

Living with terrorism or withdrawing in terror: Perceived control and consumer avoidance

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ABSTRACT

Terror attacks targeting civilians are becoming more frequent and affecting more places around the globe. Given the increasing intensity of terrorism and the threat of terrorism, consumer behavioral manifestations may occur. We conducted three studies with diverse methodologies and populations to explore how concerns with terrorism affect individuals' behavior. Two studies were conducted in Israel, a Western country that in the last decade experienced frequent terror attacks targeted at civilians. Results show that concerns with frequent terrorism increase people's desire for control and may lead to avoidant behaviors. The extent of the avoidance response depends on consumers' perceptions of whether they have some control over the odds of becoming a casualty should a terror attack occur. When individuals perceive their control to be low (but not high), they exhibit more avoidant behavior, changing their preferences and consumptions. We further find that individuals' general desire for control increases when they are primed with terrorist activities compared with general mortality. Copyright © 2015 John Wiley & Sons, Ltd.

We live in turbulent times. Terrorism and the threat of terrorism have a central place in our collective experience. Geopolitical realities suggest that terrorism will likely have an increasingly prominent place in our consciousness. Given the intensity of worry concerning terrorism, it is reasonable to assume that behavioral manifestations may occur when consumers perceive terror threats. The ubiquity of concerns about terror underscores the importance of understanding perceptions of the risks posed by terrorism (Mandel, 2005) and how terror concerns affect reasoning and thinking (Fischhoff *et al.*, 2012). In this paper, we explore how and when the threat of terrorism may drive avoidant consumer behavior.

Since 9/11, there have been nearly 5000 terrorist attacks worldwide, more than four times the number before 9/11. But even though many Western countries have experienced terrorist activity, the number of incidents has been relatively low, and public anxiety regarding terrorism quickly gives way to a baseline level of less concern. Thus, to date, individuals in most countries have been able to maintain their daily activities undisturbed by fears regarding terrorism. The experience of terrorism in Israel contrasts sharply with that in other Western countries.

According to the Global Terrorism Index, Israel ranks among the nations most affected by terrorism targeted at civilians over the past five decades. In the last decade, about 100 terror attacks targeting civilians have occurred in restaurants, nightclubs, coffee shops, buses, train stations, malls, universities, and other places. They have occurred in all major cities, as well as in smaller towns; 16.4 per cent of Israelis are terror victims, and an additional 22 per cent have a close family member or friend who was a victim (Bleich *et al.*, 2003). The local media provide extensive coverage of terror

incidents. Images of exploded buses, ruined coffee shops, wounded people, and general chaos are ubiquitous on Israeli television and in newspapers. The media have covered stories of casualties, broadcast victims' pictures, and interviewed grieving family members. Israelis are constantly reminded of the possibility of being a terror attack victim. Thus, to explore the effects of fears of frequent terrorism, we initially investigated Israelis.

HOW DOES BEHAVIOR CHANGE WHEN FEARS OF TERRORISM ARE SALIENT?

A straightforward response of individuals worried about terrorism is to avoid situations in which they may be victimized in an attack. For example, in 2004, when the terror threat was high, pedestrian traffic in Washington, DC, decreased (Bowles, 2004). In 2005, following the terror attacks on London's transportation system, there was a 30 per cent drop in metro passengers, especially leisure commuters who changed their behavior because of their aversion to unnecessary risks (BBC News, 2005). Although some consumers adopted avoidance behaviors following an increase in the salience of terrorism, many others did not. This raises the following question: How is the psychology of consumers who pursue avoidance different from those who do not?

We suggest that protection motivation theory (PMT; Rogers, 1983) may have parallels for understanding consumers' responses to ubiquitous terror threats. PMT predicts when and how individuals respond to health threats. Rogers showed that adaptive behaviors are prompted to the extent that a health threat is perceived to be serious. The magnitude of threat appraisal is dependent on the probability of an aversive outcome, and the severity of the outcome should it occur, and adaptive avoidance behaviors are likely when both are judged as severe. We extend PMT to the context of

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consumers' response to terrorism. Initially, it may seem intuitive that people would engage in avoidance behaviors when concerns with terrorism are strong. Nevertheless, based on PMT, we suggest that consumers' responses may be more nuanced. When terrorism-related concerns are heightened, there likely will be an increase in subjective probability of additional attacks. However, the perceived severity of the attack may vary.

