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Strained Interaction: Evidence That Interpersonal Contact Moderates the Death–Disability Rejection Link

Shiri Ben-Naim, Gali Aviv, and Gilad Hirschberger
Bar-Ilan University

Objective: Our objective was to examine whether brief yet significant contact between a confederate seated in a wheelchair and a nondisabled participant may attenuate the relationship between death reminders and disability rejection found in previous research. ***Method:*** One hundred two participants were randomly assigned to a mortality salience or control condition and were then seated in a room with a confederate. In half the cases, the confederate sat in a wheelchair, and in the other half in a regular chair. Furthermore, half the participants were assigned to either a collaborative task with the confederate, or to an individual task condition. At the end of the session, participants were asked to evaluate the confederate. ***Results:*** Death primes led to a more negative evaluation of the confederate in a wheelchair in the individual task condition. However, this effect was attenuated in the collaborative task condition. ***Conclusions:*** The death–disability rejection link is not deterministic and may be attenuated through meaningful contact between people without disabilities and people with physical disabilities (PWD). The findings suggest that terror management theory is a particularly useful framework for understanding and intervening in the strained interaction between PWD and nondisabled individuals.

Keywords: attitudes towards disability, terror management, interpersonal contact

Recent terror management research has indicated that attitudes and emotional responses toward people with physical disabilities (PWD) are a consequence of the attempt to defend against the awareness of physical mortality. According to this literature, PWD are a constant reminder of the fragility and vulnerability of the human body and also pose a threat to just world beliefs. As a result, when primed with death observers are motivated to feel less compassion towards PWD (Hirschberger, Florian, & Mikulincer, 2005) and to attribute more blame to them (Hirschberger, 2006). Although these studies help understand the psychodynamics underlying negative attitudes towards PWD, they may also convey a deterministic and hopeless message that reactions to PWD are doomed to be negative. The current research attempts to further explore the impact of death reminders on reactions towards PWD by examining whether brief, yet significant contact between a confederate in a wheelchair and a nondisabled participant may attenuate the impact of death primes on attitudes toward PWD. To do so, we rely on the contact hypothesis (Allport, 1954; Sherif, 1966), which has indicated that intergroup relations and attitudes may be ameliorated by engaging in meaningful contact.

Terror Management Theory

Terror management theory (TMT; eg, Greenberg, Pyszczynski, & Solomon, 1997), based on the theoretical writings of Becker (1973), argues that sophisticated human cognitive abilities may engender the awareness of the unpredictability and inevitability of death. This awareness may potentially lead to paralyzing terror. To cope with this threat, people rely on cultural worldviews that provide order, meaning, values, and a possibility for symbolic and literal immortality. Consequently, the identification with one's group provides a sense of belongingness, as well as the sense of being a valued contributor to a meaningful existence. However, because cultural worldviews are symbolic constructions of reality, these belief systems are fragile and may be threatened by worldview-inconsistent information. Thus, the encounter with others belonging to a different worldview with different conceptions of how and why the world exists and what is the meaning of life, may pose a threat to one's worldview and the protection from death-awareness that it offers. As a result, the motivation to distance from or derogate and aggress against a worldview-denying other may be greater when personal death is salient (Greenberg et al., 1997).

Studies testing terror management hypotheses have shown that priming thoughts of death (mortality salience [MS]) increases the motivation to validate cultural worldviews by positively evaluating people who reinforce the cultural worldview and negatively evaluating people who threaten it. Specifically, these studies have shown that when primed with death Christian participants rated Christian targets more positively and Jewish targets more negatively (Greenberg et al., 1990), American participants reacted more aggressively to an anti-American essay writer (e.g., McGregor et al., 1998), white American participants expressed more sympathy to a white racist (Greenberg, Schimel, Martens, Pyszczynski, & Solomon, 2001), and American and Iranian participants expressed greater support for extreme violence against each other (Pyszczynski et al., 2006).

Shiri Ben-Naim, Gali Aviv, and Gilad Hirschberger, Department of Psychology, Bar-Ilan University, Ramat-Gan, Israel.

