

Running head: MORTALITY SALIENCE AND TATTOOS

Effects of Mortality Salience on the Verdict and Sentencing Decisions of a Defendant with  
Facial Tattoos

Katherine M. Knight

Marietta College

A Thesis Submitted to the Faculty of

Marietta College

In Partial Fulfillment of the Requirements for the Degree of

Master of Arts in Psychology

May 2010

Effects of Mortality Salience on the Verdict and Sentencing Decisions of a Defendant with

Facial Tattoos

Katherine M. Knight

Marietta College

This thesis has been approved for the Department of Psychology

of Marietta College by

---

Dr. Mark Sibicky, Ph.D.

Thesis Committee Advisor

---

Dr. Christopher Klein, Ph.D.

Thesis Committee Member

### Acknowledgements

This researcher would like to thankfully acknowledge several individuals for their support and guidance throughout the research process.

Dr. Mark Sibicky, who dedicated much of his time and energy to assist this researcher at every stage of the research process and without whose knowledge and guidance this project would not have been completed;

Dr. Christopher Klein, who offered much of his time and knowledge to serve on my thesis committee and whose suggestions were greatly appreciated;

Mr. Michael Aboukhaled, who was kind enough to lend his talents to edit the defendant photograph for this study;

Her parents, family, and friends, who were steadfast in their dedication and support and who kept her sane throughout the research process.

### Abstract

Terror management theory (TMT) posits that the awareness of one's inevitable mortality creates incapacitating terror and anxiety in humans resulting in increased adherence to the cultural worldview. The current study draws upon TMT and examines the effects of mortality salience (MS) on verdict and sentencing decisions of a defendant with facial tattoos. It was predicted that MS participants exposed to the tattooed defendant would be more likely to choose the guilty verdict, rate the defendant more guilty and less innocent, and recommend harsher punishments compared to other groups. The data did not support the hypotheses. However, a significant interaction between MS induction and facial tattoos for ratings of recommended fine severity was found. Implications for future research are discussed.

## Effects of Morality Salience on the Verdict and Sentencing Decisions of a Defendant with Facial Tattoos

This study examined how mortality salience impacts sentencing of a defendant with a socially deviant appearance, specifically facial tattoos. Participant self-esteem was assessed before participants were introduced to a mortality salient or neutral induction. Participants also reviewed a court brief accompanied by a photograph of a defendant either with or without facial tattoos. Participants were asked to give a verdict of guilt, rate the defendant's guilt and innocence, and rate recommended fine and sentence severity. The goal of this study was to determine how mortality salience affects the verdicts and recommended sentences provided by simulated jury members when the defendant has facial tattoos.

### *Terror Management Theory*

In the 1970's cultural anthropologist Ernest Becker argued in his book titled, *The Denial of Death*, that all animals, including humans, share an instinctive drive for survival and self-preservation (Becker, 1973). However, due to their advanced cognitive abilities, humans differ from other animals in the awareness of their own eventual and certain death. In essence, Becker argues that humans face an existential dilemma comprised of a conflict between the drive for survival and an awareness that one's life may end at any time, regardless of preventative actions (Becker, 1973). The instinctive drive for self-preservation and survival combined with the unique awareness of inevitable death creates the potential for incapacitating terror and anxiety in humans (Becker, 1973; Greenberg, Solomon, & Pyszczynski, 1997). These observations of human nature by Becker led to the development of the social psychological theory of terror management [Terror Management Theory (TMT)] (for reviews, see Greenberg et al., 1997; Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004; Arndt & Vess, 2008).

The central thesis of TMT is that the debilitating fear created through human awareness of mortality is coped with through a cultural anxiety-buffer which includes of a cultural worldview. An individual's cultural worldview consists of the concepts and ideas that create stability and meaning in one's subjective reality and allow one to obtain a sense of personal value (Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994). The cultural worldview provides humans with a reason for existence, standards for appropriate behavior, and comfort by offering opportunities to achieve literal (e.g. religious) or symbolic (e.g. family, contributing to a nation) immortality for those who live up to the valued standards of living (Greenberg et al., 1997). When an individual believes they are upholding the standards provided by the cultural worldview, he also experiences an increase in self-esteem which functions to buffer anxiety.

In the last few decades, two general hypotheses have been derived from TMT. The first hypothesis, termed the anxiety-buffer hypothesis, states that self-esteem protects an individual from anxiety triggered by feelings of one's mortality (Greenberg et al., 1994). Research shows when high self-esteem is dispositional or experimentally induced, participants report less anxiety, less physiological arousal, and less anxiety-related defensiveness when exposed to threatening stimuli (Greenberg et al., 1994). The second hypothesis derived from TMT, related to the first, is known as the mortality salience hypothesis [mortality salience (MS)]. The mortality salience hypothesis asserts that awareness of mortality increases the commitment to and defense of the cultural worldview as well as the desire to meet the standards presented in the cultural worldview (i.e. self-esteem striving) (Greenberg et al., 1994; Arndt & Vess, 2008).

Numerous studies support the two major hypotheses of TMT and show that reminders of death motivate people to invest in and defend their cultural worldview. For example, following an MS induction, people are more likely to seek information that maintains a stable view of

reality which leads them to think in stereotypical ways and to favor those who conform to social stereotypes (Schimel, Simon, Greenberg, Pyszczynski, Solomon, Waxmonsky, & Arndt, 1999). As a result, MS increases the accessibility of death-related thoughts as well as increases in-group favoritism, out-group prejudice, and harsher penalties for those who deviate from the social norm or violate social expectations (Arndt, Lieberman, Cook, & Solomon, 2005; Greenberg, Pyszczynski, Solomon, Rosenblatt, Veeder, Kirland, & Lyon, 1990; Schimel, Hayes, Williams, & Jahrig, 2007).

Providing support for TMT and the MS hypothesis, Rosenblatt, Greenberg, Solomon, Pyszczynski, and Lyon (1989) found American participants reported more favorable reactions to a person who voiced strong allegiance towards the United States and more negative reactions to someone who reported strong aversion towards the United States following an MS induction. Because religious beliefs can also be an example of a differing worldview, Greenberg et al. (1990) asked Christian participants to report their impressions of both Christian and Jewish target persons. Half of the Christian participants experienced an MS induction while half served as the control. The researchers reported MS led to more positive evaluations of the in-group (Christian) target person versus the out-group (Jewish) target person (Greenberg et al., 1990).

Along with increased prejudice of out-group members and those who violate the cultural worldview, reminders of death also result in heightened support for those who are seen as upholding the cultural worldview. For example, Rosenblatt et al. (1989) demonstrated that MS leads to a larger recommended reward for a hero who upholds cultural values. Moreover, when faced with MS, people are more likely to support charismatic leaders because of their assumed ability to provide security from threats and to unite one's culture in the fight to overcome an identifiable 'evil' (e.g. terrorism) (Cohen, Solomon, Maxfield, Pyszczynski, & Greenberg, 2004).

Similarly, Pyszczynski, Greenberg, Solomon, & Maxfield (2006) found reminders of mortality in American participants led to increased support of radical military action against countries perceived as a threat to the United States, even when this action could kill innocent civilians, compared to control participants. This study demonstrates the preference for those who are seen as upholding the cultural worldview, even when their actions may harm others.

As Arndt and Vess (2008) point out, TMT has provided a useful framework to help us understand many important social issues, including applying TMT to the criminal justice system. Pickel & Brown (2002) found that simulated jury members who were asked to imagine their own death in a crime-related car accident were more likely to convict the defendant and recommend longer prison sentences. Similarly, Rosenblatt et al. (1989) found judges primed with MS cues set bail amounts an average of \$400 higher for a defendant accused of prostitution compared to control judges. Rosenblatt et al. (1989) also found that participants receiving an MS induction who previously held negative attitudes towards prostitution recommended more severe punishment than those who did not previously hold negative attitudes. This finding suggests MS leads to harsher punishments for a defendant who violates the participants' previously held worldview.