When frequent terror attacks occur, consumers may share the perception of increased odds of being near an attack. Media coverage of terrorism increases fear and perceptions of the odds of future attacks (Mandel, 2005). However, consumers may vary in the amount of "personal control" they believe they have in influencing their outcomes. Terror attack survivors often ascribe their survival to decisions such as being seated near or away from a cafe door or being in the back versus the front of a bus. Even though the threat of an attack occurring may be perceived as high, if individuals believe that they have control over the odds of becoming a victim in the event of an attack, there may be a lesser need to adjust behavior. By contrast, an individual who perceives a high threat of an attack, and believes she or he has little control over becoming a victim, must modify consumption patterns.

If the perception of the extent of personal control over victimhood is related to the ability to maintain typical consumer behavior (versus becoming avoidant), perceived control would be valuable as it would allow people to continue living regularly in a context characterized by threat. According to Langer (1975), people exhibit the illusion of control because they strive for complete mastery, including controlling chance events, and the desire to avoid anxiety from the perception of having no control. These motivations may also apply to living with frequent terrorism. This suggests that perceived control over becoming a terror victim (whether real or illusory) may act as a positive mechanism.

We further investigated whether concerns with terrorism are related to the desire to seek more control over one's environment (Burger and Cooper, 1979). Research has shown that high levels of desire for control often produce positive outcomes, such as elevating subjective well-being and assisting in psychological adjustment (Steptoe and Appels, 1989). Desire for control also leads individuals to engage in attributions that may distort their view of events and others (Burger and Hemans, 1988) but that helps navigate their social world (Cooper *et al.*, 1995). We thus focused on how a sense of control may insulate consumers from concerns about impending terror attacks.

Mortality salience versus terrorism salience

The immediate and salient nature of terrorism makes individuals' subsequent coping different from the phenomena studied within the terror management theory (TMT) paradigm (Greenberg *et al.*, 1986). TMT posits that when the inevitability of general mortality is primed, individuals may engage in distal defenses to manage their fears. Distal defenses do not shield the individual from the risk of mortality but instead provide them with a sense of figurative immortality—if one leaves a mark on the world, one will be remembered

after death (Rosenblatt *et al.*, 1989). We believe that TMT is not readily applicable to understanding responses to salient threats of terrorism because of TMT's focus on distal (versus proximal) defenses and subtle (versus primary) mortality awareness. Our perspective does not deal with subtle, potentially subconscious, mortality awareness but rather with salient and graphic fears fully present in consciousness. Moreover, we are concerned with overt behaviors that directly relate to the management of tangible outcomes and not the figurative effects on one's cultural worldview that are the purview of TMT.

Fear of death and consumer behavior

Consumption has been shown to be a coping activity against existential concerns. Awareness of mortality triggers the need to bolster self-esteem, which is often measured by assets and possessions. Arndt *et al.* (2004) apply TMT as a way to understand how the awareness of death affects materialism, conspicuous consumption, and consumer decisions. Following a mortality salience induction, Kasser and Sheldon (2000) show that participants expected to spend more on pleasurable items such as clothing and entertainment, Mandel and Heine (1999) show that individuals found luxury products more appealing, and Mandel and Smeesters (2008) found that individuals overconsumed and increased the immediacy of consumption. Ferraro *et al.* (2005) show that some participants primed with mortality chose to indulge with food. These papers advance our understanding of how people cope with the idea that we are "animals destined to die"; however, they do not distinguish between causes of death and treat death as a distant, albeit inevitable, event (whereas we treat death by terrorism as preventable).

Pavia and Mason (2004) examined people with an actual heightened sense that they may die sometime in the near future because of cancer. They interviewed women with breast cancer and found that interviewees consume products that have a future orientation, such as traveling, savings, and purchasing pets. Such consumption signals to the buyer that she does not expect to die in the near future.

