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The effects of positive emotion priming on self-reported reckless driving

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ABSTRACT

Five studies examined the effects of positive emotion priming on the willingness to drive recklessly. In all five, young drivers were exposed to one of the following primes of positive affect: a positive mood story; happy memories; an exciting film; a relaxing film; or thoughts on the meaning in life. Following the prime, the participants were asked to report on their willingness to drive recklessly. The responses were compared to those of groups exposed either to neutral affect, another kind of positive affect, or negative affect priming. In two of the studies, participants were also asked to report on their driving styles (risky, anxious, angry, or careful) as a second dependent variable. Positive affect, especially in the form of arousal, was found to be related to higher willingness to drive recklessly. Although men tended to report higher intentions to drive recklessly, men and women did not react differently to the emotional induction. Most interestingly, positive emotions of a relaxing nature, as well as thinking about the meaning in life, lowered the willingness to engage in risky driving. The discussion emphasizes the importance of looking for new ways to use positive emotions effectively in road safety interventions, and considers the practical implications of the studies.

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1. Introduction

Most of the emotional appeals in road safety campaigns are negative and fear-based (Lewis et al., 2008a), aimed at provoking fear, anxiety, or apprehension in the target audience. While the use of such threat appeals has attracted considerable interest in the literature, the results of years of research into their effects are far from clear or unequivocal (Wundersitz et al., 2010). On the other hand, appeals to positive emotions are seldom used in the road safety context, and are perhaps considered less effective simply because they are so rare (Lewis et al., 2007b).

In a survey of the literature on fear appeals, Elliott (2003) concluded that road safety media campaigns should adopt this approach with caution, as fear arousal can have both facilitating and inhibiting effects and may lead to defective coping mechanisms. Indeed, a number of studies have found that exposure to fear appeals can elicit maladaptive responses (e.g. Schoenbachler and Whittler, 1996; Orit Taubman - Ben-Ari et al., 2000; Witte et al., 1998) that is, responses that do not seek to control or remove the threat implied in the message, but rather to cope with the unpleasant feelings it arouses. Such maladaptive responses include defensively avoiding or ignoring the message, failing to process the threat it conveys, and denying its personal relevance. Fear appeals may also evoke reactance, so that individuals view the message as

a challenge and consequently increase the undesired behavior. All these outcomes are dangerous because they reduce the sense of threat without reducing the actual level of risk, thereby rendering the fear appeal ineffective.

In addition, the results of a meta-analysis show that the individual's response efficacy is a major predictor of adaptive outcomes from exposure to fear-evoking messages (Floyd et al., 2000), outweighing the effect of negative affect itself. Furthermore, fear appeals can "expose a person against his or her will to harmful or seriously offensive images" (Hyman and Tansey, 1990, p.110), thereby creating unnecessary anxiety among viewers. Exposing individuals to levels of fear that are psychologically uncomfortable could be considered unethical (Hastings et al., 2004).

As a result of such findings, scholars not only recommend a more cautious attitude toward the use of fear appeals, but also suggest that road safety campaign developers consider other types of appeals (e.g., Wundersitz et al., 2010). Nonetheless, alternative appeals remain rare.

Another issue that has attracted the attention of researchers is the question of whether there are gender differences in the reaction to emotion-based appeals. Early meta-analyses suggested that gender and age had little influence on the effectiveness of fear appeals (Witte and Allen, 2000). However, more recent research indicates that males and females react differently to such messages. Goldenbeld et al. (2008), for example, found that anti-speeding fear appeals had a positive or neutral effect on females, but evoked counterproductive negative reactions from males. After viewing threatening ads, males were less likely to perceive speeding as a

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