

INVESTIGATING THE SOCIAL SUPPORT FOR THREE SOCIAL-POLITICAL  
MOVEMENTS: A TERROR MANAGEMENT THEORY PERSPECTIVE

By

Esther Quiroz Santos

An Honors Project Submitted in Partial Fulfillment of the Requirements for Honors

In

The Department of Psychology

Faculty of Arts and Sciences

Rhode Island College

2018

### **Abstract**

**Objective:** This study investigated the social support for the Black, Blue, and All Lives Matter movements from the perspective of terror management theory (Greenberg et.al., 1986; TMT). **Method:** Participants completed a set of questionnaires about death, pain, self-esteem, self-consciousness, justice sensitivity and their opinions towards social issues currently happening in the nation. The order of questionnaire differed, as to prime participants with death (the experimental condition) or pain (the control condition) as their first questionnaire. **Results:** There was support for the Black Lives Matter movement regardless of priming condition. Additionally, post-hoc analysis revealed a negative correlation between participant's death anxiety score and their self-esteem, as well as a negative correlation between the death anxiety score and the blue lives matter movement. Lastly, there was a positive correlation between death anxiety and justice sensitivity. **Conclusion:** These findings suggest that mortality salience had no influence on people's opinions toward these movements; rather, the death scale served as a chronic prime.

**Keywords:** social movements, terror management theory, attitudes, priming

## Table of Contents

I. Introduction.....	5
II. Racial Disparities.....	7
III. Terror Management Theory (TMT).....	9
IV. The Current Study.....	12
V. Methods.....	13
Participants.....	13
Materials.....	14
Social Attitudes Questionnaire.....	14
Death Anxiety Scale.....	15
Fear of Pain Questionnaire III.....	15
Rosenberg Self-Esteem Scale.....	15
Self-Consciousness Scale.....	16
Justice Sensitivity Scale.....	16
Dependent Variables.....	16
Independent Variables.....	17
Procedure.....	18
VI. Results.....	18
Analysis Strategy.....	18
Hypotheses Testing.....	19
Manipulation Check.....	20
Post-Hoc Analyses of Respondents' Death Anxiety.....	20
VII. Discussion.....	21

VIII. Limitations.....25

IX. Future Directions.....26

X. References.....29

XI. Tables.....37

XII. Appendices.....41

Investigating the Social Support for Three Social-Political Movements: A terror Management Theory Perspective

Recent events of police brutality and the killings of young African Americans have increased racial tensions between African Americans and White Americans (Right Side News, 2016). There have been multiple instances in which unarmed young African American men were killed by police officers. Men such as Michael Brown, Eric Garner, Tamir Rice, and Trayvon Martin, among many others, have been victims of such brutality during their encounters with police. These and other occurrences have stirred up the nation in protests and have brought about many riots and movements on the part of African American communities, who are demanding less discrimination, racial profiling, and abuse from the police. One prominent movement that stemmed from the death of Trayvon Martin is the “Black Lives Matter” narrative. This movement originated after the acquittal of George Zimmerman, the man who killed Martin on the basis that the teenager was endangering the community while on his way home from the corner store, and spread quickly around the country. The “Black Lives Matter” movement attempts to shed light on the discrimination against Black Americans and further became a platform advocating against ongoing police brutality. It is widely supported, attracting audiences and rallies that march together advocating against the killings and the discrimination of Black Americans.

In contrast to the “Black Lives Matter” movement, the “Blue Lives Matter” movement argues that the lives of police officers are also important, as they risk their lives every day to protect the community. Although the “Blue Lives Matter” movement started as a charitable effort after the death of New York Police officers Wenjian Liu and Rafael Ramos, it has changed over time into a social-political movement as well. From a charitable point of view, it advocates

for raising awareness of the need of police officers, for the support of families of those fallen officers, and for unity amongst officers (Blue Lives Matter NYC, 2017). From a social media standpoint, it contests the “Black Lives Matter” movement. More specifically, the individuals who align with this group argue that law enforcers are not credited or given sufficient support (Geller, 2014). This movement has progressed so far that a legislative bill in Louisiana makes it a hate crime for felonies such as assault, battery and murder against police officers, firefighters and other personnel (Hong, 2016). Other cities, such as New York, Pennsylvania, Tennessee and many others, have introduced similar bills.

A third political movement that has also evolved has been the “All Lives Matter” movement. This social movement offers the notion that one group of people cannot be given more importance than anybody else and that everyone’s life is sacred and not just the lives of Black people. Although the “Black Lives Matter” movement tries to zero in on one issue and make a statement about the treatment of African Americans in this country, the “All Lives Matter” rhetoric is that everyone should be respected regardless of any demographic differences (Townes, 2015). It is evident that these social-political movements have different goals. From stopping abuse and discrimination of Black people, the protection of law enforcement, and the consideration of all peoples regardless of demographic differences, these movements try to speak with different voices. These movements have also made salient the constant reminders of the deaths of those who have fallen victim to police brutality as well as those police officers who have been targeted and killed. How does support for one of these movements differ? Does support for these social-political movements concern one’s social identity (e.g. race, occupation)? Or is there another factor that may affect the way people support one group over another?

This study examined people's support for the Black, Blue, and All lives matter movements. More specifically, this study integrated Terror Management Theory (TMT; Greenberg et. al., 1986) to examine whether a person's support for one social movement was affected by making one's mortality salient (MS), or making an individual death anxious, as suggested by TMT. Terror management theory states that because humans can be aware of their own death, a feeling of anxiety arises in them (Greenberg et.al., 1986). This anxiety affects psychological wellbeing because it goes against the instinctual notion of survival. However, humans have certain psychological buffers that give them the ability to fight or brush off certain anxieties, giving them the advantage to defend against death anxiety. To fight off death anxiety, people rely on worldviews, self-esteem, and cultural/social values that give them meaning in life. Therefore, the study's focus was to examine whether death anxiety moderates the support for these social movements and to investigate what factors, such as race, take part in this relationship.

### **Racial Disparities**

In 2011, African Americans were 31% more likely to be stopped by the police than White Americans were and 23% more likely to be stopped than Hispanics were (Langston & Durose, 2013). They were more likely to not be given a reason for the traffic stop and were more than twice as likely to be searched than White Americans were. Sakala (2014) reports that the 2010 U.S. Census finds that the African American population accounted for 13% of the entire U.S. population and out of those 13%, 40% were incarcerated. In contrast, White Americans accounted for 64% of the entire population and 39% were incarcerated population. This indicates that for every African American in the US population, there are five White Americans; however, in an examination of the US prison population, the ratio is one African American prisoner for

each White American prisoner. This means that African Americans have a disproportionate rate of incarceration in contrast to White Americans.

In the City of New York, a Stop-and-Frisk policy resulted in 685,724 people being stopped in 2011 (Stop-and-Frisk Data, 2014). Out of that immense number, 53% of them were African American people and only 9% were White. Further, in 2015, although the number drastically plummeted to 22,939 overall stop and frisks, the percentages of African Americans within that group was still high; 54% of the people stopped were Black. In contrast, in that same year, only 12% were white. Not only were the occurrences of stops high, but their effectiveness was almost nonexistent. In 2011, 88% of those stopped were innocent of any crime. That number did not drastically decrease in 2015, with still 80% who were innocent from committing any type of transgression. Consequently, African Americans have much more contact with the criminal justice system, which increases their chances of encounters resulting in negative consequences.

Since African Americans experience more contact with the police, should they have more negative attitudes towards the police? Schuck and Rosenbaum (2005) found that negative experiences with the police by Black residents in their neighborhood was associated with negative attitudes toward them. Race/ethnicity, social class, and neighborhood context also influence attitudes toward the police (Schuck, Rosenbaum, & Hawkins, 2008). In general, African Americans and Hispanics have more negative attitudes towards the police than Whites do and are also more likely to fear police and any racial discrimination from them that may not be rightly justified. Those classified as middle-class African Americans who lived in a disadvantaged neighborhood also reported more negative attitudes towards police when compared to those who lived in a more prosperous neighborhood.



These statistics show how much contact the African American community have with police and how racial tensions can be created from such contact. Tragedies that result from constant contact can stir up feelings and emotions from the African American community, which then lead to the public sentiments and movements that develop, such as the Black Lives Matter movement. In return, movements such as the Blue and All Lives Matter have risen to support the other side. These movements can become a part of people's worldviews, as they represent values and social identities that protect their notion for survival.

### **Terror Management Theory (TMT)**

Terror management theory (TMT) postulates that when people think about their own death, they experience death anxiety. To protect themselves from this distress of mortality salience (MS), they cope by using certain psychological buffers such as worldviews and self-esteem (Greenberg et.al., 1986). Worldviews are cultural standards against which one would compare one's behaviors, values, and attitudes. This can involve your national identity as well as societal values and norms that can give you meaning in life. Your worldview may allow you to be part of a culture and have a sense of self within that culture. Self-esteem therefore involves your maintaining these standards and values (Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994). Studies have shown that when it concerns self-esteem and health related behavior, people would do what it takes to enhance their self-esteem once mortality is made salient no matter whether that behavior is dangerous or not (Jessop, Albery, Rutter, & Garrod, 2008; Routledge, Arndt, & Goldenberg, 2004; Taubman, Florian, & Mikulincer, 1999).