Consumption in the aforementioned papers is believed to symbolically distance individuals from their death, whereas in the current paper, consumption is believed to help individuals prevent their death. This paper fits into the paradigm of death and consumer behavior; however, most of the existing literature deals with general mortality, whereas we specifically investigate effects of terrorism.

Another research topic that has applied fear of death is in advertising messages, especially those using the fear appeal. Research has shown that fear appeals are most effective when the likelihood of danger is high and when coping effectiveness is high (Maddux and Rogers, 1983). PMT suggests adding coping response information to fear appeals, which effectively influences adoption of appropriate coping behaviors (Tunner *et al.*, 1989; Tanner *et al.*, 1991; Pechman *et al.*, 2003). Our paper does not deal with advertising *per se*; however, we apply PMT in our framework and later on advise on how to advertise specific products.

EXPLORATORY STUDY: HOW DO PEOPLE COPE WITH FREQUENT TERRORISM

Our first study is a qualitative investigation of the effects of terrorism on consumption patterns and general behavioral tendencies. We conducted a series of depth interviews with people in Israel.

Method

Informant selection

We recruited 27 Israelis (Table 1) using a snowball sampling technique (Tepper, 1994), in which initially contacted informants provided names of additional prospective participants. Although the sample was not intended to be representative, it was diverse, with interviews being obtained from both men and women of different ages from many regions across Israel.

Interview protocol

All depth interviews were conducted in Hebrew. To enable gathering of information from geographically dispersed consumers, interviews were conducted either in person or over the phone. The depth interviews lasted between 30 and 120 minutes, with most lasting approximately 60 minutes.

Some informants had been personally victimized by terrorism, so we asked them to describe the chain of events during the attack, how the attack changed their lives, and what coping strategies they use and why. Individuals who lost a close family member to terrorism were asked about their coping strategies and behavior change as well. All participants were asked questions regarding how the spike in terrorism

affected their lives, the products they consume, how and where they shop, and generally which (if any) of their habits had changed. In a series of follow-up questions, informants were asked whether they thought they could learn to increase their chance of survival if they were involved in a terror attack. Specific follow-up questions and discussions varied by informant (McCracken, 1988) based on the preceding discussion with each individual. The quotes later were translated to English verbatim.

Analysis and interpretation

In line with grounded theory research (Miles and Huberman, 1994), we identified recurring themes through a cyclic reading and rereading of the materials. The reading was inspired by narrative analysis tools (Leiblich *et al.*, 1998), which allowed us to systematically categorize the accounts that emerged in the analysis.

Results

Our data show that almost all informants changed their behavior following terror attacks. Some informants reported extreme consumer behavior modifications, while others' behavior changed in more subtle, but quite strategic, ways. Generally, informants' responses seem to classify them into one of two groups. The first group of informants reports that the odds of being a victim should a terror attack occur are controllable to some degree. Accordingly, because these informants believe that they have control over the likelihood of becoming a victim, the specter of terror attacks either does not alter their consumer behavior much or alters their

Table 1. Informants details (alphabetical by pseudonym)

Pseudonym	Gender	Age (years)	City of residency	Involvement in terror attacks
Alon	Male	39	Tel Aviv	Victim
Ariella	Female	41	Herzeliya	None
Ben	Male	26	Tel Aviv	None
Corrine	Female	33	Ramat Hasharon	None
Daniel	Male	22	Kfar Saba	None
Ester	Female	53	Jerusalem	None
Frank	Male	33	Tel Aviv	None
Gal	Male	17	Herzeliya	None
Haguy	Male	42	Ramat Hasharon	None
Hannah	Female	62	Jerusalem	None
Idit	Female	36	Kfar Saba	None
Ilan	Male	45	Tel Aviv	None
Karmit	Female	31	Ramat Gan	Victim
Maya	Female	28	Tel Aviv	Victim
Meytal	Female	35	Hod Hasharon	Lost her husband
Nir	Male	25	Tel Aviv	None
Nirit	Female	34	Ramat Hasharon	Victim
Revital	Female	46	Raanana	None
Shlomit	Female	41	Givaatime	None
Tamar	Female	29	Ramat Aviv	None
Vicki	Female	75	Jerusalem	Lost her daughter
Yair	Male	31	Ramat Hasharon	None
Yariv	Male	18	Herzeliya	None
Yaron	Male	29	Ramat Hasharon	Victim
Yasemin	Female	16	Raanana	None
Zehava	Female	55	Tel Aviv	None
Zvi	Male	57	Beer Sheva	None

behavior strategically based on knowledge that informants believe that they have accumulated from learning about past attacks.

