difficult task. Hence, we attempted to give subjects clear reasons for a nuclear test ban, a hope that it could be obtained by congressional action that could be spurred on by citizen advocacy, and the opportunity to write a letter to their congressional representative. A week before, we obtained measures of attitudes towards a nuclear test-ban and towards the behavior of writing letters to congressional representatives, and a measure of the degree to which persons felt morally responsible for preventing nuclear war. By comparing the predictive power of the different measures when persons were or were not emotionally involved, we could examine how involvement affected moral action.

We believed that action would only occur if persons were emotionally involved in the issue. However, we were not sure of the best way to constitute a control group. We wanted the group to have the same information yet lack emotional motivation. If we simply presented information about a test ban and congressional advocacy, subjects might not act because of a relative lack of salience (See Fiske, 1987; Fox & Schofield, 1989). Yet we wanted to show that emotional involvement did not simply create salience but, rather, moved people to act by engaging their moral responsibility. Hence, we attempted to create salience without emotional involvement by using technical writing about the Hiroshima and Nagasaki bomb drops. We hoped to raise the issue of Hiroshima and remind people of the horror of nuclear weapons and

yet have them detached rather than moved. We reasoned that even those with moral responsibility would not act in these conditions; they would still live in a just world, unconnected to the injustice of a world with nuclear weapons.

Method

Participants

Participants were 38 undergraduates recruited from an introductory psychology course as volunteers to help science (and with the possibility of winning a \$100.00 raffle). Subjects who indicated an interest in participating in a study on "The effects of different media presentations on attitudes" were given a preliminary questionnaire on beliefs about nuclear war, attitudes towards political participation, and past participation in behaviors opposing or supporting the development of nuclear weapons. About half of the subjects who took questionnaires returned them. Most indicated that they supported a comprehensive nuclear test ban. Those who did not support a test ban or were not U.S. citizens were not used in the study. Thus, all 38 participants were U.S. citizens who supported a comprehensive test ban. They were randomly assigned to either an emotion or a detached condition.

Preliminary Questionnaire

Attitude towards a test ban. Participants were asked whether they agreed or disagreed with the statement: "Congress should support an agreement with the Soviet Union and all other countries to ban the testing and production of nuclear weapons" This was scaled from +5 (agree completely) to -5 (disagree completely) with no midpoint. It was followed by a question that asked about the importance of such an agreement (scaled from 1 to 10).

Attitude towards writing representatives scale. A scale measuring attitudes towards communicating with congressional representatives used six items (answered on 10 point Likert

scales labeled "exactly" to "not at all") with a Cronbach's Alpha of .85. Three of the items were normative (e.g. "My family would respect me if I were to write to my Congressperson") and three concerned the effectiveness of writing. The item with the highest item-total correlation was, "I think it would be a waste of time for someone to write to his/her congressperson" (reverse scored).

Moral responsibility scale. A scale measuring the extent to which a subject felt responsible for preventing nuclear war used five items with $\alpha = .87$. The most highly correlated item was, "It is my responsibility to care for our earth by working to ensure that nuclear war never occurs."

Promotional Material.

A week after the preliminary questionnaire participants came to the lab individually and were given the following:

Congressional aide video. All participants viewed a ten-minute videotape of an interview with a congressional aide. The aide discussed how U.S. congressional representatives are heavily influenced by the letters they receive from their constituents and how representatives could not adequately represent their constituents without knowing how the constituents felt. He mentioned that if a representative was voting in a way that the person did not like, the person should write a letter expressing displeasure, while if the representative was voting in a way that the person wanted the representative should be thanked.

Information on test ban. All participants read an op-ed piece from the "Christian Science Monitor" (Schrag, 1989) which argued that a test-ban would delay the spread of nuclear weapons and prevent the development of new weapons. An "update", written by the experimenters, was

attached and mentioned that a test-ban bill lost 207-211, but would be voted upon in Congress again in a few months.

