Making a Murderer:
Conceptualizing the Effects of Mortality Salience on Criminogenic Thinking Patterns

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Abstract

Terror Management Theory (TMT) proposes that humans seek preservation because we are aware of our vulnerabilities associated with death, creating an immense amount of fear and anxiety. As a result, humans invest in both symbolic and literal immortality—via activities that provide us with a sense of safety and reassurance to counter our inevitable demise. However, there has been little research on TMT in the realm of criminal justice. More specifically, TMT continues to be an unpracticed idea when examining the origins of an offender's criminogenic thoughts and behaviors. Therefore, this project conceptualizes the effects of mortality salience (death reminders) on a person's willingness to allow more criminogenic thought patterns. These cognitive contemplations were assessed by using a modified version of the Measure of Criminogenic Thinking Styles (MOCTS), originally a 70-item self-report measure created to calculate someone's thinking that could perpetuate criminal behavior.

Keywords: Terror Management Theory, criminogenic thinking, mortality salience

Making a Murderer

In January 2020, the infamous coronavirus first struck the world, implementing destruction upon millions of communities across the globe. Within this same year, George Floyd screamed out in terror as he pleaded for officer Derek Chauvin to remove his knee that was puncturing his neck. Resulting in hundreds of protests both within the United States and across international borders, this was not the first time our world has been reminded about our death.

On September 11th, 2001, American Airline Flight 11 crashed into floors 93-99 of the North World Trade Center. Even within our own education system, Colorado has faced the broadcast of several mass shootings, specifically from Eric Harris and Dylan Kelbold's initiation of terror at Columbine High School on April 20, 1999.

So often this type of panic has paralyzed countries in many different forms. From diseases that have sickened thousands, international wars that have killed millions, protests that have fought against racial injustices, and mass shootings that have terrorized domestic peace, death reminders are always at their forefronts. For every person that has been touched by death, we begin to realize how our own death can come at any moment, leaving us feeling helpless. As a result, the more we experience this type of chaos, the more inclined we are to act irrationally in an attempt to feel safe again.

Terror Management Theory (TMT) proposes that humans seek preservation because we are aware of our vulnerabilities associated with death. Consequently, this creates an immense amount of anxiety and fear that drives us to invest in both symbolic and literal immortality. These activities provide us with a sense of safety as we oppose our inevitable demise. The current project conceptualizes the effects of our own mortality salience on a person's willingness to allow more criminogenic thought patterns. Additionally, the study will provide the theoretical framework that will help to address the knowledge gap of how TMT explains increased acceptance of criminogenic thought patterns.

Literature Review

Seminal Studies

TMT is the idea that humans seek preservation because we are unconsciously scared about our own death, stimulating an enormous amount of fear and anxiety within ourselves (Solomon, Greenberg, & Pyszczynski, 2015). Mortality salience is a key concept that posits that when we are reminded about our own death, individuals become motivated to defend their cultural worldviews that buffer against the horror of personal annihilation (Leippe, Bergold, & Eisenstadt, 2017). In this context, being reminded of our death will cause us to invest our time in the beliefs we have about the world (Solomon, Greenberg, & Pyszczynski, 2015) to allow us to be secure in our own realities. There are two different activities we use to distract us from death: literal and symbolic immortality.

Literal immortality is the first tactic we use to feel immortal. This umbrella of activities is done by physically making ourselves live longer (Van Tongeren et al., 2017). Whether is by exercising more, investing in a better diet, or using modern technology for organ transplants and "life-saving" medications, we use these mechanisms to extend our lifespan to make us feel as though we have "beaten death" (Solomon, Greenberg, & Pyszczynski, 2015).

When people are reminded about their death, they might employ one of those types of activities listed above, but these literal immortality activities may not always work or be available. As a result, when our communal worldviews fail us, we may seek other avenues, including crime. For example, stealing groceries, robbing a bank, or committing tax fraud could be potential actions a person may take, even if they were not a criminal prior, in order to relieve their anxieties about their own death being at the forefront of their lives.

