

**EXPERIMENTAL TESTS OF TERROR MANAGEMENT AND PSYCHOLOGICAL  
RESPONSES TO TV NEWS OF IMMIGRANT CRIMINALS: IMPLICATIONS FOR  
HOSTILITY, RISK VULNERABILITY, AND ISSUE JUDGMENT**

by

PO-LIN PAN

A DISSERTATION

Submitted in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy in the  
College of Communication and Information Sciences in  
the Graduate School of  
The University of Alabama

Tuscaloosa, Alabama  
2009



## **ABSTRACT**

The purpose of this study was to explore social and psychological effects of mortality salience in TV news and social group difference between news viewers and news protagonists. Using terror management theory and social identity theory as theoretical frameworks, the study assumed that news viewers would be significantly influenced by mortality primes in TV news as well as the social group to which the criminals belonged in TV news. The assumptions in this study were investigated by two experiments: One designed to examine the social influences of TV news on news viewers' mortality thought, hostility toward the criminals, risk vulnerability and judgment of the immigration issue, and the other one devised to explore viewer's moment-to-moment responses, namely emotional responses, news evaluations, and crime perceptions.

Experiment 1 demonstrated that mortality primes in TV news activated (1) viewers' mortality thoughts, (2) increasingly hostile attitudes toward the criminals, and (3) more negative judgments on the immigration issue. There is evidence that terror management theory can be used to clarify the social influences of mortality salience on viewers. Additionally, Experiment 1 found the social influences of social group difference on viewers' judgment of the immigration issue, but not on their hostility and risk vulnerability. That is, viewers may hold negative attitudes toward the immigration issue because out-group criminals in the coverage were shaped as a negative prime in viewers, which activated viewers' negative perspectives on the immigration issue.

Experiment 2 indicated that (1) mortality primes in TV news significantly led viewers to more negative emotional responses, more newsworthy evaluations of news stories, and more severe perceptions of the criminal acts in the coverage, (2) the coverage of in-group criminals

significantly activated viewers to more severe perceptions of the criminal acts than that of out-group criminals, (3) the interactions between mortality salience and social group difference significantly affected viewers' emotional responses, news evaluations, and crime perceptions, and (4) the interactions between self-esteem and mortality primes partially generated influences on viewers' emotional responses. Therefore, mortality effects in TV news were more powerful than social group difference effects. News viewers may purposely process some news information closely related to themselves, but not react to the stories based upon the social group of the protagonists in TV news.

## **DEDICATION**

To My Dad,

Thanks for sharing what you have with me. I am trying to be the most charitable person of the family because of you.

To My Mom,

Thanks for your unconditional love and asking me to explore humbleness when I access power. I am accomplishing your goal of being a good teacher.

*(獻給我的父親和母親)*

## ACKNOWLEDGMENTS

Since I began my doctoral studies, I have attempted to think what I could write in the acknowledgements of my dissertation. Those who have ever provided helps with my studies never stop their support in my doctoral life. I am sincerely thankful to have them all as my friends, mentors, and colleagues. Without their encouragement, I could not complete my doctoral degree. If I accidentally ignore anyone who has ever helped me achieve this goal in the acknowledgments, please accept my deepest apologies.

First of all, I want to thank my program advisor and dissertation chair, Dr. Shuhua Zhou. He has been the most significant part of my academic career. Because of him, I strive to become a good educator who is always prepared to help students. Because of him, I am enthusiastic to contribute to knowledge. Because of him, I can be led to a right way to the completion of my dissertation. His numerous Friday afternoons consisted of my questions, studies, and dissertation. Any success I have experienced in the past four years is due to him.

Additionally, I want to thank my dissertation committee members: Drs. James Leeper, Gary Copeland, Yorgo Pasadeos, and William Evans. Since my first year of doctoral studies, Dr. Leeper has been my statistical advisor. He is always patient to answer my statistical questions. The data analysis in my dissertation could not be correctly executed without his advice and guidance. Dr. Copeland has served as a mentor of my doctoral life. His intelligence and sense of humor have encouraged me to develop an optimistic worldview, and his liberal perspective has also inspired me as an open-minded scholar. Dr. Pasadeos has helped me realize the value of social scientific research. I could not be good at a variety of quantitative research methodologies without his helps. Dr. Evans has provided many research participants since I collected data for

my dissertation as well as other studies. More than one hundred research participants in my dissertation were recruited by his research website.

My special thanks goes to my sisters in Taiwan. Shau-Chien and Den-Den have taken care of my parents when I have accomplished my academic goal for six years in the States. Their senses of humor, critical values, and friendships have activated me to appreciate female leaderships. Without their unconditional support, I could not entirely focus on my graduate studies. I am the luckiest person to be their young brother. My special thanks also goes to my parents. Their love and financial support were never limited during my graduate studies. Their patience and belief always led me to confidently complete all my degrees.

