WOULD YOU FANCY A PREMIUM FIVE O’CLOCK AFTER THE FUNERAL? APPLICATION OF TERROR MANAGEMENT THEORY IN DAILY SHOPPING DECISIONS

Abstract. The present study has investigated how fear-of-death activation affected consumer food product choices. Undergraduate students (N = 130; M_{age} = 22.7; M_{eage} = 21) differing on the conscious fear of death level participated in this study. The participants were divided into two experimental and one control groups. In first experimental group fear of death was induced by asking the participants to read an euthanasia story, in second experimental group by asking them to picture their own death. All experimental groups filled a fear of death personality measure prior to the experiment. Afterwards, participants had to indicate their usual shopping preferences, by choosing between several standard and premium-looking food items which were selected in the pilot study. Results show a decreased number of premium product choices in the death activation groups. Conscious level of fear had no impact on those choices. Results are discussed under the terror management theory framework.

Key words: fear of death, consumer choice, luxury products, terror management theory, mortality salience.
1. INTRODUCTION

Fear of death can have tremendous impact on person’s life, and may lead to maladaptive behaviors and bad decision making (Kastenbaum, 2000). Yet, not everyone reacts in such maladaptive ways to the fear of death (Greenberg, Pyszczynski & Solomon, 1986; Pyszczynski, Solomon & Greenberg, 2015). The terror management theory (TMT) (Greenberg, Pyszczynski & Solomon, 1986; Pyszczynski, Solomon & Greenberg, 2015) states that self-esteem is closely related to the fear of death. Greenberg et al. (1986; 1997; 2015) have showed, that those with high self-esteem are not so easily shaken by the death-related thoughts. On the basis of the TMT, Mandel and Heine (1999) showed that those being exposed to a death-reminding stimuli are more willing to purchase luxurious goods, as compared with those not subjected to such manipulation. Their subjects after death thoughts activation had a greater desire to own luxurious brands as compared to the control group. Their idea relies on Solomon, Greenberg and Pyszczynski’s (1991) statement, that the acquisition of prestigious goods, such as jewelry or automobiles, may give a person a sense of value. As Arndt, Solomon, Kasser & Sheldon (2004) summarize, death salience goes in line with the desire to show-off one’s material prestige, which requires increased spending and evokes greater conspicuous consumption. The presented study wanted to investigate whether activated fear of death would increase the wish to purchase everyday subjectively prestigious goods (more expensive ones) which were obtainable for the participants.

2. LUXURIOUS GOODS

Bourne (1957) defined luxurious goods as products that are not easily available, can be differentiated from others and are exclusive. Kapferer (1997) adds to the definition of luxury such characteristics as high price, high quality, nice appearance, uniqueness, and lack of necessity for its use. Luxurious products are also an indicator of the wealth of their owner – a notion derived by Veblen (1899; 1994) and shared by Vigneron and Johnson (1999) as well as Wiedmann, Hennings and Siebels (2007). All these authors have demonstrated that luxurious goods are purchased and consumed, often ostentatiously, to communicate to others one’s own, high position in society (conspicuous consumption). This makes luxurious goods synonymous with prestigious goods, as postulated in the terror management theory (Solomon, Greenberg, Pyszczynski, 1991).

Yet the real luxury is often unavailable for a common man, which in turn makes the research on luxurious goods poor in ecological validity. In the study of Mandel and Heine (1999) research participants evaluated goods which they could not own. The student subjects had to imagine how they would have felt, if they had had the means to buy goods they had never bought before. This raises
the question of subjectivity of luxury perception. Depending on the material standing of a person, same brand can be perceived as luxurious by one person and as ordinary thing by another (Heine, 2012). For the purpose of this project we decided to narrow down the term of luxury goods only to food products which are characterized for example by its quality (Van der Veen, 2003). In the presented study we wanted to see whether the fear of death induction would have an effect on the desire of the participants to buy everyday products such as grocery items that, despite higher prices, were within reach for the participants. We believe this makes the conclusions of the study more ecologically valid, while not undermining the basic assumption about the relation between luxurious (prestigious) products and fear of death. On top of that, affordable luxuries were not used previously as depended variables in the context of fear of death studies.

