The Effect of Reminders of Death on Reckless Driving: A Terror Management Perspective

Orit Taubman – Ben-Ari[1]

School of Social Work, Bar-Ilan University, Ramat Gan, Israel

Abstract

Why do young people, especially young men, engage in reckless driving despite the fact that this behavior contradicts the basic biological imperative of self-preservation? Answering this interesting and crucial question may lead to effective interventions. A series of studies, based on terror management theory, examined the effects of reminders of death on risk taking while driving. The dependent measures were either self-reported behavioral intentions of risky driving or driving speed in a car simulator. Findings showed that mortality-salience inductions led to more risky driving than the control condition only among individuals who perceived driving as relevant to their self-esteem. The introduction of positive feedback about driving eliminated this effect. The complex role of self-esteem in the process of risk taking is discussed.

Keywords

mortality salience; reckless driving; self-esteem

Worldwide studies reveal that driving is one of the most common risky behaviors that may endanger life, particularly among young people, and that car accidents are one of the most common causes of severe injuries and death among young people (DeJong & Atkin, 1995). Most preventive programs and media campaigns attempt to make people aware of the potential negative consequences of reckless driving (e.g., physical injuries and death). However, there are empirical and conceptual gaps in evaluating the effectiveness of these threat appeals. These gaps seem to reflect a lack of theoretical concern with the motivational sources of reckless driving, as well as with the psychological effects of threat appeals. The most interesting question seems to be related to the motivational basis of risky behavior: Why do young people, especially young men, engage in reckless driving despite the fact that this behavior contradicts the basic biological imperative of self-preservation (e.g., Greenberg, Solomon, & Pyszczynski, 1997)? To begin solving this apparent paradox, it might be useful to introduce terror management

theory (TMT) as a theoretical framework (see also the article by Solomon, Greenberg, and Pyszczynski in this issue).

SOME BASIC FACTS ABOUT TMT

TMT deals with the possible effects of the awareness of one's own mortality on social attitudes and cognitions, as well as on daily decisions and behaviors (e.g., Greenberg et al., 1997). The theory assumes that the individual's awareness of his or her own mortality could be manifested emotionally in anxiety and terror. TMT proposes two psychological mechanisms that may help the individual in managing this terror: (a) cognitive and behavioral efforts aimed at validating the individual's cultural worldview, which allows the individual to understand and give meaning to the world he or she lives in and thereby gain a sense of value along with a promise for symbolic immortality, and (b) cognitive and behavioral efforts aimed at increasing self-esteem by living up to those standards of value endorsed by the individual's society and culture (e.g., Greenberg et al., 1997).

In an extensive series of studies, it has been shown that people possessing a high sense of self-esteem or a strong conviction in their cultural worldview exhibit relatively low levels of anxiety-related feelings and cognitions in response to reminders of death (e.g., Greenberg et al., 1993; Simon, Greenberg, Harmon-Jones, Solomon, & Pyszczynski, 1996). In addition, making mortality salient enhances positive evaluation of persons who uphold one's own cultural worldview and leads to negative evaluation of those who deviate from this worldview or challenge it (e.g., Florian & Mikulincer, 1997).

A question arises regarding the theory's ability to explain behaviors that may endanger life itself. My colleagues and I conducted a series of studies specially designed to answer this question, and to show how TMT can account for risky behaviors, by focusing on the mechanism for enhancing self-esteem (Taubman – Ben-Ari, Florian, & Mikulincer, 1999, 2000). I discuss those studies after briefly reviewing the motivations for risk taking in general and for reckless driving in particular.

MOTIVATION FOR RISKY DRIVING

Theory and research have proposed that two basic motives underlie the decision to engage in any risky behavior: (a) the desire to avoid or minimize potential loss and (b) the desire to maximize potential gains (e.g., Baumeister & Scher, 1988; Lopes, 1993). Both the objective chances of gains and losses related to a risky behavior and the individual's subjective perception of those gains and losses may influence the individual's decision whether to engage in the behavior (e.g., Lopes, 1993). For example, on the one hand, reckless driving may entail the danger of serious physical injuries and even death, but on the other hand, it may also be a source of excitement and arousal and may involve the benefit of social recognition. Therefore, a person would tend to drive in a reckless way depending on (a) the extent to which the value of the potential gain outweighs the value of the potential loss involved in such behavior and (b) the extent to which the person tends to pay more attention to possible gains than to possible losses.