An example of an individual who perceives some control in the likelihood of becoming a victim is Frank, a 33-year-old owner of a pub in a trendy location in Tel Aviv (the largest city in Israel). He suggests that

The chance that someone will die from a car accident is higher than from terror attacks, and still people are driving. Most terror attacks happen in specific places and are less random than car accidents, so we should stop panicking and start living again.

Frank admitted to being afraid and more suspicious, but thinks it is not a good enough reason to stay at home. Similarly, Ben, a 26-year-old student, says he goes out to small inconspicuous places because terror attacks will most likely never happen in such places. "I continue to go out, but to specific places, and I never sit at the entrance." Nir, Ben's friend who is a 25-year-old student, says that he has changed his behavior strategically:

Of course I still go out, life must go on. I go to [a pub in the center of Tel Aviv] because it has one door, no glass wall, and I sit way inside so if a suicide bomber comes I'll be able to run away through the kitchen in the back.

Thus, because these respondents perceive that they have at least some control over the odds of becoming a victim should they be present during a terrorist attack, they are able to continue their consumer lives without serious disruption. It is worth noting that similar adaptive behavior is attributed to the mafia in New York, as Sifakis (2005) notes, "There is a myth that Mafiosi sit with their backs to the wall at all times."

Hannah, a 62-year-old retiree from Jerusalem, also perceived a high degree of control over becoming a victim. She said,

We live in Jerusalem, which is the target of many attacks, but this is our home so we must learn to survive. For example, I shop only in shopping malls that are inside buildings [not strip malls] because there are only a few entrances and they are guarded. All attacks on malls occurred at the street entrance so I simply never use that entrance and always enter through the underground parking lot. Once inside the mall, I feel safe because I know that no suicide bomber will be allowed past the security.

In Israel, between 2000 and 2002, prior to our interviews, there were 15 deadly attacks on buses, which caused massive damage and casualties. These attacks were often so lethal that passengers in private cars near the attacked bus would get hurt. Yair, a 31-year-old man who drives to Tel Aviv every morning for work, says that he

...made a decision not to worry about terrorism. I have to drive to work, it's a given. So I just let a few other cars get between me and the bus, and that way if something happens I will be safe because of the 'buffer zone' I created. If you're at least two-three cars away from the bus, you're safe.

Again, although the contexts varied widely from going out to eat, to going to a pub, to shopping, or to driving one's car, the underlying mechanism at play seems to be that consumers who believe that they have control over being a victim in a terror attack by and large continue their consumption choices with small adjustments based on their confidence that they understand the determinants of victimhood.

Unlike these individuals, others who we interviewed believe that the odds of being a victim of terrorism cannot be controlled to any degree. Accordingly, such individuals believe that one must be very protective and cautious in order to survive. In our interviews, these individuals indicated that they have dramatically altered their daily behavior in order to reduce their level of anxiety, even though this means that they will be missing out on key life experiences. These people generally believe that the only really safe place is at home because terror attacks can happen anywhere and at any time (but terrorists have never attacked residential buildings). For example, Corrine, a 33-year-old architect, recalls that one day,

A friend asked me to eat out at a restaurant, so I told her jokingly, 'let's choose one that will not explode.' We both laughed but eventually we didn't go out, it was too scary.

Thus, because this informant was unable to generate an option that she felt would minimize her odds of being a terror victim, she chose to forego a consumption opportunity.