Similar to Rosenblatt et al.'s (1989) findings, Lieberman, Arndt, Personius, and Cook (2001) found that MS results in more lenient punishment for a hate crime offender if the victim of the crime threatens the participant's worldview. Participants read essays describing a hate crime committed against a person leaving a Gay Pride Rally or a Jewish Pride Rally and the offender shouted either anti-gay or anti-Semitic insults during the attack. Researchers found MS participants were less punitive than control participants (Lieberman et al., 2001). These studies provide evidence for the MS hypothesis which posits people who are reminded of their mortality



will consistently recommend harsher punishments for those who defy their cultural worldview and more lenient punishment for those who defend it.

Because the justice system in the U.S. is founded on the assumptions of fairness and rationality, the application of TMT to understanding trial decisions is important and relevant. Understanding the impact of TMT on the legal system is significant because reminders of death are an unavoidable hazard for all those who observe or participate in trial proceedings. Because blatant reminders of death are not required to activate terror management processes, it is important to keep in mind any covert reminders of mortality present in the justice system. Arndt et al. (2005) state covert reminders of mortality may be elicited during trial proceedings through charges or details of a case (e.g. homicide, manslaughter), attorney or witness statements, or in the punishment deliberation process of jurors when capital punishment is an option. Because influential reminders of death are often present but veiled in trial proceedings, it is imperative to further study MS effects on jurors and other possible sources of this bias.

#### *United States Jury Trial System*

Jury trials are fairly common in the United States justice system with approximately 149,000 state jury trials and 5,000 federal jury trials conducted each year in the United States (US Legal Law Digest, 2009). Roughly 32 million Americans are summoned each year for jury duty and of those 32 million summoned, only 8 million citizens actually report for duty with no more than 1.5 million being impaneled (America.gov: Engaging the World, 2009).

Americans generally revere and trust the common law judicial system of the United States, viewing it as a fair and impartial judicial system uninfluenced by cultural, social, or psychological factors (Arndt et al., 2005). However, legal decisions for the most part are human decisions and are therefore open to the potential influence of bias, opinions, prejudice, and

stereotypes. A review of the literature reveals numerous studies demonstrating the impact of social and psychological factors on legal decision making through characteristics of the defendant.

### *Defendant Characteristics Affecting Legal Decision Making*

Defendant characteristics often go unnoticed but play a pivotal role in legal decision making. Previous research reveals characteristics including the defendant's previous conviction history, beliefs, attractiveness, status, and gender have a powerful impact on jury decisions.

One defendant characteristic often utilized by the prosecution is previous conviction history. A history of previous conviction for a similar crime is enough to form a negative association between the defendant and the current crime, regardless of the currently presented evidence; this association is often used to the prosecution's advantage (Clary & Shaffer, 2001). When the previous conviction is similar to the current crime, jurors are more likely to assume the individual is capable of committing the crime under investigation. This belief often results in a guilty verdict and harsher sentences for the defendant (Clary & Shaffer, 2001).

Beliefs held by the defendant may also influence jury decisions. Dissimilarity of attitudes and beliefs between jurors and defendants leads to more severe sentences and higher ratings of guilt (Griffitt & Jackson, 1973). Griffitt and Jackson (1973) exposed simulated jury members to a defendant with either similar or dissimilar attitudes to their own. This study revealed participants exposed to the defendant with attitudes and beliefs different from their own rated the defendant more guilty and sentenced the defendant to longer imprisonment with more years prior to parole eligibility than participants exposed to the defendant with similar attitudes (Griffitt & Jackson, 1973). The influence of defendant characteristics on jury decision making becomes even more complicated when additional variables are added to the situation.

Several studies reveal defendant traits such as gender, attractiveness, and status may have more severe consequences when the defendant is seen as violating social norms. Research shows defendant gender has an impact on the decisions rendered by juries depending on the inclusion or exclusion of victim impact statements. Male defendants receive harsher sentences than female defendants when no victim impact statement is presented. However, when a victim impact statement is included, the sentencing of a male defendant is not affected while the sentencing of a female defendant becomes more severe (Forsterlee, Fox, Forsterlee, & Ho, 2004). Compared to the male defendant, the female defendant also elicits higher ratings of anger when jurors are presented with a victim impact statement. These results suggest the female defendant is violating social expectations which results in more anger towards the female defendant and harsher punishment.

Defendants viewed as more attractive are judged more severely and receive harsher punishments than unattractive defendants when the crime (e.g. swindling) is related to their attractiveness (Griffitt & Jackson, 1973; Sigall & Ostrove, 1975). However, when the crime is not related to the defendant's attractiveness, the unattractive defendant is punished more severely which suggest the attractive defendant is being punished for violating social and cultural norms (Sigall & Ostrove, 1975).

Similarly, previous research also shows variations of defendant social status result in longer sentences for high-status defendants versus low-status defendants. This manipulation, however, did not affect verdicts of guilt (Bray, Struckman-Johnson, Osbourne, McFarlane, & Scott, 1978). Research reported by Bray et al. (1978) shows high-status individuals charged with a crime are held more responsible than low-status individuals charged with the same crime

because they are viewed as abusing their power or abilities which results in a significant violation of social expectations (Bray et al., 1978).

As previous evidence demonstrates, the interaction between defendant characteristics and social expectations plays a major role in jury verdicts and sentencing. However, one defendant quality that was not specifically addressed in previous research but may have an impact on jury decision making is facial tattoos. Although tattoos are generally more accepted in today's Western society, research still shows some stigma is associated with tattoos and tattoos may be seen as violating social norms. A study conducted by Lin (2002) found that participants who rated themselves as religious were less likely to view tattoos positively and were more likely to associate tattoos with crime and gang membership.

### *Tattoos*

Tattoos are a relatively permanent way to alter the appearance of one's body. Tattoos date back hundreds of years and were once used to mark slaves as property or to display religious ideals on the body (Firmin, Tse, Foster, & Angelini, 2008). Today, research has found that people get a tattoo to more clearly identify with a group, to enhance sense of self and achieve self-identification, to promote self-expression, to make a fashion statement, to be unique, or to challenge society's view of attractiveness and norms (Lin, 2002; Firmin et al., 2008; Nathanson, Paulhus, & Williams, 2006). Individuals with tattoos think body modifications enhance their sense of self and have a positive impact on their interpersonal relationships (Lin, 2002).

Tattoos are more common and accepted in today's Western society than in the past and public opinion of tattoos has become relatively more positive today than in past decades (see Firmin et al., 2008; Wohlrab, Fink, Kappeler, & Brewer, 2009a; Wohlrab, Fink, Kappeler, &

Brewer, 2009b; Swami & Furnham, 2007). In contemporary Western society, the estimated percentage of the population with at least one permanent tattoo varies between 9% and 34% with little reported disparity between the number of men and women with tattoos (Firmin et al., 2008; Swami & Furnham, 2007).

Although tattoos have become more socially acceptable over the past few decades, positive and negative perceptions of tattoos reported by nontattooed people tend to vary by age of the reporter (Lin, 2002). Younger individuals are more likely to report positive perceptions of tattooed people while older people are more likely to report negative opinions of tattooed people (Lin, 2002). Furthermore, individuals with tattoos report their friends are generally accepting and encouraging of their tattoos while their family members are often opposed and displeased (Firmin et al., 2008). However, other studies show both tattooed and nontattooed people report relatively positive perceptions of tattooed individuals, rating tattooed people as more enjoyable, interesting, and unique than nontattooed people (Armstrong, Owen, Roberts, & Koch, 2002).