Finally, my deepest gratitude is reserved for my bright wife, Juan Meng. Her critics and insights regarding mass communication research were remarkable. Her endless love, sense of humor, and encouragement during the long hours required to write the dissertation kept me motivated. My willingness to develop better personal traits is due to her. Any success in my academic career is partly her achievement.

## LIST OF ABBREVIATIONS AND SYMBOLS

$\alpha$	Alpha: Cronbach's index of internal consistency
ANOVA	Analysis of variance
$t$	Computed value of $t$ test
$df$	Degrees of Freedom: Number of values free to vary after certain restrictions have been placed on the data
=	Equal to
$\eta^2$	Eta square; Measure of strength of relationship
$F$	Fisher's $F$ ratio: A ration of two variances
GLM	General linear model
<	Less than
MSE	Mean square error
$M$	Mean: The sum of a set of measurements divided by the number of measurements in the set
$N$	Number of participants in a given statistical analysis
$p$	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
$SD$	Standard Deviation

## CONTENTS

ABSTRACT .....	ii
DEDICATION.....	iv
ACKNOWLEDGMENTS.....	v
LIST OF ABBREVIATIONS AND SYMBOLS .....	vii
LIST OF TABLES.....	xi
LIST OF FIGURES.....	xii
CHAPTER ONE: INTRODUCTION.....	1
CHAPTER TWO: REVIEW OF LITERATURE.....	4
Social Identity Theory.....	4
Terror Management Theory.....	10
Responses to Negative News.....	16
CHAPTER THREE: CURRENT STUDY.....	24
Social Influences on News Viewers.....	24
News Information Processing.....	29
Self-esteem and Social Distance.....	32
Summary of Current Study.....	35
CHAPTER FOUR: PILOT STUDY.....	37
Overview.....	37
Method.....	37
Results.....	41
Table 4.1.....	42

CHAPTER FIVE: EXPERIMENT 1.....45

    Overview.....45

    Method.....45

    Results.....50

    Table 5.1.....52

    Figure 5.1.....53

    Table 5.2.....54

    Table 5.3.....57

    Discussion.....57

CHAPTER SIX: EXPERIMENT 2.....62

    Overview.....62

    Method.....62

    Results.....66

    Figure 6.1.....67

    Figure 6.2.....67

    Table 6.1.....69

    Figure 6.3.....70

    Figure 6.4.....70

    Table 6.2.....72

    Figure 6.5.....74

    Figure 6.6.....74

    Table 6.3.....76

    Discussion.....78

CHAPTER SEVEN: CONCLUSIONS.....83

General Discussion.....83

Future Research.....87

REFERENCES.....89

APPENDIX A.....97

APPENDIX B.....103

APPENDIX C.....105

APPENDIX D.....107

APPENDIX E.....111

## LIST OF TABLES

Table 4.1 Selection of News Stories as Experimental Stimuli.....	42
Table 5.1 Multiple Comparisons of Mortality Thoughts.....	52
Table 5.2 Multiple Comparisons of Hostility toward Criminals.....	54
Table 5.3 Multiple Comparisons of Judgment of the Immigration Issue.....	57
Table 6.1 Multiple Comparisons of Emotional Responses.....	69
Table 6.2 Multiple Comparisons of Evaluations of News Stories.....	72
Table 6.3 Multiple Comparisons of Perceptions of Criminal Acts.....	76

## LIST OF FIGURES

Figure 5.1 Interaction Effects on Hostility toward Criminals.....	53
Figure 6.1 Interaction Effects on Emotional Responses.....	67
Figure 6.2 Variance in Emotional Responses.....	67
Figure 6.3 Interaction Effects on Evaluations of News Stories.....	70
Figure 6.4 Variance in Evaluations of News Stories.....	70
Figure 6.5 Interaction Effects on Perceptions of Criminal Acts.....	74
Figure 6.6 Variance in Perceptions of Criminal Acts in Coverage.....	74

## **CHAPTER ONE**

### **INTRODUCTION**

Immigration in the United States has been one of the hottest political topics in the past two decades. While politicians are working to find a solution for immigration problems, many undocumented aliens and illegal workers are attempting to cross the U.S.—Mexico border on foot to begin their American dreams. As a result, these illegal immigrants would cause a series of social turbulences in the United States. Some reports have indicated that many local governments were shortchanged millions of dollars a year in costs related to prosecuting and jailing illegal immigrants (e.g., Salant et al., 2008). Moreover, other reports have estimated that more than 595,000 immigrants, who either have criminal records or have failed to abide by deportation orders, are staying in the United States (e.g., Gorman & Blankstein, 2007). Regarding the portrayals of illegal immigrants in mass media, these immigrants in the United States have been stereotyped into a dangerous group because news media heavily describe them as “threats” to Americans. For instance, Mastro and Greenberg’s (2000) content analytic research indicates that Latino immigrants are frequently depicted as criminals and sexual aggressors in mass media. Similarly, Dixon and Linz (2000) also reveal that Latino immigrant are significantly more likely to be portrayed as lawbreakers than as defenders, whereas Whites are significantly more likely to be portrayed as defenders than as lawbreakers on television news.