On the other hand, many people also invest their time in symbolic immortality strategies. As opposed to literal immortality, symbolic distractions do not extend our physical presence on Earth. Instead, they focus on prolonging the life of our identity, reputation, and legacy past our physical lifespan (Solomon, Greenberg, & Pyszczynski, 2015; Julia Elad-Strenger, 2016). In fact, there are five different ways we can experience symbolic immortality: reproduction, personal influence through works and teachings, spirituality, "religious attainments" in search of a higher existence, and "ecstatic peak experiences" commonly seen extreme sports and adrenaline-driven experiences (Florian & Mikulincer, 1998).

Additional Studies

As far as we know, violence remains fairly stable throughout someone's lifetime (Boyle, Rosenbaum, & Hassett-Walker, 2008). More specifically, if someone is considered a "criminal" in their later years, it would be highly likely that crime has always been existent throughout their lifetime, whether from delinquent, antisocial, and impulsive behaviors to violence and abuse within the family (Boyle, Rosenbaum, & Hassett-Walker, 2008; Causes of Crime, 2018).

Additionally, other influences of crime could be biological as a result of an antisocial personality disorder or being an identical twin to someone who has higher criminality tendencies (Causes of Crime, 2018). Furthermore, not having adequate access to housing, education, and jobs as well as peer influence, drug and alcohol consumption, poverty, social inequalities, lack of communal funding, and more could all play a significant role in crime rates (Roots Cause Crime, 2018). However, it is vital to note that everyone contains the potential to be evil; the only difference is how and when we choose to allow these thoughts. For example, Arendt (1994, p. 2) articulates how Eichmann, a man apart of the Nazi party, was "an ordinary, rather bland, bureaucrat" who seemed "neither perverted nor sadistic" but "terrifyingly normal" in the way he acted during his trial. In fact, "he performed evil deeds without evil intentions" because he did not understand the consequences of his actions to others; he just wanted to do well in his job. As a result, Eichmann committed crimes under circumstances that made it impossible for him to know or to feel that he was doing wrong (White, 2020).

Theoretical Framework

Literature Gap

Despite an extensive amount of existing literature focusing on the origins of criminal behavior, there is still a prominent knowledge gap. As a result, the current study will address how Terror Management Theory, and our intellectual ability to be mortality salient, affects our willingness to have more criminogenic thought patterns that could, ultimately, perpetuate criminal or maladaptive behavior.

Hypothesis

Based on all the research that can be applied to understanding how mortality salience (MS) can perpetuate criminogenic thinking styles, the following hypothesis were tested in this project:

- **Hypothesis 1 (H_1):** When participants are reminded about their own death, then their overall total criminogenic thinking score will increase.
- **Hypothesis 2 (H_2):** When participants are reminded about their own death, then the egocentrism subscale score will increase. Egocentrism-related variables have been shown to increase across a wide range of MS studies (Burke et al., 2010).

