



# ASSOCIATION FOR CONSUMER RESEARCH

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## **Shop ‘Til You Drop: the Effect of Mortality Saliency on Consumption Quantity**

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This research examines whether exposure to death-related stimuli can affect the quantity and dollar value of the products consumers choose to purchase. In a series of four experiments, we demonstrate that mortality salient participants wish to purchase a higher quantity of products (such as foods and drinks) than do control participants. We offer a dual-route explanation for our effects: Low self-esteem participants overconsume as a means to escape self-awareness, while both low and high self-esteem participants wish to speed up the immediacy of consumption as a means to "die broke." We also address alternative explanations for these effects.

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people under MS will be more satisfied with a chosen alternative if they chose it from a large (vs. small) set. When mortality is not salient, we expected to replicate past research showing that people are more satisfied with options picked from small (vs. large) sets.

Study 1 was a 2 (mortality salience vs. control) X 2 (small vs. large set size) design. MS was manipulated by asking participants to think about their own death or dental pain. Participants were presented with an assortment of six (i.e., small set) or 30 (i.e., large set) chocolates on the computer screen (Iyengar and Lepper 2000). They were asked to hypothetically choose a chocolate from the given assortment. Participants then rated their anticipated satisfaction with the option they selected and with the choice process. There was a significant interaction between MS and set size on satisfaction with the choice process. Participants in the MS condition with 30 options felt more positive about the choice process than did participants with only six options. Participants in the control condition felt equally positive in the small and large set conditions. Also, the results indicate a significant interaction between MS and set size on feelings of having too much or too little choice. In the dental pain condition, participants with 30 options felt they had too many options to choose from while participants in the six-option condition felt they had too few to choose from. This effect was attenuated in the MS condition, with both those having six-options and 30-options feeling more comfortable with the number of options available. This suggests that participants whose mortality was made salient were not overwhelmed by larger sets.

Study 2 was a real choice situation. It was a 2 (mortality salience vs. control) X 2 (small vs. large set size) design. MS was manipulated using drunk-driving advertisements. In the MS (vs. control) condition, participants read a print ad that explicitly mentioned (vs. did not mention) death as a possible consequence of drunk-driving. Participants were presented with an actual assortment of six or 30 chocolates and asked to choose and taste a chocolate from the assortment. Participants then rated their satisfaction with the selected option and with the choice process. Consistent with prior research, in the control group, participants' satisfaction with the chocolate was lower in the 30- as compared to six-option condition. In contrast, in the mortality salience conditions, participants' satisfaction was higher in the large set than the small set. This same pattern was found for participants' feelings about making the choice. There was also a significant interaction with regards to experienced regret. In the control group, participants experienced more regret at having selected the given chocolate in the large rather than small set condition. The effect was reversed in the mortality salience condition, with less regret exhibited in the 30 option condition.

What is the underlying reason why this would occur? We posit that the psychological benefits of more options override the costs under mortality salience due to increased perceived control over the choice environment. We expect that mortality salience increases people's desire for control and this then affects perceptions of control over the choice context. In Study 3, we examine whether mortality salience increases people's desire for control. Indeed, participants in the mortality salience condition expressed a greater desire for control. This effect persisted even after controlling for participants' trait anxiety. Furthermore, the differences in desire for control were not driven by mood.

These findings enrich the literature on both MS and choice. We identify how consumers might use choice situations to exert control and consequently deal with the anxiety produced from mortality salience. Our studies identify MS as a moderator of set size effects as well as explore when and how the benefits of "too much choice" may override its costs.

### **"Shop 'Til You Drop: The Effect of Mortality Salience on Consumption Quantity"**

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Since September 11, 2001, Americans have become increasingly aware of their own inevitable mortality. Many people believe that "danger seems to lurk in every corner of life, from children's toys to McDonald's coffee, anthrax to secondhand smoke, West Nile virus to SARS." (Spencer and Crossen 2003). One way that individuals cope with their existential concerns is through their purchasing habits. For example, Mandel and Heine (1999) found that consumers exposed to death-related information demonstrated increased interest in purchasing luxury brands, such as Lexus and Rolex, which may reinforce a consumer's perceived value within a consumer-driven culture. These results have also been replicated among Japanese consumers (Heine, Harihara and Niiya 2002). However, because the above researchers did not control for the prices of the items chosen in their study, an alternative explanation for their results is that mortality salient individuals simply want to spend more money than do control individuals, regardless of the status of the products purchased.