Although much more accepted in contemporary Western society, there is also still evidence of negative social perceptions of people with tattoos. For example, Swami and Furnham (2007) found evidence of social stigmatization in the workplace. Moreover, Swanger (2006) found women with tattoos were perceived more negatively than men with tattoos and research conducted by Resenhoeft, Villa, and Wiseman (2008) shows the type of tattoo may have an impact on how tattooed women are perceived.

Further evidence of discrepancies in perceptions of men and women with tattoos is presented by Hawkes, Senn, and Thorn (2004), Wohlrab et al. (2009b), Swami and Furnham (2007) and Degelman and Price (2002). In their study, Hawkes et al. (2004) found men and women undergraduates reported more negative attitudes towards a woman with a visible tattoo

versus a man with a visible tattoo. Wohlrab et al. (2009b) found male characters with a visible tattoo were perceived as more dominant than their nontattooed counterparts while female characters with a visible tattoo were rated as less healthy than their nontattooed counterparts. Swami and Furnham (2007) asked participants to rate women both with and without tattoos on attractiveness, sexual promiscuity, and the estimated amount of alcohol consumed during a night out and found tattooed women were rated as less attractive, more sexually promiscuous, and heavier drinkers than nontattooed women. The ratings also increased in negativity as the number of tattoos increased. Degelman and Price (2002) found when participants were presented with a photograph of a woman with a visible tattoo on her upper arm they rated her more negatively on nine of thirteen personality characteristics. Similarly, Resenhoeft et al. (2008) found across two studies that a woman displaying a dragon tattoo was rated negatively on five of the thirteen characteristics while a woman with a dolphin tattoo was rated negatively on two of the thirteen characteristics. This study suggests the specific image of the tattoo may lead to different perceptions of the tattooed individual.

Although there is evidence that people misjudge individuals with tattoos, there is research showing that some differences actually do exist between tattooed and nontattooed individuals. Tattooed individuals often show increased risk taking, and sensation and thrill seeking behaviors and are also more likely to engage in various forms of misconduct including drug abuse, violence, and early sexual promiscuity. Tattooed individuals are more likely to have a large number of sexual partners and are more susceptible to boredom (Ceniceros, 1998; Nathanson et al., 2006; Wohlrab et al., 2009a; Roberts & Ryan, 2002). Because of increased risk taking and thrill seeking behaviors, tattooed individuals are also more likely to be associated with crime and

gang membership and nontattooed individuals are likely to attribute these qualities to a tattooed person (Lin, 2002).

Although tattoos are more acceptable in today's Western society, research shows the stigma associated with tattoos still violates social expectations and norms in some contexts and people may still make assumptions about the personality characteristics of individuals with tattoos. For this reason, people who experience MS may view a defendant with tattoos as violating their cultural worldview and be more likely to view them as guilty and deserving of harsher sentences.

The current research examined the effects of MS on the verdict and sentencing of a defendant with facial tattoos on trial for a mortality neutral crime (i.e. counterfeiting). It was predicted that MS participants presented with a photograph of a defendant with facial tattoos would be more likely to assign the defendant a guilty verdict, would rate the defendant more guilty and less innocent, and recommend the harshest sentences as shown in ratings for recommended fine and sentence severity, compared to participants in all other groups.

## Method

### *Participants*

Participants were 132 Marietta College undergraduate students in introductory psychology courses. To participate, participants had to be eligible for jury duty in the United States – they were United States citizens 18 years of age or older, spoke English, and were not currently under a legal disability, including felony conviction or incompetent. The mean age of participants was 19.9 years with 36 male participants (27.3%) and 96 female participants (72.7%). The study was conducted during the spring 2010 semester and participants received 1 hour of research participation credit for participating in the study.

## Materials

*Rosenberg Self Esteem Scale.* The Rosenberg Self Esteem Scale consists of 10 statements about the self. Each participant read each statement before determining how much they agreed with each one on a 4-item scale including *strongly disagree*, *disagree*, *agree*, and *strongly agree*. Participants' self-esteem was scored using a scale provided with the test. For items 1, 2, 4, 6, and 7, *strongly agree* equals 3, *agree* equals 2, *disagree* equals 1, and *strongly disagree* equals 0. Items 3, 5, 8, 9, and 10 were weighted oppositely where *strongly disagree* equals 3, *disagree* equals 2, *agree* equals 1, and *strongly agree* equals 0. Scores could range from 0 to 25; participants with scores from 0 to 14 were identified as having low self-esteem, participants with scores ranging from 15 to 25 were identified as having normal self-esteem, and participants with scores 26 or higher were identified as having high self-esteem (Rosenberg, 1965). See Appendix B for the Rosenberg Self Esteem Questionnaire and Appendix C for the scoring system.

*MS Induction.* The MS induction manipulations consisted of 2 essay questions asking participants to imagine and write about what happens to their body as they are dying and what happens to their body once they are physically dead, while the control group imagined and wrote about what happens to their body as they take an exam and what happens to their body after physically taking an exam. The manipulation was adopted from Arndt et al., 1997 (See Appendix D).

*Court Brief and Defendant Photograph.* The court brief served two purposes. First, it served as a delay between the MS or control induction and the administration of the death-thought accessibility questionnaire manipulation check. Second, the court brief and defendant photograph offered an ambiguous and vague counterfeiting situation for which the defendant was



being accused as well as the opportunity to present the defendant photograph. The defendant was presented either with or without facial tattoos, depending on participant group. See Appendix G for court brief and Appendix A for defendant photographs.

*Death-Thought Accessibility Questionnaire.* The death-thought accessibility questionnaire consists of 20 incomplete word fragments. Participants were asked to complete each fragment with the first word that comes to mind by filling in two blank letters. Fourteen of the 20 word fragments could be completed with neutral words and 6 word fragments could be completed with either death-related or neutral words. The 6 death-related words and their neutral alternatives are: *grave/grape*, *dead/deed*, *skull/skill*, *corpse/course*, *buried/burned*, and *killed/kissed*. Participant scores of death-thought accessibility were calculated as the number of death-related words reported. The death-thought accessibility questionnaire was adopted from Arndt et al., 2007 (See Appendix E for death-thought accessibility word completion task and Appendix F for scoring of death-related words).

*Verdict and Sentencing Decision Questionnaire.* The verdict and sentencing decision questionnaire consisted of a choice of a guilty or not guilty verdict. Ratings of defendant guilt, innocence, recommended fine severity, and recommended sentence severity were assessed on 9-point Likert Scales (where 1 = *not at all guilty*, *not at all innocent*, *no fine*, and *no sentence*, respectively and 9 = *very guilty*, *very innocent*, *severe fine*, and *severe sentence*, respectively). For verdict and sentencing decision questionnaire, see Appendix H.

*Post-Questionnaire.* The post-questionnaire served two purposes. First, the post-questionnaire gathered demographic information such as age, gender, ethnicity, and religiousness. Second, the post questionnaire inquired about participants' experience with and

exposure to tattoos in order to assess the perception of in-group. See Appendix I for the post-questionnaire.

### *Procedure*

Participants first read and signed the informed consent form and were told the purpose of the study was to examine personality factors associated with jury decision making (see Appendix J). Each participant then completed the Rosenberg Self Esteem Scale before being randomly assigned to one of four conditions. Participants then responded to an MS induction or control essay prompt. Next, participants read an artificial court brief of a case in which the defendant is on trial for counterfeiting accompanied by a photograph of the defendant. Half of the participants in the MS and control groups were presented a picture of a defendant with facial tattoos while the other half of participants were presented a picture of the defendant without facial tattoos. Following the presentation of the court case, participants completed a packet of questionnaires. First was a death-thought accessibility word completion task followed by a verdict and sentencing decision questionnaire. Finally, participants were instructed to complete the post-questionnaire. All participants were debriefed by email.

