

---

# *Scared Selfish: A Culture of Fear's Values in the Age of Terrorism*

MARK KONTY, BLYTHE DUELL, AND JEFF JOIREMAN

---

In the Age of Terrorism fear becomes a constant companion. This is particularly true in a society already beset by a culture of fear. We explore some cognitive effects of fear induced by victimization to explain America's reaction to the events of 9/11. Using reliable measures of value orientations we find that exposure to violence produces a shift in value orientations toward values that are more self-enhancing. America's seemingly fractured state may be explained in part by this effect.

"To him who is in fear everything rustles."—Sophocles

The social psychology of terrorists is obviously fertile ground for theorizing given the social production of most modern terrorism. While some terrorists are disaffected loners (e.g. Theodore Kaczynski), more frequently terrorists are members of subordinate social groups that support an ideology of terror-as-resistance and influence some of its members to wreak violence on their oppressors. Social psychology offers general explanations for this influence, the effects oppression has on the affect and cognition of subordinate group members, how action is tailored to express those thoughts and feelings, and even how social psychological processes produce and maintain stratification systems in the first place. The social psychology of the terrorist and the oppressed group that produces the terrorist is thus a well-plowed field in sociology. Less understood are the social psychological effects of terrorism on the victims.

Certainly, one cannot address the social psychology of terrorism's targets without addressing the role that fear plays in that social psychology. The bombings and shootings defined as terrorism occasionally have strategic goals, but the target of modern terrorism is the dominant population rather than its armed forces, govern-

---

**Mark Konty** is an assistant professor of sociology at Washington State University where he researches crime and deviant behavior from social psychological perspectives. **Blythe Duell** received her B.S. in psychology from the University of Wyoming and her M.S. in psychology from Washington State University. She has presented research at a number of conferences including the American Psychological Society and Society for Personality and Social Psychology. Her research interests include pro-social and cooperative behavior, social dilemmas, and Terror Management Theory. **Jeff Joireman** is an assistant professor of Psychology at Washington State University and a former Fulbright Scholar. His research foci include decision-making in social dilemmas, pro-environmental behavior, terror management, aggression, empathy, social values, and the consideration of future consequences.

ment, or infrastructure. While strategic targets may be attacked, the focus of terrorist activity continues to be the dominant group's most vulnerable point, its civilian population. One could argue that since terrorist acts rarely inflict debilitating casualties or strategic damage, the goal of terrorism is to instill fear in the oppressor population, "to produce a climate of fear and anxiety" (Fox et al., 2005).

Sociology and its version of social psychology do not specifically address the effects of fear on a terrorized population, but there is sufficient theoretical development to synthesize such an approach. We bring together four areas of sociological research to offer an explanation for the effects of terror on a society, particularly within the United States. First, we discuss the "culture of fear" that is hypothesized to exist in the United States. Then, we review research on the fear of crime to demonstrate some of the documented effects generated by this fear. Work in the sociology of emotions demonstrates how fear is a factor of social relations. Finally, we bring in work on the social psychology of values and argue that fear—an affective state—may have effects on individual values, a cognitive state. We then offer some preliminary research showing the effect of fear on an individual's values. We conclude that this theoretical synthesis provides an intriguing explanation for the effects of terrorism on the values, and thus actions, of the targeted population.

### Culture of Fear

Many Americans are completely unaware that they were just as unsafe, perhaps more so, long before Middle Eastern terrorists decimated the Twin Towers in September 2001 (Fox et al., 2005: 156).

In *The Culture of Fear*, Barry Glassner (1999) describes the social forces in American society that conspire to cultivate and maintain a sense of fear among the population. Creating and sustaining this fear serves some of the most powerful interests in American society. The media are interested in cultivating fear because it sells more ads and publications. The more afraid people are, the more information they crave. Politicians are interested in cultivating fear because it provides fertile ground to offer solutions. The more afraid people are, the more they crave solutions to the problem. As an added benefit, a political entity can blame the opposition for creating the dreaded conditions and stake out safe political positions against the danger. Commercial interests also benefit as people seek goods and services to make them safer. Finally, various governmental institutions benefit as they receive more funding to take care of the problem.

One of Glassner's (1999) primary aims is to explain, "why Americans are afraid of the wrong things." There is, he asserts, a laundry list of events appropriated to create the culture of fear. Moral issues like teenage pregnancy and promiscuity are easy pickings for ideological adherents. Safety concerns like plane crashes and road rage make gripping stories and are easy to disseminate. Health concerns like mutant microbes and the causes of cancer are on the minds of many in the age of medicalization. Finally, crime, particularly predatory crime and drug use, is fertile ground for cultivating fear by combining a fear of immorality with safety concerns. Thoughts that "America is going to hell *and* you are in danger" are compelling concerns.

These phenomena may, in fact, be dangerous but Glassner's point is that the danger is exaggerated and that this exaggeration is intentional because it furthers various interests. Exaggerating this danger has the effect of leaving the population

in a perpetual state of fear. Fear is a powerful emotion, Glassner notes, and its powers are harnessed for interests other than the safety of the public. In a brutal irony, generating this level of fear may actually make the society less safe as people overreact to lesser threats and fail to react to greater threats.