To investigate this possibility, the current research examines whether exposure to death-related stimuli can affect the quantity of items purchased, as well as the dollar value of the purchase. Unlike the few studies that have previously addressed the effects of mortality salience on consumers (e.g., Ferraro, Shiv and Bettman 2005), this research focuses on the quantity of products purchased and consumed, rather than consumers' choices between a given assortment of products. In a series of experiments, we demonstrate that consumers who have been recently reminded of their own impending mortality wish to purchase higher quantities of products, such as food and drinks, than do their control counterparts. We also examine several possible explanations for our results. The various explanations we test are all derived from Terror Management Theory, because mortality salience can affect individuals through various paths.

In Study 1, the mortality salient (MS) group wrote a short essay about their thoughts regarding death, while the control group wrote a short essay about going to the dentist (both of which should result in negative affect, but not necessarily death-related thoughts). Participants were then told to circle all of the items from a prepared grocery list that they intended to buy in the next week. MS participants selected significantly more total items ( $M=30.64$  vs.  $23.28$ ;  $F(1, 30)=7.47$ ,  $p<.01$ ) than did control participants, including significantly more fresh vegetables, fresh meats, canned meats, and frozen foods, as well as snacks and drinks. Therefore, it is unlikely that our participants simply wished to "eat, drink, and be merry" (Ferraro, Shiv and Bettman 2005), since they increased their consumption of both healthy and unhealthy foods. Study 2 utilized the same manipulation as study 1, but asked participants to imagine that they were hosting an informal party for friends, and to circle the items on a hypothetical shopping list of items they might buy for a party. MS participants selected more items from the grocery list ( $M=25.64$  vs.  $22.73$ ;  $F(1, 384)=4.84$ ,  $p<.05$ ), spent more total dollars ( $M=\$139.85$  vs.  $\$125.02$ ;  $F(1, 384)=4.70$ ,  $p<.05$ ), and spent a higher percentage of their budgets ( $M=131\%$  vs.  $113\%$ ;  $F(1, 384)=5.84$ ,  $p<.05$ ) than did control participants. Study 3 replicated these results with individuals' choices of snacks and drinks, and also established self-esteem as a moderator. The MS effect was more pronounced for low self-esteem individuals than for high self-esteem individuals.

The goal of study 4 was to examine whether activating mortality salience also activates the cultural norm of conspicuous

consumption, causing individuals to purchase more as a way to prove their value to society. If this explanation holds, we might expect that activating mortality salience should also activate constructs related to consumption and materialism. Therefore, participants should be more likely to complete word fragments with words related to shopping, money, and/or eating. We also altered the control manipulation (from “dentist” to “pain”) to control for an unintended alternative explanation for our prior results: that people simply don’t like to think about eating immediately after going to the dentist. And while we replicated the main effect of mortality salience found in studies 1-3, there were no significant differences in the number of word completions of investment words, shopping words, or eating words as a result of the MS manipulation. Therefore, the cultural norm explanation was not supported.

Study 5 explored whether MS individuals wish to consume higher quantities in the present time frame because they have a higher discount rate. In other words, perhaps because they believe that they might die soon, they would rather spend their money on items that can be consumed immediately, rather than to save their money, which will be useless to them upon their deaths. If this reasoning is true, they should be willing to spend more money than control subjects in order to consume a product now, rather than at a later date. Following a procedure similar to that of Loewenstein (1988), in one condition we asked participants how much they would be willing to pay to speed up delivery of a purchased item, and in a second condition we asked participants how much less they would be willing to pay in order for the delivery of an item to be slowed down (from its expected delivery date). Manipulations were as in study 4, resulting in a 2 (Prime: death vs. pain) X 2 (Delivery Change: Slow down vs. speed up) between-subject design. As predicted by the “die broke” explanation, MS participants were willing (in both the slow-down and speed-up conditions) to pay a higher premium than were control participants to receive both an iPod (M=\$39.33 vs. \$25.31) and a gift card (M=\$27.29 vs. \$18.52) immediately, rather than later.

In sum, we demonstrated consistently the effect of MS on consumption quantity, using different manipulations of MS and different measures of consumption quantity and spending. We also tested various explanations for this effect. The results indicated that consumers engage in higher consumption and spending, not because they want to endorse a predominant cultural norm (i.e., the norm of consuming), but rather because they want to “die broke”. Consumers may also want to boost their self-esteem by spending their money to make them feel good again. Therefore, effects were more pronounced for low self-esteem consumers than for high self-esteem consumers.

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