There is vast evidence that, especially for young people, reckless driving may entail various benefits for self-worth, such as increasing the sense of mastery and compe-

tence and improving social prestige and acceptance (Evans, 1991). Therefore, the need for self-enhancement may lead people to overemphasize the possible gains involved in reckless driving whenever these gains could increase feelings of self-worth.

TERROR MANAGEMENT AND RECKLESS DRIVING

In a series of studies based on TMT premises that people deny their fear of death and manage this fear by attempting to enhance their positive self-esteem, my colleagues and I (Taubman – Ben-Ari et al., 1999, 2000) assumed that reminders of death may increase the subjective value of the potential gains over the potential losses involved in reckless driving. Therefore, we hypothesized that among people who perceive driving as relevant to their self-esteem, a mortality-salience induction (a procedure in which research participants are reminded of their own inevitable death) would lead to increased reckless driving. We also hypothesized that the introduction of self-enhancing feedback after the mortality-salience induction would weaken the association between mortality salience and reckless driving. As a possible external source for enhancing self-esteem, such feedback may allow people to defend against the terror of death, and then may make unnecessary the engagement in other defensive activities, such as reckless driving. In addition, we examined the effects of a mortality-salience induction that was less abstract and theoretical than had been used previously: Although some of the participants received the conventional questions asking them to think about their own death, others watched a threatening short video concerning the horrible consequences of a car accident. We reasoned that such an appeal may

remind people of their own vulnerability and mortality while driving, and therefore may activate terror management mechanisms.

We designed a series of six studies to examine these hypotheses, using different manipulations of mortality salience (writing about one's own death, answering questions on a fear-of-death scale, watching a threatening film) and employing two different measures of reckless driving. In all the studies, participants (18- to 21-year-old males, $n = 695$) completed a scale assessing the relevance of driving to their self-esteem, half the subjects then underwent a mortality-salience induction (the other half served as a control group), and finally proneness to reckless driving was measured. The proneness to reckless driving was assessed by either a self-report scale or driving speed in a car simulator. The self-report scale consisted of 10 short scenarios of driving situations (e.g., "You are on your way back from a pub. You drank two beers and you are a little bit tired. You are driving a car full of your friends, who are shouting to you to speed up. What do you think are the chances that you will drive at 140 km/hr?"). The car simulator, which was a SEGA game machine with a built-in monitor, was composed of a real driving wheel, foot pedals for gas and brakes, and a velocity meter. A video camera was directed toward the simulator monitor and recorded the velocity meter during five driving trials.

In five of the six studies, mortality salience led men who perceived driving as relevant to their self-esteem to engage in more reckless driving than men who did not perceive driving as relevant to their self-esteem. For the former, engaging in reckless driving probably involved the potential gain of self-relevant positive outcomes that might have increased their sense of self-esteem. In contrast, for men who did not perceive driving as relevant to their self-esteem, this effect of mortality salience was nullified. The potential positive outcomes involved in reckless driving were presumably irrelevant to their defensive efforts to increase self-esteem. The observed effects of mortality salience on reckless driving could not be explained either by the participants' global self-esteem or by social desirability biases (the tendency to present oneself positively to other people).

The findings suggest that making mortality salient might have changed the subjective value of risky driving among persons who perceived driving as relevant to their self-esteem. Although reminders of death may lead people to search for courses of action that may validate their self-esteem, the perception of driving as relevant to self-esteem may focus this search on driving behavior. As a consequence, people who perceive driving as relevant to their self-esteem may overemphasize the self-relevant gains involved in driving (validating one's sense of mastery, improving social prestige), may pay little attention to potential dangers, and then may take more risks while driving.

Moreover, giving participants a positive evaluation regarding their driving after the mortality-salience induction eliminated the observed increase in risky driving, even among persons who perceived driving as relevant to their self-esteem. This feedback might have fulfilled the original need for positive self-esteem created by the mortality-salience induction, thereby making unnecessary any further self-enhancing behavior while driving.

