



# Influencing factors of materialism among residents of the UAE: The role of mortality salience and spirituality

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According to the Terror Management theory, the management of existential insecurity critically influences human behavior. In philosophical schools, spirituality is viewed as a contrast to the acquisition of materialistic possessions. We investigated whether experimentally priming participants with spirituality-related, mortality-related, and neutral texts, affects materialistic attitudes among UAE residents. We did not find any significant differences in mean self-reported materialism scores between conditions (mortality salience vs. spirituality vs. neutral prime) using a repeated-measures analysis of variance ( $F(2, 58) = 1.143$ ,  $p = .326$ ,  $\eta_p^2 = .04$ ). In view of these surprising results, reflections on the nature of materialism in a diversified domain of cultural and economic viewpoints are offered, along with implications for the conceptual foundations of TMT.

Specific area of psychology: mortality and materialism

Keywords: Materialism, mortality salience, spirituality, terror management theory

As is prevalent in many societies, the sheer concept of death and dying instigates insurmountable fear, and individuals seek various methods of coping. The theory of terror management (TMT), as first coined by Ernest Becker (1973), posits that individuals embrace materialism as a way of coping with existential insecurity and death anxiety. The theory suggests that materialism, as part of various cultural and society value systems may be used to suppress fear associated with the reality of death (Arndt & Vess, 2008; Arndt, Routledge, Cox, & Goldenberg, 2005). Acute awareness of death, also known as mortality salience, is a related concept which confronts individuals to seek coping methods such as conspicuous materialism or accumulation of materialistic wealth (Arndt, Solomon, Kasser, & Sheldon, 2004; Becker, 1973). To this effect, various research studies have shown a significant relationship between mortality salience and materialism (Fransen, Fennis, Pruyn, & Das, 2008; Kasser & Sheldon, 2000; Arndt et al., 2004). In some cases, (Fransen et al., 2008), subjects were primed with mortality salience to see if there would be an increase in their conspicuous consumerism behaviour. The general argument that these studies present is that mortality salience precipitates greed and materialistic tendencies as a way of suppressing fear and anxiety associated with death.

Evidently, the concept of possession has become an increasingly more important part of everyday life in modern societies (Richins, 1994). Contingent with capitalist economic values, theories such as terror management suggest that materialistic aspirations may reduce the anxiety of existential threats and may explain the need to spend (Christopher, Drummond, Jones, Marek, & Therriault, 2006; Johnson, Ballister, & Joiner, 2005; Kasser, 2002; Kasser & Sheldon, 2000; Pavis & Mason, 2004; Stillman et al., 2012; Stillman, Finchan, Vohs, Lambert, & Phillips, 2012). This is in line with the proposition of TMT which predicts that the possession of material things can induce a feeling of symbolic immortality (Dechensne et al., 2003) and possessions play an important role in maintaining self-worth in a threatening situation (Pavia & Mason, 2004). Moreover, studies also demonstrate that exposure to mortality-related stimuli increases participants' tendency to over-consume as a means to escape from self-awareness (Mandel & Smeesters, 2008). Such theories describe this form of coping mechanism as maladaptive behaviour (Burke, Martens, & Faucher, 2010). Explaining maladaptive behaviour, some of the most well-established findings regarding materialism highlight its negative relationships to psychological health, life satisfaction, and other measures of well-being (Arndt et al., 2004). Studied subjects were found to be less satisfied with life in general and had greater neurotic and depressive symptoms (Burroughs, Rindfleisch, & Kasser, 2002).

However, studies have also found that mortality salience also leads to more positive attitudes towards charities (Vail, Juhl, Arndt, Vess, Routledge, & Rutjens, 2012) and more pro social behaviour. In addition, mortality salience has been shown to influence creativity (Jonas, Schimel, Greenberg, & Pyszczynski, 2002), cultural trauma and recovery, legal judgments, political attitudes, and evaluations of world leaders (Burke et al., 2010). Relatedly, a comprehensive review of TMT-related research shows that wealth and material objects may generate a sense of security and buffer existential anxiety (Zaleskiewicz, Gasiorowska, & Kesebir, 2013).

