Treasure or Bargain? The Influence of Mortality Salience on Possession Valuation *

Yuqi Liu
liuy0325@outlook.com

February 18, 2020

Abstract

The present study discusses the role of self-esteem in moderating the relationship between mortality salience and valuation of possessions. Terror Management Theory (TMT) proposes that self-esteem serves as an anxiety buffer when thoughts of death are salient and that compared to people with low self-esteem, individuals with high self-esteem are less defensive in response to mortality salience. On the other hand, studies about the mere-ownership effect suggest that people with high self-esteem extend their positive self-evaluation to the evaluation of possessions just because they own them. Thus, self-esteem affects both reactions to mortality salience and the valuation process. However, no studies have explored the effect of mortality salience on possession valuation. The present study suggests that when reminded of death, people with low self-esteem raise the minimum selling price of owned objects, while people with high self-esteem lower the price. A moderation model shows that self-esteem moderates the relationship between mortality salience and valuation of possession.

Keywords: *mortality salience; mere-ownership effect; terror management theory; valuation.*

1 Introduction

In 2018, Americans gave 39.7 billion dollars to charity in the form of bequests ([Giving USA Foundation, 2019](#)), an amount that exceeds the GDP of Cameroon from the same year. Studies have revealed motives for charitable bequest giving ([Wiepking, Scaife, & McDonald, 2012](#)), including identification—mutual recognition between the donor and the charity—and the need for remembrance. These motivations are comprehensible from a terror management theory perspective. Thoughts of death, which are unavoidable when one considers bequest giving, stimulate the pursuit of figurative immortality (need for remembrance) ([Arndt, Solomon, Kasser, & Sheldon, 2004](#)) and maintain an appreciation for those who support one's beliefs (identification) ([Arndt et al., 2004](#); [Sargeant & Shang, 2008](#)). Nevertheless, no studies have explored how people reminded of mortality value their assets, the potential bequest. Insight about this topic may help charitable organizations better develop promotion strategies and target likely donors. Understanding of this topic needs to take self-esteem into consideration. On the one hand, terror management theory posits that self-esteem serves as a buffer against death anxiety ([Greenberg et al., 1992](#)), so differences in the level of self-esteem predict different responses to mortality salience ([Schmeichel et al., 2009](#); [Landau & Greenberg, 2006](#); [Routledge et al., 2010](#)). On the other hand, ownership creates an association between an owned object and the self, allowing people to extend their positive self-evaluation to the possession itself ([Gawronski,](#)

*Writing sample for master application

Bodenhausen, & Becker, 2007; Gebauer, Riketta, Broemer, & Maio, 2008; Beggan, 1992). For example, people with higher self-esteem evaluate their names more favorably (Gebauer et al., 2008). Based on relevant literature, the present study hypothesized that self-esteem moderates the relationship between mortality salience and valuation of possessions.

TMT and Self-esteem According to TMT (Greenberg, Pyszczynski, & Solomon, 1986), when mortality is made salient, people subconsciously raise defenses to reduce or eliminate this existential threat, defenses that include cultural worldview defense and self-esteem striving (Solomon, Greenberg, & Pyszczynski, 2004). A cultural worldview, that is, beliefs about the meaning, order, and permanence of the world, and standards of valued behaviors (Arndt, Greenberg, Solomon, Pyszczynski, & Simon, 1997), is shaped, at least in part, by knowledge of mortality (Arndt et al., 2004). Research evidence has shown that mortality salience leads people to defend their cultural worldview (Greenberg et al., 1990). For example, Christian participants with high mortality salience evaluated Christian targets more favorably but had more negative evaluations of Jewish targets (Greenberg et al., 1990). Mortality salience has been shown to make people evaluate local food more favorably than foreign food (Frieze & Hofmann, 2008). Mortality salience also leads people to strive toward self-esteem (Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). For example, induction of mortality salience causes risky driving among people who regard such behavior as a source of self-esteem (Ben-Ari, Florian, & Mikulincer, 1999), and it elicits stronger fitness intentions among people who believe fitness is essential to their self-esteem (Arndt, Schimel, & Goldenberg, 2003). Since self-esteem buffers concerns about death, for people whose self-esteem is inherently high, mortality salience stimulates less defensiveness. For example, after mortality salience induction, only people with low self-esteem, as opposed to those with high self-esteem, show increased approval of pro-U.S. and rejection of anti-U.S. essays (Schmeichel et al., 2009). Death-related thoughts aggravated social avoidance for individuals with low self-esteem but not for those with high self-esteem (Routledge et al., 2010). Other researchers also have explored the effect of self-esteem on behavior not explicitly related to defensiveness against death. For instance, mortality salience makes high, but not low, self-esteem participants who face risky decisions pursue opportunities for excellence in gambling (Landau & Greenberg, 2006). However, to my knowledge, no research has focused on how people value their possessions when reminded of death.