People are also more likely to praise and accept those that are like them and share the same worldview than they are of others who do not. For example, when mortality is made salient, Christians are more likely to evaluate fellow Christians higher than they rate Jewish

people and are more likely to apply more stereotypical aspects to Jewish people. Authoritarians are more likely to negatively evaluate those who do not share the same views and praise those who do, and finally, people are more likely to react positively to those who praise their culture and negatively to those who do not (Greenberg, Pyszczynski, Solomon, Rosenblatt, Veeder, Kirkland, & Lyon, 1990). These findings support the notion that mortality salience increases the likelihood of individuals supporting those who they see as part of their worldview or social identity. Under the conditions of mortality salience, African Americans then would more likely support those with whom they share a culture or social identity, such as the Black Lives Matter movement, while White Americans would be more supportive of the Blue Lives Matter movement, than in a control condition.

Moreover, mortality salience increases the use of stereotypes based on nationality, gender, race, and sexual orientation (Schimel, Simon, Greenberg, Pyszczynski, Solomon, Waxmonski, & Arndt, 1999). When primed with mortality salience, participants assigned more stereotypic traits to Germans, were more likely to explain gender-inconsistent behaviors in a stereotypic manner, increased their preferences for a stereotype-confirming African American student over a stereotype-disconfirming African American student, and an increased preference for a stereotyped feminine gay man over a masculine gay man. This demonstrates that making death aware to individuals leads participants to categorize people into groups to obtain meaning of their worldview. People prefer to apply social stereotypes to those who confirm them to cope with this death anxiety and reestablish their conceptions of what social reality should be.

TMT suggests that there are cognitive processes that involve conscious and unconscious awareness of death. These cognitive processes involve a dual processing system to fight off death anxiety (Greenberg et. al., 1994). This dual processing system includes distal and proximal

death defenses that prevent death thoughts from affecting the individual. Proximal defenses help an individual avoid death thoughts that are brought into focal attention by suppressing these thoughts and denying one's vulnerability to death at that moment. This way, individuals underwent supraliminal prime. On the other hand, distal death defenses involve death thoughts that are operating outside of awareness, or once death thoughts have been removed from focal attention. In this context, greater allegiance to one's cultural standards and values fight off death thoughts and anxiety. Distal defenses are activated by subliminal primes and are important because they rely on societal values and group identities as aid in combating death anxiety (Greenberg, Arndt, Simon, Pyszczynski, & Solomon, 2000).

Justice sensitivity is a concept concerning people's perception and tendency on how to emotionally react to injustice and unfair experiences (Schmitt, Neumann, & Montada, 1995). Kastenmuller, Greitemeyer, Hindocha, Tattersall, and Fischer (2013) explored how mortality salience increased justice sensitivity according to three death related scenarios that included the topics of terrorism, natural disasters, and other death-related materials. In this study, results indicated that, when compared to the control condition, justice sensitivity increased for victim, perpetrator, and observer when they were primed with death related pictures (study 1) or newspapers (study 2), for all three death related stimuli. These findings implicate that death-related thoughts increase justice sensitivity not only from the victim's point of view, but also from the point of views of perpetrator and observer. People feel that others also should have justice when they are treated unfairly. These findings also indicate that justice sensitivity can be used as a manipulation check to confirm that a death prime is having the desired effect.

### **The Current Study**

The purpose of this study was to (1) explore the effects of mortality salience on the support for the Black/Blue/All Lives matter movements and (2) investigate whether there was a moderating relationship between race and support for these movements. Investigating the effects of mortality salience and race on the support of these movements will further add to the terror management theory literature as well as provide some insight into how people identify with and support the movements. Due to their increasing advocacy (Right Side News, 2016), it was important to investigate how death anxiety might increase support. The killings of both African Americans and police officers have been constant news in the media and therefore are relevant to the advocacy for these social political movements. Understanding the relationship between race and support is also of importance because many of these occurrences have created racial tensions among African Americans and White Americans, which further create implications on whether one's race supports one movement.

Given previous research that suggests that mortality saliency would increase a greater tendency to support social and legal norms (e.g., being supportive of police authority), it was expected that much greater support be attributed to the "Blue Lives Matter" social movement than either the "Black Lives Matter" or "All Lives Matter" movements (Hypothesis 1), in comparison to those who are not primed with mortality salience. Thus, mortality saliency will have a differential effect on these three social movements. Further, while the previous hypothesis puts forward an interaction between the specific social movement and the presence or absence of mortality salience, this interaction is hypothesized to be moderated by the racial identity of the individual (Hypothesis 2). Majority group individuals (e.g., White respondents) would more likely respond as suggested by the first hypothesis given their identification with the

maintenance of the status quo. Alternatively, a different response can be expected from minority group respondents (e.g., African-Americans). In contrast to the control condition, mortality salience will affect their attitudes toward “Black Lives Matters” to a greater extent than the other two social movements.

In order to observe that the priming condition was effective in making mortality salient, a self-esteem measure and a justice sensitivity measure was used as manipulation checks. The TMT literature has consistently reported the impact of mortality saliency on self-esteem (see Greenberg et. al., 1994), and therefore was of interest in replicating its effects. It was predicted that higher self-esteem would lead to lower levels of death anxiety, while lower self-esteem would lead to higher levels of death anxiety. Similarly, previous research (Kastenmuller et. al., 2013) has found that individuals would experience higher sensitivity to injustices when mortality salience was primed. Consequently, this measure was used as well as a manipulation check.

### **Methods**

#### **Participants**

There were 104 total participants; however, four were eliminated for various reasons. Two participants were eliminated because they had previously participated in a pilot study of the social attitudes questionnaire. One participant was eliminated due to a language barrier. More specifically, the researcher had to walk them through the questionnaire, explaining the items. The other participant was eliminated because they had indicated they were 17 years old in the demographic portion of the questionnaires. Therefore, only 100 participants (79 females; 21 males) were included in the analysis. However, there were missing data concerning race, ethnicity and age. Of the 94 participants who indicated their age, the average age was 21 years old ( $SD = 5.98$ ). With respect to racial background, 47 participants reported that they were white,

26 were African Americans, 4 Asian/Asian American, 14 Other or multiracial and 9 respondents did not answer.

Participants were recruited from the Rhode Island College campus. The majority of the participants were recruited from the Psych 110 Intro to Psychology Course, where participants received 3-credits as well as \$1.00 for their participation. Other participants were recruited from upper level psychology courses when professors allowed the researcher to come into their classroom and offer the study. These participants received \$2.00.

### **Materials**

**Social Attitudes Questionnaire.** The Social Attitudes questionnaire involved three different questionnaires. The questionnaires were created by the researchers, containing 21 questions asking participants their level of support for certain social and economic dilemmas that are currently facing the nation, as well as the three social movements: Black Lives Matter, Blue Lives Matter, and All Lives Matter movements. The order of presentation of the movements was counterbalanced based on a Latin Square design. For example, in one condition, item 2 of the Social Attitude Scale requested respondents to report their support for the Black Lives Matter movement; item 11, the All Lives Matter movement; item 19, the Blue Lives Matter movement. A second order of these movements was: Item 2, All Lives Matter; item 11, Black Lives Matter; item 19, Black Lives Matter. Sample items of other issues included “Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs,” “Marijuana should be legalized throughout the United States for medical purposes,” and “The national media has too much control of the election process.” Participants answered on a 5-point scale ranging from -2 to 2 how much they agreed or disagreed with a certain statement. One version of the questionnaires can be found in appendix C.

**Death Anxiety Scale.** The Death Anxiety Scale (Florian & Kravetz, 1983) is a 31-item scale originally answered on a 7-point Likert scale but modified for this study to a 5-point Likert scale ranging from -2 to 2 to keep all materials consistent. It was constructed to assess an individual's attribution to the fear of personal death to the consequences of death and used here to prime participants in a supraliminal manner with the thought of their own death. It has adequate test-retest validity and has been used in various studies (Florian, Mikulincer, & Green, 1994; Florian & Snowden, 1989; & Ungar, Florian, & Zernitsky-Shurka, 1990). Reliability analysis in this study revealed a Cronbach's alpha of .947, suggesting good reliability. This questionnaire can be found in appendix D.

**Fear of Pain Questionnaire III.** The Fear of Pain Questionnaire III is a 31-item questionnaire constructed by McNeil and Rainwater (1998) that assessed individuals' fear towards pain. Measured on a 5-point Likert scale ranging from -2 to 2, the researchers report high reliability, sound factor structure, and predictive and concurrent validity. Reliability analysis in this study revealed a Cronbach's alpha of .930. This questionnaire can be found in Appendix E.