Furthermore, the proposition of 'multifaceted materialism,' constituting 'the good,' 'the bad,' and the 'ugly' of materialism (Shrum et al., 2014) stands as a clear contrast to theories such as TMT. According to this idea, consuming is not always a reaction to threat or decreased well-being, but may rather result in a number of positive outcomes. For example, materialists may experience more positive affect, less negative affect, higher satisfaction

with life (Hudders & Pandelaere, 2012), as well as more positive interpersonal relationships and interactions (Nelissen & Meijers, 2011). In another study, material possession has been associated with symbols of identity, personality, and self-expression (Burrough et al., 1991; Dittmar, 1992a; Dittmar & Pepper, 1994; Karabati & Cemalcilar, 2010). Materialism has also been found to be associated with traits such as personal control, and altruism that largely represent needs that enhance psychological functioning of individuals (Sagiv & Schwartz, 2000). This might indicate that people's desire to indulge in conspicuous consumption may be a proactive routine behaviour, especially if the buying capacities are overwhelming.

As it appears, there are no general consensus outcomes of materialistic thinking since it has been considered in the past to be maladaptive and a reaction to existential insecurities, while at the same time other accounts suggest positive outcomes. This inconsistency challenges general theoretical underpinnings of TMT which fosters a negative outcome of materialistic consumptions. Indeed, the accumulated evidence may be interpreted as evidence of differential context-specific functioning of materialism (Karabati & Cemalcilar, 2010; Shrum et al., 2014).

In the interest of conceptually enriching the association between mortality salience and materialism, it is important to consider other factors that might influence this relationship. Like death, spirituality and religion exist as a constant in the mental framework of many individuals and can theoretically mitigate the effect of existential insecurities. Most recently, Stillman and colleagues (2012) tested the hypothesis that spirituality reduces the desire to consume conspicuously. In two studies, they found, on the one hand, that individuals who reported having had spiritual experiences also reported a decreased desire to spend lavishly for consumer goods. On the other hand, participants who were asked to recall a spiritual event also demonstrated a decreased desire to consume conspicuously compared to participants who were asked to recall an enjoyable event. Consistent with these accounts, exposure to spiritual experiences has been shown to reduce the desire to consume conspicuously (Stillman et al., 2012).

One possible explanation suggests that one cannot pursue both self-enhancement (epitomized by conspicuous consumption) and self-transcendence (epitomized by spirituality and religion) simultaneously. Consequently, a strong sense of spirituality should be negatively associated with the desire to gain materialistic possessions (Kilbourne, Grunhagen, & Foley, 2005). However, it has been argued that the concept of spirituality is rather vague and has been difficult to define and operationalize (Hill et al., 2000; Shreve-Neige & Edelstein, 2004). This problem is exacerbated because religion and spirituality are often used interchangeably in the literature and the multi-dimensionality (that arises from the complexity of these concepts) is rarely captured (Hill et al., 2000).

It suffices to say, however, that the concept of spirituality in both Eastern and Western philosophical schools of thought is seen as having an adverse relationship with materialism and the desire to consume conspicuously (Stillman et al., 2012). Keeping in mind the UAE's symbolism for materialistic consumerism as well as being in a region with historically spiritual roots, the current research study was designed to assess the effects mortality salience and spirituality would have on residents' materialistic tendencies. The UAE is often portrayed as a consumer's haven, where shopping malls are ubiquitous and the spending culture of residents is considered to be among the highest worldwide (Madichie & Blythe, 2011). Moreover, the existing research in the UAE related to materialism, mortality, and spirituality are mostly conducted to assess perceptions and attitude towards consumerism (Mady et al., 2011), use of spirituality as a therapeutic measure (Lambert, 2008) or in health settings

(Ayoub & Hijjazi, 2013). The present study is unique and is, to the authors' knowledge, the first attempt for research in the area of mortality, spirituality, and materialistic thinking in this specific demographic context. The authors of this research, therefore, took interest in exploring the effects mortality salience and spirituality would have on their subjects' materialistic tendencies. Moreover, there exists inconsistency between the effects of mortality salience and materialism on the one hand, and materialism and its positive effects on the other. Additionally, the dominant protective role that spiritual priming can play in the face of existential concerns has been well-illustrated in past research. However, most accounts have so far been correlational which raises questions of causality. For this added reason, the present research adds to the existing literature by extending the general (TMT) conceptualization of the materialism construct by providing an experimental study using a repeated-measures design. By experimentally priming participants with spirituality-related, mortality-related and neutral texts, the study investigated effects on materialistic attitudes among the UAE residents.