### *Results*

The alpha level for analyses was set at .05. Participant responses in this 2 (Tattoos: facial tattoos, no facial tattoos) X 2 (MS induction: high MS, control) between-subjects factorial study were analyzed using a chi-square analysis and a between-subjects multiple analysis of variance (MANOVA). The difference between groups reporting guilty and not guilty verdicts was analyzed. Also, the main effects of MS induction and tattoos and the interaction between factors was examined for ratings of defendant guilt, defendant innocence, recommend fine severity, and recommended sentence severity. Measure of effect size was reported as partial  $\eta^2$ , where partial

$\eta^2 = .01$  represents a small effect size, partial  $\eta^2 = .06$  represents a medium effect size, and partial  $\eta^2 = .14$  represents a large effect size (Cohen, 1988).

A t-test was used as a manipulation check to analyze the affect of the MS induction on the presence of death-related thoughts. Although MS participants showed higher death-thought accessibility measured by the number of reported death-related words ( $M = 1.44$ ;  $SD = 1.19$ ) compared to control participants ( $M = 1.26$ ;  $SD = 1.03$ ), no significant effect of the MS induction on the presence of death-related thoughts was,  $t(130) = .94$ ,  $p = .350$ . See Figure 1 for a graph of these results. For further analysis, Pearson correlations were conducted to examine the relationship between the number of reported death-related words and the dependant variables including ratings of guilt and innocence and ratings of recommended fine and sentence severity. No significant relationship was found between the number of death-related words and ratings of guilt,  $r(132) = .09$ ,  $p = .293$ , ratings of innocence,  $r(132) = -.07$ ,  $p = .402$ , ratings of recommended fine severity,  $r(132) = .11$ ,  $p = .214$ , or ratings of recommended sentence severity, although this correlation did approach significance,  $r(132) = .17$ ,  $p = .053$ .

The hypothesis that MS individuals who are presented a defendant with facial tattoos would be more likely to assign the defendant a guilty verdict was not supported. A chi-square analysis showed no significant difference between groups for guilty verdicts,  $\chi^2(1) = .012$ ,  $p = .912$ , or not guilty verdicts,  $\chi^2(1) = .019$ ,  $p = .890$ . See Figure 2 for a graph of these results and Table 1 for descriptive statistics of all conviction decisions.

A 2 (MS induction: MS induction, control induction) X 2 (Facial tattoos: facial tattoos, no facial tattoos) MANOVA showed no significant main effect of MS induction,  $F(1, 128) = 1.32$ ,  $p = .266$ , Wilks'  $\lambda = .95$ , or tattoo,  $F(1, 128) = .68$ ,  $p = .604$ , Wilks'  $\lambda = .98$ , or a significant interaction between factors,  $F(1, 128) = 1.06$ ,  $p = .380$ , Wilks'  $\lambda = .96$ . Further

analysis of between-subject effects also revealed no significant main effect of MS induction on ratings of defendant guilt,  $F(1, 128) = 1.90, p = .171$ , partial  $\eta^2 = .015$ , ratings of defendant innocence,  $F(1, 128) = 2.03, p = .156$ , partial  $\eta^2 = .016$ , ratings of recommend fine severity,  $F(1, 128) = 1.33, p = .252$ , partial  $\eta^2 = .010$ , or ratings of recommended sentence severity,  $F(1, 128) = .08, p = .783$ , partial  $\eta^2 = .001$ . Similarly, no main effect of tattoos was found for ratings of defendant guilt,  $F(1, 128) = 1.17, p = .282$ , partial  $\eta^2 = .009$ , ratings of defendant innocence,  $F(1, 128) = 1.80, p = .182$ , partial  $\eta^2 = .014$ , ratings of recommended fine severity,  $F(1, 128) = .00, p = .962$ , partial  $\eta^2 = .000$ , or ratings of recommended sentence severity,  $F(1, 128) = 1.08, p = .300$ , partial  $\eta^2 = .008$ . See Table 2 for means and standard deviations for ratings of defendant guilt, defendant innocence, recommended fine severity, and recommended sentence severity based on 9-point Likert scales where higher scores correspond to higher ratings of the variable. See Figures 3, 4, 5, and 6, respectively, for graphs of the insignificant main effects and Tables 3, 4, 5, and 6 for MANOVA results of these analyses.

The MANOVA examining the interaction between MS induction and facial tattoos revealed no significant interaction between factors for ratings of defendant guilt,  $F(1, 128) = .20, p = .657$ , partial  $\eta^2 = .002$ , ratings of defendant innocence,  $F(1, 128) = .06, p = .815$ , partial  $\eta^2 = .000$ , or ratings of recommend sentence severity,  $F(1, 128) = 1.08, p = .300$ , partial  $\eta^2 = .008$ . Graphs of these insignificant interactions may be seen in Figures 7, 8, and 9, respectively.

Interestingly however, a significant interaction was found for MS induction and facial tattoos by ratings of recommended fine severity,  $F(1, 128) = 4.06, p = .046$ , partial  $\eta^2 = .031$ . Further examination of the means revealed that MS participants presented with the tattooed defendant showed the highest ratings of recommended fine severity ( $M = 6.55; SD = 1.89$ ), control participants presented the untattooed defendant showed the second highest rating for

recommended fine severity ( $M = 6.20$ ;  $SD = 1.48$ ), MS participants presented with the untattooed defendant showed the third highest rating for recommended fine severity ( $M = 5.92$ ;  $SD = 1.95$ ), and control participant presented with the tattooed defendant reported the lowest recommended rating of fine severity ( $M = 5.55$ ;  $SD = 1.91$ ). Overall, MS participants reported higher ratings of recommended fine severity ( $M = 6.23$ ;  $SD = 1.93$ ) compared to control participants ( $M = 5.87$ ;  $SD = 1.72$ ) and basically no difference was found for recommended fine severity when collapsing across the tattooed defendant ( $M = 6.05$ ;  $SD = 1.95$ ) and untattooed defendant ( $M = 6.06$ ;  $SD = 1.72$ ). See Figure 10 for a graph of this interaction.

### *Self-Esteem*

Because previous TMT research shows the impact of MS may be mediated by self-esteem, the current data was also analyzed to examine differences between quasi-experimental groups based on self-esteem scores obtained from the Rosenberg Self-Esteem Questionnaire. Based on the scoring system used with the Rosenberg Self-Esteem Questionnaire, the current sample of participants was composed of 3 low self-esteem individuals (2.3%), 92 individuals with normal self-esteem (69.7%), and 37 individuals with high self-esteem (28%).

Due to the small variance in self-esteem scores based on the Rosenberg Self-Esteem Questionnaire scoring form, the sample was trichotomized into low, normal, and high self-esteem groups based on percentile scores. Individuals with scores below the 33<sup>rd</sup> percentile (scores of 20 and below) were classified as low self-esteem, individuals with scores between the 33<sup>rd</sup> and 66<sup>th</sup> percentile (scores between 21 and 24) were classified as normal self-esteem, and individuals with scores above the 66<sup>th</sup> percentile (scores of 25 or higher) were classified as high self-esteem. This resulted in 39 individuals being placed in the low self-esteem group, 45 individuals placed in the normal self-esteem group, and 48 individuals placed in the high self-

esteem group. This trichotomization, however, did not yield any significant results. An ANOVA did not support findings from previous research that individuals low in self-esteem are more likely to report more death-related thoughts based on the raw scores from the death-thought accessibility questionnaire,  $F(2, 130) = .10, p = .907$ .