**Rosenberg Self-Esteem Scale.** The Self-esteem questionnaire (Rosenberg, 1965), originally developed for use with adolescents, but expanded for the use with many groups of people, was used to measure participant's self-esteem and serve as a manipulation check for mortality salience. Measured on a 5-point Likert scale ranging from -2 to 2, this scale has internal consistency (Heatherton & Wyland, 2003), test-retest reliability (Pullmann & Allik, 2000; & Rizwan, Aftab, Shah, & Dharwarwala, 2012;) convergent validity (Zeigler-Hill, 2010), and discriminant validity (Lovibond & Lovibond, 1995). Reliability analysis in this study revealed a Cronbach's alpha of .897. This questionnaire can be found in appendix F.

**Self-Consciousness Scale.** The Self-Consciousness Scale (Scheier & Carver, 1985) is a 22-item scale developed to assess private and public self-consciousness, as well as social anxiety and used in this study as a filler questionnaire. It was measured on a 5-point Likert scale with the same anchor points as the other scales and has been shown to have internal consistency (White & Peloza, 2009), convergent validity (Schlenker & Weigold, 1990), and discriminant validity (Lee et al, 2012). Reliability analysis in this study revealed a Cronbach's alpha of .820. This questionnaire is in appendix G.

**Justice Sensitivity Scale.** Schmitt, Gollwitzer, Maes, and Arbach (2005) developed the Justice Sensitivity Scale to measure sensitivity to injustice from the perspective of the perpetrator, victim and observer. For the purposes of this study, an abbreviated version was used. More specifically, the 10-item victim perspective was used to reduce the number of items participants completed and because it was the most pertinent scale to this study. In addition to using it as a filler scale, this questionnaire also served as a manipulation check for making mortality salience. Participants answered on a 5-point Likert scale (-2 to 2). The adequacy of the scale's psychometric properties has been reported in Schmitt et al (2005, 2010) and Baumert, Beierlein, Schmitt, Kemper, Kovaleva, Liebig, and Rammstedt (2014). Reliability analysis in this study revealed a Cronbach's alpha of .826. This questionnaire can be found in appendix H.

**Dependent Variables.** The primary dependent variable was the participant's support level for each of the three social-political movements (i.e., Black Lives Matter Movement, Blue Lives Matter Movement, or All Lives Matter movement). Participants agreed or disagreed to the following statement: "Black (Blue/All) Lives Matter' movement needs to be supported" Additionally, self-esteem and justice sensitivity served as dependent variables, used as a manipulation check for the mortality salience prime. Lastly, race served as a moderating



variable, there being a focus on whether African American participants and White-Americans responded differentially in their show of support to these three social movements.

Demographic information collected at the end of the questionnaires assessed racial background of all participants. Participants were asked to write in their age, to classify themselves as a “Male,” “Female,” “Transgender,” or “Other” and were asked for their ethnicity. Finally, they were asked to classify themselves as “White,” “African or African American,” “Asian/Asian American,” “Native American,” or “Other.” See Appendix I for the demographic questionnaire.

**Independent Variables.** There were two independent variables. The first independent variable was the priming condition, which was operationalized by the order of presentation of the questionnaires. There were two orders. The first order (the death prime condition) requested participants to complete the Fear of Personal Death Scale (Florian & Kravetz, 1983), the Self-Consciousness Scale (Scheier & Carver, 1985), Rosenberg (1965) Self-Esteem Scale, the Justice Sensitivity Scale (Schmitt et. al., 2005), the Social Attitude Scale, the Fear of Pain Questionnaire-III (McNeil & Rainwater, 1998), and a set of demographic questions. The second presentation order (the Pain prime condition) was the same except the two anxiety scales were switched in position so that the Fear of Pain Questionnaire was presented first and the Death Anxiety Scale presented just before the demographic items. The death anxiety scale in this study served as a supraliminal prime for the participants.

The evaluation of the three different social movements served as a within-subjects independent variable. In the social attitudes questionnaire, all participants indicated their support for all three social movements. The order of presentation of the social movements was counterbalanced employing a Latin-square design in order to control for order effects.

**Procedure**

After professors agreed to have the researcher come at a pertinent time to talk to their students; the researcher came to the classroom and offered the study. The researcher explained the study to the students and those who agreed stayed behind to participate (See Appendix A for informed consent form). In contrast, participants who signed up for the study to obtain course credit were instructed to meet the researcher in a section of the library located on the RIC campus where they would complete the questionnaire (See Appendix B for informed consent form).

Participants were told that the purpose of this study was to assess the influence of people's personality on their opinions. More specifically, they were told that people's personality is essential because it signifies the characteristics with which people carry themselves that make them distinctive from everyone else. Therefore, it was in our interest to understand how personality factors influenced people's opinions to current issues occurring in the nation. After participants read, understood, and signed the informed consent agreeing to participate, they were randomly assigned to receive one of the 6 conditions. These six conditions were a function of the order of presentation and the counterbalancing of the social movements.

After participants indicated that they were done with the questionnaire, the researcher asked participants what they thought about the study and if they had any questions. After a brief conversation, participants were given compensation indicating they were done with the study.

**Results****Analysis Strategy**

Various analyses were conducted. First, the hypotheses were tested via a 2 (Prime: Death vs. Pain) x 2 (Race: African American vs. White) x 2 (Order of Presentation) x 3 (Social

Movement: Black Lives Matter, Blue Lives Matter, and All Lives Matter) mixed analysis of variance (ANOVA) using social movement support as the within-subject variable (See Table 1). Next, independent samples t-tests were conducted between the self-esteem and justice sensitivity scales and the death prime for a manipulation check. Lastly, post-hoc correlational analyses of the death anxiety scale and self-esteem, justice sensitivity, and the three social movements were conducted.

### **Hypotheses Testing**

It was hypothesized that when primed with mortality salience, people would more likely agree with the Blue Lives Matter than the All and Black Lives Matter movement (a Prime x Social Movement interaction) and that this relationship would be moderated by race (a Prime x Social Movement x Race interaction). These hypotheses were not supported. There was a reliable statistical effect for respondents' attitudes towards the three social movements,  $F(2, 148) = 23.59, p < .001; \eta^2 = .24$ . Individuals were more likely to agree with the Black Lives Matter movement ( $\bar{x} = 1.45, sd = .92$ ) than either the All Lives Matter movement ( $\bar{x} = .66, sd = 1.39$ ) or the Blue Lives Matter movement ( $\bar{x} = .33, sd = 1.28$ ). The predicted prime x social movement interaction was not statistically reliable (the means for this effect are shown in Table 2), nor did race have a main effect or serve as a moderator of the prime by social movement effect. This suggests that race was not a factor in influencing people's support for the social movements and that the priming condition did not have any significant effect in this relationship. Aside from the social movement effect, none of the other potential effects reached an acceptable level of statistical reliability.

### **Manipulation Check**

Given that the current analyses did not reveal any significant effects of the priming conditions and race, it could be argued that the priming manipulation was too weak.

Consequently, independent samples t-tests were computed to see if the prime had an impact on self-esteem and justice sensitivity, two dependent variables that TMT research has previously supported. TMT literature suggests that self-esteem serves as a buffer to death anxiety (Hohman & Hogg, 2015; Routledge, Ostafin, Juhl, Sedikides, Cathey, & Liao, 2010). However, results indicated that self-esteem did not serve as a buffer to priming individuals with death anxiety. Analyses revealed no significant relationship between the priming condition and self-esteem  $t(98) = -.65, p = .451; d = .130$ . Furthermore, death anxiety has been found to affect people's sensitivity to injustices (Kastenmuller et. al., 2013; van den Bos & Miedema, 2000). However, in this study, a t-test revealed no significant relationship between justice sensitivity and the death prime ( $t(98) = -.66, p = .144; d = .131$ ). These findings are summarized in table 3.

### **Post-Hoc Analyses of Respondents' Death Anxiety**

Given the lack of significant findings from situationally primed mortality saliency, the presence of a chronic prime as assessed by individuals' score on the death anxiety scales was evaluated. This would predict that higher scores on the death anxiety scale (i.e., greater chronic mortality saliency) would be associated with greater support for the three social movements, lower self-esteem, and high justice sensitivity scores. Post-hoc analyses revealed several correlations. First, there was a negative correlation between participants death anxiety score and their self-esteem score ( $r(98) = -.391, p < .001$ ). This suggest that chronic death anxiety is associated with lower self-esteem in participants. There was a negative correlation between participants death anxiety score and their support towards the Blue Lives Matter movement

( $r(98) = -.248, p < .005$ ), suggesting that chronic death anxiety is associated with less support for the Blue Lives Matter movement. Other correlations between the remaining social movements were not significant. Lastly, there was a positive correlation between participants death anxiety score and their justice sensitivity score ( $r(98) = .329, p < .005$ ). Chronic death anxiety suggests that there is a relationship between higher sensitivity to injustices and higher death anxiety levels. These correlational findings are summarized in table 4.

