

Behavioral Effects of Mortality Salience: An Experimental Study

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Abstract

The study is intended to explain the effect of Mortality Salience (MS) on consumer behaviors. In a first part, we present a state of the art of Terror Management Theory (TMT) and its contributions in management sciences by focusing on the impact of MS on consumption. In a second part, we illustrate the results of an experiment testing the effect of death reminders on consumption choices. The results of the experiment show that the reminders of death generate, for the most part of participants, pro-materialistic consumption choices. Based on these results, we highlight the effect the death reminders can generate on Lebanese consumers.

Keywords: cultural worldview, materialism, mortality salience, terror management theory

1. Introduction

Death is an inevitable state and an unresolved mystery in human life. It is a source of anxiety, motivation and action (Ernest Becker, 1973). In this line, Becker (1973) suggests, that the human consciousness of the inevitability of death intervenes in the conceptualization of the reality of human life in terms of cause and effect (for example, life lasts a day or life equals the death). In other words, death as a source of anxiety facilitates the anticipation of the future through the construction of belief systems and cultures (solutions, for example, heroes, myths, families, etc.) at the service of management mechanisms of this existential anxiety (Arndt et al., 2004). These can be attributed meaning to human life and societies that aspire to attain a symbolic and eternal form of immortality. All in all, given the unresolved mystery of death, the creation of death management mechanisms seems necessary. Serving the same purpose, certain types of consumption reduce anxiety of death and enhance self-esteem (Urien, 2003). This encourages marketers to exploit the theme of death in their commercial communication.

In this sense, more and more sectors of activity are using death as a means of attracting and persuading customers. We can mention that of industries, NGOs, retail, etc. Added to this are prevention campaigns related to social causes (e.g., road safety, smoking, alcoholism, cancer, etc.). Finally, the same is true of the CC (Climate change) communication field where death exploitation is widely disseminated, especially in recent years (O'Neill and Nicholson-Cole, 2009). In addition, this practice is usually accompanied by logic of dramatization of speech and exaggeration of consequences (Author et al, 2017). In this regard, the actors of the field and the researchers justify the use of this register, commonly called "blackwashing" by the marketers, through the importance of the stakes and the urgency of the action. Nevertheless, operational questions concerning the productivity of dramatization via the manipulation of the mortality salience are needed. The questions stem from the observation of a modest commitment on the part of consumers in certain behaviors such as carbon sobriety and global social representations against CC (skepticism, apathy, disempowerment, etc.). The multiplicity and increase of negative consequences of CC like natural disasters require a deep reflection on this subject.

It is in this perspective that the objectives of this research are set, which are both theoretical and operational. At the theoretical level, it is first, a matter of clarifying the impact of MS, as a strategy of communication and marketing. Next, it is an answer to this query by showing the impact of MS on behavioral intentions in a Lebanese context. This research will also address the lack of knowledge about the impact of MS on consumption choices for the Lebanese people. Finally, we contribute to enrich the literature dealing with the moderating effect of the cultural worldview on consumption choices facing to mortality reminder (see Fritsche et al., 2010). For the operational plan, the purpose of this paper is to explain the impacts of MS induced by the reminders of death attribute to the communications in Lebanese wars and terrorist attacks on intentions of consumptions. This

research work will participate in the orientation of the field actors (governments, media, marketers, NGOs, etc.) in the construction of relevant and effective communications. Moreover, this research is, according to our knowledge, one of the first that explores not only the causal relationships between wars or terrorist attacks (as a mortality reminders), and consumption intentions (as a mechanism of reducing anxiety) in a Lebanese context but also in the field of marketing in general.

Based on the Terror Management Theory (TMT), considering death as a fact of essential psychological importance, as the only certain future (Greenberg et al., 2008, p. 121), has been developed since the 1980s, and has resulted in several hundred scientific contributions (Pyszczynski et al., 2015). It is few studied in management science and never in the Lebanese context. It is usefully analyzed as a research program, in the sense of Lakatos (1994).