Intellectual material. In the "detached" condition, participants (N=19) read 14 pages on the physical effects of the Hiroshima and Nagasaki bombs. These pages were taken from the first two chapters of a work on the bombings (The Committee for the Compilation of Material, 1981). While people were mentioned in passing, the pages used were written for a scientifically oriented reader and mainly discussed calculation of the time and altitude of the bomb drops and their sudden and immense thermal effects.

Emotional Material. In the "emotion" condition, participants (n=19) saw a video tape, The Lost Generation produced by a committee of Japanese citizens. This 20-minute tape juxtaposed contemporary interviews with survivors of the Hiroshima and Nagasaki bombings with army film-footage taken days after the bombing. In some cases survivors were interviewed as they watched themselves on early films. Thus, a middle-aged woman might recognize herself in footage taken of a badly burned 15-year-old. Scenes of school children playing in modern day Hiroshima were contrasted with footage of the totally desolated city, and the narrator stated that such suffering should not be allowed to happen again. It seemed to embody a compelling emotional appeal for action.

Emotion Questionnaires

Emotional response to the material about the test ban and Hiroshima was measured in two different ways. First, four special "depth of feeling" items were created to try and tap the intensity of the subject's emotional experience.¹ The "angry and frustrated" and "miserable and mad" items (See table 1) were summed to create a measure of anger, and the "sorrowful and overwhelmed" and sorrowful and depressed items were summed to yield a measure of sadness.

Second, participants were asked to indicate the extent they to which were feeling each of 23 different feelings (on 7 point scales.) This list of feelings included satisfaction, outrage, sympathy, fear, guilt, and hopelessness (six feelings used in earlier studies), as well as feelings which reflected empathy or self-distress, and feelings that had been reported by other subjects exposed to the stimulus material.

Waiting Room Material

After participants had seen or read the promotional material, they were taken to a different room where they filled out the waited to be interviewed by a different experimenter. This room contained: (1) a number of current magazines, catalogues, and copies of the student newspaper; (2) a list of addresses for the authors or producers of all the media that were utilized; (3) a list of congressional representatives and records as to whether they voted for or against a comprehensive nuclear test ban; (4) writing material and a sample letter format (without content).

Procedure

All participants were randomly assigned to one of the experimental conditions. In order to minimize social influence they were seen individually and by two experimenters. The first met the participant and gave a consent form stating that one could leave at any time that one wished. Participants were told that the experimenters were interested in evaluating the effects of different media presentations, that different people would be receiving different presentations and that the best way to be helpful was to answer all questions as honestly as possible. All participants then watched the congressional aid video and completed questions that re-measured their attitude towards communicating with the government. They were then asked to read the op-ed piece on the nuclear test ban and read or view the material on Hiroshima. When participants notified the

experimenter that they were finished, they were taken to the waiting room and given the emotional response questionnaires and the same items about moral responsibility and attitude towards a test ban that they had answered a week before.

Social influence to take political behavior was deliberately minimized by carefully constructed instructions. Participants were told, "when you are finished with this (the questionnaires) you will have your interview and debriefing. (Name of the second experimenter) will come knock on the door in about twenty minutes. If you get done early, there's some magazines over there to look at. Some people have told us that they want to see how their congressperson voted, so you can look that up over there if you want to, and some people want to write to their congressperson, or the author, or the film producer, or whatever, so there's envelopes and addresses and paper and a sample letter over there. Okay? (Name of the second experimenter) will knock on the door in twenty minutes." A clock was on the wall, and the instructions were successful in that it was not until later, when the interview began to focus on what the participant actually did in the waiting room that most participants began to realize that whether or not they wrote, or thought about writing, was of any concern to the first experimenter.

Thirty minutes later, the second experimenter came to the room and stated she would be busy for a few more minutes but that the participant could get started answering a question. She then gave him or her a sheet of paper with the simple statement: "Though we are interested in how you felt during the whole experiment, we are especially interested in the last media presentation on Hiroshima you received. Please write down, as exactly as you can, how it made you feel, during the presentation and afterwards. What did you do and think about and feel in

this room? (Please be exact.)" Five minutes later she interviewed the participant about his or her experience in the waiting room and then debriefed the subject.