Please address all correspondence to Gilad Hirschberger, PhD, Department of Psychology, Bar-Ilan University, Ramat-Gan 52900, Israel. E-mail: hirschg@mail.biu.ac.il

TMT and Responses Toward People With Disabilities

A growing body of TMT-based research suggests that people with physical disabilities pose a threat to terror management mechanisms for both direct and symbolic reasons (Hirschberger, 2006; Hirschberger, Ein-Dor & Almakias, Study 3, 2008; Hirschberger et al., 2005). On the immediate and concrete level, the encounter with a person with a physical disability is a stark reminder of one's physical vulnerability and susceptibility to severe physical damage and death. For this reason alone, people should be motivated to avoid PWD, especially when they become aware of their own mortality. However, aside from this direct reason, physical disability also challenges cultural ideals and values with regard to physical appearance. A line of research conducted by Goldenberg and her colleagues (eg, Goldenberg, McKoy, Pyszczynski, Greenberg, & Solomon, 2000; Goldenberg et al., 2001) has indicated that focusing on human physical attributes, or thinking about the physical similarities between humans and other animals, is particularly aversive under mortality salient conditions. Because the image of a healthy and beautiful body is an important value promoted by the Western cultural worldview, bodily imperfections threaten this social convention. Moreover, while searching for an existential and sublime meaning for life, reminders of the similarity between the human physical body and animal physicality is threatening, because it reminds us of our animalistic incapacities and vulnerability to death. There is a constant cultural attempt to elevate the body to more than flesh and bones, and turn it into an object of respect and dignity. Consistent with this reasoning, research has shown that priming thoughts of mortality induces more disgust towards reminders of human physicality (Goldenberg et al., 2001). On this basis, PWD may compromise terror management mechanisms because they violate important cultural standards and interfere in the attempt to deny the physical, decaying nature of the human body.

Another line of research suggests that when death is salient, the motivation to believe in a just world increases, because a world that has clear cause and effect with little room for happenstance provides a comforting illusion of personal security (Hirschberger, 2006; Landau et al., 2004). However, PWD may threaten just world beliefs as they expose observers to the possibility that they are susceptible to grave misfortune that may randomly befall them. Thus, when death is salient the motivation to disparage and deny the innocence of PWD should increase. Indeed, recent research has indicated that primes of death lead observers to seek more disparaging information about innocent victims (Landau et al., 2004, study 5), and leads to greater attributions of blame towards victims, especially those who are victims of misfortune (Hirschberger, 2006).

Currently, the research on terror management and reactions to disability support the death-disability rejection hypothesis. Namely, when death is salient emotional reactions to disability become more negative (Hirschberger et al., 2005), there is a greater motivation to justify the misfortune of a person with a disability (Hirschberger, 2006), and the willingness to help a person seated in a wheelchair is significantly decreased (Hirschberger et al., 2008). If attitudes toward disability are inextricably linked to deep-seated existential concerns, is there any hope for fundamentally changing the "strained interaction" (Siller, Chipman, Ferguson, Vann, 1967) between PWD and nondisabled individuals? In the current research, we examine this question by drawing from research on the contact hypothesis in an attempt to uncover possible moderators of the death–disability rejection link.

The Contact Hypothesis

Intergroup contact has long been considered one of the most effective strategies for improving intergroup relations and reducing prejudice (Allport, 1954; Pettigrew, 1998; Pettigrew & Tropp, 2006). However, since Allport's conceptualization of the theory (Allport, 1954) and the early research conducted on the contact hypothesis (e.g., Sherif, Harvey, White, Hood, & Sheriff, 1961), research has confirmed that intergroup contact does not always improve relations between groups, and that some types of contact may even exacerbate bias (Amir, 1976; Pettigrew, 1998). For example, in the famous "Robbers Cave Experiment" (Sherif et al., 1961), get-to-know-you type tasks did not improve hostilities between groups, and even amplified them. Only when the two groups worked together towards a common goal in a cooperative fashion were intergroup tensions reduced. Because contact does not always promote positive intergroup relations, some social psychologists have suggested that the contact hypothesis is not reliably supported by empirical research (Hopkins, Reicher, & Levine, 1997). However, a recent meta-analysis on 713 independent samples supports the contention that intergroup contact reduces intergroup prejudice (Pettigrew & Tropp, 2006).

According to Allport, there are four prerequisite features for contact to be successful at reducing intergroup conflict and achieving intergroup harmony (Allport, 1954). These four features are (1) equal status within the contact situation; (2) intergroup cooperation; (3) common goals; and (4) support of authorities, law or customs.

It seems that the above prerequisites create conditions that promote more flexible social categories and group boundaries, and enable people to expand their circle of inclusion when considering other people's in-group and out-group status. Thus, cooperative contact between groups towards a mutual goal under conditions of equal status may transform members' cognitive representations of the "other" and merge the perception of two groups into one (Gaertner, Dovidio, & Bachman, 1996).