Ownership and Self-esteem How much is the old painting "Moon Landscapes" by German painter Max Beckmann worth? Reasonably, valuation might depend on how old people think the object is. Research participants were willing to pay on average 52.61 USD when told the painting was 100 years old, but only 22.09 when told the painting was 20 years old. Interestingly, mortality reminders led participants to value the object more (McCabe, Spina, & Arndt, 2016). People who received death reminders valued it as 3.36 (scale range 1-7) while the control group valued it as 2.92 on average. The researcher reasoned that the old object, which indicates the robustness of existence, satisfies the need

for symbolic immortality. The present study was inspired by these findings. Note in the above experiment that participants evaluated a painting that they did not own, but valuing owned assets is a different matter because people are known to evaluate an object more favorably merely because they own it (Beggan, 1992). One way to measure self-esteem is to ask, "How much do you like your name?" This measurement is reliable because the evaluation of possessions is a reflection of self-evaluation (Gebauer et al., 2008). Research on neuropsychology has found that establishing ownership activates a region in the brain that functions in explicit self-referential processing (Kim & Johnson, 2012). If we view ourselves favorably, we will transfer positive perceptions to possessions (Hartley, Fisher, & Fletcher, 2020; Gawronski et al., 2007). In short, though it is well established that self-esteem serves as a buffer against death anxiety and affects object evaluation, little is known about how people value their possessions when reminded of their inevitable death.

2 Study 1

Study 1 tested the hypothesis that self-esteem moderates the relationship between mortality salience and valuation of possessions. It is expected that, when reminded of death, people with low self-esteem will ask for more to defend their value, while people with high self-esteem will not.

Procedure Participants in an online questionnaire included 31 women and 26 men. There were two parts to the study. In Part 1, participants completed the Rosenberg Self-Esteem Scale (Rosenberg, 2015). Then participants were randomly assigned to either the mortality salience group or the control group. Participants in the mortality salience group watched a video about fatal car accidents (Coolsen & Nelson, 2002; Nelson, Moore, Olivetti, & Scott, 1997) and answered questions about it. In Part 2, every participant was told that he or she was one of the participants who received a pen in return for their great efforts in Part 1. Then they watched a video that described the pen in detail and were told the following (Kahneman, Knetsch, & Thaler, 1990):

You now own the pen in your possession. You have the option of selling it if a price provided by buyers (other participants), which nobody knows now but will be determined by the system automatically later, is acceptable to you. For each of the possible prices in the provided list, please indicate whether you wish to: (1) Sell your pen at this price and receive the cash as a return; or (2) Keep your pen and take it home with you as a return. For each price, indicate your decision by marking in the appropriate column.

The pen was sold online for 6 CNY, so the price listed in the questionnaire ranged from 2 to 20 CNY with intervals of 2 in between. On a separate page, participants were instructed to write down the lowest acceptable price again to show that they understood the rule and were concentrating on the trade.

