The role of social presence in mortality salience effects

Marieke L. Fransen a,*, Dirk Smeesters b,1, Bob M. Fennis c,2

a University of Amsterdam, Amsterdam School of Communication Research, Klevenbergwal 48, 1012 CX, Amsterdam, The Netherlands
b Erasmus University, Rotterdam School of Management, Department of Marketing Management, P.O. Box 1738, 3000 DR, Rotterdam, The Netherlands
c Utrecht University, Department of Social and Organizational Psychology, Heidelberglaan 1, 3584 CS, Utrecht, The Netherlands

Abstract

Terror management theory (TMT; Greenberg et al., 1986) suggests that reminders of death intensify the desire to express cultural norms leading to culturally prescribed behavior such as charitable giving, church attendance, and extravagant spending. Living up to these norms provides high levels of self-esteem, which can serve as a buffer against existential anxiety. The present paper argues that people can experience an extra self-esteem boost when they act in accordance with cultural norms while others can observe this behavior. More specifically, the present studies hypothesized and found that the presence of others (i.e., social presence) moderates mortality salience effects on consumption-related behavior. Study 1 demonstrates that consumers, under conditions of mortality salience, express more favorable attitudes towards a luxury brand (valued in Western cultures) when they know that others can observe their behavior. Study 2 extended these results to non-luxury brands. Under conditions of mortality salience, consumers express less favorable evaluations of non-luxury (non-valued brands) when they are aware of the presence of others. These results imply that consumers derive self-esteem indirectly from the knowledge that others observe their appropriate behavior rather than directly from following the cultural values or norms of one’s society.

1. Introduction

The fear of death is so fundamental to human beings that it pervades all aspects of life. People tend to cope with the aversive thought of one’s own death in various ways (see Pyszczynski et al., 2004 for a review). Several recent studies provide empirical evidence that mortality-related thoughts also affect consumer behavior. For example, research demonstrates that people are more attracted to high status products and brands (Heine et al., 2002; Mandel and Heine, 1999), show a preference for domestic over foreign products (Fransen et al., 2008; Liu and Smeesters, in press), and intend to purchase and actually eat higher quantities of food products (Mandel and Smeesters, 2008) when they are reminded of their mortality. But are these coping strategies invariant across different consumption situations? The current paper argues that they are not. Rather, the present paper presents evidence showing that consumption-related terror management strategies are especially likely to unfold when consumption is public, and can be witnessed by others, rather than when consumption is private. More specifically, the current studies investigate the role of social presence in consumer-related mortality salience effects.

1.1. Terror management theory

Terror management theory (TMT; Greenberg et al., 1986) provides a theoretical explanation for behavior that is induced by death-related thoughts. This theory is based on the notion that human beings are (unconsciously) aware of the inevitable end that lies ahead. This awareness of one’s transient life combined with the human ‘will to survive’ leads to an insolvable conflict often referred to as terror. According to TMT, people manage this experienced terror by gaining high levels of self-esteem that can serve as a buffer against death-related concerns. People can attain high levels of self-esteem by endorsing, protecting, and living up to a cultural worldview that gives meaning, order and permanence to the self; this allows people to feel like important members of their meaningful cultural world.

Abundant research shows that people who are unconsciously reminded of their mortality engage in self-esteem striving leading to culturally prescribed behavior like, charitable giving (Fransen et al., 2008; Jonas et al., 2002). People who are reminded of their mortality are also more eager to protect their cultural norms and values by disassociating themselves from people who hold distinct worldviews (e.g., Dechesne et al., 2000). Hence, defending and protecting one’s cultural norms on the one hand, and self-esteem striving by following
the valued norms of the society on the other seem to be suitable strategies for coping with unconscious death-related thoughts.

According to Arndt et al. (2004) consumerism and materialism are important values intrinsic to the contemporary western worldview. The current western society turned into a consumer society in which the defining activity of people is consuming; money and possessions are transformed into measures of self-worth (Bauman, 1995). People can therefore derive self-esteem by living up to these ‘new’ culturally valued norms of being wealthy, spending loads of money and live exorbitantly.