### *Participant Tattoos*

Because previous TMT research posits that people are more likely to treat members of out-groups more harshly by assigning harsher penalties, the current participant sample was also questioned about their experience with tattoos and tattooed individuals in the post-questionnaire. In order to investigate this question, participants were divided into groups depending on whether or not they have a tattoo themselves. Twenty-five participants reported having at least one permanent tattoo (18.9%) while 107 participants reporting having no tattoos (81.1%). An ANOVA revealed no significant differences between groups based on their identity as a tattooed or not tattooed individual for all dependant variables.

### Discussion

The current study sought to examine the effects of mortality salience on the verdict and sentencing decisions of a defendant with facial tattoos. This study stems from findings previous TMT research which posits the anxiety resulting from the awareness of one's mortality has the potential to result in incapacitating terror which affects an individual's perception of in-group and out-group members which results in increased in-group favoritism and out-group prejudice (Arndt et al., 2005; Greenberg et al., 1990; Schimel et al., 2007).

The basic hypothesis of the current study was that MS individuals who acted as simulated jury members and were presented with a photograph of a defendant with facial tattoos would be more likely than other participants to assign the defendant a guilty verdict, higher ratings of guilt,

lower ratings of innocence, and higher ratings of recommended fine and sentence severity compared to other groups.

Overall, the hypotheses were not supported. A chi-square analysis showed that there was basically no difference between groups for guilty and not guilty verdicts, regardless of the MS induction or the defendant facial tattoos. Although some differences between groups were present when analyzing the other dependant variables, no main effect of MS induction or facial tattoos were found for ratings of guilt and innocence or ratings of recommended fine and sentence severity. Interestingly, however, a significant interaction was found between MS induction and facial tattoos for ratings of recommended fine severity. This interaction showed that MS participants who were presented with a defendant with facial tattoos assigned the harshest recommended sentences ( $M = 6.55$ ;  $SD = 1.89$ ), while control induction participants presented with the tattooed defendant assigned the least harsh recommended fines ( $M = 5.55$ ;  $SD = 1.91$ ). Alternatively, MS participants who were presented with the untattooed defendant assigned a moderate recommended fine rating ( $M = 5.92$ ;  $SD = 1.95$ ), and control participants who viewed the untattooed defendant assigned slightly higher ratings of recommended fine severity ( $M = 6.20$ ;  $SD = 1.48$ ). (A graph of this interaction may be seen in Figure 10.) These results are interesting because, as expected, the MS individuals did assign the harshest fine to the tattooed defendant. In contrast, the least severe fine recommendation was assigned to the tattooed defendant by the control participants. Overall, MS participants reported higher ratings of recommended fine severity ( $M = 6.23$ ;  $SD = 1.93$ ) compared to control participants ( $M = 5.87$ ;  $SD = 1.72$ ) and basically no difference was found for recommended fine severity when comparing the tattooed defendant ( $M = 6.05$ ;  $SD = 1.95$ ) and untattooed defendant ( $M = 6.06$ ;  $SD = 1.72$ ).

The interaction between MS induction and facial tattoos for ratings of recommended fine severity raises interesting questions about the cultural worldview and in-group/out-group perception of individuals with tattoos, in general, and facial tattoos, in particular. Because previous research shows tattooed individuals tend to be associated with gang membership and crime (Lin, 2002), it is possible that rather than fitting into participants' worldview as an out-group member because of his socially deviant appearance, the tattooed individual may have been likely to fit into participants' worldview because of the association between tattoos and crime. This discrepancy between the tattooed defendant's position in the cultural worldview as an in-group or out-group member may have had an impact on the results of the current study, although may not describe every result found.

Furthermore, another interesting possibility is that under MS, the prominent value upheld by the cultural worldview when making decisions of guilt is to be fair, just, and to disregard irrelevant factors, such as appearance. However, as seen in previous research conducted by Rosenblatt et al. (1989) where a defendant was found guilty of prostitution, the values associated with punishment, especially when under an MS induction, may cause the individual to take into account other qualities of the defendant. The effects of MS on decisions of guilt versus decisions of punishment is a topic worth pursuing in future research.

### *Limitations*

This study had several limitations. First, it appears that the MS induction was not effective and thus MS participants did not express considerably more anxiety about the thought of one's death as compared to participants in the control condition. This conclusion is supported by the lack of a successful manipulation check; MS participants did not report more death-related words compared to control participants, as was expected. It is possible that the manipulation



check might have been significant if there was a longer delay between the MS induction and the death-thought accessibility questionnaire.

Another limitation of the study is that it may have lacked external validity. Participants may not have firmly grasped the seriousness of the consequences had this trial been an actual case and they were serving as authentic jurors. Although participants were presented with the punitive guidelines for a counterfeiting crime, participants did not receive an educative background on legal decision making or receive jury instructions as they would have in an authentic trial.

A third limitation is that there was a lack of participants who scored low in reported self-esteem. Previous TMT research suggests that individuals with high self-esteem are better able to buffer the anxiety associated with thoughts of one's own death and individuals with low self-esteem are not as capable of evading death-related thoughts and are therefore more prone to displaying the effects of MS (Greenberg et al., 1994). A larger sample size, including participants who are not college students, may have resulted in a more variant sample.

Finally, the photograph of the defendant with the facial tattoos may not have been believable enough. Although the photograph is of excellent quality, is an authentic picture of a man with tattoos on his face, and no suspicion was reported by participants, it is possible that the photograph caused participants to be somewhat suspicious of the intent of the experiment or to cause them to take the study less seriously.

### *Strengths*

Although the current study had some limitations, it also has some strengths. First, to avoid distraction and any possible confounding variables participants were placed in private cubicles to complete all questionnaires. The purpose of this method was to increase privacy and

honestly on behalf of the participants. Second, the court brief used in this study was obtained from a register of Virginia Commonwealth court transcripts and was modified for the current study. The use of an authentic court transcript of a counterfeiting case allowed a more solid and realistic basis for the participants. A third and final strength was that the current study utilized questionnaire and manipulations that have been used previously and have yielded successful results in the past including the Rosenberg Self-Esteem questionnaire, the MS and control inductions, and the death-thought accessibility questionnaire. All of these qualities contributed to the basis for a stable and logical empirical study, even though the results did not provide support for the hypotheses.

#### *Future Research*

Future research is needed to further investigate the effects of MS on defendant characteristics, including the presence of facial tattoos. Although the current study did not provide significant results, the findings of this study may lead to further research in the area. It may be beneficial to replicate this study using more participants, especially a broader and more diverse sample including a greater number of participants and a sample including community members. It would also be beneficial to replicate the current study using a different defendant photograph with facial tattoos that may be more realistic than the one used in this study. It is possible that this would yield more significant findings and lead to a more externally valid study. Furthermore, as stated previously, it would be beneficial for future research to investigate the effects of MS on decisions of guilt versus decisions of punishment. Finally, it is possible that the current study could contribute to future research examining other issues of defendant appearance, besides facial tattoos, using the same design. It would be interesting to introduce other defendant

variables along with facial tattoos, such as race, to examine any interactions present between the two factors.

Even though the current study did not yield significant findings, it still offers some practical implications for TMT research and jury decision making. Although defendant characteristics such as attractiveness, gender, and status, have been investigated in previous research, this research offers a new perspective of examining the effects of MS on the evaluation of a defendant with facial tattoos. The current findings and the findings of any similar future studies may contribute to the evaluation of trial proceedings and the education of jury members.

