



Death & Racism: Mortality Salience Effects on Stereotypical Tendencies

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Abstract

A relationship between mortality salience and stereotypical thinking was examined in this research under the hypothesis proposed by terror management theory. This theory proposes that humans defend ourselves against our inevitable death by investing in cultural worldviews. Our study asked people mortality salience questions (designed to elicit death reminders) or control questions and then measured participants' level of stereotyping. In the study, 133 participants took a stereotypical thinking assessment that measured how stereotypical they were when presented with crime description. The results of the study showed trends toward significance. When exposed to mortality salience, participants were more likely to have stereotypical tendencies than those who were presented with the control questions. In addition, Native American participants showed significant stereotype threat. Together, these findings suggest that priming individuals with mortality salience leads them to have higher stereotypical tendencies, especially if they are part of a minority group.

Keywords: terror management theory, mortality salience, stereotypes, racial bias, self-esteem

Mortality Salience Effects on Stereotypical Tendencies

The use of stereotypes simplifies the way that people see the world and allows them to reduce the amount of processing that needs to be done when meeting a new person (McLeod, 2015). Stereotyping is the act of people inferring a range of abilities and characteristics that lead a person to assume that all members of the same group share the same abilities and characteristics (McLeod, 2015). Whereas there are many different subcategories of stereotyping, racial stereotyping is the focus for our research purposes. These stereotypes include biases that exist for different races, cultures, and ethnic groups. Racial stereotyping tends to favor the race of the beholder while belittling other races (McLeod, 2015).

Stereotypes lead to social categorization, which is a cause of prejudice attitudes. The idea of prejudice attitudes against others has been widely regarded as a self-protective function (Schimel et al., 1999). Prejudicial attitudes lead to in-groups and out-groups that maintain a “them” and “us” mentality (Hurwitz & Peffley, 1997). When introduced to others who exhibit differences based on race and culture, the validity of an individual’s worldview is called into question (Schimel, et al., 1999), which is why individuals defend their own in-groups so fervently.

Though there are many reasons stereotyping occurs, one prominent psychological theory that explains it is terror management theory. Terror management theory (TMT) states that humans are predisposed toward survival on a biological basis, which is true of all animals. However, humans have the unique capacity for self-reflection, which makes them aware that they will die one day (Das, Bushman, Bezemer, Kerkhof & Vermeulen, 2009). The awareness of an individual’s own inevitable death is referred to as mortality salience (MS) (Das et al., 2009). Terror management theory proposes that when people think of their death, it creates a

potential for terror (Das et al., 2009). The way that people avoid becoming paralyzed by the terror of their inevitable death is by immersing themselves in cultural systems and worldviews that offer a sense of immortality. Throughout the history of terror management theory, evidence has been prevalent that individuals defend their worldviews when presented with mortality salience (Tjew-A-Sin & Koole, 2018). The faith that people have in their cultural worldview operates as a defense against death-related anxiety (Das et al., 2009).

When it comes to the topic of stereotyping, an individual's self-esteem is partially protected through prejudicial attitudes. (Tjew-A-Sin & Koole, 2018). In-group bias is not a new topic in psychology; beginning in early infancy, babies tend to favor in-groups. This action is not carried out in a malicious manner, but there is a certain belongingness to one's ethnic background (Marcelo & Yates, 2018). Bernal and cohorts (1990) explained, however, how humans have an innate desire to get along with other humans including those of different races and backgrounds. Thus, the question of why we end up being so negatively biased towards other races lingers.

Representation of race in media may have a large role in negative bias. Studies done by Das and colleagues (2008) suggests that media plays a large role in how we perceive other races, and what we should think about them. When constantly presented with information that is negative about certain races, people will begin to attribute this information to individuals who fit that racial profile. Moreover, it becomes easier to dehumanize them and offhandedly attribute the constant stereotypical traits associated with them (Goff, Ebenhardt, Williams, & Jackson, 2008). It is especially prevalent when the news about an individual actually affects those watching it. For example, following the 9/11 terrorist attacks, there was a rise in prejudiced attitudes towards Muslim individuals in the United States, regardless of whether

they were part of an extremist group or not (Das et al., 2008). This study also provides information based on TMT that prejudice against out-groups is a result of trying to suppress fear that is evoked by thoughts of death. These studies conclude that media priming can lend a hand to dangerous stereotyping of out-groups, especially when the thought of death is present.