Glassner's work predated September 11, 2001 but ever since those devastating attacks on the World Trade Center and the Pentagon his thesis has played out. The media devoted almost 24-hour coverage to the attack and again when the United States sent troops overseas to "do something about it." A daily diet of color-coded warnings and announcements that this or that building is under threat are now de rigueur. Politicians engaged the "politics of fear" (Altheide, 2004) to push through emergency legislation giving control agents more authority to investigate and prevent further attacks and giving the executive branch the authority to use the military as it sees fit. Commercial interests rushed to market products to keep the public safe. Products not previously in demand—gas masks and sealable rooms to guard against biological or chemical weapons, parachutes and inflatable slides to escape from high rises under attack, giant bomb-detecting machines for airports and important buildings—now found a hungry market. New governmental institutions were formed and given tremendous power and oversight. New federal workers in the airports require babies and old ladies to present their shoes for inspection while stray bags are destroyed with explosives.

Crucial to Glassner's argument is that the threat is exaggerated to serve interests other than public safety. While one would be hard pressed to say that such an audacious and devastating attack should not be viewed as threatening, when looked at in context it becomes obvious that the threat is overstated. For example, if an attack like the one on 9/11 occurred *every year*, a person residing in this country is still 15 times more likely to be murdered by a fellow citizen and has a similar likelihood of dying in a car accident. Clearly, by these objective numbers, the threat of dangerous drivers and homicidal neighbors is greater than the threat of terrorism. One can, moreover, look to the relative attention paid to terrorism before the attack and after. It is doubtful that American society is *more* vulnerable after the attack than before, but clearly Americans are far more fearful of terrorism after 9/11. What, then, is the source of this fear if not an objective threat assessment? By Glassner's hypothesis the fear is generated by powerful entities with a strong interest in maintaining a high level of fear toward terrorism.<sup>1</sup>

### Fear of Crime

An established body of literature demonstrates a connection between consuming media information about crime and the fear of crime.<sup>2</sup> While there is some inconsistency in the various studies, several patterns emerge (Eschholz et al., 2003). Generally, there is a correlation between consumption of information about crime and the fear of crime. Even though males and young people are more likely to be the victims of crime, women and the elderly are more afraid of crime (Ferraro, 1996).

Fears about crime have an effect on behavior. A fear of crime constrains social behavior (Liska et al., 1988). People who fear crime are less likely to venture beyond their front doors thus constraining their interaction with others. Research in fact demonstrates a clear inverse relationship between community integration and

the fear of crime (Gibson et al., 2002). Where community integration is high, the fear of crime is low.

Fears about crime also have cognitive effects. People who are afraid of crime trust their neighbors less (Hartnagel, 1979). Fear of crime also produces a preference for more punitive reactions to crime, as individuals who fear crime are more likely to call for harsher sentences (Sotirovic, 2001). Crime-oriented media has an indirect effect on punitive beliefs in "three strikes" laws (Callanan, 2001). Media consumption has a direct effect on fear, which in turn has a direct effect on support for three-strikes penalties. Gender interacts with fear such that women who are fearful become more punitive than men (Beckett and Sasson, 2000).

Altheide (2004) draws connections between the construction of fear of terrorism and the fear of crime. His work shows how the "politics of fear" is used to construct an enemy or "other" that should be feared. Dissent against this construction is not tolerated and dissenters are classified with the "others." This "othering" has consequences for how the members of the affected group cognitively construct their worlds. One interesting effect of this particular scare is that it seems to be producing a consumerist ethos where Americans are encouraged to indulge self-desire as their contribution to the "war on terror."

There is, thus, a strong case that powerful interests in American society are served by the cultivation of fear. There are data demonstrating the cognitive effects of fear, particularly the fear of victimization. One of the goals of terrorism is to produce fear, but when that fear is further cultivated within a society the effects of fear are amplified.

## Fear

Fear is one of the four primary, autonomic emotions (Kemper, 1987). Fear is one of the first emotions experienced by children, is consistently found across cultures, and it has definite evolutionary advantages. As a primary emotion, it has a distinct "autonomic pattern" in that it produces very specific and unique biochemical, sensation, and behavioral responses. When a person is afraid the brain releases specific chemicals, the individual feels specific sensations, and manifests specific behavioral reactions that are not present with other primary emotions like anger or satisfaction. According to Kemper (1991), fear results from social interaction when the person is made to feel powerless and subject to the will of others. Fear is a relational product, when a social relation is structured such that one entity has the power to dictate the outcome of a second party, the second party will experience fear.

In terms of terrorism, fear is generated in the general population when people come to believe that they may become a random victim.<sup>3</sup> In Kemper's terms people fear terrorism because it places them in an almost totally powerless position relative to the terrorist. This powerlessness is the direct result of the fact that no one knows when the terrorist will strike, simply that it will occur. The public is completely at the mercy of terrorists willing to attack anything, anytime, anywhere, and is thus in a totally subordinate position *vis-à-vis* the terrorist. If political, media, and other powerful interests further amplify the calculated probability of this subordination, the inference is made that this powerless position is likely to occur at any moment. Fear caused by the very real threat of terrorism is increased by the amplification of that threat by purveyors of the culture of fear.