The contact hypothesis as formulated by Allport (1954) focuses on the group level and examines whether contact between groups reduces negative attitudes towards stigmatized groups. In the current research we slightly deviate from this conceptualization of the hypothesis and examine whether contact between two groups ameliorates evaluations on the individual level. Given that PWD represent a stigmatized but legally protected group, and given the reluctance of nondisabled individuals to express their biases against PWD, we believed that the effects of prejudice may be more evident at the interpersonal level rather than the intergroup level.

The Present Research

Research examining reactions to stigma suggests that observers often experience emotional ambivalence when encountering stigmatized others (e.g., Stangor & Crandall, 2000). In the case of

physical disability, studies have shown that nondisabled observers may experience emotions ranging from sympathy and compassion to aversion and disgust when encountering PWD (Carver, Glass, & Katz, 1978; Jones et al., 1984; Katz, 1981; Scheier, Carver, Schultz, Glass, & Katz, 1978). Recent studies have highlighted the terror management processes underlying the tendency to reject and disengage from PWD (Hirschberger, 2006; Hirschberger et al., 2005). In the current research, we continue this line of investigation and examine whether an interaction between a PWD and a nondisabled person, satisfying the conditions of the contact hypothesis, may moderate the impact of death salience on the negative responses of nondisabled persons toward PWD.

Thus, the objectives of the current research are twofold: first, we attempted to replicate the findings obtained in previous research that have shown that death primes lead to more negative attitudes towards PWD (Hirschberger, 2006; Hirschberger et al., 2008; Hirschberger et al., 2005). Similar to our behavioral study of helping (Hirschberger et al., 2008), the current research examines the hypothesis in a real-life interaction between a participant and a confederate seated in a wheelchair. Second, previous research has identified terror management as a source of the "strained interactions" (Siller et al., 1967) between PWD and nondisabled individuals, and may have inadvertently promoted the conclusion that attitudes towards PWD are doomed to be negative. In the current research, we examine whether brief contact between a confederate seated in a wheelchair and a nondisabled participant that satisfies the conditions of the contact hypothesis is enough to attenuate the impact of death primes on attitudes towards disability.

It is important to note that in most cases, primes of death have been shown to promote affiliative tendencies. For example, studies have indicated that mortality salience increases identification with in-group members (Arndt, Greenberg, Schimel, Pyszczynski, & Solomon, 2002; Castano et al., 2002), increases the desire for physical proximity to others (Wiseman & Koole, 2003), and increases the importance of and desire for intimate relationships (eg, Florian et al., 2002; Hirschberger, Florian, & Mikulincer, 2002, 2003). Based on these studies we expect that primes of death will increase the favorable evaluation of the nondisabled confederate. This component of the research strengthens our contention that the impact of death primes on rejection is specific to physical disability, because in most other cases the opposite pattern is expected.

Based on this information, we hypothesize that: (a) primes of death will lead participants to more negatively evaluate a confederate seated in a wheelchair when conducting an individual task; (b) however, when working together on a collaborative task no significant differences will be found in the evaluation of the confederate between the mortality salience and control conditions; (c) primes of death will lead participants to more positively evaluate the nondisabled confederate regardless of tasks.

Method

Participants

One hundred four undergraduate students from Bar-Ilan University participated in the study for course credit. Two participants were removed from the analyses because they suspected the confederate in the wheelchair might not have a disability. Thus, the analyses were based on 102 participants, 34 men and 68 women ranging in age from 18 to 34 (median = 23, SD = 2.8). All of the participants were Hebrew speakers and reported not to have any type of physical disability. Participants were asked to sign an informed consent sheet and were told that they could leave the study at any time.

Materials and Procedure

The study was individually administered and participants were randomly assigned to the different experimental conditions. A research assistant explained that this is the first part of a larger study and that another participant in another room is filling out the same questionnaires. Participants received a packet of questionnaires and were asked to work through the packet at their own pace while making sure to follow the exact order in which the questionnaires were arranged.

First, participants completed a bogus personality inventory intended to guise the purpose of the study. Then, half of the participants were randomly assigned to the *mortality salience condition* and answered the following two open-ended questions, which served to prime thoughts of death: "Please briefly describe the emotions that the thought of your own death arouses in you." And "What do you think happens to you as you physically die and once you are physically dead?" The other half was assigned to the *control condition* and was asked parallel questions replacing all references to death with "tooth ache." To distract participants from the death prime, as recommended by Arndt, Greenberg, Pyszczynski & Solomon (1997), they completed a neutral questionnaire on leisure time activities immediately after the mortality salience or control condition. This procedure has been successfully used in numerous terror management studies (e.g., Florian et al., 2002; Greenberg et al., 1990).