Prejudice of out-groups is especially prevalent when there are high nationalistic beliefs (Tjew-A-Sin & Koole 2008). After 9/11, in-group partiality was reported to have risen (Morgan, Wisneski, & Skitka, 2011), as well as values about cultural worldview in the United States. However, this also led to an immense distrust of Arab Americans and Muslims. In fact, according to Tjew-A-Sin and Koole (2018), the higher the national identity of an individual, the lower their positive attitudes towards multiculturalism were. This is especially true when coupled with death primes, such as a terrorist attack or a news article describing an out-group committing a crime resulting in death.

In cases where a crime has recently occurred, there is an even higher chance there will be prejudice. This happens because the information, which is emotionally evoking, has just recently been encoded into the long-term memory (Arndt, Greenberg, & Cook, 2002). Information is transcribed into long-term memory through a hierarchical process (Fathima, Sasikumar, & Roja 2012). When information has strong emotional concepts that are meaningful to us, a more powerful neural connection is formed. Lockhart and Craik (1990) argue that this deeper connection makes the information easier and more readily available to recall. Therefore, when people are introduced to information such as death, perpetrated by someone who fits an already embedded racial stereotype, they are more likely to feel a stronger emotional connection to this information.

Much of the research conducted on stereotypical thinking related to TMT has focused on either the effects of one certain race, or a race associated with events that have brought about the thoughts of death, such as 9/11. For our research, we collected data on stereotypical thinking about a wide variety of races while delving deeper into the research surrounding media priming and prejudice. Along with this, we assessed how short-term and long-term memory is affected by MS. Research shows that long-term convictions will almost always prevail over short-term information. Accordingly, we anticipated that deep-rooted prejudice would take precedent over the short-term information provided to our participants.

Our study sought to find a relationship between MS and stereotypical thinking. Specifically, when exposed to MS, we wanted to see if participants would be more likely to show prejudice against five races by linking them to stereotypical crimes.

Method

Participants

Participants included 133 undergraduate students from a college in southwest Colorado. About 66 percent of the participants were female, and the other 34 percent were male. Around 50 percent of the participants were Caucasian, 33 percent were Native American, 8 percent were Hispanic, 7 percent were African American, and 2 percent were Asian. The age of the participants ranged from 18 to 24 with the mean age of participants being 19 years old.

Materials

Mortality Salience Questionnaire (Appendix B). The mortality salience (MS) questionnaire was adapted from early TMT studies done by Greenberg et al (1986). By presenting participants with questions that made them think directly of death, they were expected to reject members of different out-groups. This was based off decades of TMT

research, with the MS questions being used in around 200 studies (Burke, Martens, & Faucher, 2010). Participants who were not given this questionnaire were given a form that asked them about their fall semester, which acted as our control (Appendix C).

Stereotypical Tendencies Scale. In attempting to measure the amount of stereotypical tendencies one had when presented with MS, we created a two-part assessment that gave us a 0-5 rating system. The first form (Appendix D) had five stereotypical crime descriptions perpetrated by non-racially stereotypical offenders. The second form (Appendix G) had five mugshot photos present, with the races being White, Native American, African American, Asian, and Hispanic (Figure 1). Below the mugshot photos were the same stereotypical descriptions of crimes, this time without a perpetrators race being present. If a participant matched a racially stereotypical mugshot with a racially stereotypical crime (i.e. Hispanic mugshot with illegal immigrant crime description) we would mark them down for one point of stereotypical tendency. This was done for all five mugshots.

Design

This was an experiment with a between-subjects design. The independent variable was the mortality salience questions, and the control was the semester at the college questions. The dependent variable was the level of stereotyping.