3. FEAR OF DEATH AND CONSUMER CHOICES

There are many studies that show a link between fear of death and consumer behaviors. For example Maheswaran and Agrawal (2004) have demonstrated that fear of death can affect purchase choices in two ways. First, mortality salience decreases the willingness to accept new information, which in turn increases the need to purchase products that have been proved to be effective. Second, death related thoughts increase the motivation to impress and therefore people aim to behave in a socially acceptable manner, which is also reflected in their purchases. Chopik and Edelstein (2014) have demonstrated that people with activated fear of death are more willing to spend money on luxurious products. They speculate that it might be associated with consumers’ desire for fame, which is in line with the reasoning of Arndt et al. (2004). Greenberg et al. (2010) indicate that consumers might be more willing to buy luxury products, because those products heighten the status of a person buying them. The fear of death activation can also increase the price evaluation of and preference for products coming from one’s own country as compared to foreign ones (Friese & Hoffman, 2008; Mulder, Wan & Dahl, 2011). What is more, when fear of death was activated, people declared bigger willingness to buy relationship-boosting products (Żemojtel-Piotrowska et al., 2011). There is also evidence, that fear of death has specific significance for financial decision-making (Zaleskiewicz, Gasiorowska, Kesebir, 2013)

From the current study’s perspective, the most important linkage between mortality salience and conspicuous consumption is shown by Arndt et al. (2004). They state that people have a tendency to cover their fear of death by purchasing products of high value. As those purchases boost the buyer’s self-esteem, the fear is buffered and the death is no longer such an active threat. On the basis of this proposal, we speculate that more expensive products should be more desirable in the mortality salience condition.
4. FEAR OF DEATH AS AN INDIVIDUAL VARIABLE

Not everybody fears death to the same extent. In general, people may either relive their feelings or suppress them (Rosenfeld, 1971) and this will have varying consequences on their behavior. There are a few ways of conceptualizing the individual level of the fear of death. Muchnik and Rosenheim (1982) conceptualized fear of death as a single-factor construct, which was subsequently used by Besser, Amir and Barkan (2004). Similar approach was used by Żemojtel-Piotrowska and Piotrowski (2009) who juxtaposed single factor fear of death with fascination with death.

Florian and Mikulincer (1997) reported that specific death related individual concerns did impact people’s choices, but these authors did not investigate general fearfulness in the purchase choice context. In the current study, we wanted to see whether the general degree of individual death fear had an effect on participants’ behavior. Specifically, we assumed that the greater individual fear of death is, the greater the impact will death salience manipulation have on the product choice. We wanted to strengthen the predictive power of the study by controlling for death fearfulness, operationalized as conscious fear of death level.

5. ASSUMPTIONS OF THE PRESENT STUDY

The present study aimed to find out whether the fear of death activation could impact the daily shopping decisions of people. Unlike the previous studies that typically have used luxury items that are out of reach for the participants, the present study used less and more expensive products that were achievable for the participants. We wanted to see if such item choices were also affected by the death salience. We assumed that the activation of death-related thoughts would increase the choice of products deemed as subjectively exclusive (more expensive), regardless of their objective status just like the terror management theory would state. Yet, since the degree of the fear of death can be buffered by personality variables, we speculated that individual level of the conscious fear of death would mediate the relation. We assumed that those with higher conscious fear of death would be more susceptible to the effect compared with those with lower levels of fear. The mediation assumption is based on the premise, that the activation of the fear of death is actually temporarily increasing the existing predisposition to fear death, which is present to a varying degree in every person. Therefore the measured individual level of the fear of death should work as mediator between death-related thought activation and luxurious products choices (which reflect the self-esteem buffer). The assumed model is presented on the graph 1.
Would you fancy a premium five o’clock after the funeral?...

**Graph 1.** Assumed moderation model

*Source:* own elaboration based on Greenberg, Pyszczynski & Solomon, 1986; Mandel & Heine, 1999

6. **METHOD**

6.1. **Pilot Study**

The first step of research was a pilot study designed to select products that could be perceived as luxurious, while being affordable for an average student. We chose ten pairs of everyday products of the same type but of different brands/quality, and asked 40 psychology undergraduates from a small university to rate which (if any) of the two products shown they would evaluate as luxurious. The products evaluated were those which students use in their daily life – clothes, cosmetics and food items. We also collected responses on the subject which product from each pair would be usually chosen in a shop. We also asked how luxurious they would rank each product on a scale from 1 to 7 (1 being the *least luxurious*, and 7 – *highly luxurious*). The results are presented in a table 1.