Following completion of the questionnaires, the participant was led into another room where a confederate was waiting. Two research assistants who were not aware of research hypotheses or of prime conditions alternately served as confederates. An independent samples t-test was conducted to examine whether there were differences between the two confederates in how the participants of the current research evaluated them. As expected, the test revealed no significant differences in the perception of the confederates $t(100) = -.88$, p = ns. In half of the cases the confederate was confined to a wheelchair, and in the other half she sat on a regular chair.

After seating the participant in the room with the confederate, they were randomly assigned to one of two task groups, individual or collaborative. Both tasks were based on questions from university admissions scholastic aptitude tests (Louster, 1977). In the individual task group, the participant and confederate each received a series of 20 shape-completion tasks to be completed individually within four minutes. In the collaborative condition, both the participant and the confederate were given a similar task that required them to cooperate for successful completion within a four-minute time frame. The collaborative task included ten problems presented to participants (5 to the participant and 5 to the confederate), and a clue necessary to complete each problem was given to the other participant. The instructions were as follows: "Each one of you is given five problems in different colors. Each problem is missing data that is necessary for completion. However,

the other participant has a clue in the same color that may help you solve the problem. Both of you must complete the problems alternately (each one in his or her turn answers the problem), and you may ask the other participant for the missing data. Your score will be a couple score that is made up of the time it took to complete the tasks and the number of correct answers. You are not compared to each other, but to other couples who participated in this task."

Upon completion of the task, participants were asked to complete a 15-item questionnaire on a 1 to 7 scale (1 = "*not at all*"; 7 = "*very much*") in which they were asked to evaluate a list of traits (e.g., "friendly", "smart", "popular", and "honest") of the other participant (the confederate). Higher scores indicated a more positive evaluation of the confederate. In the current sample the questionnaire had acceptable internal consistency (Cronbach's alpha = .69). Then, participants completed a demographic questionnaire, were debriefed and thanked for their participation.

Results

To examine whether mortality salience, target disability and task type influenced the evaluation of the confederate's traits, an analysis of variance (ANOVA) was conducted, with mortality salience (death, control), target disability (wheelchair-bound confederate, nondisabled confederate), and task type (individual, collaborative) as the factors, and evaluation of the confederate's traits as the dependent variable.[1] The analysis yielded no significant main effects. However, the ANOVA yielded a significant two-way interaction between mortality salience and target disability, $F(1, 94) = 9.68$, $p < .01$, as well as the expected three-way interaction between mortality salience, target disability, and task type, $F(1, 94) = 4.17$, $p < .05$ (see Table 1 for means and *SD*s). Tests for Simple Main Effects examining the source of the significant three-way interaction yielded the following effects that are displayed in Figure 1: (1) Mortality salience led to a more negative evaluation of the confederate in a wheelchair in the individual task condition compared to the control condition (pain salience), $F(1, 94) = 9.71$, $p < .01$; (2) However, this effect was attenuated in the collaborative task condition such that there were no significant differences in the evaluation of the confederate between the mortality salience and control conditions, $F(1, 94) = .17$, $p = ns$; (3) Mortality salience led to a marginally higher evaluation of the nondisabled confederate compared to the control condition in both the collaborative, $F(1, 94) = 2.23$, $p = .13$, and individual task conditions, $F(1, 94) = 3.86$, $p = .05$. These three findings support our research hypotheses.

Table 1
Means and SDs of Confederate Evaluations as a Function of Mortality Salience, Target Disability, and Task Type

	PWD		Nondisabled	
	Collaborative task	Individual task	Collaborative task	Individual task
Mortality salience				
M	5.12	4.7	5.21	5.02
SD	.59	.44	.42	.8
N	13	12	13	13
Pain salience				
M	5.01	5.49	4.85	4.55
SD	.64	.66	.78	.43
N	13	12	13	13

Note. PWD = people with physical disabilities.