2. Theoretical Principles and Mechanisms of TMT

The basic hypotheses of the TMT have all been confirmed. The idea of finiteness thus proves to motivate individuals to maintain a high level of self-esteem, to conform to their cultural model, and to develop in their place defensive behaviors—as established, in particular by the meta-analysis conducted by Burke et al. (2013), in 277 experiments. A reminder of mortality leads individuals to value, support and promote those who share their cultural model. It leads them to devalue or punish (until physical aggression) those who do not share it or who transgress it (Giannakakis & Fritsche, 2011; Seibert et al., 2014). It creates a distancing of those who are vectors of another cultural model (Portelinha et al., 2012; Vail et al., 2012). Exposed to a mortality recall, individuals with high self-esteem (distal defense) do not need to mobilize proximal defense (Taubman Ben-Ari & Findler, 2005).

The deployment of positive heuristics has led to the formulation of many other theoretical hypotheses, empirically tested. Among other interesting results, it turns out that the accessibility of thoughts related to death increases when the cultural model is threatened; conversely, approval of the cultural model decreases the accessibility of thoughts related to death (Schimmel et al., 2007). The effect of activating and reinforcing prejudices and inter-group conflicts has been documented in a very diverse way. A reminder of mortality values what belongs to the sameness and devalues what belongs to otherness. It values the inside groups and devalues the outside groups. It promotes the use of stereotypes in the description of individuals in a group; it encourages a thorough search for explanations to justify non-stereotyped behavior; it leads to more favorable evaluations of stereotyped individuals, relative to non-stereotyped individuals. It increases, among other examples, the dislike of non-Jews towards Jews, heterosexuals towards homosexuals, young adults towards the elderly, etc. (Pyszczynski et al., 2015). It decreases the attention to the medical needs of patients of another religion; it promotes altruism, donations, generosity towards local charities and decreases donations to foreign ones (see Jonas et al., 2013), etc.

And again, individuals under the mortality salience put away ideas or activities reminding them that they are, in origin, natural beings (thus mortal) - animals (Arndt et al., 2005). By inducing an awareness of the temporality of existence, the confrontation with nature causes a reminder of mortality (Pienaar, 2011), which, in defense, produces an increase of the psychological distance to the natural environment (Vess & Arndt, 2008).

The link to this natural environment is complex. If individuals include it as a component of their identity, a mortality reminder makes them want to preserve it (Fritsche & Häfner, 2012). In addition, the distal effects of a mortality recall are a function of socio-cultural norms that are made contextually salient (Jonas et al., 2013). A mortality reminder increases the environmental guilt of ecological individuals when ecological values are raised (Harrison and Mallett, 2013). It then provokes pro-environmental behaviors (Fritsche et al., 2010, Gailliot et al., 2008). However, this reminder of mortality has no effect on individuals who do not endorse these values (Harrison & Mallett, 2013). When ecological values are salient, in a mortality recall, it significantly influences the level of environmental concern of individuals, depending on whether, or not, self-esteem is a function of the commitment of environmental actions (Swim et al., 2009, Vess & Arndt, 2008).

In view of these different mechanisms, the scope of TMT seems very broad, especially in terms of its behavioral effects. These tend to arouse the interest of marketing professionals insofar as the question of materialism holds, as we have seen, a cardinal place. We therefore propose to analyze the specific deployment of TMT in the marketing field by questioning the commercial and, more broadly, professional practices associated with it.

3. Marketing Perspectives of the TMT and Variability of Behavioral Effects

If, at first reading, the TMT invites the use of death at the commercial level—in particular in the exercise of market communication—at second reading, the exploitation of the salience of mortality can have negative

consequences for social and psychological plans. This duality opens the field to a critical comment on the ethical dimension of the exploitation of death (more specifically a mortality reminder) in the context of marketing practices that do not necessarily belong to a domain or a sector directly, linked to death.