Procedure

Professors around campus in the fall semester of 2018 were asked if we could use their classes for our research. We attended nine classes, and participants who agreed to participate in the study were given a packet with a consent form (Appendix A) face up. After giving participants a moment to read through and ask any questions, we let them begin. Each group opened to the first page. This page contained the MS question or the control question. We gave the participants four minutes to write on these pages and would not let them continue on until

the four minutes had expired. This was done to ensure the participants with the MS questions put thought into them, so they effectively were treated with MS. They then flipped to the second page. Here they had 10 minutes to read the five crime descriptions and complete two buffers (Appendix E & F). The first buffer was a crossword puzzle and the other was a connect-the-dots. They were then able to complete the last part of the study, which included the second part of the stereotypical tendencies scale and a demographics page (Appendix H) to end the study. We conducted the study the same way in every class, and randomly distributed out control and MS questionnaire to ensure we had around the same number of each.

Results

Our primary goal for this study was to determine the significance of mortality salience (MS) questions on individual's stereotypical tendency (ST) levels. Stereotypical scores were based off a rating system of 0-5, with 0 being no stereotypical tendencies and 5 being high ST. These tendencies were based off Figure 1.

Our study showed trends towards significance that, when presented with MS questions, participants showed higher ST than those who were not (see Table 1). Participants exposed to MS ($n=69$) had a mean stereotypical score of 1.579($SD = 1.499$), whereas those who got the control question ($n=64$) had a mean stereotypical score of 1.141($SD = 1.331$). This yielded a mean difference, MS minus control, of 0.439. A two-sample independent t-test with $\alpha=0.05$, two-tailed, was used $t(131) = 1.78$, $p = 0.077$, $r^2=0.3096$. This means that 31% of the variation in the percentage of ST can be attributed to whether participants were exposed to mortality salience (death reminders) or not.

Demographic Variables

In addition to our main hypothesis, we also wanted to analyze how different races responded to our survey. A one-way between subjects ANOVA was conducted to compare the effects of MS on Stereotypical Tendencies (ST) for Native Americans, Caucasians, African Americans, Asians and Hispanics. The ANOVA test showed Hispanic participants had the highest level of ST for both control and MS groups overall, $F(0, 4) = 2.181$, $p = .024$ (see Table 3). Of our participants, Native Americans made up 32% of the study (see Table 2). Along with this, they were the only race that yielded a significant difference for ST in death versus control, $t(41) = 1.947$, $p = 0.05$, $r^2 = 0.628$. This shows that MS increased the ST in Native Americans significantly. All remaining analyses were non-significant.

Discussion

When exposed to MS, participants were more likely to have higher stereotypical tendencies (ST) than those who were presented with a control. This is likely due to a need to protect their cultural ideals, which are threatened when presented with thoughts of death. By matching the mugshots with the stereotypical crimes, participants used stereotyping to reduce death anxiety. The threat of death was thereby transiently reduced for them.

Through post hoc analysis, we noticed finer gradations regarding the participants' results. For instance, those who got the control question about their academic semester seemed to display higher levels of anxiety than those answering the MS questions. This could be in part due to the fact that we distributed our study during the week prior to and the week of midterms, which is a stressful time in a student's life. This anxiety could have also brought about some feelings of terror, which is why we found high reports of ST in the control and the MS group.

Additionally, we found problems throughout our MS groups responses. In many cases, participants were confusing the Hispanic and Native American mugshots. Individuals who maintain a prejudice attitude toward other races have preconceived notions about people from a particular racial background, and those preconceived notions may alter how a person thinks or acts around someone of the other race. Therefore, if an individual holds a prejudice attitude toward either Native Americans or Mexicans and cannot tell the difference between the two races, he or she may think and act negatively toward the individual of either Native American or a Mexican background. Thinking or acting negatively toward an individual ranges anywhere from making a rude comment about the person to not giving a person a job position due to their race.

Stereotype Threat

Native Americans had the highest ST out of all the races of the participants. We believe this is likely due to the theory of stereotype threat. Our study was directed at making explicitly stereotypical situations, which is a feature of stereotype threat. When people are faced with their own negative stereotypes, they often confirm the belief, which leads to lower performance on tasks (Aronson, 2002). Specifically, when blatant racist cues are present, there are distractions that inhibit individuals' working memory resources (Pennington, Heim, Levy & Larkin, 2016). Therefore, when the participant's read the stereotypical crime, their performance levels likely went down. Furthermore, when they reached the matching section, their working memory levels had also likely depleted, confirming the embedded stereotype.