Given the relational source of fear, it is likely that cognitive changes accompany the affect. An individual must, at the very least, be aware of the powerlessness of their relational position to experience fear. This awareness implies that the individual's attention is directed toward the relationship and that relevant information about that relationship is accessed. It is, after all, this information that produces the fear. In short, it is the cognitive understanding that one is in a subordinate position that produces the affect. Some social psychological theories linking cognition to affect, Affect Control Theory for example, argue that cognitions produce affect but that affect in turn produces changes in cognition (Smith-Lovin and Heiss, 1988; MacKinnon, 1994). The change in cognition functions to reduce the affective experience. The experience of fear should produce cognitive changes that reduce the fear experience. We look to individual values as one type of cognitive change brought about by the experience of fear.

### Values

The study of values first gained prominence in anthropology and sociology where the concept was used to explain, respectively, why cultures appeared to be so different from each other and why individual societies appeared so homogenous and seemed to function properly over time. For anthropologists, values as "conceptions of the desirable" produce a unique set of preferences in each culture (Kluckhohn, 1951). For sociologists, values as "the criteria by which goals are chosen" produce a unified society that pursues common goals (Williams, 1951). For both fields, the intergenerational transmission of values reproduces the culture or society.

The critical turn in sociology questioned this assumption and argued that rather than acting as a unifying force in society, values are co-opted to maintain established social arrangements. This occurs in two ways. First, a society inculcates values supporting the status quo by favoring the system currently in place. In a capitalist society this means values for wealth, success and status. Second, different positions in the social hierarchy inculcate sets of values that increase the likelihood that a person will stay at the same social level in which they are socialized. Kohn and Schooler's (1969) work nicely demonstrates this effect by showing how blue-collar parents favor values like conformity that are more useful in blue-collar occupations while white-collar parents favor values like self-direction that are more useful in white-collar occupations.

The study of values also suffered from inadequate measurement methods and anemic theorizing about how values affect behavior at the individual level. Social psychologists recently began to establish more robust theories of values' individual level effects as well as valid and reliable indicators of individually held values. Schwartz (1992, 1994) defines values as "desirable, transsituational goals, varying in importance, that serve as guiding principles (p. 21)." Values function to serve individual and group interests, to motivate action by giving it direction and emotional intensity, and by providing standards for judging and justifying action. Schwartz devised two measures of values that were found to be reliable across dozens of diverse cultures. Schwartz and his colleagues also discovered a number of significant relationships between values and various behaviors (Schwartz, 1996; Schwartz and Huisman, 1995; Schwartz et al., 2001).

One of the novel contributions in Schwartz's work is the affirmation of dimensions that underlie values. With data from almost 200 samples Schwartz (1992, 1994) demonstrates that there are two orthogonal value dimensions. One dimension is anchored by values for "openness to change" on one end and "conservation" on the other. The other dimension represents the self versus social dichotomy often noted in sociology. Anchored by Self-Transcendent (S-T) values on one end and Self-Enhancement (S-E) values on the other end,

This dimension reflects a conflict between acceptance of others as equals and concern for their welfare versus pursuit of one's own relative success and *dominance over others* (1996, p. 5; emphasis added).

People who are guided by values at either end of the dimension, tend to behave in ways that are consistent with those values. Individuals with S-T value orientations tend to behave in cooperative ways while those with S-E value orientations favor competition.

Values do not determine behavior, but rather indicate among competing choices which choices are more preferable. Preference alone does not determine behavior as the individual is also faced with varying probabilities for successfully obtaining the desired result as well as the possibility that other consequences may ensue (Feather, 1992). A young man may desire to marry a Hollywood starlet, but his chances of success are low and may result in a black eye from the starlet's current romantic interest.

Also muddying the connection between values and behavior is the internal value conflicts experienced by individuals (Tetlock, 1986). People give priority to all kinds of values, but because some values are opposed in meaning, if not in practice, they cannot be realized simultaneously. The individual is left with an internal conflict that must be sorted out before they decide which values to act on. Most people experience a degree of this value pluralism, but they also tend to lean one way or the other with a few extreme individuals unhampered by pluralism's conflicts.

## Research

These contributions from sociology and social psychology can be synthesized to posit some effects that fear has on values. Powerful interests in American society appear to be capable of generating fear in the population. Fear, such as the fear generated by terrorism, appears to make people more punitive in their responses. When a person is punitive toward another, they are less concerned for the welfare of those others and more concerned with their own welfare. Since fear is generated by asymmetrical distributions of power in social relationships, and self-enhancing values motivate behavior in the direction of dominance, it follows that fear should have the effect of producing cognitions that reduce this perceived dominance, i.e. self-enhancing values. One way to cope with the fear produced by total subordination to the will of terrorists is to adopt a more self-enhancing value orientation that reaffirms the scared target's preference to be dominant as well. At least one observer notes the "consumerist" effect of terrorism on American culture (Altheide, 2004). In this research we test this supposition at the individual level. *When fear is made salient, the individual's value orientation will become more self-enhancing.*



## Methods

### *Participants and Procedure*

Introductory psychology students (115 men, 120 women, median age = 19; 78 percent Caucasian) participated in groups ranging in size from 10 to 20 persons in partial fulfillment of a course requirement. All materials were presented in a single packet and participants received a written debriefing at the end of their session.