<table>
<thead>
<tr>
<th>Item type</th>
<th>Usually shopped</th>
<th>Luxury evaluation</th>
<th>Luxury evaluation</th>
<th>Luxury evaluation difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>n</em></td>
<td><em>(M, SD)</em></td>
<td><em>(M, SD)</em></td>
<td><em>Wilcoxon’s T</em>, <em>Z</em>, <em>p-value</em></td>
</tr>
<tr>
<td>Vodka</td>
<td>16</td>
<td>3.55 (1.28)</td>
<td>5.00 (1.15)</td>
<td>90.0 3.95 &lt;.001</td>
</tr>
<tr>
<td>Boxer shorts</td>
<td>13</td>
<td>3.65 (1.70)</td>
<td>5.85 (1.41)</td>
<td>98.0 3.69 &lt;.001</td>
</tr>
<tr>
<td>Tea</td>
<td>26</td>
<td>2.80 (1.30)</td>
<td>5.45 (1.01)</td>
<td>11.5 5.28 &lt;.001</td>
</tr>
<tr>
<td>Jeans</td>
<td>29</td>
<td>3.50 (1.43)</td>
<td>5.46 (1.26)</td>
<td>68.5 3.92 &lt;.001</td>
</tr>
<tr>
<td>Coffee</td>
<td>13</td>
<td>3.60 (1.52)</td>
<td>4.52 (1.28)</td>
<td>112.0 2.84 &lt;.05</td>
</tr>
<tr>
<td>Sausage</td>
<td>27</td>
<td>3.90 (1.21)</td>
<td>5.46 (1.21)</td>
<td>80.5 3.71 &lt;.001</td>
</tr>
<tr>
<td>Hair spray</td>
<td>13</td>
<td>3.25 (1.77)</td>
<td>5.20 (1.44)</td>
<td>150.5 3.49 &lt;.001</td>
</tr>
<tr>
<td>Ice cream</td>
<td>19</td>
<td>3.23 (1.48)</td>
<td>5.33 (1.38)</td>
<td>60.5 4.17 &lt;.001</td>
</tr>
<tr>
<td>Frozen pizza</td>
<td>15</td>
<td>3.00 (1.26)</td>
<td>5.10 (1.01)</td>
<td>14.5 5.00 &lt;.001</td>
</tr>
<tr>
<td>Bottled water</td>
<td>38</td>
<td>3.38 (1.73)</td>
<td>6.15 (1.08)</td>
<td>43.5 4.65 &lt;.001</td>
</tr>
</tbody>
</table>

*Source:* own data.
Because the luxury evaluation between regular and subjectively luxurious products was significant for all pairs, for the main phase of the study we choose three pairs of food products (tea, sausage and bottled water), where regular version was declared to be purchased more often than the luxury version. We did exclude the products where the students declared buying the luxurious product more often than its regular counterpart, because of assumed definition of luxury, that is (Bourne, 1957) products which are not easily available. If majority of students was already regularly purchasing a more expensive product, it was rather not a luxury for them (but a commodity). A most important negative consequence of this choice is a weakening of the dependent variable measurement scale, from quasi-continuous (1–10) to ordinal (1–3).

6.2. Research Participants and Procedure

In the main study, 130 undergraduates ($M_{age} = 22.7$; $Me_{age} = 21$) were recruited. They were encouraged to take part in two ostensibly unrelated studies on personality and consumer choices for additional course credits. After login on the web page, they were divided at random into three groups – two of them were experimental groups, and one was a control group. The experimental groups differed on the method of fear of death activation. Many studies struggle to measure the impact of death activation on people’s behavior (Łukaszewski & Boguszewska, 2008). For this reason we included two ways of inducing the fear of death and checked for the individual differences in the fear-base level after death was mentioned. The participants in the first group ($N = 46$) read the story about euthanasia. After reading the story the participants were asked to describe the feelings that the story evoked on them. The second experimental group ($N = 41$) had to describe the physical things that will happen to them after they die. Afterwards they had to describe how they felt when they were thinking about their own death. Then all participants excluding control group ($N = 43$) were asked to complete a fear of death measure – the death anxiety scale.

After this research participants were invited to take part in another study on consumer choices. In this ostensibly unrelated study, participants were given a pair of every day grocery items and asked which product they would buy if they were doing shopping in the particular moment.

6.3. Measures

The fear of death was measured with the death anxiety subscale from the death anxiety and fascination scale (Żemojtel-Piotrowska & Piotrowski, 2009). It is a highly reliable (Cronbach’s alpha = 0.8) and stable (test-retest consistency: $r = 0.78$), 9 item measure. In the present study the reliability was even higher (Cronbach’s alpha = 0.85).
A dependent variable was the sum of choices of subjectively luxurious products over their non-luxurious counterparts. As there were three product pairs to choose from, this variable could take the value from zero to three.