Behavioral Index. The participant's behavior was scored on the following six point scale:

Reported only reading magazine=0; reported checking representatives voting record=1; reported checking voting record and thinking of writing but dismissing the idea=2; reported checking record and intention to write=3; reported intention to write and took envelope or copied down address=4; wrote letter in waiting room=5.

Results

Behavior varied widely ranging from eight participants who simply read magazines in the waiting room to three who immediately wrote letters. The mean score on the behavioral index was 1.87.

Participants in the emotion condition were more inclined to act ($\bar{m} = 2.3$) than those in the detached condition ($\bar{m} = 1.5$), but the difference might be attributed to chance, $t(36)=1.55$, $p<.065$ (single tail value). We, therefore, explored the results in three different ways. First, we assumed that the emotion condition created more emotional involvement and a greater propensity to act in accord with one's beliefs and investigated why this might be so. Second, we avoided that assumption and contrasted those subjects who were emotionally affected with those who were not. Finally, we contrasted those who acted (regardless of the experimental condition) with those who failed to act.

Emotion vs. Detached Condition

An examination of emotional responses revealed a significant difference between the experimental conditions. The four items which attempted to measure depth of response by inquiring about imagined duration were particularly effective, both in distinguishing between

conditions and in predicting behavior. The items and their means, standard deviations, and correlations with behavioral index are displayed in table 1.

Insert Table 1 About Here

While not as effective, the more traditional emotion items also revealed differences between the conditions. All 23 items were in the expected direction on the 7 point scales. In the emotional condition there were significantly ($p < .05$) higher means for distressed ($\underline{M}=5.0$, vs. $\underline{M}=3.9$), moved ($\underline{M}=5.3$ vs. $\underline{M}=3.6$), and outrage ($\underline{M}=5.1$ vs. $\underline{M}=3.7$), and a significantly lower means for bored ($\underline{M}=1.5$ vs. $\underline{M}=2.5$). All correlations with the behavioral index were in the expected direction and those with alarmed, ashamed, contented, disturbed, and moved were statistically significant at beyond the .05 level.²

A "personal distress" scale was formed by adding the ratings on alarmed, distressed, disturbed, grieved, perturbed, upset, and worried. An "empathic concern" scale was formed by adding the ratings on compassion, moved, softhearted, sympathy, tender and warm. Neither scale discriminated between the emotion and detached group. The personal distress scale was somewhat predictive of behavior. Emotional condition $r(19) = .31$, detached condition $r(19) = .25$, overall $r(38) = .33$, $p < .04$. The empathic concern scale was not predictive of behavior.

A series of 2x2 repeated measure analyses of variance explored the before - after effects of the two experimental conditions. As expected, since we deliberately only used persons who had favorable attitudes towards a test ban, neither attitude towards a nuclear test ban nor importance of a test ban showed significant increases or interactions. As we had hoped, attitude towards communicating with representatives improved under both conditions, ($F[1,36] = 5.97$) and the interaction did not approach significance. As anticipated, there was a significant interaction between experimental condition and pre-post measures of personal responsibility, F

(1,35)=4.9, $p=.034$. The acceptance of personal responsibility increased in the emotion condition ($M=+3.3$) while it slightly decreased in the detached condition ($M=-1.4$).

We then correlated the final scores on attitude towards communicating with representatives, acceptance of responsibility, anger and sadness with the behavioral index, comparing the correlations when subjects were in the emotional and detached conditions. The results are shown in table 2.

Insert Table 2 About Here

While attitude towards communicating with representatives predicted behavior in both conditions, moral responsibility significantly predicted behavior in the emotion but not in the detached condition. Thus it appears that moral responsibility is activated or made relevant in a particular situation in which a person is emotionally involved. Anger also significantly predicted behavior in the emotion condition.