## References

- America.gov: Engaging the World. (2009). *Jury service in the United States*. Retrieved September 22, 2009, from [http://www.america.gov/st/usgenglish/2009/July/20090706162635\\_ebyessedo5.389911e-02.html](http://www.america.gov/st/usgenglish/2009/July/20090706162635_ebyessedo5.389911e-02.html).
- Armstrong, M. L., Owen, D. C., Roberts, A. E., & Koch, J. R. (2002). College students and tattoos: Influence of image, identity, family, and friends. *Journal of Psychosocial Nursing, 40*, 21-29.
- Ardnt, J., Greenberg, J., Pyszczynski, T., & Solomon, L. (1997). Subliminal exposure to death-related stimuli increases defense of the cultural worldview. *Psychological Science, 8*(5), 379-385.
- Ardnt, J., Greenberg, J., Solomon, S., Pyszczynski, T., & Simon, L. (1997). Suppression, accessibility of death-related thoughts, and cultural worldview defense: Exploring the psychodynamics of terror management. *Journal of Personality and Social Psychology, 73*(1), 5-18.
- Arndt, J., Lieberman, J.D., Cook, A., & Solomon, S. (2005). Terror management in the court room: Exploring the effects of mortality salience on legal decision making. *Psychology, Public Policy, and Law, 11*(3), 407-438.
- Arndt, J. & Vess, M. (2008). Tales from existential oceans: Terror management theory and how the awareness of our mortality affects us all. *Social and Personality Psychology Compass, 2*(2), 909-928.
- Becker, E. (1973). *The denial of death*. New York: Free Press.
- Bray, R. M., Struckman-Johnson, C., Osborne, M. D., McFarlane, J. B., & Scott, J. (1978). The

- effects of defendant status on the decisions of student and community juries. *Social Psychology*, 41(3), 256-260.
- Ceniceros, S. (1998). Tattooing, body piercing, and Russian Roulette. *The Journal of Nervous and Mental Disease*, 186(8), 503-504.
- Clary, E. G. & Shaffer, D. R. (2001). Another look at the impact of juror sentiments towards defendants on juridic decisions. *The Journal of Social Psychology*, 125(5), 637-651.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2<sup>nd</sup> ed.). Hillsdale, NJ: Erlbaum.
- Cohen, F., Solomon, S., Maxfield, M., Pyszczynski, T., & Greenberg, J. (2004). Fatal attraction: The effects of mortality salience on evaluations of charismatic, task-oriented, and relationship-oriented leaders. *Psychological Science*, 15, 846-851.
- Degelman, D. & Price, N. D. (2002). Tattoos and ratings of personal characteristics. *Psychological Reports*, 90(2), 507-514.
- Firmin, M. W., Tse, L. M., Foster, J., & Angelini, T. (2008). Christian student perceptions of body tattoos: A qualitative analysis. *Journal of Psychology and Christianity*, 27(3), 195-204.
- Forsterlee, L., Fox, G. B., Forsterlee, R., & Ho, R. (2004). The effects of a victim impact statement and gender of juror information processing in a criminal trial: Does the punishment fit the crime? *Australian Psychologist*, 39(1), 57-67.
- Greenberg, J., Pyszczynski, T., Solomon, S., Rosenblatt, A., Veeder, M., Kirkland, S., & Lyon, D. (1990). Evidence for terror management theory II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. *Journal of Personality and Social Psychology*, 58(2), 308-318.

- 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(4), 627-637.
- Greenberg, J., Solomon, S., & Pyszczynski, T. (1997). Terror management theory of self-esteem and social behavior: Empirical assessments and conceptual refinements. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 29, pp. 61-139). New York: Academic Press.
- Griffitt, W. & Jackson, T. (1973). Simulated jury decisions: The influence of jury-defendant attitude similarity-dissimilarity. *Social Behavior and Personality*, 1(1), 1-7.
- Hawkes, D., Senn, C. Y., & Thorn, C. (2004). Factors that influence attitudes towards women with tattoos. *Sex Roles*, 50(9-10), 593-604.
- Lieberman, J. D., Arndt, J., Personious, J., & Cook, A. (2001). Vicarious annihilation: The effect of mortality salience on perceptions of hate crimes. *Law and Human Behavior*, 25, 547-566.
- Lin, Y. (2002). Age, sex, education, and perception of tattoos. *Psychological Reports*, 90, 654-658.
- Nathanson, C., Paulhus, D. L., & Williams, K. M. (2006). Personality and misconduct correlates of body modification and other cultural deviance markers. *Journal of Research in Personality*, 40, 779-802.
- Pyszczynski, T., Greenberg, J., Solomon, S., Arndt, J., & Schimel, J. (2004). Why do people need self-esteem?: A theoretical and empirical review. *Psychological Bulletin*, 130, 435-468.
- Pyszczynski, T., Greenberg, J., Solomon, S., & Maxfield, M. (2006). On the unique

- psychological import of the human awareness of mortality: Theme and variations. *Psychological Inquiry*, 4, 328-356.
- Resenhoeft, A., Villa, J., & Wiseman, D. (2008). Tattoos can harm perceptions: A study and suggestions. *Journal of American College Health*, 56(5), 593-596.
- Roberts, T. A. & Ryan, S. A. (2002). Tattooing and high risk-behavior in adolescents. *Pediatrics*, 110, 1058-1063.
- Rosenberg, M. (1965). Self-esteem scale. *Society and the Adolescent Self-Image*. Princeton, New Jersey: 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(4), 681-690.
- Schimmel, J., Hayes, J., Williams, T., & Jahrig, J. (2007). Is death really the worm at the core? Converging evidence that worldview threat increases death-thought accessibility. *Journal of Personality and Social Psychology*, 92(5), 789-803.
- Schimmel, J., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., Waxmonsky, J., & Arndt, J. (1999). Support for a functional perspective on stereotypes: Evidence that mortality salience enhances stereotypic thinking and preferences. *Journal of Personality and Social Psychology*, 77(5), 905-926.
- Sigall, H. & Ostrove, N. (1975). Beautiful but dangerous: Effects of offender attractiveness and nature of the crime on juridic judgment. *Journal of Personality and Social Psychology*, 31(3), 410-414.
- Swami, V. & Furnham, A. (2007). Unattractive, promiscuous and heavy drinkers: Perceptions of

women with tattoos. *Body Image*, 4, 343-352.

Swanger, N. (2006). Visible body modification (VBM): Evidence from human resource managers and recruiters and the effects on employment. *Hospitality Management*, 25, 154-158.

US Legal Law Digest. (2009). *United States Juries*. Retrieved September 21, 2009, from <http://lawdigest.uslegal.com/courts/juries/7324/>.

Wohlrab, S. Fink, B., Kappeler, P., & Brewer, G. (2009a). Differences in personality attributions toward tattooed and nontattooed virtual human characters. *Journal of Individual Differences*, 30(1), 1-5.

Wohlrab, S., Fink, B., Kappeler, P., & Brewer G. (2009b). Perceptions of human body modification. *Personality and Individual Differences*, 46, 202-206.



## Appendix A

### Defendant Photograph



## Appendix B

## Rosenberg Self-Esteem Scale

**PERSONALITY QUESTIONNAIRE**

Please answer the questions below as honestly as you can. These questions are meant to analyze several aspects about your personality. Honest responses will be appreciated.