### **Discussion**

This study investigated terror management theory and its effects on people's support for the current social movements of Black Lives Matter, Blue Lives Matter, and All Lives Matter. It was expected that those individuals primed in a supraliminal manner with a death anxiety scale would indicate greater support for the Blue Lives Matter movement than any other movement, compared to the pain prime. However, this hypothesis was not supported. Analysis indicated that no matter the priming condition, people held a supportive opinion of the three-social movement, especially the Black Lives Matter movement, and these attitudes were not affected by the death anxiety prime in comparison to a pain prime. The most obvious explanation for this lack of effect is that responding to the death anxiety scale was insufficient to make mortality salient. The most consistent and effectively used mortality salience prime in TMT literature is a narrative question (e.g. Greenberg et. al., 1994; Greenberg et. al., 2000; & Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989). Participants are to answer the following question: Briefly describe the emotions that the thought of your own death arouses in you. Jot down, as specifically as you can, what you think will happen to you physically as you die and once you are physically dead (Rosenblatt et. al., 1989). Having participants write at will and in depth about their thoughts of death might access their fear of death more efficiently and therefore making mortality more

salient. The use of the death anxiety scale in this study was not the classic way in which it is always used, rendering it a less effective way of making mortality salient. However, the classic approach generated ethical concerns due to a high risk of making participants uncomfortable, resulting in the development of a different methodology that did not produce the desired effects.

Our second hypothesis predicted that race would be a moderating variable in that, if primed with mortality salience instead of pain, African Americans would more likely agree with the Black Lives Matter movement while White Americans with the Blue Lives Matter movement. This hypothesis was also not supported. Again, participants overall were more likely to agree with the Black Lives Matter movement more than any other movement, regardless of race and/or priming condition. The reasoning for this might stem from the fact that Northern public 4-year colleges are frequently more liberal in their attitudes. Respondents may have perceived the Blue Lives Matter movement as a more conservative view relative to the Black Lives Matter movement. Alternatively, the Black Lives Matter movement may be more salient to the public, attaining more attention from the media due to the events (i.e. riots) across cities that have risen and the public sentiment it has created. Therefore, people's support towards this movement in a more liberal environment, may not be influenced by the individual's race, rather influenced by the overall saliency to the movement.

In support of the notion that the death anxiety prime did not influence respondent's opinions, independent samples t-tests between death anxiety and self-esteem and justice sensitivity did not support the manipulation. This further puts into question the usefulness of this questionnaire in influencing participants' behaviors by making mortality salient. In contrast, post-hoc correlational analysis did reveal several interesting findings. The negative correlation between death anxiety and self-esteem supports previous research in that self-esteem serves as a

buffer for mortality salience, with high self-esteem reducing the mortality salience effects (Abeyta, Juhl, & Routledge, 2014; Routledge et. al., 2010). Abeyta et. al., (2014) found that at low levels of self-esteem, death anxiety levels increased after making mortality salience, this effect happening when death anxiety is measured subliminally. Poorer self-esteem does not help individuals fend off death anxiety therefore making them more vulnerable.

These findings suggest that the death anxiety scale did not serve as a situational prime of mortality saliency but rather a means of assessing the level of respondents' overall death anxiety. Thus, the death anxiety questionnaire represented an operationalization of a more chronic prime. Respondents' scores on the death anxiety scale were significantly correlated with self-esteem as expected by theory. Chronic death anxiety produced higher sensitivity to injustices and was present for individuals with low self-esteem, supporting previous research in mortality salience creating death anxiety. Friedman and Rholes (2009) tested religious fundamentalism as a chronic death prime. They argued that religious fundamentalism served as a terror management function as individuals associate death in a much more positive manner, which leads to them having less of a worldview defense after being primed with mortality saliency. Having high religious fundamentalism and its resultant positive orientation towards death required less anxiety-buffering processes. Therefore, this type of fundamentalism serves as a chronic prime of life after death, unconsciously being active in individuals. Consequently, the present use of the death anxiety scale assessed the level of chronic fear of death and therefore represents a chronic prime and correlated with participant's sensitivity to injustices and self-esteem (for a review on death thought accessibility, see Hayes, Schimel, & Arndt, 2010)

The negative correlation concerning the death anxiety score and the Blue Lives Matter movement is somewhat paradoxical in this study. The TMT literature proposes that individuals

would more likely agree with things that represent their worldviews, and uphold morals and values representing this worldview. It was expected that the social movement representing law enforcement individuals who uphold the law would be more likely supported yet this finding indicates otherwise. One possible explanation is that, with the notion that this was a liberal campus, participants may be connecting this movement as a catalyst to the events happening with African Americans, tying police officers to these tragedies. They may also be associating the actions of police officers as threatening their notion for survival, as they are associated with killing individuals, not protecting the community, and being corrupt. Considering that race did not have an influence, experiencing chronic death anxiety and having salient the tragedies involved with police officers, participants may see this movement as going beyond race and as countering the notion for survival as a nation overall.

A positive correlation revealed that chronic death anxiety leads participants to be more sensitive to injustices from the perspective of the victim. This is in accordance with the findings by Kastenmuller et. al. (2013), who by priming individuals with death related scenarios led to greater justice insensitivity. It also supports research by van de Bos and Miedema (2000), who through three studies, investigated how mortality salience had an impact on participants' reaction to a fair or an unfair experience, or justice sensitivity, based on procedural fairness. They concluded that participant's justice sensitivity increased when they had a voice, particularly more when they were also in the mortality salience condition than when they were in the control condition. This correlational analysis in this study seems to support the notion that the death anxiety scale produced a chronic prime for individuals rather than serving as a situational prime. Again, however, the findings in this study are limited by the nature of the analysis in not being causal.



**Limitations**

In addition to the death anxiety questionnaire not being a strong enough prime, another major limitation to this study is the fact that recruitment of participants could not be targeted in obtaining a substantial and equal number of participants that are African American and White American. In this study, there were only 26 African American participants compared to 47 White Americans, and although for the purposes of the analysis, all participants who indicated they were not White were grouped into one single group of minorities, it does not serve as a representative sample. This limits the interpretation of how race moderates the relationship between the prime and support towards the movements.

Correlational analysis also limits the interpretation of the results in this study. Although there were several significant correlations, a key difference is the fact that these findings do not establish a causal relationship. Making mortality salient and its direct influence on people's opinion does not aid in establishing how one's worldview comes into effect leading people to recognize and identify themselves with one of these movements that have become so important for Americans overall. While the present study showed a statistically reliable negative correlation between self-esteem and chronic death anxiety, the research literature has offered mixed results. McGregor, Gailliot, Vasquez, and Nash (2007) have concluded the opposite: individuals with higher self-esteem who are made death anxious respond with a greater defense for their worldviews (see Burke, Martens, Faucher, 2010 for a review). Consequently, individuals with high self-esteem, rather than it serving as a buffer against death anxiety, become threatened because their world-view is part of their self-worth. These mixed findings put into question the real moderating effects of self-esteem and although the findings in this study

support the relationship between mortality salience and self-esteem as a buffer, it also puts into question what aspects of self-esteem are actually influential and in what circumstances.

Lastly, the use of a college student population limits the present study. The major platform for recruitment was the Introduction to Psychology Participant Pool, which mainly enrolls freshmen in the college. They may have a different outlook on these issues than a more diverse population that could have been recruited.

### **Future Directions**

Although there were limited statistically reliable findings, future research needs to focus on establishing a relationship between mortality salience and support for these social movements using a much stronger prime. Having participants write about the thought of their own death may make them more consciously aware of it. Furthermore, research should focus on establishing a clear relationship between self-esteem and death anxiety, as evidenced by the lack of clear-cut conclusions on its effects. The dual-processing system supported by TMT literature is important in recognizing the type of death defense (distal vs. proximal) activated. A meta-analysis review on mortality salience examined the effects of delays in measuring mortality salience (Burke et al., 2010). They focused on the number of tasks given to participants to produce a delay (i.e. one, two, or three) and the type of tasks. The majority of the studies included in this meta-analysis used the Positive and Negative Affective Schedule (PANAS; Watson, Clark, & Tellegen, 1988) as a delay task, this scale measuring participants' mood to positive and negative affect items. Other delays included puzzles, surveys, or other mood measurements. A delay indicated that researchers were tapping into distal death defenses. It was concluded that longer delays produced larger mortality salience effects on the dependent variable. In this study, the manipulation of mortality salience was supraliminal and without a delay to activate the proximal death defenses.

Participants were consciously aware of the death related thoughts after being primed. This type of priming has been found to increase the likelihood to engage in healthier behavior, for example, to defend against the thought of death (Bevan, Maxfield, & Bultmann, 2014; Taubman-Ben-Ari & Findler, 2005).

Due to the lack of support for this prime and therefore this type of death defense in this study, other research should focus on a subliminal prime and activating distal death defenses, having participants complete a task before measuring the dependent variable. Having participants complete the PANAS as a task and then measuring the dependent variable after this delay could produce noteworthy results. According to Greenberg et. al. (2000), by having participants become distracted from mortality related thoughts, individuals are more likely to defend their worldview because there is more accessibility of these thoughts. This worldview could include their identification with social movements that speak to the survival of peoples as a race, as is the rhetoric and example of the Black Lives Matter movement.