Emotionally Affected vs. Non-affected Subjects

Examination of the participants written statements about their feelings revealed that 14 of the 19 persons in the emotion condition expressed the intense emotion we had predicted. Anger, outrage, and disgust were expressed by most (As one participant wrote, "I was repulsed, disgusted, and very angry."). However, four of the 14 who were emotionally involved expressed only intense sorrow, sympathy or sadness, and one became upset and angry at the film producer! The four persons who did not report intense emotions appeared to defend by intellectualizing (One wrote, "I found the presentation interesting")

As expected 10 of the 19 subjects in the detached condition showed little or no emotional response (e.g. "I was curious to read about the technical details"). However, to our surprise, nine subjects were emotionally affected by the article. In most of these cases, the article stimulated

affect-laden thoughts about atomic war that were unrelated to the article per se (One participant wrote, "I felt sad...because...families were split up...doesn't the government have any feelings...") One subject became angry (and wrote a letter) because she was, "...taken back by how technical the article was...it made me feel that the U.S. wasn't concerned about the people involved."

A comparison between the 23 participants from both conditions who reported being affected and the 15 who were not affected revealed a highly significant difference in behavior ($M=2.6$, vs. 0.7 , $t(36)=4.29$, $p<.0001$). For the 38 participants, behavior was correlated $+0.57$ ($p<.001$) with anger and $+0.45$ ($p.02$) with sadness.

Actors vs. Non-Actors

Since the attempt to experimentally control emotional involvement was only partially successful, we made an independent analysis of when subjects acted on their beliefs. First, we compared the 10 subjects who scored 3 or above on the behavioral index (wrote or intended to write) with the 28 who scored below 3. Seven of the ten actors were in the emotion condition, all four "depth" of emotion measures were significantly greater at $p<.01$, and the extent of their emotional arousal was evidenced by significantly greater ($p<.05$) scores on alarmed, distressed, disturbed, moved, upset, and personal distress. T-tests also revealed significant differences on positive attitude towards writing representatives, $t = 3.09(36)$, $p<.001$, and degree of moral responsibility, $t=2.08(36)$, $p<.05$.

To investigate whether high scores on any one of these three factors sufficed to insure action we selected participants who were the upper quartile of attitude towards writing representatives, participants in the upper quartile of moral responsibility, and participants who were in the upper quarter of emotional arousal (as indicated by the four depth of emotion measures). In each case it was clear that the factor was necessary but not sufficient to insure

action. Of the 11 subjects highest in attitude towards writing, 5 failed to act and 4 of these showed no emotional arousal. Of the 10 subjects highest in moral responsibility, 5 failed to act and 4 of these showed no emotional arousal. Of the 11 subjects highest in emotional arousal, 5 failed to act and 3 of these were below average in attitude towards writing representatives and/or moral responsibility.

To investigate the relative importance of attitude towards writing, moral responsibility and the arousal of anger, we entered these variables into a multiple regression equation to predict the behavior of writing. Although, taken alone, all three variables significantly predicted behavior, only attitude and anger contributed to the final multivariate equation $R(37) = .66$ with beta weights of .43 and .36 respectively.

While it is anger, rather than personal responsibility, that combines with attitude to predict the moral action of writing, this anger was predicted by the moral responsibility scores that were obtained a week before participants viewed or read the material about Hiroshima ($r(37) = +.41, p < .01$). Hence, we may postulate that the acceptance of personal responsibility for doing something to prevent nuclear war led to anger when the participants were challenged by the material on the continued testing of weapons and the evidence of their destructive effects. Nevertheless, it is the degree of anger rather than the degree of responsibility that best predicts the extent to which moral action occurred.

Discussion

Since anger rather than personal responsibility is a more direct predictor of moral action we must modify Blasi's (1999) argument that emotion does not explain moral motivation. While we may agree that moral behavior requires the acceptance of moral responsibility and the

intentionality this implies, the motivation that is required for moral action may require emotion, and emotion of a particular sort.

It is interesting to note the limitations of our experimental manipulation. On the one hand, the very powerful video appears to have provoked a defensive reaction in 5 of the 19 subjects. On the other hand, the apparently innocuous scientific article stimulated latent feelings of resentment towards government or sorrow over atomic war in 9 of 19 subjects. Nevertheless, it is clear that on the average the video produced more emotional involvement and, particularly, deeper feelings of anger.