Method

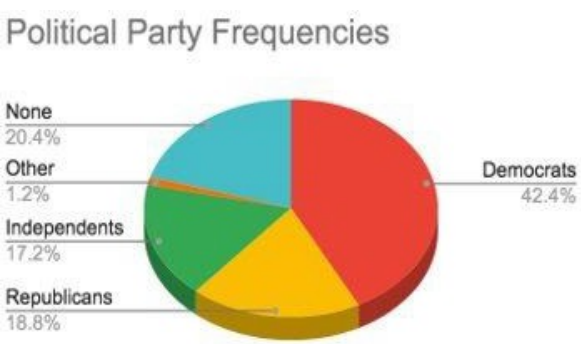
Material and Procedure

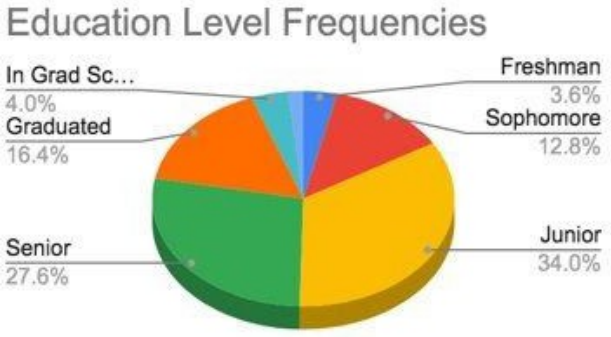
Participants were given one of two different surveys: the experimental group was reminded about their death and the control group was instead reminded about pain at the dentist. Each survey consisted of an implied consent form, a demographics section, and a picture delay. Additionally, they received a shortened version of the Measure of Criminogenic Thinking Styles (MOCTS) manual report (see Appendix for all materials).

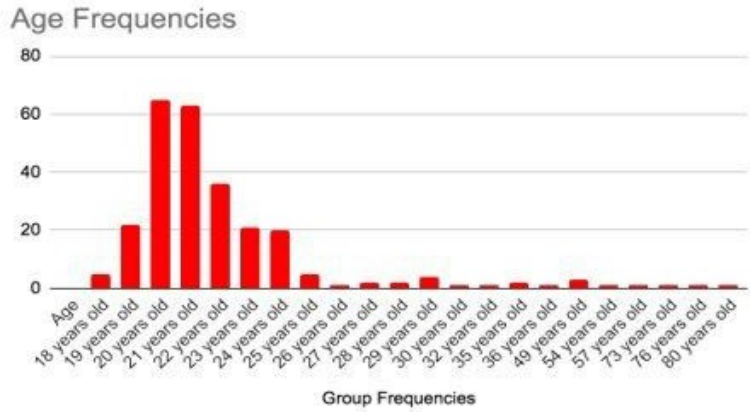
MOCTS is used to calculate someone's likelihood to commit a crime and/or re-offend (Kyle, 2018). This instrument is a 70-item self-report that determines "the presence of thinking styles that perpetuate criminal and other maladaptive behaviors" (Mandracchia, 2017). In it there are three subscales that measure criminogenic thinking based on "Control," "Cognitive Immaturity," and "Egocentrism" (Mandracchia, 2017). We employed a modified version of the MOCTS, totaling to only 30 questions with the original purpose remaining (Appendix 6).

Participants

This survey sampled 250 participants; 31.2% of the sample population was male and 68.8% were females with ages ranging from 18 years old to 80 years old and a mean of 23.2. Through a random assignment selection process, automated by an online randomization system, 125 people received the death reminder survey (treatment/experimental group) in Form A (Appendix 3) whereas the other 125 participants received the dental reminder survey (control group) in Form B (Appendix 4). Further information about participation demographics are listed below.