Measurement Two variables of interest in the current study were self-esteem and the selling price of the pen. The Rosenberg Self-Esteem Scale contains 10 items on a four-point scale ranging from “strongly agree” to “strongly disagree.” The global self-esteem score was defined as the sum of scores for all items except Question 8, which is problematic for Chinese participants because of cultural differences (Lumei, 2006). Valuation of the pen equaled the lowest price in Chinese yuan that the participant was willing to accept (WTA) for selling it.

Table 1: WTA for Both Groups

<i>High Self-Esteem</i>		<i>Low Self-Esteem</i>	
MS	Control	MS	Control
8.0	17.0	14.7	12.0

Figure 1: Self-esteem and WTA

Result As expected, moderation analysis (Hayes, 2017) revealed that self-esteem moderated the relationship between mortality salience and valuation of possessions ($p = .04$). People with high and low self-esteem reacted differently to mortality salience. Table 1 lists the mean WTA for both groups of people (1SD above and below the mean, respectively). People with low self-esteem asked a higher price to sell an owned object, while people with high self-esteem did the opposite. From another point of view, as shown in Figure 1, in the control group, WTA was positively correlated with self-esteem, while in the mortality salience group, the correlation was reversed. These results are consistent with the prediction from the mere-ownership effect, but these two conditional effects were not statistically significant in the moderation analysis ($p = .19$; $p = .11$).

3 Discussion

Consistent with previous research, the current study suggests that self-esteem plays an important role in reactions to mortality salience. It was shown that people with high self-

esteem tend to lower their selling price when reminded of death. But the reason for this remains unclear. Whether such behavior is a way to boost self-esteem indirectly, for example, by acquiring self-esteem from appreciation of others (Fransen, Smeesters, & Fennis, 2011), or it indicates that people with high self-esteem calmly resign themselves to fate (Yen & Cheng, 2010) is unclear. On the other hand, given that the amount of money donated in the form of bequests is decreasing (Giving USA Foundation, 2019), perhaps fundraisers are facing difficulties because people tend to distance themselves from topics associated with death (James III & Routley, 2016). Understanding individual differences in attitudes towards possessions when faced with the inevitability of death may help fundraisers better develop strategies to increase bequests and fulfill the psychological needs of those who actively face death by donating to the social world.

References

- Arndt, J., Greenberg, J., Solomon, S., Pyszczynski, T., & Simon, L. (1997). Suppression, accessibility of death-related thoughts, and cultural worldview defense: Exploring the psychodynamics of terror management. *Journal of personality and social psychology*, 73(1), 5.
- Arndt, J., Schimel, J., & Goldenberg, J. L. (2003). Death can be good for your health: Fitness intentions as a proximal and distal defense against mortality salience 1. *Journal of Applied Social Psychology*, 33(8), 1726–1746.
- Arndt, J., Solomon, S., Kasser, T., & Sheldon, K. M. (2004). The urge to splurge: A terror management account of materialism and consumer behavior. *Journal of Consumer Psychology*, 14(3), 198–212.
- Beggan, J. K. (1992). On the social nature of nonsocial perception: The mere ownership effect. *Journal of personality and social psychology*, 62(2), 229.
- Ben-Ari, O. T., Florian, V., & Mikulincer, M. (1999). The impact of mortality salience on reckless driving: A test of terror management mechanisms. *Journal of personality and social psychology*, 76(1), 35.
- Coolsen, M. K., & Nelson, L. J. (2002). Desiring and avoiding close romantic attachment in response to mortality salience. *OMEGA-Journal of Death and Dying*, 44(3), 257–276.
- Fransen, M. L., Smeesters, D., & Fennis, B. M. (2011). The role of social presence in mortality salience effects. *Journal of Business Research*, 64(1), 29–33.
- Friese, M., & Hofmann, W. (2008). What would you have as a last supper? thoughts about death influence evaluation and consumption of food products. *Journal of Experimental Social Psychology*, 44(5), 1388–1394.
- Gawronski, B., Bodenhausen, G. V., & Becker, A. P. (2007). I like it, because i like myself: Associative self-anchoring and post-decisional change of implicit evaluations. *Journal of Experimental Social Psychology*, 43(2), 221–232.