### *Assessing Initial Values*

We assessed Self-Transcendence and Self-Enhancement values using Schwartz's (1992) Value Inventory which instructs participants to rate the extent to which each of 56 values (e.g., a world at peace, equality) serves "as a guiding principle" in their life. The instrument and values measured for this analysis are given in Appendix A. For each subject a S-E and S-T score were computed by averaging the scores for each. A general value orientation for this dimension was computed by subtracting the person's S-E score from their S-T score. A positive number means the individual has an overall value orientation that is more self-transcending.

### *Story Manipulation*

Participants read one of two newspaper stories. One story described a random murder of two young people and the other story described a recent discovery in astronomy (text for the stories is given in Appendix B). The two stories were approximately the same length. After reading the story, participants answered several questions about the story to mask the true purpose for reading it. First, participants rated how interesting, well written, and easy to follow the passage was on 7-point scales. Next, participants wrote down how the passage made them feel. Finally, participants briefly described the main points of the story.

The purpose of the story manipulation is to make fear salient. Newspapers have a stronger fear-producing effect than other media among some populations (Lane and Meeker, 2003). We assume that all of our subjects are exposed to the same culture of fear described by Glassner (1999). Any variation in exposure or effect should be evenly distributed across our groups. The murder story should, therefore, make the fear of murder salient to the people in that condition.

### *Post Manipulation Values: Portrait Values Questionnaire*

After completing some other distractor tasks participants completed Schwartz et al.'s (2001) Portrait Values Questionnaire (PVQ). Unlike Schwartz's 56-item Value Scale described earlier where participants directly rate the importance of various values, the PVQ assesses values by asking participants to rate the extent to which they are similar to another person who is described via 40 statements (1 = very much like me to 6 = not at all like me). Each statement is designed to tap into one of the value orientations identified in Schwartz's research. The measures used in this analysis are given in Appendix C. In validity tests performed by Schwartz et al. (2001) this measure of values correlated highly with values measured by the

Schwartz Value Inventory. Our measures had bivariate correlations ranging from .638 (S-T) to .793 (value orientation).

Consistent with our initial value measure we computed the average score for both S-E and S-T values. Value orientation was computed by subtracting S-E measures from S-T measures. A positive number means the individual has a value orientation that is more self-transcending.

One problem with comparing these two value measures is that one is based on a 9-point scale while the other is based on a 6-point scale. To correct for this we converted both scales to begin at zero and then used a .67 multiplier to convert the 9-point scale into a scale with a range of six. Both scales could thus range from 0-5.<sup>4</sup>

## Results

We use a general linear model repeated measures procedure to analyze the change in value orientation from time 1 to time 2. The story manipulation is the between subjects factor. Figure 1 illustrates the change in value orientation. At time 1 both groups of subjects had similar value orientations. At time 2 the value orientations of those who read the science story became slightly more self-enhancing (.334 to .292) while the value orientations of those in the murder story condition became significantly more so (.310 to .115). A one-tailed test of significance indicates that the story x value orientation interaction is statistically significant ( $p = .039$ ). These results support our hypothesis that when fear is made salient value orientations become more self-enhancing.

## Discussion

Our work here is an attempt to apply sociological theory and research to the question of how terrorism affects the target population. We are particularly interested in how the salience of fear affects individual cognition. We think the theoretical synthesis and preliminary data reported here help explain America's reaction to the 9/11 attacks.

Commentators noted that the initial public reaction to the 9/11 attacks was a strong sense of social solidarity. Americans ignored their differences and focused on their similarities. "They" attacked "Us," and the American public felt the need to stand together. Those who were "with us" were our friends, while those who were "against us" were our enemies. The validity of this observation is an empiri-

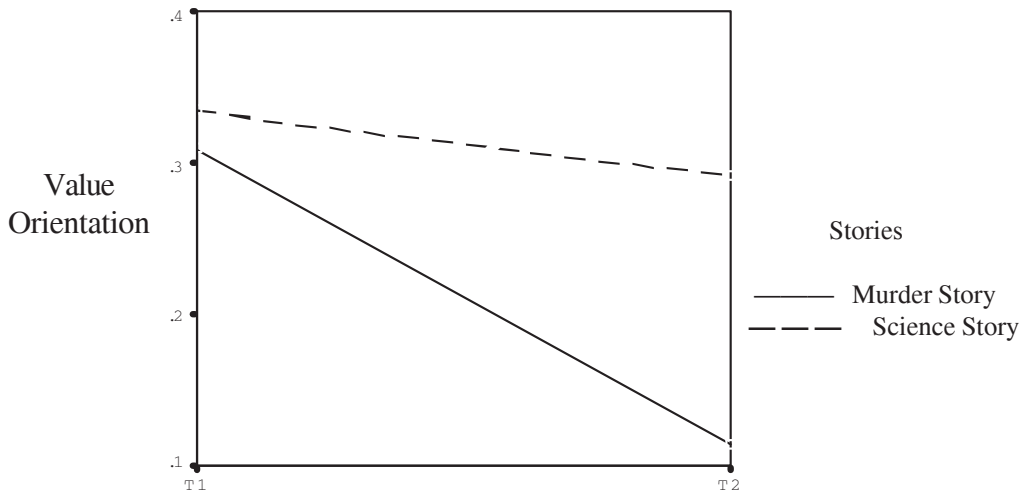
**Table 1**

Descriptive Statistics				
	Low	High	mean	s.d.
T1: Self-Enhancement	1.22	5.30	3.69	.63
T1: Self-Transcendent	1.02	5.16	4.01	.54
T1: Orientation	-4.27	2.05	.311	.69
T2: Self-Enhancement	1.14	5.00	3.18	.84
T2: Self-Transcendent	.80	4.90	3.38	.65
T2: Orientation	-3.91	2.67	.189	1.08