Previous research has suggested that under death nonsalient conditions PWD elicit more positive evaluations than nondisabled individuals (e.g., Hirschberger, 2006; Hirschberger et al., 2008, Study 3). To examine this possibility we conducted additional analyses. Tests for Simple Main Effects indicated that when death was not salient participants engaged in an individual task evaluated the confederate in a wheelchair more favorably than the nondisabled confederate, $F(1, 94) = 14.45$, $p < .001$. No other significant differences were found between the wheelchair-bound and nondisabled confederate in all other conditions. However, Tests for Simple Main Effects comparing the two task conditions revealed that when death was not salient, and the confederate sat in a wheelchair, a marginally significant difference was found between the individual task and the collaborative task condition, $F(1, 94) = 3.75$, $p = .06$, indicating that evaluations were slightly more favorable in the individual task condition. No other significant differences were found between the two tasks in all other conditions.

One of the critical questions that this research attempted to address is whether a physical disability actually is a handicap in social interaction. Because attitudes towards disability tend to be ambivalent it is sometimes hard to give a definitive answer to this question. From our perspective attitudes towards PWD should be more negative when death is salient, but might even be more positive (a compassion effect) under death nonsalient conditions. To test this contention, we ran separate analyses for the mortality salience and pain salience conditions. In these analyses we compared target evaluations towards the wheelchair-bound confederate in the individual task condition with evaluations towards a combination of the other three conditions (disability, contact; no disability, no contact, no disability contact). In the mortality salience condition, the analysis revealed that when death was salient evaluations of the confederate in a wheelchair were more negative ($M = 4.7$, $SD = .44$) than in the other three conditions combined ($M = 5.11$, $SD = .61$) $t(49) = -2.133$, $p < .05$. This finding substantiates previous research (e.g., Hirschberger, 2006; Hirschberger et al., 2008) and indicates that in the absence of collaborative interaction MS reliably leads to derogation of PWD. The analysis in the pain salience condition produced an opposite pattern of results and indicated that when death was not salient attitudes towards disability were more positive ($M = 5.49$, $SD = .66$) than in the other three conditions combined ($M = 4.8$, $SD = .64$) $t(49) = 3.19$, $p < .01$. These findings underscore the ambivalence nondisabled people feel towards PWD.

Overall, these results validate findings from previous research and indicate that reminders of death lead to more negative evaluations of people with disabilities. However, these findings also support the hypothesis of the current research and indicate that brief, yet meaningful contact may attenuate the death–disability rejection link.

[1] There were no significant main effects of gender and no significant interactions between gender and the other variables.

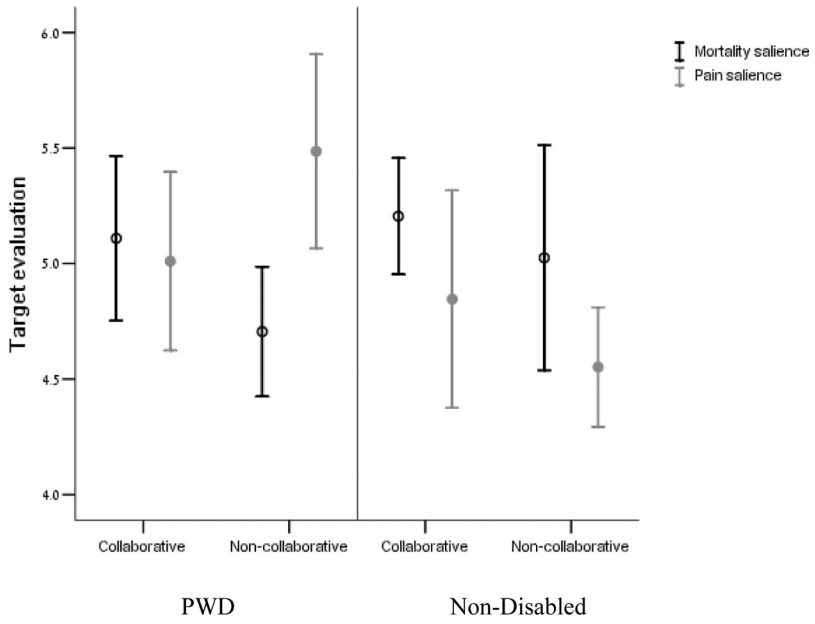

Figure 1. The impact of mortality salience, task type, and target disability on target evaluations.

Discussion

The results of the current research replicate and significantly extend previous research on the death–disability rejection link. First, our findings indicate that when nondisabled participants are exposed to subtle reminders of mortality, and are then asked to complete an individual task in the presence of a wheelchair-bound confederate, they evaluate the confederate more harshly. This finding is in line with previous research indicating that primes of death lead to less compassion towards a person with a physical disability (Hirschberger et al., 2005), to greater attributions of blame towards severely injured others (Hirschberger, 2006), and to a greater reluctance to help a confederate sitting in a wheelchair (Hirschberger et al., 2008). The current research not only replicates these effects with a measure of social evaluation, but also strengthens our previous assertions that these effects take place in a real-life encounter with people with disabilities, and not only in hypothetical scenarios.