Like Corrine, other informants who perceived that they did not have control over becoming a victim should a terror attack occur talked about their attempts to minimize excursions because they felt that staying at home, and thus completely avoiding terror attacks, is the best course of action. The most extreme behavior change was exhibited by individuals who got hurt or lost loved ones in terror attacks. Months and even years after the event, these informants did not leave their homes unless it was necessary (e.g., to go to work). These consumers did most of their shopping online and minimized social interactions because like Maya, a 28-year-old professional said,

After a while my friends realized that I'm not the same person. I don't like to go out anymore, I only want to stay at home. I was really only minimally hurt but the horror I've seen with my own eyes will never leave me. If that means having fewer friends, then that's ok. As long as I'm safe.

Meytal, a 35-year-old who lost her husband in a terror attack on civilians, says that she did not let her kids go on school trips for years. Although medicated, she feels that the anxiety levels that such trips would produce are more than she can tolerate.

Avoidant behavior is by no means restricted to victims. Many informants told us that they adapted their shopping behavior. Ariella, a 41-year-old woman, said,

I only go to the mall if I really need to buy something and I try not to take the kids with me. I usually wait and then

do several errands the same day – it is very calculated. It's not fun anymore.

Similarly, Ester, a 53-year-old social worker from Jerusalem, said that she avoids shopping in most malls in Tel Aviv and moreover avoids going to movies. Thus, Ester's behavior reflects her desire to avoid all consumer settings that may be a target for terrorists. Idit, a 36-year-old PR manager from Kfar Saba (a city close to the border with the Palestinian Authority), says that her uncertainty about her ability to predict whether she becomes a victim makes her reluctant to wait in line in public places. She often avoids lines because "... it can be just a guy with a large bag, but it can be a suicide bomber, who knows these days." Another avoidant strategy born out of lack of perceived control mentioned by several informants is to leave the house very early in the morning, before the rush hour, to avoid traffic because "...it [traffic] is like a death trap... if the car next to me explodes I will certainly die because there is nowhere to escape."

Discussion

This study provides initial evidence that consumers' perception of their ability to control the likelihood of being a victim drives responses to ubiquitous terrorism threats. Consumers who perceive some control, because of their own skill and comprehension of past events, make minor but strategic adjustments that allow them to live mostly unaffected by terrorism concerns. This is distinct from the notion "it won't happen to me" (Weinstein, 1984) in which people have an overly positive view of the future. Weinstein (1984) extended PMT and suggested that health risks that are thought to be controllable by people's actions are likely to evoke unrealistic optimism about susceptibility. Here, however, the informants who believe that their actions can control their likelihood of being victims exhibit behaviors similar to those suggested by the illusion of control theory, which locates the source of the expected outcome in terms of personal control.

In contrast, consumers who felt that victimhood was not controllable engaged in avoidance behaviors, routinely foregoing previous outing preferences in favor of staying home and avoiding public contexts in which terror attacks have been concentrated. Consistent with this finding, Lori (2002) reported that during a terror peak in Israel, there was an increase in the sales of books, children's workbooks, crossword puzzles, comfort foods (chocolate, ice cream, and cakes), furniture, dinnerware, flat-screen TVs, and espresso machines. Memberships in DVD rental services rose by 60 per cent. These anecdotal data suggest that people tried to make their homes more engaging, perhaps to partially replace outings they chose to forego to avoid terrorism. Such consumption changes represent a strategic shift in spending on home entertainment following the notion "my home is my fortress," which represent a departure from predictions based on TMT, suggesting that people will consume more (Mandel and Smeesters, 2008), indulge more (Ferraro *et al.*, 2005), and smoke more (Hansen *et al.*, 2010) as distal defenses and based on their self-esteem.

Our qualitative study was useful in gaining deep insight into consumers' thoughts and behavioral responses under

threats of terrorism. Next, we conducted two studies that allow firm conclusions regarding what we believe emerged as the key driver of consumers' responses to terror: the perception of control regarding whether one will become a victim should a terror attack occur.