### 6.4. Results

As the first step, we tested for mean differences with Kruskal-Wallis’s ANOVA – $H(2, N = 130) = 6.45; p < .05$; partial $\eta^2 = 0.05$. Average number of subjectively luxurious products chosen was the highest in the control group. The results were significant but the effect was weak. The means and standard deviations are presented in the table 2 below.

<table>
<thead>
<tr>
<th>Group</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control (C)</td>
<td>43</td>
<td>2.21</td>
<td>0.12</td>
</tr>
<tr>
<td>Describe your death (D)</td>
<td>41</td>
<td>2.02</td>
<td>0.12</td>
</tr>
<tr>
<td>Euthanasia (E)</td>
<td>46</td>
<td>1.76</td>
<td>0.12</td>
</tr>
</tbody>
</table>

**Source**: own data.

To compare all the means independently, a series of Mann-Whitney’s U-tests was conducted. There were significant differences in the number of subjectively luxurious products chosen between the euthanasia story and the control group. We haven’t observed significant differences between control group and the experimental group, which had to describe their own death. The differences between two control groups were not significant (tab. 3).

Then we tested for the differences on conscious fear of death between those groups. We used ANOVA to compare the level of the trait between groups and ANCOVA to see if it modifies the impact of different death activations on subjectively luxurious product choice. The results show no significant differences in this trait for participants in different experimental groups ($M_e = 22.4$, $SD = 5.14$ for euthanasia group, $M_d = 23.8$, $SD = 5.6$ for the own death description group) and no impact of the trait on the luxury product choice (Trait effect: $F = 1.47; p > .05$). The experimental group effect remained significant: $F = 3.14; p < .05$; $\eta^2 = 0.05$.

<table>
<thead>
<tr>
<th>Comparison</th>
<th>$Z$</th>
<th>$p$-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euthanasia (E) vs Control (C)</td>
<td>$Z = 2.53$</td>
<td>&lt;.01</td>
<td>0.07</td>
</tr>
<tr>
<td>Own Death Description vs Control (C)</td>
<td>$Z = 1.22$</td>
<td>n.s.</td>
<td>–</td>
</tr>
<tr>
<td>Euthanasia (E) vs Own Death Description (D)</td>
<td>$Z = 1.29$</td>
<td>n.s.</td>
<td>–</td>
</tr>
</tbody>
</table>

**Source**: own data.
Finally, we tested the assumed mediation model, using the bootstrapping method. For the purposes of this analysis the number of samples 5000 (Preacher, Hayes, 2008) was declared with a confidence interval of 95%, using the BCa method (*bias-corrected and accelerated*) (MacKinnon, Lockwood, Williams, 2004). We standardized all variables in order to receive Beta coefficients. The direct relation between independent variable (activation of the fear of death) and the dependent variable (amount of chosen subjectively luxurious goods) proved to be statistically significant, but weak. Then we tested for the relation between fear of death activation, and the conscious level of fear of death. This relation proved to be not significant. The relationship between conscious fear of death and the number of luxurious goods chosen was significant. Our model as a whole came out to be not significant ($F_{1,128} = 1.54; p > 0.05$). All results are provided in table 4.

**Table 4.** Results of the mediation analysis

<table>
<thead>
<tr>
<th>Mediation Path</th>
<th>Beta</th>
<th>t</th>
<th>p</th>
<th>Lower CI</th>
<th>Upper CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-&gt;M (a)</td>
<td>-0.11</td>
<td>-1.24</td>
<td>0.217</td>
<td>-0.28</td>
<td>0.06</td>
</tr>
<tr>
<td>M–Y (b)</td>
<td>-0.18</td>
<td>-2.05</td>
<td>0.043</td>
<td>-0.35</td>
<td>-0.01</td>
</tr>
<tr>
<td>X–Y (c)</td>
<td>-0.19</td>
<td>-2.20</td>
<td>0.029</td>
<td>-0.36</td>
<td>-0.02</td>
</tr>
<tr>
<td>X(M)–&gt;Y (c’)</td>
<td>0.11</td>
<td>1.36</td>
<td>0.176</td>
<td>-0.05</td>
<td>0.29</td>
</tr>
</tbody>
</table>

*Signify:* X – predictor (fear of death activation form); M – mediator (conscious level of fear of death); Y – dependent variable (amount of chosen subjectively luxurious goods).

*Source:* own data.