Furthermore, the current research set-out to examine whether this negative process wherein existential fears and concerns lead to the rejection and derogation of people with physical disabilities may be attenuated. To do so, we relied on the contact hypothesis which has convincingly demonstrated in over four decades of research that significant intergroup contact may have a buffering effect on negative attitudes towards stigmatized groups (Pettigrew & Tropp, 2006). Specifically, participants were randomly assigned to either an individual task condition or to a collaborative task condition in which participant and confederate worked together in a collaborative fashion to complete a task. The results of the study indicate that in the collaborative task condition primes of death did not significantly increase negative attitudes towards the wheelchair-bound confederate. These findings demonstrate, for the first time, that the death-disability rejection link may be attenuated to the extent that death primes no longer induce negative attitudes towards disability.

To ensure that the impact of death on negative attitudes, and the moderating effect of contact on this process are unique to the "strained interaction" (Siller et al., 1967) between people with disabilities and nondisabled people, we employed a control group wherein participants interacted with confederates who were seated in a regular chair. The findings from this component of the research increases our confidence that the effects of death on rejection are unique to disability by indicating that primes of death led to a more positive evaluation of the nondisabled confederate in both the individual and collaborative conditions (at marginal significance). These findings suggest that when the interaction partner is nonthreatening to terror management mechanisms, mortality salience induces greater motivation for interpersonal contact. This finding is in line with a body of research indicating that primes of death induce a strong motivation for the creation and maintenance of close relationships (see Mikulincer, Florian, & Hirschberger, 2003 for a review), and may even motivate interpersonal contact with attitudinally different others (Wiseman & Koole, 2003).

The findings from the nondisabled component of the study also places in perspective the findings obtained from the interactions between participant and nondisabled confederate. Although interpersonal contact significantly moderated the negative impact of death primes on attitudes towards disability, this effect did not lead to the positive attitudes experienced towards nondisabled others, particularly when death is salient. Thus, the findings of the current study show for the first time that the death-disability rejection link is not deterministic and may be changed such that attitudes towards people with disabilities are improved.

Whereas contact only moderates the negative impact of death on attitudes towards disability, primes of death seemed to lead to an overall more positive evaluation of the nondisabled target regard-

less of task type. At first sight, it may seem as though attitudes towards the nondisabled confederate were more positive than towards the wheelchair-bound confederate when death was salient. However, a closer look at the data suggests that this is not the case. In fact, when participants engaged in the individual task and death was not salient, there were significantly more positive attitudes towards the confederate with a disability than towards the nondisabled confederate. Primes of death erased this difference by increasing positive attitudes towards the nondisabled confederate. Similar findings have been obtained in previous research indicating that when death is not salient, nondisabled participants exhibit more favorable attitudes towards people with disabilities even when compared to nondisabled targets (Hirschberger, 2006, Studies 1–3; Hirschberger et al., 2008; Hirschberger et al., 2005, Study 1). This *compassion effect* may reflect the normative sympathetic response most people have towards PWD, when not defending against death awareness, and may also be due to an overcorrection that takes place when people are aware that their feelings may bias their assessment (e.g., Wegener & Petty, 1997).

The findings of the current research as well as previous findings (Hirschberger, 2006; Hirschberger et al., 2005) illustrate the ambivalence people experience towards people with disabilities. According to Hirschberger (2006), these seemingly inconsistent responses may be explained by the tension between normative attributional processes and defensive needs. Under emotionally and motivationally neutral conditions observers are likely to experience and exhibit kind and caring responses to people with disabilities that reflect normative social values. Thus, a suffering other will elicit more help and care than a nonsuffering other. However, under mortality salience conditions the need to shield the self from death awareness takes precedence over common values and then defensive needs may override prosocial concerns. In this case, the suffering of another may spark the unsettling awareness of personal vulnerability and also threaten the validity of just world beliefs leading to physical and emotional disengagement from the other.

Strengths and Limitations

The current research represents the first attempt to examine the moderating conditions of the death–disability rejection link, employing a real-life interaction between a participant and a confederate playing the role of a person with a disability. However, one should keep in mind the possibility that reactions to people with real disabilities may differ. Moreover, the dependent variable used in this study, confederate evaluation, is a self-report questionnaire that may be subject to biases and demand characteristics. Future studies should replicate this design using a behavioral dependent variable.