Although this is conjecture, there are studies that have been executed to support our theory on Native Americans and their high levels of stereotyping. Jaramillo, Worrell, and Mello (2015) conducted a study that aimed to identify how ethnic identity and stereotype threat

impacted Native American adolescents. They found that when there are high levels of perceived discrimination, there were reportedly lower levels of self-esteem; moreover, the results of their study support the conclusion that Native Americans stereotype at a higher level due to stereotype threat. We intentionally created a situation where there was a high level of stereotypical discrimination. As mentioned previously, people often make up for low self-esteem by filling preconceived stereotypes in order to stabilize their conception of their own world views. A reason for Native Americans providing more stereotype threat answers than others could be due to Native Americans relating or empathizing on a deeper level to the crime described, and they may have felt more likely to pursue a stronger stereotypical ideology to feel as though they were not the only ones being discriminated against while inadvertently stereotyping against themselves, as well.

Limitations

Of possible limitations, time restraints and location were the two that impacted us the most. Due to our study having trends towards significance, it would have been beneficial to have had more time in order to gather more participants. Moreover, having a wider variety of participants from places other than a liberal arts college may have added more validity to our results. Finally, our crime-matching task was purely hypothetical. This may reduce the amount of real-world external validity. It would be beneficial to have a more realistic study set-up.

Future Research and Implications

Our study showed evidence that when people feel threatened, they tend to act in more stereotypical ways. Throughout our research, media prevalence on stereotypical thinking was in the background. These two ideas tied together, that media prevalence instills fear by presenting people with stereotypical cues, create a clear problem. Future research ideas include

mediation tactics when it comes to stereotyping. By bringing down the overall stereotypical tendencies people feel on a daily basis, there may be room for improvement when threatened. This can be done by doing studies based on checks and balances within one's in-group, and seeing how the same sanctions work when an out-group member tries to step in. Research done on popular media applications, such as that done by Kevin Munger (2016) who did an experiment to reduce racist harassment on Twitter, could benefit this field of study significantly.

Another possible study is focusing on positive media about other cultures and races. Using mainstream media to portray other races as beneficial to society and measuring stereotypical tendencies against these races after positive portrayal could lead to more beneficial results. By focusing more on the great things others do, perhaps there will be less inclination to stereotype. Finally, changing the overall narrative of the United States would be of great benefit in this regard: By attempting to reframe stories that enhance other races, we have the potential to see improvement on thoughts about other races.

We hope that by identifying what the problem may be when it comes to stereotypical tendencies, we can implement plans for further research that can decrease racism and the deleterious effects stereotypes have in our modern world. The first step is figuring out how people can defend their self-esteem without using stereotypes detrimentally.

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Table 1.
Stereotypical Tendencies Scores by Group

Treatment	<i>n</i>	<i>M</i>	<i>SD</i>
Mortality Salience	31	1.4516	1.54
Control	35	1.2286	1.59

Note. The mean is based off the 0-5 system of stereotypical tendencies

Table 2

Demographic: Race of Participants

		<i>n</i>	Percent
Race	White	66	49.6
	Native American	43	32.3
	Hispanic	11	8.3
	African American	9	6.8
	Asian	1	.8
	Total	130	97.7
	Missing	3	2.3
Total		133	100.0

Note. “Missing” participants were those who did not include their race on the demographic page, or simply left the demographic page blank.

Table 3

Comparison of participants mean stereotypical tendency scores by ethnicity

Ethnicity	<i>n</i>	<i>M</i>	<i>SD</i>
White	66	1.33	1.56
Native American	43	1.27	1.31
Hispanic	11	2.18	1.47
Black	9	1.22	.83
Asian	1	.0000	.
Total	130	1.36	1.44

Note. The mean is based off the 0-5 system of stereotypical tendencies

Figure 1. Stereotypical Tendencies Scale

Please match the following headshots to the crimes committed below by circling the description number. Please do not leave any spaces blank. If you do not remember an answer, make your best guess.

				
Crime 1 2 3 4 5	Crime 1 2 3 4 5	Crime 1 2 3 4 5	Crime 1 2 3 4 5	Crime 1 2 3 4 5

Crime # 1

Denver, CO: Tax evasion on about 10 thousand dollars' worth of unpaid taxes over the time span of three years was recently reported. The perpetrator was arrested in his office at Google.