Figure 1

Change in Value Orientation



Story x Orientation interaction:  $p = .039$

cal question but it certainly seemed to be the dominant sense at the time. It wasn't long, however, before this unity began to fracture. Public debate about how to respond began with a consensus but quickly fractured into acrimony. Public protests begat charges of treason. Depending on your position either the government or our allies couldn't be trusted. Americans viewed France and Germany as both allies and enemies. Islam was judged to be peaceful and destructive. The 2004 election focused on the individual's economy and security. In short, what began as in-group unity and social cooperation became a divided population with self-interested drives as people staked out their personal political positions and material needs.

We believe that the theory and data presented here suggest a plausible social psychological explanation for this phenomenon. The initial response to the 9-11 attack produced a brief cooperative and unifying effect. Over time, however, as the culture of fear enhanced the perception of this threat, people in the United States reacted with more self-enhancing motives. The value orientation shifted to the self-enhancement deduced from Glassner's and Kemper's sociological arguments about fear. Glassner argues that the diet of fear is constant, probably more so since 9/11. Kemper (1991) argues that fear is produced when a person experiences a relative position of powerlessness. We predicted that this condition should produce a reaction where people became more self-enhancing as a way to cope with extreme powerlessness. Our data bears this out. When people pre-exposed to the culture of fear had fear made salient by a story about the asymmetrical power relations during murder, they reacted by expressing a more self-enhancing value orientation.

This effect should be generalizable to the aftermath of any terrorist attack in the United States. It may even be likely that another terrorist attack will see this effect magnified. The culture of fear is certainly prominent, perhaps more so than at any time in recent history. Another attack could send Americans even further into their polarized ideological trenches and their material self-interest. In fact, this seems to be the logic of terrorism. Fear, in and of it self, is not likely to dissuade a powerful entity like the United States. But a divided and self-oriented population may shake the nation's desire to press its interests abroad. Divide and conquer is a maxim in conflict and terrorism seems well suited to that strategy.

A next logical step is to compare the effects of the fear manipulation in a culture not plagued by the culture of fear. Perhaps a society not plagued by a culture of fear would react differently. Spain reacted, almost immediately, by tossing out a more conservative government for one that could be described as advancing more self-transcending values. When terrorists kidnapped Japanese workers, the reaction of Japanese society was to chastise the workers for behavior that went against the social interests of Japanese society. Societies without a culture of fear or with a self-transcending value orientation to begin with may react in an opposite way.

Clearly our preliminary study cannot address all of the issues raised here and, in fact, our result probably raises more questions than it answers. Nevertheless, a sociological view of the social psychology of terrorist victims suggests that the culture of fear plays right into the hands of the terrorists. In a culture of fear, fear produced from a sense of powerlessness results in a psychological shift toward self-enhancement. Terrorist attacks on Americans leave them scared selfish.

## Appendix A

### Time 1 Value Measures

**Directions:** Shown below are a number of things people might value. Using the scale shown below, please rate the extent to which each value is important to you. Please place your rating in the space provided to the left of each item. For each value, complete the following sentence: **As a guiding principle in my life \_\_\_\_\_ is:**

-1	0	1	2	3	4	5	6	7
Opposed to my Values	Not Important			Important			Very Important	Of Supreme Importance

- |       |     |  |
|-------|-----|--|
| _____ | 1.  | <b>Equality</b> —equal opportunity for all                     |
| _____ | 2.  | <b>Inner Harmony</b> —at peace with myself                     |
| _____ | 3.  | <b>Social Power</b> —control over others, dominance            |
| _____ | 4.  | <b>Pleasure</b> —gratification of desires                      |
| _____ | 5.  | <b>Freedom</b> —freedom of action and thought                  |
| _____ | 6.  | <b>Sense of Belonging</b> —feeling that others care about me   |
| _____ | 7.  | <b>Wealth</b> —material possessions, money                     |
| _____ | 8.  | <b>A World at Peace</b> —free of war and conflict              |
| _____ | 9.  | <b>Mature Love</b> —deep emotional and spiritual intimacy      |
| _____ | 10. | <b>Social Recognition</b> —respect, approval by others         |
| _____ | 11. | <b>Unity with Nature</b> —fitting into nature                  |
| _____ | 12. | <b>Wisdom</b> —a mature understanding of life                  |
| _____ | 13. | <b>Authority</b> —the right to lead or command                 |
| _____ | 14. | <b>True Friendship</b> —close, supportive friends              |
| _____ | 15. | <b>A World of Beauty</b> —beauty of nature and the arts        |
| _____ | 16. | <b>Social Justice</b> —correcting injustice, care for the weak |
| _____ | 17. | <b>Loyal</b> —faithful to my friends, group                    |
| _____ | 18. | <b>Ambitious</b> —hardworking, aspiring                        |
| _____ | 19. | <b>Broad-Minded</b> —tolerant of different ideas and beliefs   |
| _____ | 20. | <b>Protecting the Environment</b> —preserving nature           |
| _____ | 21. | <b>Influential</b> —having an impact on people and events      |
| _____ | 22. | <b>Capable</b> —competent, effective, efficient                |
| _____ | 23. | <b>Honest</b> —genuine, sincere                                |
| _____ | 24. | <b>Intelligent</b> —logical, thinking                          |
| _____ | 25. | <b>Helpful</b> —working for the welfare of others              |
| _____ | 26. | <b>Responsible</b> —dependable, reliable                       |
| _____ | 27. | <b>Forgiving</b> —willing to pardon others                     |
| _____ | 28. | <b>Successful</b> —achieving goals                             |