1.2. Mortality salience and social presence

As mentioned before, TMT states that people derive self-esteem from living up to culturally prescribed values and norms because meeting these norms allows people to feel like valuable persons in a valuable society. However, it remains unclear whether one directly derives self-esteem from looking at oneself and knowing that one behaves according to valued norms or that self-esteem is derived more indirectly from the fact that other society members witness how ‘correctly’ one behaves. Social Impact Theory (Latané, 1981) states that people desire to be viewed in a positive light by others (Baumeister, 1982; Frey, 1978; Leary and Kowalski, 1990; Riorian et al., 2001), and therefore have the tendency to engage in impression management strategies when other persons are present or only imagined to be present (Latané, 1981). For instance, people show more helping behavior (Van Rompay et al., 2009) when they know a security camera is observing them.

Hence, consumers are motivated to gain the approval of others, which can be achieved by behaving in ways that are approved within a situation or cultural worldview (Kallgren et al., 2000). But why do people need social approval? Research on Sociometer theory (e.g., Leary, 2003; Leary et al., 2000; Leary et al., 1995; Leary et al., 1998) demonstrates that social approval positively affects self-esteem, which according to TMT is essential for dealing with mortality-related thoughts. Therefore, the present paper argues that not only behaving according to cultural norms but also the knowledge that others see and witness one’s culturally approved behavior is essential in dealing with existential anxiety. Hence, social presence might be an important factor in explaining mortality salience effects. In accordance with TMT, the current studies propose that people derive self-esteem from living up to cultural norms which makes them valuable persons in their society. In extension, these studies proffer that self-esteem receives an even greater boost when others (can) witness their socially approved behavior. Based on the notion that social approval leads to enhanced levels of self-esteem (e.g., Leary, 2003; Leary et al., 1995), the current studies expect that people are especially prone to show culturally prescribed behavior under conditions of mortality salience when other members of their cultural worldview can witness their behavior but less so when others are not present.

Study 1 tests this proposition by investigating whether social presence moderates the relationship between mortality salience and brand evaluations. As observed in previous research the current study expects that mortality salience leads to more favorable evaluations of luxury brands (Heine et al., 2002; Mandel and Heine, 1999). Moreover, this study hypothesizes that the effect of mortality salience on luxury brand evaluations is stronger when people are aware of the presence of others.

2. Study 1

2.1. Method

2.1.1. Design and participants

The present study used a 2 (mortality salience vs. control)×2 (social presence vs. control) between-participants design. A total of one hundred and eleven undergraduate students (41 male) with a mean age of 21.4 (SD = 2.15) participated in the study.

2.1.2. Procedure

Participants were seated in a room behind a computer providing all further instructions. After answering some demographic questions, participants were randomly assigned to one of the four experimental conditions. Participants in the experimental condition received a mortality salience manipulation while participants in the control condition were questioned about taking an exam. Previous research has shown that mortality salience effects mainly occur after distraction from conscious thoughts about death (Greenberg et al., 1994), hence participants were asked to respond to an extensive personality questionnaire to distract them from conscious thoughts about their mortality. After the mortality salience manipulation, participants evaluated a luxurious product. To make participants aware of the social presence it was stated, in the experimental condition, that their answers would be seen and evaluated by another participant. In the control condition no such statement was made.

2.1.3. Mortality salience

Mortality salience was induced by asking participants in the mortality salience condition to answer two open-ended questions regarding their own death: ‘Please briefly describe the emotions that the thought of your own death arouses in you’ and ‘Jot down as specifically as you can, what you think will happen to you when you physically die’ (cf. Greenberg et al., 1997). Participants in the control condition answered the same questions concerning taking a difficult exam (cf. Heine et al., 2002).

2.1.4. Social presence

Social presence was manipulated by informing half the students that another participant would evaluate their ratings. The other half of the participants did not receive this message. This manipulation served to give participants the feeling that another person would see their answers and therefore could approve or disapprove their evaluation.

2.1.5. Brand evaluation

Participants were exposed to an advertisement of a luxurious Mercedes car. In a pretest with different car brands Mercedes was rated as the most luxurious car brand (M = 5.7 as compared to, for example, Opel, M = 3.7). Attitude towards the advertised car was measured using an 8-item product attitude measure. Participants indicated, on 7-point scales, the quality, appeal, and reliability of the product (α = .85). The mean score on this measure served as the dependent variable.