On the other hand, other research has focused on priming individuals with death related scenes (i.e. Luke & Hartwig, 2014). Possibly priming participants with scenes related to the events of each of the movements would increase their support for them. Further, future research should focus on recruiting an appropriate number of individuals of African American and White American racial background. Parker and Taylor (2015) offer the interesting notion that Black and White people have different worldviews and that they may be so adherent to these worldviews that they may fail or be reluctant to recognize and legitimize other worldviews. This effect can be exacerbated by making mortality salient. Future research could explore these different worldviews from the TMT perspective.

Lastly, collecting demographic information on political party affiliation and focusing on a much older population can have other implications. Although this research was conducted in a primarily liberal college, such information was not collected barring the researchers from possibly establishing a relationship between conservative and liberal individuals. Additionally, older participants may have more conservative views, therefore possibly lending more support to the Blue Lives Matter movement.

## References

- Abeyta, A. A., Juhl, J., & Routledge, C. (2014). Exploring the effects of self-esteem and mortality salience on proximal and distally measured death anxiety: A further test of the dual process of model of terror management. *Motivation and Emotion, 38*(4), 523-528. doi:10.1007/s11031-014-9400-y
- Baumert, A., Beierlein, C., Schmitt, M., Kemper, C. J. Kovaleva, A., Liebig, S., & Rammstedt, B. (2014). Measuring four perspectives of justice sensitivity with two items each. *Journal of Personality Assessment, 96*(3), 380-390. doi:10.1080/00223891.2013.836526
- Bevan, L. A., Maxfield, M., & Bultmann, M. N. (2014). The effects of age and death awareness on intention for healthy behaviours. *Psychology & Health, 29*(4), 405-421. doi:10.1080/08870446.2013.859258
- Blue Lives Matter NYC. (2016). <https://bluelivesmatternyc.org/>
- Burke, B. L., Martens, A., & Faucher, E. H. (2010). Two decades of terror management theory: A meta-analysis of mortality salience research. *Personality and Social Psychology Review, 14*(2), 155–195. doi:10.1177/1088868309352321
- Florian, V., & Kravetz, S. (1983). Fear of personal death: Attribution, structure, and relation to religious belief. *Journal of Personality Social Psychology, 44*(3), 600-607. doi:10.1037/0022-3514.44.3.600
- Florian, V., Mikulincer, M., & Green, E. (1994). Fear of personal death and the MMPI profile of middle-age men: The moderating impact of personal losses. *OMEGA, 28*(2), 151-164. doi:10.2190/38CT-BHUV-7HY5-VP6T

- Florian, V. & Snowden, L. R. (1989). Fear of personal death and positive life regard a study of different ethnic and religious-affiliated American college students. *Journal of Cross-Cultural Psychology, 20*(1), 64-79. doi:10.1177/0022022189201004
- Friedman, M., & Rholes, W. S. (2009). Religious fundamentalism and terror management: differences by interdependent and independent self-construal. *Self and Identity, 8*, 24-44. doi:10.1080/15298860801984788
- Geller, E. (2014, Dec 22). The rise of the pro-police #BlueLivesMatter movement. Retrieved from <http://www.dailydot.com/layer8/blue-lives-matter-twitter-hashtag/>.
- Greenberg, J., Arndt, J., Simon, L., Pyszczynski, T., & Solomon, S. (2000). Proximal and distal defenses in response to reminders of one's mortality: Evidence of a temporal sequence. *Personality and Social Psychology Bulletin, 26*, 91-99. doi:10.1177/0146167200261009
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of the need for self-esteem: A terror management theory. In R.F. Baumeister (Ed.), *Public self and private self* (pp. 189-212). New York: Springer.
- Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., & Lyon, D. (1990). Evidence for terror management 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. doi:10.1037/0022-3514.58.2.308
- Greenberg, J., Pyszczynski, T., Solomon, S., Simon, L., & Breus, M. (1994). Role of consciousness and accessibility of death-related thoughts in mortality salience effects. *Journal of Personality and Social Psychology, 67*, 627-637. doi:10.1037/0022-3514.67.4.627

- Hayes, J., Schimel, J., Arndt, J., & Faucher, E. H. (2010). A theoretical and empirical review of the death-thought accessibility concept in terror management research. *Psychological Bulletin*, *136*(5), 699-739. doi:10.1037/a0020524
- Heatherston, T. F., & Wyland, C. (2003) Why do people have self-esteem? *Psychological Inquiry*, *14*(1), 38-41.
- Hohman, Z. P., & Hogg, M. A. (2015). Mortality salience, self-esteem, and defense of the group: mediating role of in-group identification. *Journal of Applied Psychology*, *45*, 80-89. doi:10.1111/jasp.12277
- Hong, S. (2016). *The New Republic*. Retrieved Sept. 6<sup>th</sup>, 2016 from <https://newrepublic.com/minutes/135823/blue-lives-matter-movement-just-gained-first-victory-louisiana-hate-crime-bill>.
- Jessop, D. C., Albery, I. P., Rutter, J., & Garrod, H. (2008). Understanding the impact of mortality-related health-risk information: A terror management perspective. *Personality and Social Psychology Bulletin*, *34*, 951-964. doi:10.1177/0146167208316790.
- Kastenmuller, A., Greitemeyer, T., Hindocha, N., Tattersall, A. J., & Fischer, P. (2013). Disaster threat and justice sensitivity: a terror management perspective. *Journal of Applied Social Psychology*, *43*, 2100-2106. doi:10.1111/jasp.12163
- Langton, L. & Durose, M. (2013). Police behavior during traffic and street stops, 2011 (Special Report. NCJ242937). Washington, DC: U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Lee, J. R., Moore, D. C., Park, E., Park, S. G. (2012). Who wants to be “friend-rich”? Social compensatory friending on facebook and the moderating role of public self-

consciousness. *Computers in Human Behavior*, 28, 1036-1043.

doi:10.1016/j.chb.2012.01.006

Lovibond, P. F. & Lovibond, S. H. (1995). The structure of negative emotional states:

Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335-343.

doi:10.1016/0005-7967(94)00075-U

Luke, T. J., & Hartwig, M. (2014). The effects of mortality salience and reminders of terrorism on perceptions of interrogation techniques. *Psychiatry, Psychology and Law*, 21(4), 538-550. doi:10.1080/13218719.2013.842625

McGregor, I., Gailliot, M. T., Vasquez, N. A., & Nash, K. A. (2007). Ideological and personal zeal reactions to threat among people with high self-esteem: Motivated promotion focus. *Personality and Social Psychology Bulletin*, 33, 1587–1599.

doi:10.1177/0146167207306280

McNeil, D. W., & Rainwater, A. J. (1998). Development of the Fear of Pain Questionnaire—III. *Journal of Behavioral Medicine*, 21(4), 389-410. doi:10.1023/A:1018782831217

Parker, A., & Taylor, M. J. (2015). Through a different lens: Use of terror management theory to understand blacks' and whites' divergent interpretations of race-related events. *The Western Journal of Black Studies*, 39(4), 292-299.

Pullmann, H., & Allik, J. (2000). The Rosenberg self-esteem scale: Its dimensionality, stability, and personality correlates in Estonian. *Personality and Individual Differences*, 28, 701-715. doi:10.1016/S0191-8869(99)00132-4



- Right Side News. (2016, Jun. 12). Black Lives Matter: Understanding Its Origins, History, and Agendas. Retrieved from <https://www.rightsidenews.com/2016/07/12/black-lives-matter-understanding-origins-history-agendas/>.
- Rizwan, M., Aftab, S., Shah, I., & Dharwarwala, R. (2012). Psychometric properties of the Rosenberg self-esteem scale in Pakistan late adolescent. *The International Journal of Education and Psychological Assessment, 10*(1), 124-138.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenblatt, A., Greenberg, J., Solomon, S., Pyszczynski, T., & Lyon, D. (1989). Evidence for terror management theory I: The effects of mortality salience on reactions to those who violate or uphold cultural values. *Journal of Personality and Social Psychology, 57*, 681-690. doi:10.1037/0022-3514.57.4.681
- Routledge, C., Arndt, J., & Goldenberg, J. L. (2004). A time to tan: Proximal and distal effects of mortality salience on sun exposure intentions. *Personality and Social Psychology Bulletin, 30*, 1347-1358. doi:10.1177/0146167204264056
- Routledge, C., Ostafin, B., Juhl, J., Sedikides, C., Cathey, C., & Liao, J. (2010). Adjusting to death: The effects of mortality salience and self-esteem on psychological well-being, growth motivation, and maladaptive behavior. *Journal of Personality and Social Psychology, 99*, 897-916. doi:10.1037/a0021431.
- Sakala, L. (2014). Breaking Down Mass Incarceration in the 2010 Census: State-by-State Incarceration Rates by Race/Ethnicity. *Prison Policy Initiative*. Retrieved from <http://www.prisonpolicy.org/reports/rates.html>.