3.1 *The Positive Impact of Exploiting Death Mortality in the Economic and Commercial Levels*

An induction of mortality impacts relationships with brands and products. The “mixed effect” is found here fully. Individuals exposed to mortality reminders develop ethnocentric, nationalistic and patriotic consumer behaviors - where endogenous (inside group) logic is found (e.g., Liu & Smeesters, 2010, Maheswaran & Agrawal, 2004). They show preferences for local offers (Fransen et al., 2008). The relationship to consumption itself is altered. One of the major impacts of a mortality reminders on consumer behavior thus falls under materialism - defined by Ladwein (2005) as “propensity of individuals to value material goods or possessions”, qualifying material consumers as “individuals who are very invested in what the consumer society offers them and see it as a means of self-realization”. Materialism is a dominant cultural model in the West (Fransen et al., 2008; McMahon, 1995), which is the case in the Eastern countries too, especially in Lebanon (Moawad & Tissier-Desbordes, 2007). Material objects, through their acquisition and possession, contribute significantly to self-esteem (Mandel & Heine, 1999; Choi et al., 2007). In this socio-cultural context, mortality reminders increase spending (e.g., Ferraro et al., 2005; Fransen et al., 2008; Mandel & Smeesters, 2008). They induce an increase in the quantity of objects purchased, and an increase in the quality of the chosen objects, through a valuation of brands and an orientation towards luxury (e.g., Arndt et al., 2004; Choi et al., 2007; Dar-Nimrod, 2012; Maheswaran & Agrawal, 2004; Rindfleisch et al., 2009; Sheldon & Kasser, 2008; Solomon et al., 2004; Vess & Arndt, 2008). Mortality reminders increase the attractiveness of products that, in commercial advertisements, enhance self-esteem (Dar-Nimrod, 2012; Das et al., 2014).

After the theoretical elements presented above, it is effective from a marketing point of view to resort to the mortality reminders to sell products whose characteristics are associated with cultural values. This means that advertisers use mortality to conquer new customers and change their buying behavior. This reasoning is based on a vision that is as real as it is theoretical. Indeed, the proliferation of images of death broadcast by the media, especially on television and on the web, (e.g., the terrorist attacks of Beirut, the war in Lebanon and Syria, refugees, etc.), encourages consumers to buy products that are notably present on the same media.

In the same vein, Cally (2011) shows that death makes selling effective. He describes the use of death as a productive business strategy, whether in the cinema and/or in reality. Take the case of cinema for example; Horror movies characterized by the salience of death may be used as a prolific advertising theme by marketers (Cally, 2011). According to the same author, death is an advertising theme much in demand by marketing professionals who use it as advertising stimuli. In the same logic, Sabri-Zaaraoui et al. (2006) point out that advertisers do not hesitate to stage taboos and considers death as one of the latter, which is frequently exploited as a privileged source of inspiration in advertising creation (Sabri-Zaaraoui et al., 2006). On this point, Cally (2011) empirically proves by concrete examples this high exploitation of death by marketers. Thus, he illustrated by giving the example of McDonalds when it chose to invite the character of the killer from the movie “Scream” to *fast-food*, using the slogan “Come as you are”. According to the same author, this advertisement targeted, in general, fans of horror movies, and more particularly the people who were scarred by this horror movie during its release. A second example is the “Axe” deodorant brand and the “Toyota” car, which used “Zombies, i.e., Undead” to advertise their products. To attract viewers, both brands used the power or the army of the dead. Thus, Cally (2011) believes that these “zombies” constitute the business of these brands. We conclude with the example of the brand IPA beer, showing a gentleman who never dies despite the many fatal accidents he faced, and with the example of the brand “East pack” that did not hesitate to let appear a skeleton to backpack of the brand (cited by Manceau and Tissier-Desbordes, 1999).

On the other hand, we can say that in general, death makes sale. It represents a growing “business” not necessarily linked to traditional companies, offering products and services distributed in markets directly or indirectly related to death (Mercanti-Guérin, 2011). We refer here as an example to insurance and banks (e.g., life insurance, death insurance, child insurance, etc.), funeral enterprises (e.g., flowers, plates, coffins), food companies (e.g., products with no expiry date, functional food, vegetarian products, etc.), pharmaceutical and cosmetic industries (e.g., anti-wrinkle products, anti-aging product, youth-solution product, etc.), amusement parks, automobile, travel, video games, etc.

Overall, we conclude that death as a “profession” is becoming more and more widespread. On the other hand, death as a “taboo” object is less and less noticeable. Thus, there are many industries working in the death market. i.e. taking death as “a profession”. The latter appears profitable from an economic point of view and therefore

encourages companies to adopt it, especially brands that are difficult to perceive (Manceau & Tissier-Desbordes, 1999).