Interestingly, although the film showing the car accident had a significant impact on both self-reported intentions to drive recklessly and actual behavior in a driving simulator, these effects were in opposite directions: This threatening video seemed to lead participants to report that they would drive more carefully in hypothetical scenarios, yet in fact they drove less carefully in a simulator. In any case, the film seemed to influence reckless driving only among the men who perceived driving as relevant to their self-esteem. A possible explanation for the different results obtained with the different measures may be that the film differed in some important way from the reminders of death used in most TMT studies. Beyond making mortality salient, the film may also have implied a social demand for careful driving. Therefore, people who perceived driving as relevant to their self-esteem could sustain their sense of self-worth either by engaging in reckless driving or by conforming with the expectations implied in the film. In addition, when the men were asked to report on their intentions in hypothetical driving scenarios, they may have focused on analyzing and judging the conventional way to behave in these scenarios, and thus their responses may have reflected mainly what is expected in these scenarios. In contrast, when the men actually drove in a simulator, they may have been more preoccupied with the task of driving and showing off driving skills; therefore, they may have been less susceptible to the social demands implied by the film and may have chosen to enhance their self-esteem by driving recklessly.

Although the findings summarized in this review can be explained within the TMT framework, reactance theory (Brehm & Brehm, 1981) may provide an alternative explanation. This theory attempts to explain human behavior in situations involving a threat to perceived freedom, stating that such a threat arouses a motivational state directed toward establishing the threatened freedom

more securely. This motivation can be evidenced in behavioral efforts to reassert a threatened freedom, such as rejecting a coercive attempt at attitude change. It is possible that the road-trauma film in the current studies was perceived as coercive by the participants, thus leading to a boomerang effect, increasing behaviors that this kind of film is usually intended to reduce. This explanation, however, cannot be applied as easily to the other mortality-salience inductions used, because when participants were debriefed, they usually did not acknowledge the relationship between the various studies' measures. Moreover, if reactance theory could serve as a suitable explanation for the current findings, it should also be able to explain the fact that subjects who did not perceive driving as relevant to their self-esteem did not react to mortality salience in the same way. That is, if people react to a threat to their freedom, implied in the mortality-salience inductions, by enhancing their willingness to take risks, this should have been manifested by all the participants in the mortality-salience condition, regardless of whether driving was relevant to their self-esteem.

A few limitations of the studies should be mentioned. First, the participants were young men, and although the study of risky driving is most relevant for this population, future studies should assess different age, gender, and cultural groups. Second, the data deal only with risky driving. Further research should examine other risky behaviors, such as drug abuse and unsafe sex. Finally, the use of a car simulator may have limited real-life validity. Although a driving simulator is more valid than self-report measures of reckless driving, it still does not represent driving in real-life circumstances. Further studies should examine driving behavior in conditions in which reckless driving may present

a real threat of death. Despite these limitations, the present studies provide an important step forward in understanding the impact that the awareness of one's existential condition may have on the psychological processes underlying decision making and risky behavior.

Further studies may assess the impact of mortality salience on additional risky mundane or extreme behaviors. They may focus on relevant individual differences, including personality traits such as sensation seeking and impulsivity. They may also examine the role of situational factors on the decision to engage in risky behavior after exposure to reminders of death, such as the emotional state of the individual, the presence of other people (e.g., peers vs. adults), or the context in which the behavior is taking place.

Beyond their theoretical novelty, the present findings have important practical implications. They point out the need to examine behavioral reactions to media campaigns instead of relying solely on people's self-reports about their reactions to the campaigns. At the same time, the findings emphasize the need to consider specific target populations, because threats may have a boomerang effect on certain groups. In light of the findings, interventions using threats to try to prevent risky behaviors should be further assessed for effectiveness. Eliciting fear of death may not necessarily be the appropriate way to moderate or change risky attitudes and behaviors.

Recommended Reading

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Note

1. Address correspondence to Orit Taubman – Ben-Ari, School of Social Work, Bar-Ilan University, Ramat Gan 52900, Israel; e-mail: taubman@mail.biu.ac.il.

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