- Scheier, M. F., & Carver, C. S. (1985). The self-consciousness scale: A revised version for use with general populations. *Journal of Applied Social Psychology, 15*(8), 687-699.  
doi:10.1111/j.1559-1816.1985.tb02268.x
- Schimel, J., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., Waxmonski, J., & Arndt, J. (1999). Stereotypes and terror management: Evidence that mortality salience enhances stereotypic thinking and preferences. *Journal of Personality and Social Psychology, 77*, 905-926. doi:10.1037/0022-3514.77.5.905
- Schlenker, B. R., & Weigold, M. F. (1990). Self-Consciousness and Self-Presentation: Being Autonomous Versus Appearing Autonomous. *Journal of Personality & Social Psychology, 59*(4), 820-828. doi:10.1037/0022-3514.59.4.820
- Schmitt, M., Gollwitzer, M., Maes, J., & Arbach, D. (2005). Justice sensitivity: Assessment and location in the personality space. *European Journal of Psychological Assessment, 21*, 202–211. doi:10.1027/1015-5759.21.3.202
- Schmitt, M., Baumert, A., Gollwitzer, M., & Maes, J. (2010). The Justice Sensitivity Inventory: Factorial validity, location in the personality facet space, demographic pattern, and normative data. *Social Justice Research, 23*(2-3), 211-238. doi:10.1007/s11211-010-0115-2
- Schmitt, M., Neumann, R., & Montada, L. (1995). Dispositional sensitivity to befallen injustice. *Social Justice Research, 8*, 385-407.
- Schuck, A. M., & Rosenbaum, D. (2005). Global and neighborhood attitudes toward the police differentiation by race, ethnicity and type of contact. *Journal of Quantitative Criminology, 21*, 391–418. doi:10.1007/s10940-005-7356-5.

- Schuck, A. M., Rosenbaum, D., & Hawkins, D. F. (2008). The influence of race/ethnicity, social class, and neighborhood context on residents' attitudes toward the police. *Police Quarterly, 11*(4), 496-519. doi:10.1177/1098611108318115
- Stop-and-Frisk Data. (2014). New York Civil Liberties Union. Retrieved December 11, 2016 from <http://www.nyclu.org/content/stop-and-frisk-data>.
- Taubman-Ben-Ari, O., & Findler, L. (2005). Proximal and distal effects of mortality salience on willingness to engage in health promoting behavior along the life span. *Psychology & Health, 20*, 303-318. doi:10.1080/08870440512331317661
- Taubman Ben-Ari, O., Florian, V., & Mikulincer, M. (1999). The impact of mortality salience on reckless driving: A test of terror management mechanisms. *Journal of Personality and Social Psychology, 76*, 35-45. doi:10.1037/0022-3514.76.1.35
- Townes, C. (2015, Oct 22). Obama explains the problem with 'All Lives Matter'. *Thinkprogress*. Retrieved from <https://thinkprogress.org/obama-explains-the-problem-with-all-lives-matter-780912d54888#.a6sie2ehl>.
- Ungar, L., Florian, V., & Zernitsky-Shurka, E. (1990). Aspects of fear of personal death, levels of awareness, and professional affiliation among dialysis unit staff members. *OMEGA, 21*(1), 51-67. doi:10.2190/0749-XDR2-VT5J-X0HW
- Van den Bos, K., & Miedema, J. (2000). Toward understanding why fairness matters: The influence of mortality salience on reactions to procedural fairness. *Journal of Personality and Social Psychology, 79*, 355-366. doi:10.1037/0022-3514.79.3.355
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 53*, 1063-1070. doi:10.1037/0022-3514.53.6.1063

White, K., & Peloza, J. (2009). Self-benefit versus other-benefit marketing appeals: Their effectiveness in charitable support. *Journal of Marketing*, 73(4), 109-124.

doi:10.1509/jmkg.73.4.109

Zeigler-Hill, V. (2010). The interpersonal nature of self-esteem: Do different measures of self-esteem possess similar interpersonal content? *Journal of Research in Personality*, 44, 22-

30. doi:10.1016/j.jrp.2009.09.005

Table 1

Prime Condition: Death vs. Pain x Race (White vs. Minority) x Order of Presentation x Social Movement (Black Lives Matter, All Lives Matter, Blue Lives Matter) Mixed Analysis of Variance using Social Movement Support as the within-subject variable.

Source of Variance	<i>df</i>	<i>ms</i>	<i>F</i>	<i>p</i>	$\eta^2$
Prime Condition (P)	1	.03	.02	.901	.00
Race (R)	1	.95	.50	.483	.01
Order of Presentaion (O)	2	.80	.42	.661	.01
P x R	1	.24	.12	.72	.00
P x O	2	.44	.23	.796	.01
R x O	2	1.32	.69	.505	.02
P x R x O	2	1.58	.82	.443	.02
error	74	1.91			
Social Movement (S)	2	31.40	23.59	<.001	.24
S x P	2	1.26	.94	.392	.01
S x R	2	2.68	2.01	.137	.03
S x O	4	.078	.06	.994	.00
S x P x R	2	3.37	2.53	.083	.03
S x P x O	4	.62	.47	.760	.01
S x R x O	4	.94	.71	.589	.02
S x P x R x O	4	1.17	.88	.479	.02
error	148	1.33			

Table 2

The Means (and Standard Deviations) for Respondents' Support for the Three Socio-Political Movement across the 2 Experimental Conditions

Socio-Political Movement	Experimental Condition		Overall
	Death Prime	Pain Prime	
Black Lives Matter	1.40 (1.00)	1.51 (0.83)	1.45 (0.92)
All Lives Matter	0.56 (1.42)	0.77 (1.38)	0.66 (1.39)
Blue Lives Matter	0.44 (1.14)	0.21 (1.41)	0.32 (1.28)
Number of Subjects	43	43	86

Table 3

Independent samples t-test for death anxiety and the Self-esteem and Justice Sensitivity scales.

Measure	Death Prime Means	Pain Prime Means	t	df	2-tailed p-value	Effect Size (d)
Self-esteem	5.94(7.28)	6.94(8.07)	-.65	98	.517	0.13
Justice Sensitivity	.60(6.44)	1.56(8.07)	-.66	98	.512	0.13

Table 4: Correlational analysis of the death anxiety questionnaire and other variables

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>1. Death Anxiety</b>	1						
<b>2. Self-Esteem</b>	<b>-.391**</b>	1					
<b>3. Self-Consciousness</b>	<b>.301**</b>	<b>-.452**</b>	1				
<b>4. Justice Sensitivity</b>	<b>.329**</b>	<b>-.403**</b>	<b>.341**</b>	1			
<b>5. Black Lives Matter</b>	.163	-.161	<b>.234*</b>	.144	1		
<b>6. All Lives Matter</b>	-.064	.105	-.192	.032	-.096	1	
<b>7. Blue Lives Matter</b>	<b>-.248*</b>	.157	<b>-.325**</b>	-.010	.092	<b>.350**</b>	1

\*p &lt; .05, \*\* p &lt; .01



## Appendix A

### CONSENT DOCUMENT Rhode Island College

#### Personality Factors and their Relationship to Social Issues

You are being asked to participate in a research study concerning personality factors and their relationship to social issues. You are being asked because you are over the age of 18 years and therefore have all the qualifications of being able to participate in this study. Please read the following document below and ask any questions you might have before deciding whether to participate.

Dr. David B. Sugarman, a Professor of Psychology at Rhode Island College, is conducting this study in collaboration with his student Esther Quiroz, an undergraduate student at Rhode Island College.

#### **Why this Study is Being Done (Purpose)**

Your personality are the characteristics with which you carry yourself that make you distinctive from everyone else. It influences your interactions with others, your life experiences, and it determines how you relate to the social world. Most importantly, it influences your perceptions, thinking, and attitudes. The anxieties that you have and how you solve everyday problems also arise from one's personality. Therefore, the purpose of this study is to analyze how personality factors relate to your attitudes towards social issues that are currently facing the nation.

#### **What You Will Have to Do (Procedures)**

If you do decide to participate, these are the sequences of events:

First, if you decide to participate after reading this document, you will sign this document giving us consent. You will then be randomly assigned to complete a series of questionnaires. The presentation of the questionnaires varies depending on what condition you are randomized to. These questionnaires relate to some personal statements about you and your thoughts about certain life occurrences (e.g., death, pain), your personality (e.g, your self-concept, your anxieties), and your attitudes about some social and economic issues facing the nation. After you complete the questionnaires, which would take approximately 12 minutes, the researcher will ask you questions regarding your experience and you will also have the opportunity to ask any questions you might have.

#### **Compensation**

If you do decide to participate and complete the entire study, you will receive two-dollars as compensation. You will not receive compensation if you do not complete the study from finish to end, including allowing us to use your data.

#### **Risks or Discomforts**

While we think that it is possible that you may find answering some questions as upsetting and eliciting certain emotional responses and discomfort, the topics in these questionnaires come up in everyday life, whether in conversation with family and friends or typical media outlets. Thus, the risks to this study are minimal. You can skip any section that you don't want to answer, and you can stop the study at any time. If you are a student at Rhode Island College and you want to talk to someone about your feelings or about problems that you are having, you can call the Rhode Island College Counseling Center at 401-456-8094. If you are not a Rhode Island College student, you can find a psychologist to help you at this website <http://www.apapracticecentral.org/>. You are responsible for all fees associated with these services. We will not pay this fee.