## **Appendix B**

### **Story Manipulations**

[MURDER STORY] Jason Burgeson's family spent Sunday morning picking out his casket, the finality almost too much to bear. "It was crushing," said sister Kellie Surdis, 26. "We can't make sense of it," she said of her brother's murder. "We're just completely shocked. We just keep praying."

Burgeson, 20, of Lakeville, Mass., was killed Friday along with Amy Shute, 21, of Coventry. Police say they were the victims of a random early morning carjacking at gunpoint in Providence Friday that ended with them both being shot in the head at a Johnston golf course. Five male suspects have been charged with murder, kidnapping, and carjacking. They are scheduled to be arraigned Monday.

Burgeson's family says it will push for the death penalty under a federal carjacking statute. The statute allows for the death penalty if the crime results in murder. Rhode Island does not have the death penalty. "This was a random act," said Surdis, of Fall River, Mass. "Jason was picked out of nowhere. We'll do what we can to get the death penalty."

Tom Connell, spokesman for the U.S. attorney, said it would ultimately be up to Attorney General Janet Reno to seek the death penalty under the federal statute. A grand jury would first have to indict the suspects on the charges for the U.S. attorney to get involved.

Burgeson and Shute, who Surdis said had been dating, were forced into Burgeson's sport utility vehicle at gunpoint about 2 a.m. Friday after a night out dancing. The carjackers took the victims to a Johnston golf course under construction and after arguing about whether to kill the pair, shot them both in the head.

The crime shocked the community of 26,500, which last had a murder five years ago. "This was a carjacking that got out of control," Johnston Police Chief Richard Tamburini said. "These were innocent victims in the wrong place at the wrong time."

The suspects, Gregory Floyd, 19; Harry Burdick, 21; Sammie Sanchez, 20; Raymond Anderson, 19, Kenneth Day, 21, are being held at the state prison. Burdick is from Pawtucket; the others are from Providence. Police said the victims were friends who did not know their assailants. One of the suspects was stopped by police while riding in Burgeson's vehicle less than an hour after the investigation began. On Saturday, police rounded up the other four suspects separately.

Police found a 40-caliber, semiautomatic weapon at a Providence residence that they believe was used to kill both victims. Burgeson was shot twice; Shute once. Workers discovered the bodies early Friday afternoon. Tamburini said the victims were found together in a "semi-sitting position." He said an engagement ring that belonged to Shute was found at the scene by investigators. "She removed it in an attempt to hide it from the assailants," Tamburini said. The victims, who were not engaged, were robbed of a small amount of cash. The police chief called the facts of the case "amazing. It was a very bizarre investigation." He said he could not provide further details.

Carol Shute, Amy's mother, could not be immediately reached for comment Sunday. She told The Providence Journal her daughter "was a beautiful girl. She never gave me any trouble." Amy Shute had left school but was planning to return to the University of Rhode Island in the fall. She was working toward a psychology de-

gree. Burgeson was a college student home for the summer from St. Cloud State University, in Minnesota. He wanted to be a disc jockey. Surdis said her father, Ernest Burgeson, hurt a hand punching a wall after learning of his son's death. She said the family is spending a lot of time "holding each other" and going through photo albums to remember happier times. "I took a picture from the album of the first time he shaved, he yelled at me to not take the picture," Surdis said. "He was happy-go-lucky, never had a care in the world," she said.

Surdis said the family will establish a scholarship fund in her brother's memory. The fund, to be set up at Bridgewater Savings Bank, will support graduating students at Apponequet High School who plan to study communications. In Johnston, Mayor William Macera hoped the arrests will calm neighborhood fears concerning the murders. "People are very upset that this happened in our community," he said. "It was really a brutal murder. People are sick of the violence. "You can read about it happening elsewhere but when it comes in your backyard it frightens you," Macera said. The police chief said the golf course was chosen randomly by the assailants.

[SCIENCE STORY] Deep inside a glacier at the South Pole, the world's most unconventional telescope is facilitating a new kind of astronomy based not on light but on neutrinos, ghostly particles that emerge from the hearts of supernovas and quasars. The Antarctic Muon and Neutrino Detector Array—AMANDA for short—has no mirror, no eyepiece, and no dome. Instead, it consists of about 700 bowling-ball-sized glass sensors that pick up the faint blue flashes given off when neutrinos collide with atoms more than a mile down in the Antarctic ice.