1. I feel that I am a person of worth, at least on an equal basis with others.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

2. I feel that I have a number of good qualities.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

3. I really feel that I am a failure.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

4. I am able to do things as well as most other people.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

5. I do not have much to be proud of.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

6. I take a positive attitude toward myself.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

7. On the whole, I am satisfied with myself.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

8. I wish I could have more respect for myself.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

9. I certainly feel useless at times.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

10. At times I think I am no good at all.

*Strongly Agree*      *Agree*      *Disagree*      *Strongly Disagree*

## Appendix C

### Rosenberg Self-Esteem Scale Scores

#### **Rosenberg Self-Esteem Scale**

Scores are calculated as follows:

- *For items 1, 2, 4, 6, and 7:*

Strongly agree = 3

Agree = 2

Disagree = 1

Strongly disagree = 0

- *For items 3, 5, 8, 9, and 10 (which are reversed in valence):*

Strongly agree = 0

Agree = 1

Disagree = 2

Strongly disagree = 3

The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem.

## Appendix D

## Mortality Salience Induction and Control Essays

## The Projective Life Attitudes Assessment

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

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

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

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.*

[illegible]

## The Projective Life Attitudes Assessment

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

1. Please briefly describe the emotions that the thought of taking an exam arouses in you.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

2. *Jot down, as specifically as you can, what you think will happen to you as you physically take an exam and once you have physically taken an exam.*

[illegible]

## Appendix E

## Death-Thought Accessibility Word Completion Task

**WORD COMPLETION TASK**

Please complete the following word fragments by filling letters in the blanks to create words. Please fill in the blanks with the first word that comes to mind. Write one letter per blank. Some words may be plural. Thank you.

1. C O \_ \_ S E

11. C H A \_ \_

2. P L A \_ \_

12. K I \_ \_ E D

3. \_ \_ O K

13. C L \_ \_ K

4. W A T \_ \_

14. T A B \_ \_

5. D E \_ \_

15. K \_ \_ G S

6. B \_ T \_ L E

16. S K \_ \_ L

7. M \_ J \_ R

17. T R \_ \_

8. P \_ \_ T U R E

18. P \_ P \_ R

9. F L \_ W \_ R

19. B \_ R \_ E D

10. G R A \_ \_

20. P O S T \_ \_



## Appendix F

### Death-Thought Questionnaire Death-Related Words

#### **Death-Thought Accessibility Neutral & Death Related Words**

1. Course/Corpse
5. Deed/Dead
10. Grape/Grave
12. Kissed/Killed
16. Skill/Skull
19. Burned/Buried

Appendix G

Court Brief

1

UNITED STATES v. ANDERSON

---

PUBLISHED  
UNITED STATES DISTRICT COURT  
FOR THE FOURTH CIRCUIT

---

UNITED STATES OF AMERICA,  
*Plaintiff,*

v.

}

No. 07-6752

ROBERT ANDERSON,  
*Defendant.*

---

Case from the United States District Court  
For the Eastern District of Virginia, at Richmond.  
Michael S. Wallace, Senior District Judge.  
(CR-80-62)

Argued: June 3, 2004

Decided: September, 20, 2004

Before CAMPBELL, KING, and MARTIN, Circuit Judges.

---

COUNSEL

**ARGUED:** Adam Mark Cooper, Assistant Federal Public Defender, Richmond, Virginia, for Defendant. Charlotte E. Horn, Assistant United States Attorney, Richmond, Virginia, for Plaintiff.

**ON BRIEF:** Thomas J. Berry, Federal Public Defender, Richmond, Virginia, for Defendant. Paul Brock, United States Attorney, Richmond, Virginia, for Plaintiff.

---

## I.

On April 22, 2002, police officers responded to a call from Josh Krupowski, the manager of a Wendy's restaurant on Bell Avenue in Colonial Heights, Virginia. Krupowski reported that a middle-aged white male with red hair and wearing a grey sweatshirt had attempted to pass a counterfeit twenty dollar bill. After the bill reacted to a counterfeit detection pen used by one of the restaurant employees, Krupowski advised the defendant that Wendy's would not accept it. The employee reported Anderson reacted with shock and irritation. Anderson then took the bill and left the restaurant but remained in the Wendy's parking lot in his car.

Three police officers responded separately to Krupowski's call, arriving at Wendy's within minutes of one another. The first to arrive, Officer Richard Jolitz, began approaching cars parked in the Wendy's parking lot and questioning people. The second to arrive, Officer Stephen Harris, went inside the restaurant and spoke to Krupowski, who verified that the counterfeit bill had been returned to the suspect and that it had a black "X" on it from the counterfeit detection pen.

By this point, a third officer, Detective William Davis, had arrived on the scene and joined Officer Jolitz in questioning people in the parking lot. Because Anderson fit the description given by the employee of a middle-aged man wearing a grey sweatshirt, Officer Jolitz patted him down for weapons. During the pat down search, the officer discovered a wad of money in one of Anderson's pockets, including an extremely large amount of suspicious looking bills. None of these bills, however, bore the incriminating black "X."

Officer Wilson arrested Anderson for possession of counterfeit bills and transported him to police headquarters.

## Appendix H

## Verdict and Sentencing Decision Questionnaire

**VERDICT & SENTENCING DECISION**

*Please answer the following questions as a member of the jury. Your honesty will be greatly appreciated.*

1. Do you think this defendant is guilty or not guilty?

Guilty

Not Guilty

2. On a scale of 1 to 9 with **1** being ***not at all guilty*** and **9** being ***very guilty***, how guilty do you think the defendant is?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9

Not At all  
Guilty

Somewhat  
Guilty

Very  
Guilty

3. Do you think this defendant is innocent?

Yes

No

4. On a scale of 1 to 9 with **1** being ***not at all innocent*** and **9** being ***very innocent***, how innocent do you think the defendant is?

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9

Not At All  
Innocent

Somewhat  
Innocent

Very  
Innocent

Please proceed to the next page.

***Please read the guidelines below before proceeding to the next set of questions.***

Counterfeiting U.S. currency is a federal offense. According to Title 18, Section 471 of the United States Code:

*“Whoever, with intent to defraud, falsely makes, forges, **counterfeits**, or alters any obligation or other security of the United States, shall be fined under this title or imprisoned not more than 20 years, or both.”*

According to Title 18, Section 472 of the United States Code:

*“Whoever, with intent to defraud, passes, utters, publishes, or sells, or attempts to pass, utter, publish, or sell, or with like intent brings into the United States or keeps in possession or conceals any falsely made, forged, **counterfeited**, or altered obligation or other security of the United States, shall be fined under this title or imprisoned not more than 20 years, or both.”*

5. If the defendant is found guilty, what fine would you recommend?

Please mark your recommended fine on the scale below.

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9

No Fine

Moderate  
Fine

Severe Fine

6. What dollar amount would you recommend for a fine? \_\_\_\_\_

7. If the defendant is found guilty, what sentence would you recommend?

Please mark your recommended sentence on the scale below.

1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7 ----- 8 ----- 9

No Sentence

Moderate  
Sentence

Severe  
Sentence

8. How years in prison would you recommend? \_\_\_\_\_

## Appendix I

## Post-Questionnaire

**POST-QUESTIONNAIRE**

*Please complete the following information about yourself.*

1. What is your age?

Younger than 18      18      19      20      21      22      23      24      Over 24

2. What is your gender?

Male                  Female

3. What is your GPA? \_\_\_\_\_

4. What is your ethnicity? (Mark all that apply.)

☐ Caucasian/European-American      ☐ Black/African-American

☐ Hispanic-American                      ☐ Pacific Islander-American

☐ Native American                          ☐ Asian-American

☐ Other

5. What is your political ideology?

Conservative                  Liberal                  Other \_\_\_\_\_

6. What is your level of education?

Undergraduate Student                  Graduate Student                  Other \_\_\_\_\_

7. What is your major? \_\_\_\_\_

8. What is your marital status?

Single      Married      Divorced      Other

9. What is your hometown and state? \_\_\_\_\_

10. On a scale of 1 to 9 with **1** being *not at all religious* and **9** being *very religious*, how would you rate your religiousness?