### **Benefits of Being in the Study**

There are no other direct benefits to you.

### **Deciding Whether to Be in the Study**

Being in this study is your choice to make. Nobody can force you to be in this study. If you choose not to be in this study, nobody will hold it against you. You can change your mind and quit the study at any time, and you do not have to give a reason for it. If you decide to quit during the procedure, you will not be compensated for it.

### **Confidentiality and How Your Information will be Protected**

Because this is a research study, results will be summarized across all participants and shared in any reports that we publish and any presentations that we give. Your name or any personal information will not be used in any reports or presentations. Several steps will be taken to protect your identity and any information that you give us. Your information will be coded with a set of letters and numbers and used wherever your name appears. The information will be kept in a locked file cabinet and will only be accessible to the researchers who are part of this study. The only time your information will have to be shared is if it is subpoenaed by a court, or if you are a suspect of harming yourself or others. Your information will have to be reported to the appropriate authorities. Additionally, if there are any problems with the study, the record may be viewed by the Rhode Island College Review Board, which is responsible for protecting the rights of participants in research studies. The information collected from your participation will only be kept for a minimum of three years after the study is over, which will then be appropriately destroyed.

### **Who to Contact**

Any questions you might have can be answered now. If, after you complete your participation and are no longer in the reach of the researcher, you have any other questions, you can contact David Sugarman ([dsugarman@ric.edu](mailto:dsugarman@ric.edu), 401-456-8611), or Esther Quiroz ([equiroz\\_5711@email.ric.edu](mailto:equiroz_5711@email.ric.edu)).

If you think you were treated in a bad manner in this study, have complaints, or would like to talk to someone other than the researchers about your rights and/or safety as a participant, please contact Cindy Padula by email at [IRB@ric.edu](mailto:IRB@ric.edu), or by phone at 401-456-9720.

For your record, you will be given a copy of this form to keep.

**Statement of Consent**

I have read and understand the information that was presented above and am willing to participate in the study "Personality Factors and their Relationship to Social Issues." I understand that my participation is fully voluntary and that I have the option of stopping my participation at any moment with no consequences. All my questions have been answered and if any other come up after my participation, I will contact the people mentioned above. I am at least 18 years of age.

Print Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Researcher Obtaining Consent: \_\_\_\_\_

## Appendix B

### CONSENT DOCUMENT Rhode Island College

#### Personality Factors and their Relationship to Social Issues

You are being asked to participate in a research study concerning personality factors and their relationship to social issues. You are being asked because you are over the age of 18 years and therefore have all the qualifications of being able to participate in this study. Please read the following document below and ask any questions you might have before deciding whether to participate.

Dr. David B. Sugarman, a Professor of Psychology at Rhode Island College, is conducting this study in collaboration with his student Esther Quiroz, an undergraduate student at Rhode Island College.

#### **Why this Study is Being Done (Purpose)**

Your personality are the characteristics with which you carry yourself that make you distinctive from everyone else. It influences your interactions with others, your life experiences, and it determines how you relate to the social world. Most importantly, it influences your perceptions, thinking, and attitudes. The anxieties that you have and how you solve everyday problems also arise from one's personality. Therefore, the purpose of this study is to analyze how personality factors relate to your attitudes towards social issues that are currently facing the nation.

#### **What You Will Have to Do (Procedures)**

If you do decide to participate, these are the sequences of events:

First, if you decide to participate after reading this document, you will sign this document giving us consent. You will then be randomly assigned to complete a series of questionnaires. The presentation of the questionnaires varies depending on what condition you are randomized to. These questionnaires relate to some personal statements about you and your thoughts about certain life occurrences (e.g., death, pain), your personality (e.g, your self-concept, your anxieties), and your attitudes about some social and economic issues facing the nation. After you complete the questionnaires, which would take approximately 12 minutes, the researcher will ask you questions regarding your experience and you will also have the opportunity to ask any questions you might have.

#### **Compensation**

If you do decide to participate and complete the entire study, you will receive one-dollar as compensation as well as course credit. You will not receive compensation if you do not complete the study from finish to end, including allowing us to use your data.

#### **Risks or Discomforts**

While we think that it is possible that you may find answering some questions as upsetting and eliciting certain emotional responses and discomfort, the topics in these questionnaires come up in everyday life, whether in conversation with family and friends or typical media outlets. Thus, the risks to this study are minimal. You can skip any section that you don't want to answer, and you can stop the study at any time. If you are a student at Rhode Island College and you want to talk to someone about your feelings or about problems that you are having, you can call the Rhode Island College Counseling Center at 401-456-8094. If you are not a Rhode Island College student, you can find a psychologist to help you at this website <http://www.apapracticecentral.org/>. You are responsible for all fees associated with these services. We will not pay this fee.

### **Benefits of Being in the Study**

There are no other direct benefits to you.

### **Deciding Whether to Be in the Study**

Being in this study is your choice to make. Nobody can force you to be in this study. If you choose not to be in this study, nobody will hold it against you. You can change your mind and quit the study at any time, and you do not have to give a reason for it. If you decide to quit during the procedure, you will not be compensated for it.

### **Confidentiality and How Your Information will be Protected**

Because this is a research study, results will be summarized across all participants and shared in any reports that we publish and any presentations that we give. Your name or any personal information will not be used in any reports or presentations. Several steps will be taken to protect your identity and any information that you give us. Your information will be coded with a set of letters and numbers and used wherever your name appears. The information will be kept in a locked file cabinet and will only be accessible to the researchers who are part of this study. The only time your information will have to be shared is if it is subpoenaed by a court, or if you are a suspect of harming yourself or others. Your information will have to be reported to the appropriate authorities. Additionally, if there are any problems with the study, the record may be viewed by the Rhode Island College Review Board, which is responsible for protecting the rights of participants in research studies. The information collected from your participation will only be kept for a minimum of three years after the study is over, which will then be appropriately destroyed.

### **Who to Contact**

Any questions you might have can be answered now. If, after you complete your participation and are no longer in the reach of the researcher, you have any other questions, you can contact David Sugarman ([dsugarman@ric.edu](mailto:dsugarman@ric.edu), 401-456-8611), or Esther Quiroz ([equiroz\\_5711@email.ric.edu](mailto:equiroz_5711@email.ric.edu)).

If you think you were treated in a bad manner in this study, have complaints, or would like to talk to someone other than the researchers about your rights and/or safety as a participant, please contact Cindy Padula by email at [IRB@ric.edu](mailto:IRB@ric.edu), or by phone at 401-456-9720.

For your record, you will be given a copy of this form to keep.

**Statement of Consent**

I have read and understand the information that was presented above and am willing to participate in the study "Personality Factors and their Relationship to Social Issues." I understand that my participation is fully voluntary and that I have the option of stopping my participation at any moment with no consequences. All my questions have been answered and if any other come up after my participation, I will contact the people mentioned above. I am at least 18 years of age.

Print Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_ Date: \_\_\_\_\_

Name of Researcher Obtaining Consent: \_\_\_\_\_

## Appendix C

1					
You are going to be presented with a series of statements regarding social and economic issues facing the nation. Please read each statement and indicate the degree to which you agree or disagree with them.					
Statements	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Marijuana should be legalized throughout the United States for medical purposes.	-2	-1	0	1	2
2. "Black Lives Matter" movement needs to be supported.	-2	-1	0	1	2
3. Universal Health Insurance should be a priority for Congress.	-2	-1	0	1	2
4. The "old-fashioned ways" and the "old fashioned values" still show the best way to live.	-2	-1	0	1	2
5. Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs.	-2	-1	0	1	2
6. Whenever science and religion conflict, religion is always right.	-2	-1	0	1	2
7. State government more effectively meets the needs of their populace than the federal government does.	-2	-1	0	1	2
8. Older people get more than their fair share from the government	-2	-1	0	1	2
9. Government should take more responsibility to ensure that everyone is provided for	-2	-1	0	1	2
10. People should take more responsibility to provide for themselves	-2	-1	0	1	2
11. "Blue Lives Matter" movement needs to be supported.	-2	-1	0	1	2

<b>12. Prostitution should be legalized nationally.</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>13. Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent.</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>14. The national media has too much control of the election process.</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>15. People who belong to different religions are probably just as moral as those who belong to mine</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>16. There is no “one right way” to live life; everybody has to create their own way.</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>17. In the long run, hard work usually brings a better life</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>18. Fixing the country’s infrastructure should be given a lot more attention.</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>19. “All Lives Matter” movement needs to be supported.</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>20. Old people have too much political influence</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>
<b>21. Hard work doesn’t generally bring success – it’s more a matter of luck and connections</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>



## Appendix D

Please read each statement and indicate the degree to which you think it applies to you.
--