## **Method**

### *Design*

A within-groups repeated-measures design was adopted in the present study. Priming was categorized as independent variable and comprised 3 conditions (mortality vs. spirituality vs. neutral condition). Conditions were counterbalanced (i.e., 6 different possible sequences). Impact of these priming conditions on materialistic thinking was investigated.

### *Participants*

The sample comprised of opportunistically recruited undergraduate and postgraduate Psychology students at Middlesex University Dubai. Data from twelve out of 72 originally recruited participants were discarded from analysis due to experimental attrition and missing data. Therefore, data of 60 participants (55 female, mean age = 24.44, SD = 6.51) were included in our analyses.

### *Materials*

*Priming Conditions: (Mortality salience, Spirituality, Neutral).*

*Mortality Salience:* Following a well-established approach (Cohen, Pierce, Chambers, Meade, Gorvine, & Koenig, 2005; Landau et al., 2009), participants in the mortality salience condition were primed by being asked to conscientiously respond to the following open-ended task: "Please briefly describe the emotions that the thought of your mortality arises in you."

*Spirituality:* In the spiritual priming condition, participants were presented with two quotations by the poets Rumi "Be like the sun for grace and mercy. Be like the night to cover others' faults. Be like running water for generosity. Be like death for rage and anger. Be like the Earth for modesty. Appear as you are. Be as you appear." (pg. 23, LaTona, 1999), and Henry David Thoreau "As you simplify your life, the laws of the universe will be simpler; solitude will not be solitude, poverty will not be poverty, nor weakness." (pg. 35, LaTona, 1999), to which they rated their agreement on a 10-point Likert-type scale (1 = *strongly*

*disagree*, 10 = *strongly agree*). We used these quotations because they have been demonstrated to show strong priming effects in previous studies (Rothschild et al., 2009).

*Neutral*: In the non-spiritual priming condition, participants were exposed to two quotations by William Shakespeare: “Give thy thoughts no tongue”; and Leonardo Da Vinci: “Life well spent is long” (pg. 13, LaTona, 1999). Here also, participants rated their agreement on a 10 point Likert-typed scale.

*Materialistic thinking* (Richins & Dawson, 1992). This self-report measure is an 18-item scale with a Likert-typed response format ranging from 1 (*strongly disagree with this statement*) to 5 (*strongly agree with this statement*). A sample item is “I’d be happier if I could afford to buy more things.” The measure has been shown to possess excellent psychometric qualities (Christopher et al., 2006). Cronbach alphas in the present study were .84, .84, and .85 for spiritual, neutral, and mortality primes respectively.

### Procedure

Data was collected after class in classroom-settings. Confidentiality of data was ensured, participation was voluntary, and written informed consent was obtained. Those who consented were presented with an information sheet which informed them that they would be participating in a study about consumer behavior. Since data of each participant were collected on three different days in three consecutive weeks, only those participants who indicated that they would be able to participate on all three occasions were recruited. Questionnaires were administered to the participants on the same day of the week in 3 consecutive weeks. The participants were provided with one of the three different primes in each week (i.e., mortality salience vs. spirituality vs. neutral prime) and assessed on materialistic thinking. To control for order effects, conditions were counterbalanced (i.e., 6 different possible sequences). This study was reviewed and approved by the Ethics Committee of Middlesex University Dubai.

## Results

Means and standard deviations are provided in Table 1. We did not find any significant differences in mean self-reported materialism scores between conditions (mortality salience vs. spirituality vs. neutral prime) using a repeated-measures analysis of variance ( $F(2, 58) = 1.143, p = .326, \eta_p^2 = .04$ ). Therefore, contrary to our hypothesis, no influence of mortality salience or spirituality priming was observed.