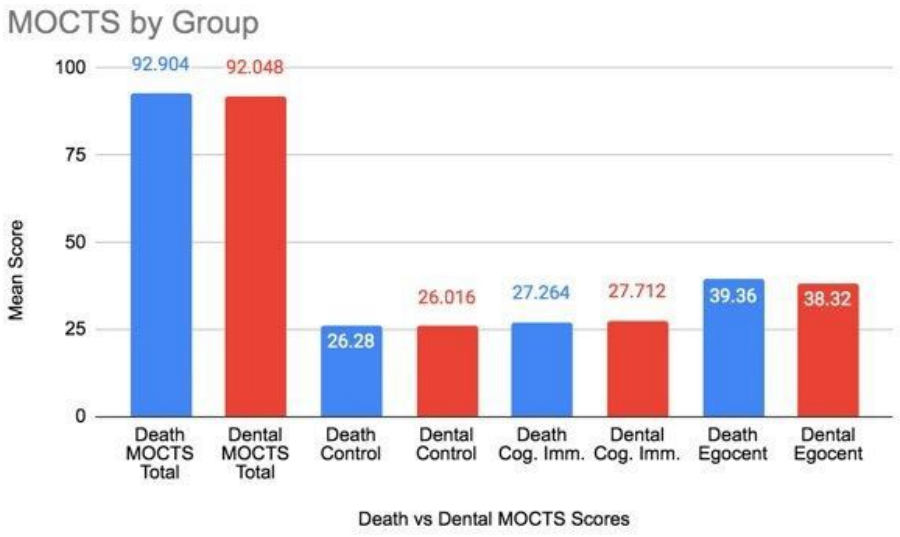


Analysis

We analyzed the results using a linear regression model and independent sample t tests that compared how the death reminder versus the dental reminder affected participant MOCTS scores.

Results

Mean Scores of MOCTS Test and Subscales



Results for Total MOCTS Score and by Subscale

Total MOCTS by Group				
	Mean	**SD**	**Significance**	**T value**
Death	92.904	11.046	0.528	$t(248) = -0.632$
Dental	92.048	10.371		

Egocentrism Scores				
	Mean	**SD**	**Significance**	**T value**
Death	39.36	4.057	0.046	$t(248) = -1.848$
Dental	38.32	4.81		

Control Score				
	Mean	**SD**	**Significance**	**T value**
Death	26.28	5.231	0.661	$t(248) = -0.439$
Dental	26.016	4.233		

Cognitive Immaturity Score				
	Mean	**SD**	**Significance**	**T value**
Death	27.264	7.389	0.619	$t(248) = 0.498$
Dental	27.712	6.813		

Whereas there were no statistically significant differences between the overall MOCTS scores of experimental and control participants ($p > 0.05$), we did find a statistically significant different between scores on the egocentric subscale only ($p < 0.05$). Therefore, our first hypothesis was rejected but our second hypothesis was supported.

Discussion

Implications

Our findings that egocentrism increases following a death reminder aligns with a previous study in which desire for fame—a variable closely related to narcissism and egocentrism—increased after death reminders were given to the participants (Greenberg, Kosloff, Solomon, Cohen, & Landau, 2010). Consequently, this study sheds light on how death reminders can impact on a person's criminogenic thought patterns, specifically enhancing our willingness to accept maladaptive thoughts as a result of boosted egocentrism (e.g., "I can do whatever I want because I am special"). As our survival instinct turns on and our fight and flight response ignites, we begin to narrow our focus only about ourselves. We become more concerned with how we will avoid death that we distract ourselves away from death by thinking we are more important than we actually are.

In terms of this study, we can begin to imagine the relationship between egocentrism and crime when someone is reminded about their own death. For example, returning to the recent fear-driven situations that have reminded us about death (war, terrorist attacks, mass shootings, climate change, COVID-19, etc.), if initial death-defying strategies break down, this could explain why stores were being robbed during the pandemic and during the current BLM protest and why war raged after 9/11. Ordinary people may choose crime (and criminogenic thought patterns such as egocentrism) when pursuing their normal communal worldviews does not distract them away from their own death.

In theory, this project can help guide law enforcement and crime analysts in grasping how crime can be detected and prevented. Moreover, we can also begin to understand the policy implications from these results. As for the criminal justice system, we need to provide more rehabilitation and restorative justice programs that would teach criminals how to regulate their emotions, especially when they are faced with death-reminding situations and provide them with a sense of hope as a distraction to our inevitable demise.

Limitations and Future Directions

Several aspects of this study could be amended for future study trials. Firstly, the participation composition could be more varied. Most of the students were white democrat-leaning females who were either juniors or seniors in college. Additionally, the surveys were given in the midst of a global pandemic and one of the most contentious elections in our lifetimes. As a result, the immense amount of fear and anxiety already circulating our culture could have impacted the MOCTS scores in this research.

Strengths of the current research paradigm should also be noted. We had a large sample size and this was an unprecedented study with no previous work on this precise and important topic—the connection between death and crime.