2.2. Results and discussion

2.2.1. Brand evaluation

To test the hypotheses a 2 (mortality salience vs. control condition)×2 (social presence vs. control condition) ANOVA on brand evaluation was performed. The results yielded the expected interaction effect between mortality salience and social presence (F(1, 107) = 4.66, p < .05). This indicates that the mortality salience manipulation particularly affected product evaluation when social presence was activated. Additional simple main effect analysis showed that participants in the social presence condition rated the luxurious brand more positive when mortality was salient (M = 5.5, SD = .61) than when they thought about a difficult exam (M = 5.1, SD = .99; F(1, 107) = 4.31, p < .05). Participants in the control condition (no social presence condition) did not show such an effect (M = 5.2, SD = .75 and M = 5.4, SD = .74; F(1, 107) < 1, ns). No significant main effects of both mortality salience and social presence (Fs< 1, ns) on brand attitude were observed.
Although the results did not show a significant main effect of mortality salience on product attitude in this study, the expected interaction effect between mortality salience and social presence was observed. This indicates that social presence indeed plays a crucial role in the process of dealing with mortality-related thoughts. The effects of mortality salience only appeared when participants were made aware of the presence of others. Knowing that others observe how one performs ‘correct’ behavior seems to serve as an extra self-esteem boost serving as a buffer against existential anxiety. This is a novel finding in the mortality salience literature, as previous research did not systematically manipulate the factor social presence. This suggests that mortality salience effects mainly occur for behaviors that provide a source of self-esteem (e.g., consuming luxury products, tanning) when these behaviors are publicly observable.

Study 2 extends these findings by arguing that not only luxury brands are rated more favorable (Heine et al., 2002; Mandel and Heine, 1999) but that non-luxury brands are evaluated less favorable when thoughts about death are activated. Non-luxury brands do not function as a solid source of self-esteem, and hence should not be rated more favorable when death-thoughts are activated. Moreover, under the public scrutiny of others, non-luxury brands may completely be dysfunctional to bolster one’s self-esteem in the face of death, and, hence, might be evaluated more negatively.

Thus, the present study expects that people reminded of their mortality evaluate luxury brands more positively and non-luxury brands more negatively especially when they are aware of the presence of others.

3. Study 2

3.1. Method

3.1.1. Design and participants

In Study 2 a 2 (mortality salience vs. control condition) × 2 (social presence vs. control condition) × 2 (luxury brands vs. non-luxury brands) design with the first two factors as between-participant factors and the last factor as a within-participants factor was used. Seventy-seven participants (49 male) with a mean age of 23.8 (SD = 4.37) took part in the study.

3.1.2. Procedure

Participants were invited by email to take part in a study on consumer behavior. The email included a link of a website where participants could respond to the questionnaire. Upon entering the website, participants were randomly allocated to one of the four experimental conditions. After answering some demographic questions, all participants responded to a filler questionnaire that served to distract participants from the real goal of the study. This questionnaire was followed by a mortality salience manipulation after which participants (in both conditions) solved five mathematical questions which were used to remove the death-related thoughts from focal conscious attention (see Arndt et al., 1997). Next, all participants evaluated two luxury brands and two non-luxury brands. To make participants aware of the presence of others it was stated (before actually rating the brands) that their brand evaluations would be made public; in the control condition no such statement was made.

3.1.3. Mortality salience

Participants in the mortality salience condition responded to the same death-related questions as the ones used in Study 1. In the control condition, participants answered questions regarding dental pain (as in the classical paradigm developed by Greenberg et al., 1997). The mathematical problems were used to distract participants from their focal death-related thoughts.

3.1.4. Social presence

Informing half of the participants that their brand evaluations would be made public served as a social presence manipulation. The other half of the participants did not receive this message. This manipulation served to give participants the feeling that others could see (and therefore approve or disapprove) their ratings.

3.1.5. Brand evaluation

Primarily, a pilot study (N = 20) to examine which brands are regarded as luxury and non-luxury was conducted. The brands Medion (M = 3.5) and Tawa (M = 2.5) were evaluated as least luxurious and the brands Armani (M = 6.2) and Mercedes-Benz (M = 6.0) were rated as most luxurious. A t-test between the mean score of the two non-luxury brands and the mean score of the luxury brands confirmed that Armani and Mercedes-Benz were indeed evaluated significantly more luxurious than Medion and Tawa (t(19) = 15.00, p < .001).

To measure participants’ attitudes towards the luxury and non-luxury brands, participants evaluated each of the four brands on 5-point scales. They indicated how positive, interesting and important they rated the brand and how likely it was that they would buy the brand in the future. A measure of luxury brand attitude was formed by calculating the mean score on the questions regarding the two luxury brands (α = .86); a measure of non-luxury brand attitude was constituted by calculating the mean score on the items regarding the two non-luxury brands (α = .83).