EXPERIMENT 1: FREQUENT TERRORISM INCREASES THE DESIRE FOR CONTROL

In experiment 1, we tested whether priming terrorism increases the desire for control to a greater extent than does priming death unrelated to terrorism. We expected that the uniqueness of terrorism and its frequency would lead consumers to express a greater desire for control compared with a mortality prime. The need for control under frequent terrorism is urgent and purposeful in helping people retain behaviors and activities. Thus, we aim to show that terrorism is a distinct threat and leads to different responses than those reported in the TMT literature. Although the inevitability of the outcome is common to both thoughts of terrorism and death, the exploratory study suggests that the former is dealt with proximal defenses and tactical strategies, while the TMT literature suggests that the latter is dealt with distal defenses and figurative strategies. Therefore, this experiment provides another point of distinction between our work and TMT.

Method

Participants were 62 Israeli undergraduate students (53% female, average age 25 years) who were randomly assigned to one of the two experimental conditions. Priming "general death" was performed by administering the Fear of Death Scale (Collett and Lester, 1969). Participants rated 16 statements (e.g., "The total isolation of death" and "The disintegration of your body after you die") on a scale ranging from 1 = *very disturbing* to 5 = *not disturbing at all*. Participants in the "death by terrorism" condition responded to items adapted from the Fear of Death Scale with the help of two informants injured in terror attacks to focus on terrorism (e.g., "Feeling intense pains from internal wounds" and "Seeing scattered body parts"). The full scale is available in the online supplemental material.

After the experimental manipulation and a filler task, participants completed Burger and Cooper's (1979) Desirability of Control Scale. This scale measures differences in the extent to which individuals are motivated to control events in their environment and reflects both state and trait tendencies. We used six items from the original scale, including "I prefer a job where I have a lot of control over what I do" and "I wish I could push many of life's daily decisions off on someone else" (reverse coded). The scale ranged from 1 = *The statement does not apply to me at all* to 7 = *The statement always applies to me*.

Results and discussion

A pretest with 120 participants from the same pool as the main experiment (38% female, average age 24 years) included the manipulation sentences, a 20-minute unrelated task, and three manipulation check statements ("I am

horrified to know that I go to places where terror attacks occurred, and I could have died in those attacks”; “I’m not stressed when people around me talk about the chances of getting hurt in a terror attack”; and “I think I would be very scared to see lots of bodies covered with blood”). We summed the participants’ answers (0 = *disagree* and 1 = *agree*) and found that those primed with terrorism agreed to more sentences ($M=1.88$, $SD=0.97$) than those primed with general death ($M=1.45$, $SD=0.87$), $F(1, 118)=6.27$, $p=0.014$.

In the main experiment, we aggregated participants’ responses to the Desirability of Control Scale and found that when concerns regarding death by terrorism were prompted, participants reported a greater desire for control ($M=5.41$, $SD=0.79$) than when general death was prompted ($M=5.02$, $SD=0.45$), $F(1, 60)=5.51$, $p=0.02$. Participants’ gender and age did not affect these results. These findings confirm the elevated desire for a sense of control when one has to live in constant fear of terrorism. In the next experiment, we explore the role that desire for control play in the context of consumption, when terrorism is a threat.

EXPERIMENT 2: CONTROLLABILITY AFFECTS CHOICE OF LEISURE ACTIVITY

In this experiment, we asked participants to imagine themselves in a situation of frequently occurring terrorist activity, and beliefs in their ability to have control over becoming a victim were manipulated. Our core hypothesis was that avoidant behavioral intentions, akin to those reported in the exploratory study, would be more likely when perceptions of control were low versus high. Similar to Kasser and Sheldon (2000) and Pavia and Mason (2004), we test our hypotheses using more social-related consumption activities, specifically the context of leisure-type activities.¹

We expected that avoidance would be selective. Specifically, participants in the low-control condition would not engage in across-the-board avoidance of leisure activities but would only avoid activities that would place them in situations likely to be the site of terrorist attacks (evening activities out versus at their or friends’ homes).