Based on these edits, there are several directions we could offer suggestions to further this study. For one, this study would not be given during either a global pandemic or a Presidential election. Furthermore, it would be valuable to test the actual likelihood of the participants committing a crime rather than mere criminogenic thinking. For instance, after death reminders, participants could be given the opportunity to steal a small amount of money from a communal jar.

In sum, we believe this line of research can help in some small way to guide law enforcement and crime analysts in grasping how crime can be detected and prevented as well as advising future policy directions to our country's political, economic, and criminal justice realms.

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Appendix

1. ***Implied Consent***

"Thank you for agreeing to participate in this research study about personality and values. Your participation is completely voluntary. You will be asked to fill out this questionnaire packet, which should take about twenty minutes to complete, in three parts. There are no foreseeable risks to your participation. To protect your confidentiality, only aggregate data will be reported and names will only be used for course credit. There is no direct compensation to you, though you may receive course credit for participating in this research (or be offered an alternate assignment). If you have any questions about this research or would like to know the results of the study, you may contact Dr. Brian Burke in the psychology department at 247-7088. For questions about your rights as a research participant, contact Dr. Melissa Thompson at 247-7580 or Dr. Jennifer Lowell at 247-6185. If this research brings up any uncomfortable feelings, you may contact the Counseling Center at 247-7212, which offers up to 5 sessions free of charge."

2. ***Demographics Sheet***
    - Gender
        - Male, Female, Neither
    - Political Party
        - Democrats, Republicans, Independents, None, Other
    - Ethnic Background
        - Caucasian/White, African American/ Black, Native/ Indigenous, Hispanic/ Latinx, Asian/ Asian American, Other
    - College Status
        - First-Year, Sophomore, Junior, Senior
    - Age
        - 18 years old or older

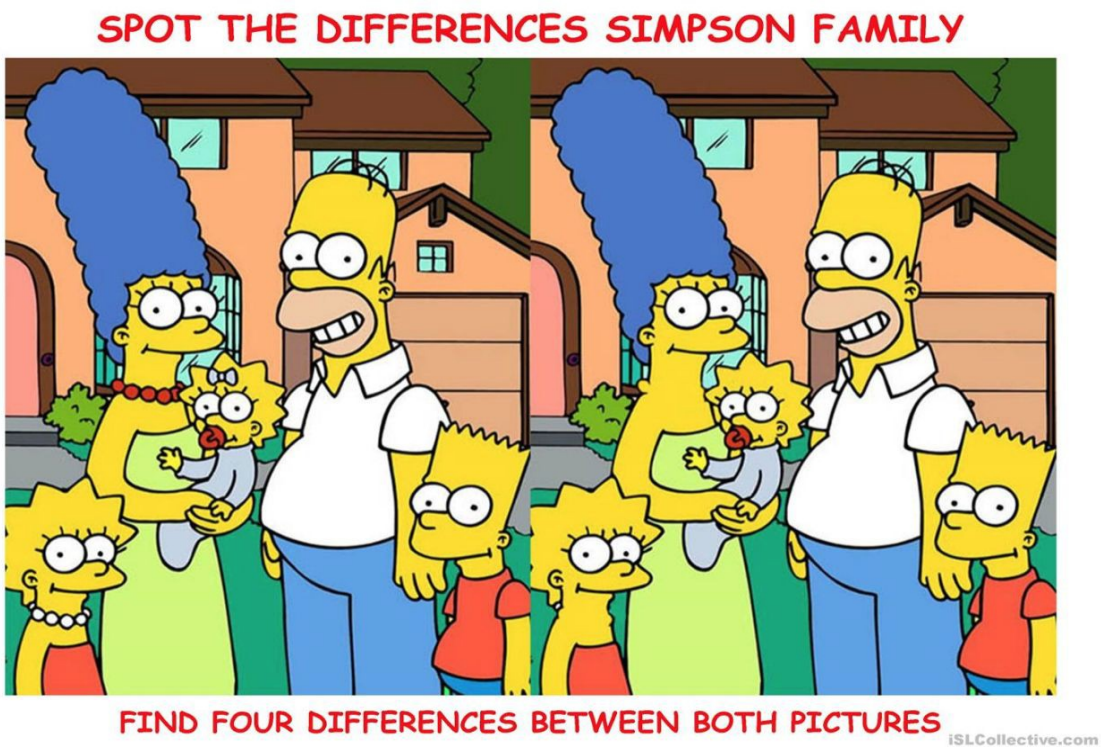
3. ***Death Reminder (Form A: Experimental Group)***