Item	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1. Death frightens me because I won't be able to do creative activities	-2	-1	0	1	2
2. Death frightens me because it ends all of my plans and activities	-2	-1	0	1	2
3. Death frightens me because I won't be able to continue any spiritual activities	-2	-1	0	1	2
4. Death frightens me because it ends my ability to think	-2	-1	0	1	2
5. Death frightens me because my life will not have been exploited	-2	-1	0	1	2
6. Death frightens me because it separates me from life itself	-2	-1	0	1	2
7. Death frightens me because I will miss future events	-2	-1	0	1	2
8. Death frightens me because it does not allow me to realize my life goals	-2	-1	0	1	2
9. Death frightens me because it ends my ties with loved ones	-2	-1	0	1	2
10. Death frightens me because of the loss of life's pleasures	-2	-1	0	1	2
11. Death frightens me because my absence will not be felt	-2	-1	0	1	2
12. Death frightens me because events will take place without me	-2	-1	0	1	2
13. Death frightens me because I will be forgotten	-2	-1	0	1	2
14. Death frightens me because my loss will not hurt close ones	-2	-1	0	1	2

<b>15. Death frightens me because of the burial deep in the earth</b>	-2	-1	0	1	2
<b>16. Death frightens me because life will go on without me</b>	-2	-1	0	1	2
<b>17. Death frightens me because loss of human semblance</b>	-2	-1	0	1	2
<b>18. Death frightens me because the fate of my body</b>	-2	-1	0	1	2
<b>19. Death frightens me because my family will still need me</b>	-2	-1	0	1	2
<b>20. Death frightens me because relatives will not overcome the sorrow</b>	-2	-1	0	1	2
<b>21. Death frightens me because sorrow to relatives and friends</b>	-2	-1	0	1	2
<b>22. Death frightens me because of the inability to provide for my family</b>	-2	-1	0	1	2
<b>23. Death frightens me because of the uncertainty of what to expect</b>	-2	-1	0	1	2
<b>24. Death frightens me because of the uncertainty of existence after death</b>	-2	-1	0	1	2
<b>25. Death frightens me because its mysteriousness</b>	-2	-1	0	1	2
<b>26. Death frightens me because of the unknown associated with it</b>	-2	-1	0	1	2
<b>27. Death frightens me because of the decomposition of the body</b>	-2	-1	0	1	2
<b>28. Death frightens me because there is a loss and destruction of self</b>	-2	-1	0	1	2
<b>29. Death frightens me because of the entrance into a state of everlasting sleep</b>	-2	-1	0	1	2
<b>30. Death frightens me because of the destruction of my personality</b>	-2	-1	0	1	2
<b>31. Death frightens me because of the possible punishment in the hereafter</b>	-2	-1	0	1	2

## Appendix E

**INSTRUCTIONS:** The items listed below describe painful experiences. Please look at each item and think about how **FEARFUL** you are of experiencing the **PAIN** associated with each item. If you have never experienced the **PAIN** of a particular item, please answer on the basis of how **FEARFUL** you expect you would be if you had such an experience. Circle one rating per item to rate your **FEAR OF PAIN** in relation to each event

Item	Not at all	A little	A fair amount	Very Much	Extreme
1. Being in an automobile accident	-2	-1	0	1	2
2. Biting your tongue while eating	-2	-1	0	1	2
3. Breaking your arm	-2	-1	0	1	2
4. Cutting your tongue licking an envelope	-2	-1	0	1	2
5. Having a heavy object hit you in the head	-2	-1	0	1	2
6. Breaking your leg	-2	-1	0	1	2
7. Hitting a sensitive bone in your elbow-your "funny bone"	-2	-1	0	1	2
8. Having a blood sample drawn with a hypodermic needle	-2	-1	0	1	2
9. Having someone slam a heavy car door on your hand	-2	-1	0	1	2
10. Falling down a flight of concrete stairs	-2	-1	0	1	2
11. Receiving an injection in your arm	-2	-1	0	1	2
12. Burning your fingers with a match	-2	-1	0	1	2
13. Breaking your neck	-2	-1	0	1	2

<b>14. Receiving an injection in your hip/buttocks</b>	-2	-1	0	1	2
<b>15. Having a deep splinter in the sole of your foot probed and removed with tweezers</b>	-2	-1	0	1	2
<b>16. Having an eye doctor remove a foreign particle stuck in your eye</b>	-2	-1	0	1	2
<b>17. Receiving an injection in your mouth</b>	-2	-1	0	1	2
<b>18. Being burned on your face by a lit cigarette</b>	-2	-1	0	1	2
<b>19. Getting a paper-cut on your finger</b>	-2	-1	0	1	2
<b>20. Receiving stitches in your lip</b>	-2	-1	0	1	2
<b>21. Having a foot doctor remove a wart from your foot with a sharp instrument</b>	-2	-1	0	1	2
<b>22. Cutting yourself while shaving with a sharp razor</b>	-2	-1	0	1	2
<b>23. Gulping a hot drink before it has cooled</b>	-2	-1	0	1	2
<b>24. Getting strong soap in both your eyes while bathing or showering</b>	-2	-1	0	1	2
<b>25. Having a terminal illness that causes you daily pain</b>	-2	-1	0	1	2
<b>26. Having a tooth pulled</b>	-2	-1	0	1	2
<b>27. Vomiting repeatedly because of food poisoning</b>	-2	-1	0	1	2
<b>28. Having sand or dust blow into your eyes</b>	-2	-1	0	1	2
<b>29. Having one of your teeth drilled</b>	-2	-1	0	1	2
<b>30. Having a muscle cramp</b>	-2	-1	0	1	2

## Appendix F

Please read each statement and indicate the degree to which you agree or disagree with them.

STATEMENT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I feel that I am a person of worth, at least on an equal plane with others.	-2	-1	0	1	2
2. I feel that I have a number of good qualities.	-2	-1	0	1	2
3. All in all, I am inclined to feel that I am a failure.	-2	-1	0	1	2
4. I am able to do things as well as most other people.	-2	-1	0	1	2
5. I feel I do not have much to be proud of.	-2	-1	0	1	2
6. I take a positive attitude toward myself.	-2	-1	0	1	2
7. On the whole, I am satisfied with myself.	-2	-1	0	1	2
8. I wish I could have more respect for myself.	-2	-1	0	1	2
9. I certainly feel useless at times.	-2	-1	0	1	2
10. At times I think I am no good at all.	-2	-1	0	1	2

## Appendix G

Please read each statement and indicate the degree to which you think it applies to you.

Item	Not like me at all	A little like me	Neutral	Somewhat like me	A lot like me
1. I'm always trying to figure myself out.	-2	-1	0	1	2
2. I'm concerned about my style of doing things.	-2	-1	0	1	2
3. It takes me time to get over my shyness in new situations.	-2	-1	0	1	2
4. I think about myself a lot.	-2	-1	0	1	2
5. I care a lot about how I present myself to others.	-2	-1	0	1	2
6. I often daydream about myself.	-2	-1	0	1	2
7. It's hard for me to work when someone is watching me.	-2	-1	0	1	2
8. I never take a hard look at myself.	-2	-1	0	1	2
9. I get embarrassed very easily.	-2	-1	0	1	2
10. I'm self-conscious about the way I look.	-2	-1	0	1	2
11. It's easy for me to talk to strangers.	-2	-1	0	1	2
12. I generally pay attention to my inner feelings.	-2	-1	0	1	2
13. I usually worry about making a good impression.	-2	-1	0	1	2

<b>14. I'm constantly thinking about my reasons for doing things.</b>	-2	-1	0	1	2
<b>15. I feel nervous when I speak in front of a group.</b>	-2	-1	0	1	2
<b>16. Before I leave my house, I check how I look.</b>	-2	-1	0	1	2
<b>17. I sometimes step back (in my mind) in order to examine myself from a distance.</b>	-2	-1	0	1	2
<b>18. I'm concerned about what other people think of me.</b>	-2	-1	0	1	2
<b>19. I'm quick to notice changes in my mood.</b>	-2	-1	0	1	2
<b>20. I'm usually aware of my appearance.</b>	-2	-1	0	1	2
<b>21. I know the way my mind works when I work through a problem.</b>	-2	-1	0	1	2
<b>22. Large groups make me nervous.</b>	-2	-1	0	1	2

## Appendix H

Please read each statement and indicate the degree to which you agree or disagree with them.

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. It bothers me when others receive something that ought to be mine.	-2	-1	0	1	2
2. It makes me angry when others receive an award which I have earned.	-2	-1	0	1	2
3. I can't easily bear it when others profit unilaterally from me.	-2	-1	0	1	2
4. I can't forget for a long time when I have to fix others' carelessness.	-2	-1	0	1	2
5. It gets me down when I get fewer opportunities than others to develop my skills.	-2	-1	0	1	2
6. It makes me angry when others are undeservingly better off than me.	-2	-1	0	1	2
7. It worries me when I have to work hard for things that come easily to others.	-2	-1	0	1	2
8. I ruminate for a long time when other people are being treated better than me.	-2	-1	0	1	2
9. It burdens me to be criticized for things that are being overlooked with others.	-2	-1	0	1	2
10. It makes me angry when I am treated worse than others	-2	-1	0	1	2