**7. DISCUSSION AND LIMITATIONS**

We wanted to compare the impact of a standard death activation (description of own body after death) and a novel method – a sad but involving euthanasia story. To our surprise, only the story-based activation of death thoughts significantly changed the declared behavior of our participants. This was contrary to our hypothesis. People who read a story about death chose more expensive (subjectively luxurious) products less often. There may be multiple reasons for such a pattern of results. Łukaszewski and Boguszewska (2008) claim, that there are many doubts concerning mortality salience activation. There are many buffers and moderating variables, which can change the direction of relationships (as happened in our study). We believe that one of the reasons may lie in our multiple death thoughts activation. The experimental groups may have been overexposed to death stimuli. The initial self-esteem boost (which should increase the likelihood for choosing subjectively luxurious products) may have occurred after the first death mention.
The subsequent mortality salience activation in the experimental groups (the fear of death questionnaire) may have exhausted this buffer, so there was no effect – illustrated by lower willingness to choose premium items. Because we measured the likelihood of choosing those products in our pilot study, we used this number as a benchmark. In the pilot study a chance for choosing a premium version of the tea was 14/40, 13/40 for the sausage and 2/40 for the mineral water. This gives a cumulated number of 29/40 or 0.73 subjectively luxurious products chosen in the condition, where death was not mentioned at all. We tested this likelihood against our experimental result ($M = 2.21$ subjectively luxurious products chosen), and we found significant differences (post-hoc $t$-test; $t(42) = 13.72, p < 0.001$). This may support the proposition that the death activation effect is limited – too much death thoughts decreases the willingness to purchase subjectively luxurious items after the initial boost – this proposition would have to be further tested.

In addition, although study participants reported different levels of conscious death anxiety, the level of this trait had no significant relation on the observed product purchase declarations. In fact, there was no relation between conscious fear of death and everyday luxury product choice (post-hoc Pearson correlation tests; $p > 0.05$ in all the groups). These results suggest that the situational activation of the fear of death can have some influence on consumer choice, reflected in choice of more expensive daily products. This effect may depend on the type of products. More expensive daily product may lose its charm, while the unattainable luxury one may become more attractive. The present study suggests that this happens regardless of whether participants had high or low level of death fear.

The present study also had many limitations. First, the number of participants was quite small. In addition, the ways used to activate fear of death may not have been ideal, and further studies should be conducted to build better ways to provoke fear of death, while controlling the trait level of the fear. We also did not quantitatively test the feelings evoked by the euthanasia story, which may have differed from those evoked in the second experimental condition. Although a qualitative analysis of the stream of thoughts typed by the participant, indicates that the manipulation worked similarly in both experimental conditions, without a quantitative measure for emotions (e.g. using face tracker), a definitive comparison between those conditions cannot be made. Also the questionnaire that measured the fear of death may have been too short, and the number of grocery items too small.

The study shows that situational activation of the death-related thoughts can have an effect on daily luxury product choice among those that are and are not afraid of death. The generalization of the effects remains limited.
REFERENCES


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**CZY MIAŁBYŚ OCHOTĘ NA HERBATKĘ PO POGRZEBIE? ZASTOSOWANIE TEORII OПANOWANIA TRWÓG W CODZIENNYCH DECYZJACH ZAKUPOWYCH**

**Abstrakt.** Przedstawione badanie weryfikowało, jak aktywizacja myślenia o śmierci wpływała na wybory zakupowe produktów spożywczych. W badaniu wzięli udział studenci (*N = 130; M_{age} = 22.7; M_{age} = 21*) różniący się pod względem poziomu świadomego lęku przed śmiercią. Uczestnicy zostali podzielenci na dwie grupy eksperymentalne i jedną kontrolną. Nie aktywizowano myślenia o śmierci w grupie kontrolnej. W pierwszej grupie eksperymentalnej aktywizowano myślenie o śmierci przy pomocy historii o eutanazji, w drugiej zaś poprzez prośbę wyobrażenia sobie własnej śmierci. Grupy eksperymentalne przed przystąpieniem do eksperymentu wypełniały kwestionariusz lęku przed śmiercią. Następnie badani mieli określić swoje codzienne preferencje zakupowe, dokonując wyboru pomiędzy paroma standardowymi oraz luksusowymi produktami spożywczymi, wybranymi w badaniu pilotażowym. Wyniki pokazują mniejszy wybór produktów luksusowych przez osoby w grupach z aktywowanym myśleniem o śmierci. Świadomy poziom lęku przed śmiercią nie miał wpływu na decyzje badanych. Wyniki są dyskutowane w perspektywie teorii opanowania trwogi.

**Słowa kluczowe:** lęk przed śmiercią, decyzje konsumenckie, produkty luksusowe, teoria opanowania trwogi.