An additional merit of the current research is the novel paradigm developed in this study to induce either a collaborative interaction or a parallel individual task. However, at this point we cannot determine whether the effects found are characteristic of any collaborative interaction or are limited to this method. Future research should replicate these findings using a different interaction paradigm.

Moreover, several researchers have questioned whether the effects of contact on prejudice reduction generalize beyond the immediate situation (e.g., Amir, 1969, 1976; Pettigrew, 1998). This critical question is beyond the scope of the current research, but an answer is pertinent for evaluating the impact of contact on the death–disability rejection link. Future research should attempt to examine the effects of brief contact on prejudice reduction over time and across different situations. It is also important to note that although the current research relies on the contact hypothesis, it slightly differs from it as our dependent measure focused on interpersonal perceptions and not on the reduction of intergroup prejudice. Future research should examine whether these effects extend to intergroup perceptions.

Conclusions

Previous research on the death–disability rejection link, illustrating the powerful effects of death primes on negative attitudes and reactions to disability, may have inadvertently conveyed the fatalistic message that as long as death poses a problem for humans, so will people with disabilities bear the brunt of defenses against death awareness. However, the current research indicates, for the first time to our knowledge, that brief interpersonal contact with people with disabilities, which satisfies the conditions of the contact hypothesis, may attenuate the impact of death on disability rejection. It is important to note that the current research employed a relatively brief and superficial interaction paradigm. If reactions to disability may be dramatically altered in a short laboratory procedure, it leaves room for optimism that more sustained and natural interactions with PWD may diffuse the symbolic threat to terror management mechanisms posed by physical disability, and contribute to persistent attitude change.

References

Allport, G. W. (1954). *The nature of prejudice.* Cambridge, MA: Addison-Wesley.

Amir, Y. (1969). Contact hypothesis in ethnic relations. *Psychological Bulletin, 71,* 319–342.

Amir, Y. (1976). The role of intergroup contact in change of prejudice and race relations. In P. Katz & D. A. Taylor (Eds.), *Towards the elimination of racism* (pp. 245–308). New York: Pergamon Press.

Arndt, J., Greenberg, J., Pyszczynski, T., & Solomon, S. (1997). Subliminal exposure to death-related stimuli increases defense of the cultural worldview. *Psychological Science, 8,* 379–385.

Arndt, J., Greenberg, J., Schimel, J., Pyszczynski, T., & Solomon, S. (2002). To belong or not to belong, that is the question: Terror management and identification with gender and ethnicity. *Journal of Personality and Social Psychology, 83,* 26–43.

Becker, E. (1973). *The denial of death.* New York: Free Press.

Carver, C. S., Glass, D. C., & Katz, I. (1978). Favorable evaluations of Blacks and the handicapped: Positive prejudice, unconscious denial, or social desirability? *Journal of Applied Social Psychology, 8,* 97–106.

Castano, E., Yzerbyt, V., Paladino, M., Sacchi, S. (2002). I belong, therefore, I exist: Ingroup identification, ingroup entitativity, and ingroup bias. *Personality and Social Psychology Bulletin, 28,* 135–143.

Florian, V., Mikulincer, M., & Hirschberger, G. (2002). The anxiety buffering function of close relationships: Evidence that relationship commitment acts as a terror management mechanism. *Journal of Personality and Social Psychology, 82,* 527–542.

Gaertner, S. L., Dovidio, J. F., & Bachman, B. A. (1996). Revisiting the contact hypothesis: The induction of a common ingroup identity. *International Journal of Intercultural Relationships, 20,* 271–290.

Goldenberg, J. L., McKoy, S. K., Pyszczynski, T., Greenberg, J., & Solomon, S. (2000). The body as a source of self esteem: The effects of mortality salience on identification with one's body, interest in sex, and appearance monitoring. *Journal of Personality and Social Psychology, 79,* 118–130.

Goldenberg, J. L., Pyszczynski, T., Greenberg, J., Solomon, S., Kluck, B., & Cornwell, R. (2001). I am not an animal: Mortality salience, disgust, and the denial of human creatureliness. *Journal of Experimental Psychology: General, 130,* 427–435.