**Table 1.** Means and Standard Deviation of Materialism Scores by Condition

	Mean	SD	95% confidence interval	
			Lower bound	Upper bound
Spiritual	2.67	0.50	2.54	2.80
Neutral	2.72	0.49	2.59	2.84
Mortality	2.71	0.49	2.58	2.83

## Discussion

Past research indicates that people's tendencies towards materialism and consumption partly stem from fear of death (Arndt et al., 2004; Burke et al., 2010; Christopher et al., 2006; Johnson et al., 2005; Rindfleisch & Burroughs, 2004), and the terror management framework provides adequate tools to empirically test this assumption by the implicit activation of insecurity related to mortality concerns. The majority of research indicates that materialistic desires inherently conflict with spiritual ideologies that might emphasize a simpler, self-contained construct of reality (Arndt, Solomon, Kasser, & Sheldon, 2004; Rindfleisch, Burroughs, & Wong, 2008; Rothschild et al., 2009; Stillman et al., 2012). The results of the present study did not find any significant influence of priming with mortality salience and spirituality on materialistic thinking in residents of the UAE.

These findings are inconsistent with predictions of the terror-management theory. Moreover, our findings are in contrast to evidence from previous research (Rothschild et al., 2009; Shariff & Norenzayan, 2007; Stillman et al., 2012). On the one hand, this may be due to possible limitations as encountered in any experimental study (see below). On the other hand, significant study effects (particularly in social psychology) have often been observed to be difficult to replicate (e.g., Wagenmakers et al., 2012). Difficulties to replicate have been attributed to non-genuine effects (e.g., Ioannidis, 2005) or effect inflation (e.g., Ioannidis, 2008). We should have been able to detect even small effects (corresponding to  $f^2 = .10$ ), according to the well-established effect size classification by Cohen (1988), assuming 80% power ( $\alpha = .05$ ) in a repeated measures analysis of variance. Therefore, the present design should have been able to adequately detect effects of our experimental manipulations. Nonetheless our null findings add significantly into the existing body of research by providing a different perspective to the theoretical notion of TMT and materialistic thinking. Materialistic thinking has often been found associated with negative outcomes in situations of increased existential anxiety (TMT). The non-significant findings of our research suggest a potential for expansion in the theoretical understanding of TMT, utilising a more global approach to understand the possible association between mortality salience and consumption of materialistic goods. We discuss a number of further probable factors that may account for our observed null findings, i.e., the non-significant differences.

First, some researchers call for a more rigorous operationalization of the concept of spirituality by arguing that the conceptualization of the construct appears to be too vague. Spirituality is often defined as an individual's personal experience which has to do with personal transcendence related to any belief in the quest for ultimate meaning (Hill et al., 2000). On the other hand, religion is the formally structured realm of this experience and is marked by membership to a particular institution or ideology (like the church). The dialectical relationship between spirituality and religion is important in this context, because it may help in explaining our observed results. The study utilized quotes with a spiritual connotation in order to induce spirituality. However if, for the sake of argument, we make the assumption that participants are religiously oriented, then a spiritually oriented prime may not have the desired effect. Indeed, Rothschild et al. (2009) found that individuals high in religious fundamentalism became more compassionate following mortality reminders only when compassionate values were portrayed in a religious context (i.e., Bible or Qur'an) but priming compassionate values in non-religious contexts had no impact. Furthermore, it may be argued that if spirituality is just one dimension along a more religious orientation, then priming with spiritual cues will not have the intended influence.

Another possible reason related to spirituality and mortality salience might be the manner how a particular spiritual tradition views mortality. Based on spiritual or religious orientation, the negative trajectory so often observed in TMT research can shift dramatically. In this vein, a negative correlation has been demonstrated between materialism and well-being in individuals with collectivistic value orientations, but no such association has been found in individualistic cultures (Burroughs & Rindfleisch, 2002). For example, some Western neo-spiritual traditions view life as a “once only” phenomenon wherein death is seen as the ultimate end of existence (Massoudi, 2010); and even atheism espouses the ‘one life’ doctrine. For these individuals, mortality salience-induced terror might be stronger owing to higher perceived vulnerability to death. However, Eastern spiritual traditions take a different approach to conceptualizing mortality (Shreve-Neiger & Edelstein, 2004). For example, in Hinduism and Buddhism, which have tangentially created much of the Eastern spiritual tradition, death is not seen as an end of one’s existence. Thus, mortality may not generate as much terror in such religious contexts. This fundamental difference between Eastern and Western religious philosophies may challenge the basic premise of TMT that mortality induces terror.