3.2 The Negative Impact of Exploiting Death Mortality in the Social and Psychological Levels

The activation of mortality salience in marketing, communication or other fields is not insignificant because it poses an important ethical problem. It is the arbitration that professionals do, more or less consciously; between the commercial benefits they can derive from exploiting SM, and the psychosocial risks they potentially support for their marketing objectives. In this regard, Letho and Stein (2009) identified individual psychic and physical disorders directly attributable to a state of anxiety about death. These two authors first recall, based on the work carried out by Abdel-Khalek (2005), that anxiety about death is charged with a heterogeneous set of negative emotions like disarray, worry and insecurity. It seems, then, that anxiety about death changes the personal relationship with time, so that individuals anxious about their existence find difficulties in projecting themselves (Letho & Stein, 2009; Martz & Linveh, 2003, 2007). A state of anxiety is also likely to lead some individuals to social isolation causing personal and intimate disorders, e.g., lack of self-confidence, eating disorders, difficulties in building a relationship (Bassett, 2007). Finally, Letho and Stein (2009) examine the role of anxiety about death in the appearance or reinforcement of psychiatric pathologies.

Given the potentially harmful psychological consequences of death anxiety on individuals, the use of mortality reminders requires some caution from marketing professionals. Their responsibility for this “collateral” damage may indeed be engaged. Regulatory and ethical bodies have also acted in the direction of limiting or even banning certain marketing practices that call for mortality reminders. Organizations such as the ARPP in France (i.e., Regulatory Authority for Advertising) have censored several advertisements with a catastrophic story, provoking a feeling of anxiety too high among the receivers. This was the case, for example, of WWF international campaign, which made an analogy between the number of victims of 11 September 2001 and the human losses during the Tsunami in South-East Asia at the end of 2004. The visual of the advertisement showed Manhattan attacked by a flock of airliners and was captioned by the following phrase: “The Tsunami killed 100 times more people than September 11, 2001” (“The Tsunami killed 100 times more people than 9/11”).

On the ethical level, the questioning of the use of the language of death in advertising is very early made by Mandel and Heine (1999). Later, Dar-Nimrod (2011) and Das et al. (2014) suggested that marketers or advertisers may voluntarily create mortality recalls whose goal is to increase the envy of the products presented in the literature. Marketing of terror (advertisement) pushes the viewer to buy it. Other specialists are more interested in rising a legal questioning of this practice. Their first goal is to regulate the use of such advertisements, then to pursue the companies involved. Other authors underline the birth of a culture of horror resulting from the omnipresence of the death in the media landscape and fear its perverse effects (e.g., a replication of violence) as consequences of the social acceptance of death and the trivialization of its use in advertising. It should be noted that children and young people are easily influenced from the use of violence and death (Manceau & Tissier-Desbordes, 1999) and are therefore most likely to be adversely affected by its adverse effects.

As mentioned earlier, death as a mean of persuasion is also used in prevention campaigns with a social purpose. Nevertheless, this means of persuasion is questioned by some researchers, who stipulate that death can have effects opposite to those expected by advertisers (denial, rejection, flight). Others, on the other hand, support the idea of the effectiveness of its use to get the message across (attract attention, improve memory, generate action).

In recent years, the death is disseminated on the media (e.g., the wars, news about terrorist attack). But what about its effect? We tested the effect of death reminders on consumptions choices.

4. Methodological Context of the Research Program

4.1 Design, Participants and Experimental Procedures

The experiment is based on a single factor. For the manipulated variable (i.e., MS), we provided two types of discussions: discussion on the Wars and terrorist attacks in Lebanon versus discussion about the economic situation in Lebanon. The aim of the manipulation was to test the impact of these two types of discussion on consumption choices. Based on experimental protocols that implement TMT, the experiment carried out here involves one experimental group that is exposed to MS and another one that is not exposed, to examine the behavioral effect of these two types of discussions. The participants were divided into two groups; the first one was assigned to the MS discussion (N participants = 80) and the other to the NMS discussion (N participants = 80). We specify that, all participants live in the same geographic area (Beirut), that has undergone several attacks. The difference is that, one group is exposed to MS (remember the war) and the other is not. Overall, 160

university students (90 women; M age=20.24; standard deviation (SD)=1.43) participated in this experiment. All the participants belong to the same neighborhood, the same religion and the same culture. To measure the behavioral effects of MS, research in TMT protocols generally uses participants with these sociodemographic criteria and profile (e.g., Arndt et al., 2009).