1	-----	2	-----	3	-----	4	-----	5	-----	6	-----	7	-----	8	-----	9
Not At All								Somewhat								Very
Religious								Religious								Religious

11. What religion would you most closely identify with, if any?

\_\_\_\_\_

12. Do you have any tattoos?

Yes      No

13. If yes, how many? \_\_\_\_\_

14. If yes, would you consider getting any more tattoos in the future?

Yes      No

15. If yes, are your tattoos visible while wearing normal everyday clothes?

Yes      No

16. Approximately how many of your close friends have at least one tattoo?

0      1 – 5      6 – 10      10 or More

17. If you do not have a tattoo, would you ever consider getting one?

Yes

Maybe

No

18. Have you ever read this court brief before?

☐ Yes, I have read this court brief before.

☐ No, I have not read this court brief before.

19. Have you ever seen a photograph of this defendant before?

☐ Yes, I have seen the defendant's photograph before.

☐ No, I have not seen the defendant's photograph before.



## Appendix J

## Informed Consent Form

**INFORMED CONSENT FOR PARTICIPATION IN PSYCHOLOGY STUDY**

**Title of Research:** Personality Characteristics Associated with Jury Decision Making

**Primary Investigator:** Katherine Knight; kmk002@marietta.edu

**What is the purpose of this research study?**

This research is investigating personality characteristics associated with jury decision making. This research study has been approved by the Marietta College Human Subjects Committee.

**How many people will take part in this study?**

Approximately 120 Marietta College students will participate in this study.

**How long will your part in this study last?**

The study should take no longer than 60 minutes. You will receive **1 hour of credit** towards your psychology class research participation requirement. Participants will be debriefed by email following conclusion of the study.

**What will happen if you take part in the study?**

During the course of this study you will be asked to complete two personality questionnaires and answer two open-ended questions assessing personality traits. You will then be asked to review a court brief with an attached photo of the defendant before providing a verdict for the defendant as well as a recommend sentence including a fine and prison sentence. You will also be asked to provide demographic information including but not limited to your age, race, education, marital status, religious information, major, and political ideology.

**What are the possible risks and/or benefits from being in this study?**

A possible risk resulting from this study is that you may feel anxiety, distress, and/or discomfort when disclosing personality traits and determining a verdict and sentence for the defendant. Benefits of participation include 1 research credit towards any psychology class requiring research participation and education about psychological research in general and this topic in particular.

**How will your privacy be protected?**

The researchers will make every effort to protect your privacy. Your name will only appear on this informed consent form and in the records for the Marietta College Participant Pool. Your responses to the questionnaires are only associated with an assigned code number and are completely anonymous. The data will only be accessible to the researcher and stored separately from consent forms. All records will be destroyed within one year and all data collected will be used for research purposes only.

**Voluntary Participation and Discontinuation of Participation**

Participation is voluntary. Refusal to participate will involve no penalty or loss of benefits or compensation to which the subject is otherwise entitled. The subject may discontinue participation at any time without penalty or loss of benefits.

**Participant's Agreement:**

I have read the information provided above. I have asked all the questions that I have at this time and I voluntarily agree to participate in this research study. I understand that I may contact *Katherine Knight* (kmk002@marietta.edu), with questions about the study, and *Sam Crowther* (sam.crowther@marietta.edu), Chair of the Human Subjects Committee, with questions about research participant rights.

---

Participant's Signature

---

Printed Name of Participant and Date

---

Participant Email Address

---

Investigator Signature

Table 1

*Number (Percentages) of Guilty and Not Guilty Verdicts by Participant Group*

Participant Group	<i>n</i>	Number of Guilty Verdicts (%)	Number of Not Guilty Verdicts (%)
MS/Facial Tattoos	33	15 (45.5)	18 (54.5)
MS/No Facial Tattoos	33	15 (45.5)	18 (54.5)
Control/Facial Tattoos	33	18 (54.5)	15 (45.5)
Control/No Facial Tattoos	33	19 (57.6)	14 (42.4)
Total	132	67 (50.8)	65 (49.2)

Table 2

*Means (Standard Deviations) for Participant Ratings of Defendant Guilt, Defendant Innocence, Recommended Fine Severity, and Recommended Sentence Severity*

Condition	Participant Ratings			
	<u>Guilt</u>	<u>Innocence</u>	<u>Fine Severity</u>	<u>Sentence Severity</u>
MS/Facial Tattoos	4.91 (1.99)	4.94 (2.01)	6.55 (1.89)	4.61 (1.89)
MS/No Facial Tattoos	5.14 (1.89)	4.55 (1.97)	5.92 (1.95)	4.61 (2.05)
Control/Facial Tattoos	5.24 (2.35)	4.52 (2.37)	5.55 (1.91)	4.33 (2.20)
Control/No Facial Tattoos	5.79 (1.96)	3.95 (1.78)	6.20 (1.48)	5.08 (2.05)

Table 3

*Multiple Analysis of Variance Statistics for Ratings of Defendant Guilt*

Source	<i>df</i>	<i>F</i>	$\eta^2$	<i>p</i>
MS Induction	1	1.89	.015	.171
Facial Tattoos	1	1.17	.009	.282
MS X Tattoos	1	.20	.002	.657

*Note.* Values analyzed using  $\alpha = .05$

Table 4

*Multiple Analysis of Variance Statistics for Ratings of Defendant Innocence*

Source	<i>df</i>	<i>F</i>	$\eta^2$	<i>p</i>
MS Induction	1	2.03	.016	.156
Facial Tattoos	1	1.80	.014	.182
MS X Tattoos	1	.055	.000	.815

*Note.* Values analyzed using  $\alpha = .05$

Table 5

*Multiple Analysis of Variance Statistics for Ratings of Recommended Fine Severity*

Source	<i>df</i>	<i>F</i>	$\eta^2$	<i>p</i>
MS Induction	1	1.33	.008	.252
Facial Tattoos	1	.00	.000	.962
MS X Tattoos	1	4.06	.031	.046

*Note. Values analyzed using  $\alpha = .05$*

Table 6

*Multiple Analysis of Variance Statistics for Recommended Sentence Severity*

Source	<i>df</i>	<i>F</i>	$\eta^2$	<i>p</i>
MS Induction	1	.08	.001	.783
Facial Tattoos	1	1.08	.008	.300
MS X Tattoos	1	1.08	.008	.300

*Note.* Values analyzed using  $\alpha = .05$



## Figure Captions

*Figure 1.* A graph of the lack of insignificant manipulation check of MS induction, using the measure of death-thought accessibility.

*Figure 2.* A graph of the insignificant difference between groups for guilty and not guilty verdicts.

*Figure 3.* A graph of the lack of a main effect of MS induction or tattoos, using the dependent variable of rating of defendant guilt.

*Figure 4.* A graph of the lack of a main effect of MS induction or facial tattoos, using the dependent variable of ratings of defendant innocence.

*Figure 5.* A graph of the lack of a main effect of MS induction or facial tattoos, using the dependent variable of ratings of recommended fine severity.

*Figure 6.* A graph of the lack of a main effect of MS induction or facial tattoos, using the dependent variable of ratings of recommended sentence severity.

*Figure 7.* A graph of the lack of interaction between MS induction and facial tattoos, using the dependant variable ratings of defendant guilt.

*Figure 8.* A graph of the lack of interaction between MS induction and facial tattoos, using the dependant variable ratings of defendant innocence.

*Figure 9.* A graph of the lack of interaction between MS induction and facial tattoos, using the dependant variable of ratings of recommend sentence severity.

*Figure 10.* A graph of interaction between MS induction and facial tattoos, using the dependant variable of ratings of recommended fine severity.





