3.2. Results and discussion

3.2.1. Brand evaluation

A 2 (mortality salience vs. control condition) × 2 (social presence vs. control condition) × 2 (luxury brands vs. non-luxury brands) ANOVA with repeated measures on the last factor, was performed to

![Fig. 1. Brand evaluation as a function of mortality salience and social presence.](image-url)
test the hypotheses. The results demonstrated a significant main effect of brands ((F(1, 71) = 57.39, p < .001) indicating that the luxury brands were generally evaluated more positively (M = 3.2, SD = .82) than the non-luxury brands (M = 2.3, SD = .64). Moreover, the results yielded a significant interaction effect between mortality salience and brands (F(1, 71) = 12.49, p < .01). Most focal to the main hypothesis, the expected three-way interaction between mortality salience, brands, and social presence was found (F(1, 71) = 8.21, p < .01). This indicates that the interaction between mortality salience and brands was more pronounced when people were aware of the social presence than when such awareness was absent (Fig. 1).

Additional analysis of the simple main effects demonstrated that among participants in the social presence condition, mortality salience led to a more positive evaluation of the luxury brands (M = 3.7, SD = .96) than the control condition (M = 2.8, SD = .65; F(1, 71) = 13.28, p < .01). Conversely, participants in the social presence condition rated the non-luxury products more negatively when mortality was salient (M = 2.0, SD = .61) than when mortality was not salient (M = 2.6, SD = .50; F(1, 71) = 9.91, p < .01). This pattern of results was not found when social presence was absent (both Fs < 1, ns).

4. General discussion

According to TMT people need self-esteem to deal with unconscious existential anxiety, which they can achieve by following the rules, norms, and values of one's cultural worldview. One important norm in current society is consumerism (Arndt et al., 2004; Bauman, 1995). People can therefore derive self-esteem, serving as a buffer against existential threat, through consumerism. The purpose of this research was to explore whether one derives self-esteem directly from following the cultural values or norms of one's society or from the fact that one knows that others observe one's appropriate behavior. The results of Studies 1 and 2 show that the (imagined) presence of others increases the effects of mortality salience on brand evaluations. People who are reminded of their mortality evaluate luxury brands more positive (Studies 1 and 2) and non-luxury brand more negative (Study 2) under conditions of social approval. This implies that self-esteem receives an extra boost when one knows that others observe and are aware of one's culturally prescribed behavior.

These results extend work by Heine et al., (2002) and Mandel and Heine (1999) who demonstrate that people reminded of their mortality evaluate high status products and luxurious brands more favorably than participants in a control condition. The current studies show that not only luxury brands are evaluated more positively under conditions of mortality salience but also non-luxury brands are simultaneously evaluated more negatively when mortality-related thoughts are activated. This means that people not only reduce their experienced terror by expressing positive attitudes towards culturally valued items (ingroup favoritism) but also by expressing negative evaluations of items that are not valued in one culture (outgroup derogation). In addition, the present results also show an important extension to this past work; the effects of activated death-thoughts on the evaluation of (non)luxury brands only occur when social presence is made salient. Without the scrutiny of others, luxury brands seem not to provide a solid source to bolster one's self-esteem. The present studies herewith contribute to the knowledge of terror management effects on consumer-related behavior.

In future research it would be interesting to further unravel the effects of social presence in TMT-effects. Social impact theory predicts, for instance, that the total impact of others on a target person is a function of the strength, number and immediacy of the other (Latané, 1981). Jackson and Latané (1981) report that the effects of social presence increase when the number of observers increases. In the present context, it is plausible to assume that the effects of social presence, under conditions of mortality salience, become stronger when the persons observing the behavior are significant others with whom one shares cultural norms and values. One would probably derive more self-esteem from the notion that similar others ‘approve’ one's behavior than when one receives approval from others that are dissimilar and don't share cultural norms and values.

These results are of practical relevance because numerous omnipresent environmental stimuli, such as television programs (Liu and Smeesters, in press) and brands (Fransen et al., 2008) can activate mortality salience. The presence of these different stimuli may therefore influence consumer behavior through the activation of mortality-related thoughts. This influence seems particularly strong under conditions of social presence, that is, when consumers are not alone in a consumer situation (e.g., when shopping with friends or family).

Acknowledgments

The authors thank Karin Ludwig, Sarah Lehmann, Manuela Schiek and Andreas Bremer for assistance in data collection.

References