With no electrical charge and little or no mass, neutrinos zip through the universe largely unimpeded by gravity or magnetic fields, passing blithely through stars, planets, and your body. But one time in a billion a passing neutrino will strike a proton. The collision ejects a heavy electron, or muon, that travels in the same direction as the neutrino and leaves a trail of blue light as it sheds energy, much like a meteorite burning up in the atmosphere. AMANDA's photoreceptors absorb that telltale blue flash, turning the light into a measurable and meaningful electrical signal. A computer then compares the signals from several photoreceptors to calculate the path of the light streak in three dimensions. From that, scientists have a good idea of the neutrino's point of origin. "The muon tells us the direction the neutrino came from, and then we have a telescope, because you can point the neutrino back up into the sky," says Francis Halzen, a physicist at the University of Wisconsin at Madison.

High-energy neutrinos emerge from some of the most violent phenomena in the universe, including supernovas, quasars, and other types of active galaxies. Because neutrinos barely interact with matter, they reach Earth still carrying unadulterated information about the cosmic events that produced them. Photons of visible light, in contrast, can get absorbed, obscured, and altered by intervening matter on its way to Earth. "Photons are very gregarious. They interact with everything. Only neutrinos can bring us unvarnished information," says Robert Morse, Halzen's colleague at Wisconsin and AMANDA's project leader.

Just finding neutrinos is not good enough—it's the rare, very energetic ones that Morse and Halzen are after. But Earth is constantly showered with a far greater abundance of low-energy neutrinos generated in the sun or created when cosmic rays strike atoms in the upper atmosphere. Scientists have built giant underground

water tanks to detect these solar neutrinos. Even the largest of these neutrino observatories—the 12.5-million-gallon Super Kamiokande in Japan—is too small to catch the few high-energy neutrinos, however.

Since it is prohibitively expensive to build a sufficiently large tank of water, physicists Halzen and Morse pursued a suggestion from a glaciologist: Look for neutrinos in the vast expanses of ultra-clear ice in Antarctica. At depths greater than about three quarters of a mile, the pressure inside the glaciers squeezes out air bubbles, creating an extremely transparent medium in which a photon of light travels an average of 700 feet before being absorbed. Down there, the ice is bathed in a continuous blue glow from millions of sparking muons.

The primary task of the AMANDA sensors is to study this glow and track how the muons travel through the ice. All the downward-moving muons come from low-energy neutrinos created in the atmosphere above the South Pole. The interesting ones will be those moving upward, which are mostly more energetic particles originating from the sun or from somewhere far beyond the solar system. The intensity of each blue flash reveals the energy of the neutrino that produced it.

So far, AMANDA successfully detected and tracked the background of low-energy neutrinos from the sun. To pick up the long-sought high-energy particles from intergalactic space, Morse and his Wisconsin colleagues are adding 5,000 detectors to transform AMANDA into IceCube. At 3,000 feet in each dimension, IceCube will be the largest single scientific instrument ever built. Finding even a handful of neutrinos from quasars and their ilk could allow the first direct measurement of the massive, galaxy-shaping, star-swallowing black holes believed to lie at the center of these celestial bodies. “The hope is that a particle that is almost nothing may tell us everything about the universe,” says Halzen



# Appendix C

## Time 2 Value Measures

### Person Profiles IVM

Here we briefly describe some people. Please read each description and think about how much each person is or is not like you. Put an X in the box to the right that shows how much the person in the description is like you.

	HOW MUCH LIKE YOU IS THIS PERSON?					
	Very much like me	like me	some- what like me	a little like me	not like me	not like me at all
2. It is important to him to be rich. He wants to have a lot of money and expensive things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. He thinks it is important that every person in the world be treated equally. He believes everyone should have equal opportunities in life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. It's very important to him to show his abilities. He wants people to admire what he does.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. It's very important to him to help the people around him. He wants to care for their well-being.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Being very successful is important to him. He likes to impress other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. It is important to him to be in charge and tell others what to do. He wants people to do what he says.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. It is important to him to be loyal to his friends. He wants to devote himself to people close to him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. He strongly believes that people should care for nature. Looking after the environment is important to him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. He believes all the worlds' people should live in harmony. Promoting peace among all groups in the world is important to him.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. He thinks it is important to be ambitious. He wants to show how capable he is.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. It is important to him to respond to the needs of others. He tries to support those he knows.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29. He wants everyone to be treated justly, even people he doesn't know. It is important to him to protect the weak in society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Getting ahead in life is important to him. He strives to do better than others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Forgiving people who have hurt him is important to him. He tries to see what is good in them and not to hold a grudge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. He always wants to be the one who makes the decisions. He likes to be the leader.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. It is important to him to adapt to nature and to fit into it. He believes that people should not change nature.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your cooperation!

## Notes

1. See Furedi (1997), and Massumi (1993) for similar arguments.
2. See Eschholz (1997) and Heath and Gilbert (1996) for reviews of the research.
3. Of course being an actual victim will also produce fear, but here we are focusing on the production of fear from the threat that one will become a victim.
4. To test the robustness of this approach we also computed factor scores for each measure and found strikingly similar results. The direction of the effects and significance levels were almost identical.