As a first step, the individuals were randomly assigned to the two experimental groups and were invited to think about the two topics of the discussion type. Immediately following the discussions, participants completed the Positive and Negative Affect Schedule (PANAS) of Watson et al. (1988) and participated in a ‘word search game’ to determine their emotional state. At the end of this distraction phase, which lasted between 3 and 5 minutes, the participants completed a questionnaire asking them to make consumption choices between baskets of pro-materialistic products and services and baskets of non-materialistic products and services. Finally, participants also provided information on their socio-demographic profile: age, gender, SPC, income and family status.

4.2 Materials

4.2.1 Independent Variable

The experiment’s manipulated variable is the “type of discussion” and it has two modalities. The first type of discussion is an “anxiety discussion” that generates MS, in describing the wars and terrorist attacks in Lebanon, and the disastrous consequences of wars and terrorist attacks in Lebanon. The second type of discussion is an “economic discussion”. In this condition, participants are not exposed to MS (Greenberg et al., 1997).

4.2.2 Manipulation of MS

TMT requires various protocols to create and manipulate MS. These protocols have been clearly defined and widely presented by TMT theorists (see Greenberg, 2011). According to these protocols, manipulation of MS is carried out as follows: the researchers ask the participants to answer two (imaginary and open) questions about their own deaths, before presenting them with the main questions (this is the protocol most often used by researchers). The researchers carry out the experiment in a place associated with and evocative of death (e.g. a funeral home or cemetery) and expose the participants to visual messages (e.g. images of a bad car crash and terrorist attacks) or textual messages (puzzles or word association games) related to death. The researchers then ask participants to fill in a measurement scale of anxiety in relation to death. This involves, first, verifying that MS has generated the behavior expected by the experimenter, and second, comparing these behavioral effects with those observed in the other experimental condition(s). The second group was interviewed after being exposed to questions or messages that were emotionally ‘neutral’, that is, not generative of thoughts related to death. Indeed, the choice of discussions is justified. The remind of the war and terrorist attacks is a validated mechanism for the manipulation of MS (cf. Choi et al., 2007; Doherty & Clayton, 2009).

4.2.3 Affect and Distraction Phase

Immediately after discussions, the experimental subjects were asked to carry out two tasks. First, the participants filled out the PANAS affect measurement scale created by Watson et al. (1988) and translated into French by Caci and Baylé (2007). Using this 20-item scale, subjects can describe their emotional state using a series of adjectives. The two positive and negative dimensions are evaluated separately over 10 items. Each of these is measured with a 5-point Likert scale specifying the intensity of emotional reaction experienced felt (ranging from 1 very little or not at all to 5 very often or very much). The process of completing this scale was a distraction phase following discussions, thus making it a way of controlling for affect. This method was used, within the framework of TMT, to displace death-related thoughts away from the subjects’ focus of attention. The second task was to fill in a word search grid. The objective here was twofold. On one hand, it constituted a distraction phase between independent variable « discussion » and responding to the dependent variable and, on the other hand, it shifted again the participants’ focus of attention away from MS (see Vess & Arndt, 2008). The reason for using two distraction tasks rather than one was because we wanted to make sure that distal defenses were fully activated. Indeed, when death-related thoughts are the focus of attention, MS does not arouse distal defenses (Greenberg, 2011; Pyszczynski et al., 2015). We, however, were mainly interested in studying the behavioral effects of MS at the distal level.

4.2.4 Dependent Variable

The objective of this study is to explain the consumption choices in response to a communication. We mean by consumption choice, consumption intention or consumption trend. Following discussions and the distraction phase, participants were asked to choose between the following consumption packages: “a Range Rover, an apartment in Beirut, and an invitation in luxury restaurant”, versus “a hybrid car, an apartment in the village and

an invitation for a hiking day). The participants were asked to choose a basket each time. The products and services in the various baskets were selected according to their materialistic or no-materialistic ranking (cf. Mandel & Heine, 1999).