Of course, the stimulus materials differed in ways besides emotional evocativeness. Some of these other differences may have accounted for some of the differences in behavior we observed. Further, while the video created an emotional involvement by leading the viewer to empathize with the victims of Hiroshima, it also made a moral appeal. Hence, we cannot be sure whether either one of these components of emotional involvement is sufficient, or whether both are necessary to stimulate action. Future studies should attempt to separate these features. The study also suffers from the fact that since few participants actually wrote a letter while they were in the waiting room, our measure of pro-social behavior was partly based on reports of intention. In the future, it would be desirable to find behaviors that a larger percentage of the subjects would objectively perform.

In spite of these limitations the study clearly suggests that emotional involvement (as contrasted with mere intellectual awareness) is necessary if a person is to act on his or her beliefs in the absence of social pressure. Nine of the ten persons who acted in the study reported 5 or higher on the 7 point "angry and frustrated" item. No matter how much a person was for a

nuclear test ban or had a positive attitude towards communicating with the government, if emotional energy in the form of anger was not aroused the person did not act.

Yet it is also true that emotional motivation is not sufficient for action. There were eleven other subjects who reported a 5 or higher on the "angry and frustrated" item yet failed to act. Compared to subjects who did act, these subjects had significantly lower scores on attitude towards writing their representative, $t(18)=2.30$, $p<.05$.

The role of attitude towards writing seems clear. We would expect that people with more positive attitudes towards writing would be more likely to write to their congressperson. But how are we to understand how that attitude interacts with moral responsibility and emotional arousal? There has been continued debate as to whether moral obligation adds predictive power to that provided by attitude towards behavior and social norms (Gorsuch & Orthberg, 1983; Pomazal & Jaccard, 1976; Schwartz & Tessler, 1972; Zuckerman & Reis, 1978). The data reported here suggest that moral obligation adds predictive power when emotion is involved. Thus, in this study the proclaimed responsibility for preventing nuclear war did not lead a person to act on these beliefs unless emotion was involved. Only 5 of the 10 subjects in the upper quartile of moral responsibility acted. Four of these five subjects were in the emotional condition and all 5 reported high levels of arousal. The 5 subjects who did not act were all in the detached condition and only one reported some arousal.

Yet it is also true that emotional motivation is not, in itself, sufficient reason to act. Of the 19 participants in the emotional condition, 14 showed appropriate levels of emotional involvement yet only 7 acted. When we contrasted these actors with the non-actors we did not find significant differences in attitude towards behavior, or in evaluation or importance of a test ban. We did find a significant difference in their moral responsibility, $t(12)=2.86$, $p<.022$.

On the one hand, these data support Blasi and Oresick's (1985) view that moral action depends on personal commitments rather than simple emotional forces. On the other hand, it seems clear that the motive to maintain a consistent identity (and, hence, to act in accord with one's commitments) is only challenged when one becomes emotionally involved. Participants with high moral responsibility failed to act in the detached condition unless, despite the experimenters' intentions, they became emotionally involved. Hence, we postulate that, in the absence of normative forces, emotional involvement in a particular situation is necessary if latent moral responsibility is to lead to action.

How may we reconcile findings that stress the importance of emotion with a rational approach towards action, such as that proposed by Fishbein (1980)? A rational approach stresses that action is motivated by intention and that these intentions are affected by a person's attitude towards the behavior and the normative forces acting on the person. We considered the possibility that emotional involvement might increase positive attitudes towards the behavior of writing or the normative forces for a test ban. However, these were already strong and were not increased by emotional involvement. How then does emotional motivation exert its affect? We propose that emotion influences the formation of the intention to act. There is a good deal of evidence from the early experiment of the Lewinian school (see de Rivera, 1977) that intentions are not automatically produced, but are created by the person. It seems reasonable to propose that the motivational energy involved in intention formation may come from emotion.

Certainly, the statements made by subjects while they were in the waiting room support this conjecture. For example, here are reflections from two subjects who had positive attitudes towards communicating with government and high moral responsibility, but who were in the detached condition:

(1) "I was relaxed and browsed through the library catalogue. I also looked up my congressperson and how he voted. I was pleased with his vote. However, I didn't feel any urge to write him."