## References

- Altheide, David L. 2004. "Consuming Terrorism." *Symbolic Interaction* 27: 289-308.
- Beckett, Katherine and Theodore Sasson. 2000. *The Politics of Injustice*. Thousand Oaks, CA: Pine Forge Press.
- Callanan, Valerie Jean. 2001. *The Determinants of Punitiveness: The Effects of Crime-Related Media Consumption and Crime Salience on Californians' Support for Three Strikes Sentencing*. Dissertation, University of California Riverside.
- Eschholz, Sarah. 1997. "The Media and Fear of Crime: A Survey of the Research." *Journal of Law and Public Policy* 9: 37-59.
- Eschholz, Sarah, Ted Chiricos and Marc Gertz. 2003. "Television and Fear of Crime: Program Types, Audience Traits, and the Mediating Effect of Perceived Neighborhood Racial Composition." *Social Problems* 50: 395-415.
- Feather, Norman T. 1992. "Values, Valences, Expectations, and Actions." *Journal of Social Issues* 48:109-124.
- Ferraro, Kenneth. 1996. "Women's Fear of Victimization: Shadow of Sexual Assault?" *Social Forces* 75: 667-690.
- Fox, James Alan, Jack Levin and Kenna Quinet. 2005. *The Will to Kill*, second edition. Boston: Allyn and Bacon.
- Furedi, Frank. 1997. *Culture of Fear: Risk-Taking and the Morality of Low Expectations*. London: Casell.
- Gibson, Chris L., Jihong Zhao, Nicholas P. Lovrich, and Michael J. Gafney. 2002. "Social Integration, Individual Perceptions of Collective Efficacy, and Fear of Crime in Three Cities." *Justice Quarterly* 19: 537-564.
- Glassner, Barry. 1999. *The Culture of Fear: Why Americans Fear the Wrong Things*. New York: Basic Books.
- Hartnagel, Timothy F. 1979. "The Perception and Fear of Crime: Implications for Neighborhood Cohesion, Social Activity, and Community Affect." *Social Forces* 58: 176-193.

- Heath, Linda and Kevin Gilbert. 1996. "Mass Media and Fear of Crime." *American Behavioral Scientist* 39:379-386.
- Kemper, Theodore D. 1987. "How Many Emotions Are There: Wedding the Social and the Autonomic Components." —. 1991. "Predicting Emotions from Social Relations." *Social Psychology Quarterly*, 54: 330-342.
- Kluckhohn, Clyde. 1951. "Values and Value-Orientations in the Theory of Action: An Exploration in Definition and Classification." Pp. 388-442 in *Toward a General Theory of Action*, edited by T. Parsons and E.A. Shils. Cambridge, MA: Harvard University Press.
- Kohn, Melvin M. and Carmi Schooler. 1969. "Class, Occupation, and Orientation." *American Sociological Review* 34:659-678.
- Lane, Jodi and James W. Meeker. 2003. "Ethnicity, Information Sources, and Fear of Crime." *Deviant Behavior*, 24: 1-26.
- Liska, Allen E, Andrew Sanchirico and Mark D. Reed. 1988. "Fear of Crime and Constrained Behavior: Specifying and Estimating a Reciprocal Effects Model." *Social Forces* 66: 827-837.
- MacKinnon, Neil J. 1994. *Symbolic Interaction as Affect Control*. Albany: SUNY Press.
- Massumi, Brian. 1993. *The Politics of Everyday Fear*. Minneapolis: University of Minnesota Press.
- Schwartz, Shalom H. 1992. "Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries." Pp. 1-65 in *Advances in Experimental Social Psychology*, Vol. 25, edited by M.P. Zanna. New York: Academic Press.
- . 1994. "Are There Universal Aspects in the Structure and Nature of Human Values." *The Journal of Social Issues* 50: 19-45.
- . 1996. "Value Priorities and Behavior: Applying a Theory of Integrated Value Systems." Pp. 1-24 in *The Psychology of Values: The Ontario Symposium*, Vol. 8, edited by C. Seligman, J.M. Olson and M.P. Zanna. Mahwah, NJ: Lawrence Erlbaum Associates.
- Schwartz, Shalom H. and Sipke Huismans. 1995. "Value Priorities and Religiosity in Four Western Religions." *Social Psychology Quarterly* 58: 88-107.
- Schwartz, Shalom H. Gila Melech, Arielle Lehmann, Steven Burgess, Mari Harris, Vicki Owens. 2001. "Extending the Cross-Cultural Validity of the Theory of Basic Human Values with a Different Method of Measurement." *Journal of Cross-Cultural Psychology* 32: 519-542.
- Smith-Lovin, Lynn and David R. Heise (eds). 1988. *Analyzing Social Interaction: Advances in Affect Control Theory*. New York: Gordon and Breach.
- Tetlock, Philip E. 1986. "A Value Pluralism Model of Ideological Reasoning." *The Journal of Personality and Social Psychology* 50: 819-827.
- Williams, Robin. 1951. *American Society: A Sociological Interpretation*. New York: Knopf.

Copyright of American Sociologist is the property of Transaction Publishers and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.