5. Findings and Discussion (Contributions, Limits and Future Research)

Using SPSS 21.0 (statistical software) we conducted the data analysis. The study analysis was divided into two parts. At first time; a chi-square test (χ^2) was performed to test the significant association between variables. Several arguments justify our using and automatically call of the chi-square test. Firstly, the objective of our research is to investigate the difference association impacts between the two conditions of the independent variable on the dependent variables. Then, the nature of our sample (independent) and data collected of our independent and dependent variables (dichotomous nominal data).

Our analysis revealed that both discussions generate in general pro-materialistic consumption choices in the Lebanese context. Most participants opted for rather materialistic consumption choices ($P=80\%$). This result support H1 (See appendix A). We can explain these results by the earlier discussed studies that have shown that materialistic consumption—which is highly valued—defines many people’s cultural worldview (Arndt et al., 2004). It is the dominant culture in Lebanon and in this century. Materialistic consumption is a defense mechanism to reduce anxiety of death and enhancement of self-esteem.

In addition, the analyses show that, MS inducing discussion leads participants to opt for pro-materialistic products (Range Rover, apartment in Beirut, invitation in luxury restaurant; $\chi^2 > 14.639$, $p < 0.05$ for all choices). These results support H2.

On the other hand, the results show that, in the absence of MS or economical discussion, individuals are more likely to opt for non-materialistic choices rather than pro-materialist consumption choices. These results confirm that Lebanese consumers opted to pro-materialist consumption choices scenically when death anxiety is salient. (Hybrid car, apartment in the village, invitation for one day hiking, $\chi^2 > 9.610$, $p < 0.05$ for all choices). These results support H3.

These results mean that significant interactions were emerged between the mortality salience and the choice of the products and services. These choices scores are logic because the dominant culture in Lebanon is materialistic, especially that Lebanese people live in a terror climate. The consumption as materialistic choices led, to reduce anxiety of death and reinforce self-esteem, then to defend their culture worldview and values. The wars and terrorist attacks had impact positively the materialistic cultural worldview. We can therefore conclude that the sources of culture worldview affect and moderate the choice of consumer behavior facing to MS.

According to these results, all stakeholders (governments, NGO’S, marketers) should reduce the diffusion of all elements that increase the reminders of death in the media and society in general. It is also important to change the dominant culture in Lebanon to reduce the negative impact of this type of consumption in different levels (psychological, social, and environmental).

Our work enriches the corpus of marketing literature through the concepts imported from psychology to explain the impact of death anxiety induced through wars and terrorist attacks on consumer intentions to consumption.

This is the first paper that investigates in detail the interaction between “wars and terrorist attacks” and “intentions to consumption”. This paper is aimed to obtain the scientific contributions discussed in other disciplines and absent in ours, about the causes of consumer intentions to consumption against death anxiety generated in different situations. Our mission was to contribute scientifically in reducing materialistic consumption by reducing the using of reminders of death. In fact, materialistic consumption is an adaptive mechanism of defenses of mortality salience (Arndt et al., 2004). If we reduce the use of death on media for example we reduce materialistic consumption. On the other hand, it is necessary to value another culture than the dominant one, the materialistic culture (Urien, 2003).

Some limitations have emerged in our study. The first of these limitations concerns the psychological impact of this study; we mean the MS manipulation through the reminder of death for participants. The second limitation is relation to different cultures present in Lebanon, we can’t measure all the cultural worldviews presented in this country.

For future research, it would be good to distinct between different cultural worldviews and the consumer’s choices of consumption. Again, it is necessary to largely apply this experimental protocol in other countries to see if the results will be confirmed. Another experiment can be considered by adding other materials to manipulate MS, like Videos about wars. This will help to test the external validity of our results.

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Appendix A

Corpus of Hypotheses

Hypotheses	
H1	In a situation with MS, individuals are inclined towards pro-materialistic consumer choices.
H2	In the absence of MS, individuals are more likely to opt for non-materialistic choices rather than pro-materialist consumption choices.
H3	In the both situations, individuals are predominantly inclined towards pro-materialistic consumer choices.

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