(2) "If I had been more angered, moved, scared and sad, I believe I would have written...He voted `yes' on the issue and I would like to thank him. But as I sit here, I think there are many causes (on) which my energy would have a greater positive affect."

By contrast, subjects with equivalent attitudes who were in the emotion condition decided to write.

Note that we are not proposing that emotion propels people to action apart from their intentions, rationality, and moral responsibility. Rather, we propose that emotion (which may or may not be in touch with reality) influences the creation of intentions that are based on rational attitudes and moral responsibility.

What is the nature of the emotional energy in the situation with which we are dealing? The data suggest that it is anger (in the form of moral outrage) -- rather than sympathy, sorrow, guilt, or fear -- that is motivating the political action of writing a letter to a congressperson. While this action is clearly pro-social behavior it is "righteous" behavior rather than the "personal helping" behavior that is more frequently studied. It is the energy involved in restoring justice, in removing a challenge to what ought to exist. The situation in which humans find themselves when they face the presence of nuclear weapons is inherently distressing and a challenge to the existence of a just world. While some may be able to take political action out of compassion, many may require the energy of righteous anger in order to overcome the challenge posed by uncaring governments, and to avoid the political passivity implicit in assuming that the

world is just. Of course, this willingness to face political distress may itself be motivated by an underlying empathetic concern. Such a possibility must be investigated in future research.

References

- Batson, C. D., Early, S., & Salvarani, G. (1997). Perspective taking: Imagining how another feels versus imagining how you would feel. Personality & Social Psychology Bulletin, 23 (7), 751-758.
- Batson, D., Fultz, J., & Schoenrode, P. (1987). Distress and empathy: Two qualitatively distinct vicarious emotions with different motivational consequences. Journal of Personality, 155, 19-39.
- Batson, C. D., Thompson, E. R., Seufferling, G., Whitney, H., & Strongman, J. A. (1999). Moral hypocrisy: Appearing moral to oneself without being so. Journal of Personality and Social Psychology, 77 (3), 525-548.
- Blasi, A. (1999). Emotions and moral motivation. Journal for the Theory of Social Behaviour, 29 (1), 1-19.
- Blasi, A., & Oresick, R.J. (1985). Emotions and cognitions in self-inconsistency. In D. Bearison & H. Zimiles (Eds.), Thoughts and emotion. (pp. 147-165). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Chapman, M., Zahn-Waxler, C., Cooperman, G., & Iannotti, R. (1987). Empathy and responsibility in the motivation of children's helping. Developmental Psychology, 23, 140-145.
- Committee for the compilation of materials on damage caused by the atomic bomb in Hiroshima and Nagasaki (1981). Hiroshima and Nagasaki. The physical, medical and social effects of the atomic bombings. New York: Basic Books, Inc.
- The Defense Monitor (1999). Two giant steps closer to a new nuclear arms race (Vol. 28, p. 6). Washington, DC: Center for Defense Information.

de Rivera, J. H. (1977). Field theory as human-science: Contributions by Lewin's Berlin Group. New York: Gardner Press.

de Rivera, J. H. (1994). The emotional motivation of righteous behavior. Social Justice Research, 7 (1), 91-106.

Eisenberg, N., Fabes, R. H., Miller, P. A., Fultz, J., Shell, R., Mathy, R. M., & Reno, R. (1989). Relation of sympathy and personal distress to prosocial behavior: A multimethod study. Journal of Personality and Social Psychology, 57, 55-66.

Fishbein, M. (1980). A theory of reasoned action: Some applications and implications. In M. M. Page (Ed.), Nebraska Symposium on Motivation (Vol. 27, pp. 65-116). Lincoln, NB: Nebraska University Press.

Fiske, S. T. (1987). People's reaction to nuclear war: Implications for psychologists. American Psychologist, 42, 207-217.

Fox, D. C., & Schofield, J. W. (1989). Issue salience, perceived efficacy and perceived risk: An experimental study of the origins of pro-arms control behavior. Journal of Applied Social Psychology, 19, 805-827.