Method

To increase confidence in the generality of our findings, this experiment was conducted in the USA. Two-hundred and two American undergraduate students (61% female, average age 20 years) participated in a survey ostensibly funded by Israeli universities trying to attract exchange students. Participants first read a one-page article about Israel presented on a computer screen for 2 minutes. The article described the 2001–2004 era of frequent terror attacks, an overview of the history of terrorism, and statistics about where attacks

often occur in Israel. High controllability was manipulated by adding:

Do these similarities of attacks suggest that attacks are predictable? Many in Israel would say yes. From listening to the stories of terror attack survivors, many Israelis believe they find common threads. For example, why sit at the entrance to a restaurant if most attacks happened there? Sit at the back, facing the door, and you will have a better chance to run away and survive. If you are driving, always let other cars get between you and a bus so that if there is an attack on the bus, you are more likely to survive. Similarly, go to inconspicuous places, shop at stores, not malls, and you will be fine.

The low controllability manipulation read,

Do these similarities suggest that terror attacks are predictable? Many in Israel would say no. While similarities exist, many other factors may affect one’s involvement in an attack. For example, the time of day for restaurant attacks varies greatly (some take place during lunch and some during dinner); some attacks have occurred in less conspicuous restaurants on side streets; several attacks have involved shooting at civilians rather than detonating a body-belt (i.e., suicide bombers).

Next, participants were instructed to imagine that they were living in Israel and were asked to gauge the frequency in which they will engage in each of the following Saturday night activities (1 = *never* and 5 = *always*): “go out wherever I want,” “go out to inconspicuous places,” “go to friends’ houses,” and “stay home.” We then asked two questions to assess the effectiveness of the manipulation: “Do you think that the likelihood of being a victim of terrorism is controllable?” (1 = *not at all* and 5 = *very much*) and “Do most Israelis think that the likelihood of being a victim of terrorism is controllable?” (1 = *yes*, 2 = *no*, and 3 = *I don’t know*). Finally, we asked a number of demographic questions.

Results and discussion

Participants who read the high (versus low) controllability manipulation believe that most Israelis think terror attacks are predictable (74.5% versus 34.6%), $\chi^2=64.76$, $p<0.001$, and also personally believe that terror attacks are predictable ($M_{\text{high}}=4.12$, $SD=0.82$ versus $M_{\text{low}}=3.83$, $SD=1.05$), $F(1, 200)=4.97$, $p=0.027$.

As expected, participants primed with low controllability were more likely to engage in avoidant behaviors. Specifically, these participants reported that they would be less likely to go out wherever they wanted ($M_{\text{low}}=2.25$, $SD=1.01$ versus $M_{\text{high}}=3.26$, $SD=0.85$), $F(1, 200)=57.88$, $p<0.001$, less likely to go out to inconspicuous establishments ($M_{\text{low}}=2.56$, $SD=1.08$ versus $M_{\text{high}}=3.67$, $SD=0.93$), $F(1, 200)=72.53$, $p<0.001$, but more likely to stay home and forego the consumption of any leisure activity ($M_{\text{low}}=3.82$, $SD=0.72$ versus $M_{\text{high}}=2.80$, $SD=0.63$), $F(1, 200)=108.03$, $p<0.001$. However, and as predicted, there was no difference in the likelihood of leaving one’s home to socialize if it was at a friend’s home, with a low risk

¹Leisure activities, including social-type activities, have been a topic of interest to marketers; see, for instance, Holbrook and Hirschman (1982), Cotte and Ratneshwar (2003), and El Hedhli *et al.* (2013).

similar to one's own home ($M_{\text{low}}=3.37$, $SD=1.02$ versus $M_{\text{high}}=3.53$, $SD=0.99$), $F(1, 200)=1.37$, $p=0.24$. The demographic variables did not interact with the independent variables in any untoward fashion.

Participants' leisure choices were supportive of our predictions. When terror attacks are frequent, consumers' behavioral responses depended on their perceptions. When consumers believe they have control over the likelihood of becoming a victim, they are more likely to venture out into public. In line with the exploratory study, participants were likely to engage in avoidant consumer behaviors when they felt they had little control over whether or not they would become a victim in an attack. Activities that would not put participants in harm's way were likely to be pursued regardless of perceived control.