- Gebauer, J. E., Riketta, M., Broemer, P., & Maio, G. R. (2008). "how much do you like your name?" an implicit measure of global self-esteem. *Journal of Experimental Social Psychology*, 44(5), 1346–1354.
- Giving USA Foundation. (2019). *See the numbers—giving usa 2019 infographic*.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In *Public self and private self* (pp. 189–212). Springer.
- Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., & Lyon, D. (1990). Evidence for terror management theory ii: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of personality and social psychology*, 58(2), 308.
- Greenberg, J., Solomon, S., Pyszczynski, T., Rosenblatt, A., Burling, J., Lyon, D., & Simon, L. (1992). Assessing the terror management analysis of self-esteem: Converging evidence of an anxiety-buffering function. *Journal of Personality and Social Psychology*, 63(6), 913–922.
- Hartley, C., Fisher, S., & Fletcher, N. (2020). Exploring the influence of ownership history on object valuation in typical development and autism. *Cognition*, 197, 104187.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- James III, R. N., & Routley, C. (2016). We the living: the effects of living and deceased donor stories on charitable bequest giving intentions. *International Journal of Nonprofit and Voluntary Sector Marketing*, 21(2), 109–117.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1990). Experimental tests of the endowment effect and the coase theorem. *Journal of political Economy*, 98(6), 1325–1348.
- Kim, K., & Johnson, M. K. (2012). Extended self: medial prefrontal activity during transient association of self and objects. *Social cognitive and affective neuroscience*, 7(2), 199–207.
- Landau, M. J., & Greenberg, J. (2006). Play it safe or go for the gold? a terror management perspective on self-enhancement and self-protective motives in risky decision making. *Personality and Social Psychology Bulletin*, 32(12), 1633–1645.
- Lumei, T. (2006). Shortcoming and merits of chinese version of rosenberg (1965) self-esteem scale [j]. *Psychological Exploration*, 2, 88–91.
- McCabe, S., Spina, M. R., & Arndt, J. (2016). When existence is not futile: The influence of mortality salience on the longer-is-better effect. *British journal of social psychology*, 55(3), 600–611.
- Nelson, L. J., Moore, D. L., Olivetti, J., & Scott, T. (1997). General and personal mortality salience and nationalistic bias. *Personality and Social Psychology Bulletin*, 23(8), 884–892.
- Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why do people need self-esteem? a theoretical and empirical review. *Psychological bulletin*, 130(3), 435.
- Rosenberg, M. (2015). *Society and the adolescent self-image*. Princeton university press.

- Routledge, C., Ostafin, B., Juhl, J., Sedikides, C., Cathey, C., & Liao, J. (2010). Adjusting to death: the effects of mortality salience and self-esteem on psychological well-being, growth motivation, and maladaptive behavior. *Journal of personality and social psychology*, 99(6), 897.
- Sargeant, A., & Shang, J. (2008). Identification, death and bequest giving. *Association of Fundraising Professionals, Reports on Fundraising And Philanthropy*.
- Schmeichel, B. J., Gailliot, M. T., Filardo, E.-A., McGregor, I., Gitter, S., & Baumeister, R. F. (2009). Terror management theory and self-esteem revisited: the roles of implicit and explicit self-esteem in mortality salience effects. *Journal of personality and social psychology*, 96(5), 1077.
- Solomon, S., Greenberg, J. L., & Pyszczynski, T. A. (2004). *Lethal consumption: Death-denying materialism*. American Psychological Association.
- Wiepking, P., Scaife, W., & McDonald, K. (2012). Motives and barriers to bequest giving. *Journal of Consumer Behaviour*, 11(1), 56–66.
- Yen, C.-L., & Cheng, C.-P. (2010). Terror management among taiwanese: Worldview defence or resigning to fate? *Asian Journal of Social Psychology*, 13(3), 185–194.