Gorsuch, R. L., & Ortberg, J. (1983). Moral obligation and attitudes: Their relation to behavioral intentions. Journal of Personality and Social Psychology, 44 (5), 1025-1028.

Kay, A. F. (1998). Locating consensus for democracy. St. Augustine, FL: American Talk Issues.

Lerner, M. J. (1980). The belief in a just world: A fundamental delusion. New York: Plenum Press.

Leventhal, H. (1970). Findings and theory in the study of fear communications. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 5, pp. 120-181). New York: Academic Press.

Locatelli, M. G., & Holt, R. R. (1986). Antinuclear activism, psychic numbing, and mental health. The International Journal of Mental Health, 15, 143-161.

McClenney, L., & Neiss, R. (1989). Psychological responses to the threat of nuclear war. Journal of Applied Social Psychology, 19, 1239-1267.

Montada, L., & Schneider, A. (1989). Justice and emotional reactions to the disadvantaged. Social Justice Research, 3, 313-344.

Pomazal R.J. & Jaccard, J.J. (1976). An informational approach to altruistic behavior. Journal of Personality and Social Psychology, 33 (3), 317-326.

Radke-Yarrow, M., & Zahn-Waxler, C. (1986). The role of familial factors in the development of prosocial behavior: Research findings and questions. In D. Olwens, J. Black, & M. Radke-Yarrow (Eds.), Development of antisocial and prosocial behavior (pp. -). New York: Academic Press.

Sarbin, T. (1989). Emotion as situationed action. In L. Cirillo, B. Kaplan, & S. Wapner (Eds.), Emotion and ideal human development (pp.77-99). Hillsdale, NJ: Erlbaum.

Schrag, P. G. (1989). Banning nuclear tests - it's Bush's move. Christian Science Monitor, April 24.

Schwartz, S. H., & Tessler, R. C. (1972). A test of a model for reducing measured attitude-behavior discrepancies. Journal of Personality and Social Psychology, 24 (2), 225-236.

The Lost Generation. Chicago, IL: Documentaries Plus.

Tyler, T. R., & McGraw, K. M. (1983). The threat of nuclear war: Risk interpretation and behavioral response. Journal of Social Issues, 39, 25-40.

Zuckerman, M., & Reis, H. T. (1978). Comparison of three models for predicting altruistic behavior. Journal of Personality and Social Psychology, 36 (5), 498-510.

Table 1.

Measuring the Depth of Emotional Response and its Correlation with The Behavioral Index.

				Condition				
Regarding the bombing on Hiroshima and how it makes you feel, how well does the following statement represent your feelings?								
		M	SD	R	Emotional		Detached	
1 = not at all	7 = very much so				M	SD	R	
You are feeling angry and frustrated, and you can imagine feeling angry and dismay for a long time		4.9a	1.7	.51*	3.7	1.6	.44	
You are feeling sorrowful and overwhelmed, but you can imagine feeling rage.		4.9	1.8	.45	4.4	2.0	.24	
You are feeling sorrowful and depressed, but you can imagine feeling dread.		5.3b	1.6	.41	3.8	1.5	.11	
You are feeling miserable and mad, and you can imagine feeling uncomfortableness and anger for a long time.		5.1c	1.7	.59**	3.3	1.5	.16	

Note. a, b, c = difference between means in different conditions significant at $p < .05$, $.01$, $.001$ level.

* $p < .05$. ** $p < .01$

Table 2.

Correlations between Predictive Factors and The Behavioral Index in Different Conditions.

Condition	Predictive Factors			
	Attitude towards writing	Moral responsibility	Anger	Sadness
Emotional condition	.59**	.72***	.57**	.45
Detached condition	.62**	.11	.33	.20

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Footnotes

1. We want to express our appreciation for Dr. Thomas Snyder who worked with data from Emotional Mining Company to generate these items.
 2. An analysis by gender revealed that females reported significantly more anxiety, distress, sadness, upset and worry, and significantly less boredom and satisfaction. However, female scores on the behavioral index were not significantly higher than males ($t[36]=.12$). It seemed possible that females might be more influenced in the emotion condition and males in the detached condition.
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