    - Question 1: Please briefly describe the emotions that the thought of your own death arouses in you.
    - Question 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.

4. ***Dental Reminder (Form B: Control Group)***

    - Question 1: Please briefly describe the emotions that the thought of your own dental pain arouses in you.
    - Question 2: Jot down, as specifically as you can, what you think will happen to you as you physically experience dental pain and once you have physically experienced dental pain.

5. ***Delay (In Both Groups' Surveys): Spot the differences***



6. **Survey**

- Three subscale measures: Control, Cognitive Immaturity, Egocentrism

30-Question Self-Report: (experimental and control group questionnaire)

Likert Scale:

1= Strongly Disagree | 2= Disagree | 3= Mixed/Neutral | 4= Agree | 5= Strongly Agree

1. I expect that I will be the best at whatever I do.
2. I can be very professional when it comes to things I care about.
3. When my partner (spouse, lover) and I get into a fight, I know it is because she/he wants to leave me.
4. I am always thinking of ways to make life more exciting.
5. When people tell me I'm good at something, I find it hard to believe them.
6. I tend to focus on negative things and forget about what is good in my life.
7. Each day should be lived to the fullest, because it could be your last.
8. I feel worthless if I don't do well.
9. I think of myself as one of a kind.
10. I find myself looking for ways to gain power.
11. No one tells me what I can and cannot do in a relationship.
12. I tend to see the worst in situations.
13. I tend to blow little things out of proportion.
14. I would rather have the power to do something illegal or unethical than the power to do something legal and ethical.
15. When it comes to things I care about, I am a perfectionist.
16. I tend to expect that the worst will happen.
17. I haven't done anything to anyone that they didn't deserve.
18. I live for today, because I could die tomorrow.
19. Life is much easier when I control what people do, think, and feel.
20. I'm not like everyone else.
21. I find that if I make one mistake on the job, I can't let it go.
22. I prefer to do things myself, that way I know they will be done right.
23. I can't enjoy the present, because of all the bad things in my past.
24. It seems my mind is always racing.
25. I find myself always wanting to be the leader in everything.
26. Once I make a judgment about someone, there is little chance of me changing my mind.
27. I need power and control to function in life.
28. I will not tolerate things that I don't like.
29. Awful things from the past will always haunt my future.
30. Even though people don't tell me, I know they think bad stuff about me.

Scoring Sheet

Control	**Likert Scale (1-5)**	**Cognitive Immaturity**	**Likert Scale (1-5)**	**Ego-centrism**	**Likert Scale (1-5)**
Question	**Response #**	**Question**	**Response #**	**Question**	**Response #**
3		5		1	
10		6		2	
11		8		4	
14		12		7	
17		13		9	
19		16		15	
25		21		18	
26		23		20	
27		29		22	
28		30		24	

Scale	**Possible Range of Scores**	**Question Numbers**
Control	10 - 50	3, 10, 11, 14, 17, 19, 25, 26, 27, 28
Cognitive Immaturity	10 - 50	5, 6, 8, 12, 13, 16, 21, 23, 29, 30
Egocentrism	10 - 50	1, 2, 4, 7, 9, 15, 18, 20, 22, 24
Total Criminogenic Thinking Score	30 - 150	