Second, in light of the present study’s findings, the general construct of materialism in TMT research may be in need of expansion. Materialism, defined earlier as the ‘acquisition’ of objects, often status-laden (Richins & Dawson, 1992), is precociously challenged in light of globalization. In the context of this research, luxury is synonymous with the UAE, and materialism may be a way to foster and strengthen social status and assimilate oneself along a dimensional social hierarchy, especially in Dubai (Mady et al., 2011). This means that materialistic thinking may be seen as a proactive process as opposed to a reaction to anxiety. The present research highlights that defining materialistic thinking as the mere desire for an acquisition of wealth seems conceptually insufficient. This has been supported by the proposition of “multifaceted materialism” (Shrum et al., 2014), wherein consuming or indulging in material possession may not always be a reaction to existential insecurities or threats but rather might result in certain positive outcomes (Burrough et al. 1991; Dittmar, 1992a; Hudders & Pandelaere, 2012; Karabati & Cemalcilar, 2010; Nelissen & Meijers, 2011; Sagiv & Schwartz, 2000).

Furthermore, materialism as a value can be learned through socialization or an acculturation process. According to Kilbourne et al. (2005) the individual is shaped by society, which pursues the culturally sanctioned goals of financial success, possessions, public image, and high status. Under this perspective, consumers can learn to become more or less materialistic according to their environment. In relation to the present research, the dominant, prevalent idea in most developments in the UAE is the promise of luxury and prestige. UAE’s economic system emphasizes free market transactions in products and investments, creating a hybrid market, where consumption might be a meaningful communal experience (Mady et al., 2011). Based on participants from Dubai, Mady et al. (2011) found that the development has fostered the aspiration of consumerism and superficial hedonism. Therefore, in Dubai, materialistic pursuits might be a way to deal with mortality by exercising control over one’s immediate environment in a way that is accepted and endorsed in the dominant cultural and economic worldview.

This study is not without limitations. First, the participants were limited to undergraduate and graduate students. It would be interesting to see if similar effects would be observed in older individuals who have exhausted their materialistic pursuits to a certain extent, and who also might have a different understanding of mortality in general. Second,

this study did not control the factor of religious orientations towards mortality. If people subscribe to a religious or spiritual ideology that views death as an escape from life, or a state of mediation between this life and the afterlife, they are less likely to be influenced by existential anxiety.

However, from a methodological point of view, our study has used a counter-balanced repeated-measures design in a comparatively large number of participants which should have allowed robust assessment of priming effects whilst ruling out between-groups sampling biases. Of note, the divergence from normative effects observed between materialism, mortality, and spirituality in this research has far reaching consequences for the theoretical expansion of TMT or materialism itself. In line with the recent diffusion of global consumer culture in the UAE marketplace, with the sudden development of large-scale shopping malls, the offerings of themed ambiance and multi-cultural restaurants, has created a disruption in traditional status hierarchies and given rise to globalizing ideologies that do not contend with the modernist definition of materialism. In this view, the most important implication of this research is the conceptual renovation of materialism in line with globalizing cities across the world, that have created homogenized global consumers where materialism can be seen as a liberating and meaningful collective experience (Holt, 2002) contingent with the collectivistic goals of most spiritual traditions.

To summarize, although our findings are inconsistent with some previous studies (Rothschild et al., 2009; Shariff & Norenzayan, 2007; Stillman et al., 2012), the present research illuminates factors that may stand vigilant against the anxiety of mortality. This indicates that people may ascribe higher values and meaning to life, which might be less pronounced than the negative effects of existential anxiety, but which are nevertheless important to consider. Previous TMT research and conceptual reviews have reported and mainly focused on maladaptive coping strategies such as conspicuous consumption in regard to mortality salience, thus leaving aside the beneficial outcomes such as positive view towards charity. Moreover, less attention has previously been directed towards other cultural views that engender a different awareness about mortality, one that is not negative or anxiety provoking, but perhaps liberating. For a theory that purports to offer a broad view of the human existential condition, this is a remarkable gap. In the future, it is therefore important to consider whether the motivational forces generated by terror management processes are capable of producing personal or social benefits beyond the effective management of death awareness.

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