GENERAL DISCUSSION

Three studies, with diverse methodologies and participants, converge to tell a compelling story about when and how behavior changes in the face of salient terrorism threats. When consumers believe they have some control over the odds of victimhood in an attack, their behaviors are not materially affected by terrorism threats. However, when consumers perceive that the odds of victimhood are uncontrollable, their behavior changes and they become avoidant, abandoning their preferences in the hopes of avoiding the public contexts where most terrorism occurs.

We tested this behavior more formally in experiments 1 and 2. In the first experiment, we found that people primed with terrorism desire control over a variety of aspects in their lives. Further, this experiment established another point of difference between our conceptualization of terrorism and the conceptualization of mortality salience within the TMT literature as we found that participants primed with terrorism desire significantly more control compared with participants primed with thoughts of death unrelated to terrorism. Next, we examined the effect of controllability of becoming a victim should a terror attack occur on several behavioral intentions in experiment 2. When perceived control was low versus high, participants were less likely to go out on weekend nights for leisure purposes but more likely to simply stay home. This result suggests the value for consumers of having high perceived control over becoming a victim in managing their lives when terrorism is a salient concern. Indeed, when perceived control is high (either extant in the exploratory study or manipulated in experiment 2), people can live their lives according to their preferences without much disruption.

Taken together, these results show that when terrorism is frequent, people will make behavioral decisions to avoid high-risk contexts if they feel that they cannot control whether or not they will become a victim should a terror attack occur. When people feel confident that they can avoid becoming a victim in a terror attack, their behavior is not markedly affected by terrorism concerns. Behaviors

that occur in low-risk contexts are unrelated to perceived victimhood control.

How the marketplace may change if terrorist activity increases

Our results have implications for predicting how people's behavior will change if a country is hit with multiple terror attacks, and the ambient fear of terrorism increases. Generally, many people may become driven by the desire to avoid situations and contexts in which they feel vulnerable. For example, data about movie goers following the Aurora, Colorado, shooting shows that, overall in North America, there was a 25 per cent decline in movie ticket sales in the week after the shooting compared with the same period in the previous year (New York Times, 29/7/2012). However, unlike this leisure activity, which may be avoided, parents across the nation sent their children to school on Monday, 16 December 2012, only three days after the shooting at Sandy Hook Elementary School in Connecticut.

In contrast, we predict that demand for products and services that facilitate avoidance will increase. For example, food delivery services may flourish at the expense of restaurants and demand for video-streaming equipment and services may emerge from people's increasing reluctance to go to movie theaters. In addition, there may be a shift in preferences for distribution channels. Specifically, channels in which consumption occur in crowds, where consumers may feel exposed, are likely to be perceived less favorably and accordingly contract. Thus, we would expect contraction of retail channels to the benefit of shop-at-home channels (online and catalogs). We would expect that demand for goods at malls, especially open ones, would decrease. By contrast, boutiques may experience greater foot traffic because they are frequented by fewer individuals and are thus a less compelling target for terrorists.

The key driver of which products, services, and channels suffer declining demand would likely be individuals' perceptions of the attractiveness of the relevant consumption contexts to a terrorist. To the extent that a given context shares key points of similarity with the site of recent terror attacks, it may come to be avoided. For example, demand for flight tickets fell sharply after 9/11 in the USA from 90.6 million seats in August 2001 to 67.5 million seats in September. The industry lost \$US1.1bn as a result of the drop in demand (Blalock *et al.*, 2009), and airlines stock prices similarly were hard hit. Another impact of 9/11 is that many Americans reported acute stress symptoms like insomnia and nightmares, and those people were three times more likely than others to be given diagnoses of new heart problems (Tierney, 2008). This suggests that terrorism is not as nearly as harmful to society as the related fear it causes.

The nature of terrorism is that it is hard to predict, and neither the tactics nor the targets chosen by terrorists are readily discerned before attacks. This complexity noted, in this research, we describe a set of general phenomena that may be likely to characterize people's behavior in a

period of frequent terror. Individuals will engage in avoidant behavior to the extent that they perceive they cannot control whether they will become a victim if a terror attack does occur, and a general need for control is likely to emerge when terrorism is frequent.

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