Crime #2

El Paso, TX: On Wednesday morning, around 9:20 a.m., man was pulled over and searched after not having a license and registration. After a further search, it was discovered that the male was not a legal immigrant, so he was transported to the local jail until further actions can be taken.

Crime # 3

Santa Fe, NM: A local man was picked up Friday evening walking along a dirt road for crimes associated with public intoxication. The perpetrator was asked to leave a local casino after displaying inappropriate behavior. He was then picked up while walking along a road leading to a reservation

Crime # 4

Detroit, MI: A crime was reported in a local neighborhood that involved two store fronts that were victims of an armed robbery. The two stores reported damage including gunshots in the walls, broken glass, and \$2,000 of stolen merchandise.

Crime # 5

San Francisco, CA: The local news reported the hacking of multiple online bank accounts in the attempt to steal money. The perpetrator was tracked back to his locally owned massage parlor.

Appendix A

Consent Form

In this study we will ask you to perform a personality test and three cognitive tasks. All information you provide will remain confidential. Your participation is completely voluntary, and there are no direct benefits to participants, but we appreciate your time and effort. If for any reason during this study you do not feel comfortable, you may stop the study. Your participation in this study will require approximately 30 minutes. When the study is complete, you may reach out to us for the results of the study, as well as any questions you may have. If these questions bring up issues that you would like to discuss further, the Fort Lewis College Counseling Center has professional counselors available. Personal counseling is confidential, and services are free to students on a short-term basis, and the contact information is listed below.

If you have any further questions concerning this study please feel free to contact us through email: Katie Lewis at kelewis@fortlewis.edu or Annie David at akdavid@fortlewis.edu.

If you have questions about your rights as a research participant, contact Becky Clausen (970) 247-7237 or Missy Thompson (970) 247-7580.

The Counseling Center is in 260 Noble Hall and can be reached Monday - Friday 8:00 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m. at (970) 247-7212.

Appendix B
The Projective Life Attitudes Assessment

This assessment is a recently developed, innovative personality assessment. Recent research suggests that feelings and attitudes about significant aspects of life tell us a considerable amount about the individual's personality. Your responses to this survey will be content-analyzed in order to assess certain dimensions of your personality. Your honest responses to the following questions will be appreciated.

1. PLEASE BRIEFLY DESCRIBE THE EMOTIONS THAT THE THOUGHT OF YOUR OWN DEATH AROUSES IN YOU.

2. JOT DOWN, AS SPECIFICALLY AS YOU CAN, WHAT YOU THINK WILL HAPPEN TO YOU AS YOU PHYSICALLY DIE AND ONCE YOU ARE PHYSICALLY DEAD.

**PLEASE DO NOT CONTINUE ON TO THE
NEXT PAGE UNTIL INSTRUCTED TO DO SO**

Appendix C

Below, please give a detailed description of how the Fall semester of 2018 at Fort Lewis college has been for you. Include as much detail as possible.

[illegible]

**PLEASE DO NOT CONTINUE ON TO THE
NEXT PAGE UNTIL INSTRUCTED TO DO SO**

Appendix D

Please read all the crime descriptions below.

Crime # 1 Detroit, MI: A crime was reported in a local neighborhood that involved two store fronts that were victims of an armed robbery. Suspect was an Asian man. The two stores reported damage including gunshots in the walls, broken glass, and \$2,000 of stolen merchandise.

Crime #2 Santa Fe, NM: A local man was picked up Friday evening walking along a dirt road for crimes associated with public intoxication. The black male was asked to leave a local casino after displaying inappropriate behavior. He was then picked up while walking along a road leading to a reservation.

Crime # 3 San Francisco, CA: The local news reported the hacking of multiple online bank accounts in the attempt to steal money. The main suspect for the crime is a 5'11" Mexican male who was tracked back to his locally owned massage parlor.

Crime # 4 Denver, CO: Tax evasion on about 10 thousand dollars' worth of unpaid taxes over the time span of three years was recently reported. The perpetrator, a 5'7" Native American male, was arrested in his office at Google.

Crime # 5 El Paso, TX: On Wednesday morning, around 9:20 a.m., a 5'9" white male was pulled over and searched after not having a license and registration. After a further search, it was discovered that the male was not a legal immigrant, so he was transported to the local jail until further actions can be taken.