Greenberg, J., Pyszczynski, T., & Solomon, S. (1997). Terror management theory of self esteem and cultural worldviews: Empirical assessments and conceptual refinements. In P. M. Zanna (Ed.), A*dvances in experimental social psychology* (Vol. 29, pp. 61–141). San Diego: Academic Press.

Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., et al. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology, 58,* 308–318.

Greenberg, J., Schimel, J., Martens, A., Pyszczynski, T., & Solomon, S. (2001). Sympathy for the devil: Evidence that reminding whites of their mortality promotes more favorable reactions to white racists. *Motivation and Emotion, 25,* 113–133.

Hirschberger, G. (2006). Terror management and attributions of blame to innocent victims: Reconciling compassionate and defensive responses. *Journal of Personality and Social Psychology, 91,* 832–844.

Hirschberger, G., Ein-Dor, T., & Almakias, S. (2008). The self-protective altruist: Terror management and the ambivalent nature of prosocial behavior. *Personality and Social Psychology Bulletin, 34,* 666–678.

Hirschberger, G., Florian, V., & Mikulincer, M. (2002). The anxiety buffering function of close relationships: Mortality salience effects on the readiness to compromise mate selection standards. *European Journal of Social Psychology, 32,* 609–625.

Hirschberger, G., Florian, V., & Mikulincer, M. (2003). Strivings for romantic intimacy following partner complaint or partner criticism: A terror management perspective. *Journal of Social & Personal Relationships, 20,* 675–687.

Hirschberger, G., Florian, V., & Mikulincer, M. (2005). Fear and compassion: A terror management analysis of emotional reactions to physical disability. *Rehabilitation Psychology, 50,* 246–257.

Hopkins, N., Reicher, S., & Levine, M. (1997). On the parallels between social cognition and the "new racism." *British Journal of Social Psychology, 36,* 305–329.

Jones, E. E., Farina, A., Hastorf, A. H., Markus, H., Miller, D. T., & Scott, R. A. (1984). *Social stigma: The psychology of marked relationships.* New York: Freeman.

Katz, I. (1981). *Stigma: A social psychological analysis.* Hillsdale, NJ: Erlbaum.

Landau, M. J., Johns, M., Greenberg, J., Pyszczynski, T., Martens, A., Goldenberg, J. L., et al. (2004). A Function of form: Terror management and structuring the social world. *Journal of Personality and Social Psychology, 87,* 190–210.

Louster, P. (1977). *Intelligence tests: Check your IQ!* Tel-Aviv: Reshafim.

McGregor, H., Lieberman, J. D., Solomon, S., Greenberg, J., Arndt, L., Simon, L., et al. (1998). Terror management and aggression: Evidence that mortality salience motivates aggression against worldview threatening others. *Journal of Personality and Social Psychology, 74,* 590–605.

Mikulincer, M., Florian, V., & Hirschberger, G. (2003). The existential function of close relationships: Introducing death into the science of love. *Personality and Social Psychology Review, 7,* 20–40.

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology, 49,* 65–85.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90,* 751–783.

Pyszczynski, T., Abdollahi, A., Solomon, S., Greenberg, J., Cohen, F., & Weise, D. (2006). Mortality salience, martyrdom, and military might: The Great Satan versus the axis of evil. *Personality and Social Psychology Bulletin, 32,* 525–537.

Scheier, M. F., Carver, C. S., Schultz, R., Glass, D. C., & Katz, I. (1978). Sympathy, self-consciousness, and reactions to the stigmatized. *Journal of Applied Social Psychology, 8,* 270–282.

Sherif, M. (1966). *Uncommon predicament.* Boston: Houghton Mifflin.

Sherif, M., Harvey, O. J., White, B. J., Hood, W. R., & Sheriff, C. W. (1961). *Intergroup conflict and cooperation: The robbers cave experiment.* Norman, UK: University of Oklahoma Book exchange.

Siller, J., Chipman, A., Ferguson, L., & Vann, D. H. (1967). Studies in reactions to disability. XI: *Attitudes of the non-disabled towards the physically disabled.* New York: NYU School of Education.

Stangor, C., & Crandall, C. S. (2000). Threat and the social construction of stigma. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 62–87). New York: Guilford Press.

Wiseman, A., & Koole, S. L. (2003). Hiding in the crowd: Can mortality salience promote affiliation with others who oppose one's worldview? *Journal of Personality and Social Psychology, 84,* 511–526.

Wegener, D. T., & Petty, R. E. (1997). The flexible correction model: The role of naive theories of bias in bias correction. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 29, pp. 141–208). San Diego, CA: Academic Press.

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