When illegal immigrants are negatively described as threats in news media, these portrayals may cause a variety of psychological responses and subsequent stereotypes in news viewers. These processes can be explained within two social psychological frameworks—social identity theory and terror management theory.

On the basis of social identity theory, people may automatically categorize themselves as in-group members and others as out-group members in terms of gender, race, and nationality when they are exposed to a certain cue that reminds them of their group membership. After they perceive differences between the in-group and the out-group, they will exhibit all kinds of group behaviors within the in-group and discrimination against the out-group in order to achieve self-esteem and self-enhancement, which may generate stereotypical thoughts and behaviors (Abram & Hogg, 1988; Tajfel & Turner, 1986). In this view, the news portrayals of immigrant threats provide a cue to news viewers, causing them to identify social group difference between news viewers and depicted immigrant criminals in news coverage (e.g., racial or nationality difference). Consequently, news viewers with exposure to these portrayals may have different cognitions, attitudes, and behaviors from those without exposure to these portrayals.

Regarding terror management theory, people are aware of their own existence and the possibility that their existence may end, when they are exposed to mortality primes. This awareness of mortality creates a potential for managing terror in order to stay alive. Specifically, terror management theorists suggest that reminding people of death causes them to negatively evaluate those who threaten their beliefs and to be hostile toward those who violate their cultural worldview (Greenberg et al., 1996; McGregor et al., 1998). In this view, when the news portrayals of immigrant threats play a role of mortality reminder that makes news viewers consider mortality in their thoughts, viewers will attempt to manage their sense of terror. Consequently, viewers' psychological reactions to immigrant threats are activated, which shapes their attitudes toward immigrants and their judgments of the immigration issue.

The current study approaches news viewers' psychological reactions to immigrant threats on the basis of social identity theory and terror management theory. By manipulating the news coverage of immigrant criminals with mortality salience, the first experiment in this study strives

to examine the social influences of immigrant threats in news coverage on news viewers. Specifically, it examines whether the news portrayals of immigrant threats can influence news viewers' connection to mortality thoughts, their hostility toward immigrant criminals, their vulnerability to risk, and their subsequent judgments of the immigration issue. The second experiment in this study attempts to examine news viewers' information processing of immigrant threats in news coverage. Moreover, the second experiment uses viewer's self-esteem and social distance from immigrants as two moderators to examine whether these two personality traits can generate influences on information-processing outcomes. Simply put, the second experiment looks at how news viewers emotionally react to immigrant criminals in news coverage, how they evaluate news stories of immigrant criminals, and how they perceive criminal acts of immigrants in news stories. In summary, the current study is designed to offer insight into news media's influences on viewers' perceptions of immigration issues and perceived threats stemming from these issues.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

#### **Social Identity Theory**

It is a social psychological axiom that people want to feel more positive about who they are and about the groups to which they belong. Similarly, people belong to social groups whose collective purpose is to provide social distinction by contrasting themselves to members of out-groups (Hogg, 2007). This drive for self-esteem and social distinction provides a foundation of Social Identity Theory (SIT) in developing an important link between inter-group discrimination and self-esteem enhancement (Tajfel, Billings, Bundy, & Flament, 1971; Tajfel & Turner, 1986). According to SIT, people show group behaviors within in-groups and discrimination against out-groups as part of social identity process, with the aim to achieve positive self-esteem and self-enhancement (Abrams & Hogg, 1988; Tajfel & Turner, 1986).

Once people identify themselves as group members, their group behaviors through categorization arise. The group members are motivated to obtain or maintain positive social identity by engaging in inter-group comparisons in order to create favorable attitudes toward and evaluations of their group (Tajfel & Turner, 1986). In addition, the in-group may influence the group members by minimizing normative in-group differences and maximizing norm differences between the in-group and the out-group. According to Hogg (1995), the process of accentuating the boundaries between the in-group and the out-group enhances self-esteem, particularly under conditions demanding clarity of the in-group and the out-group boundaries, such as times of conflict.

#### ***Self-categorization Process***

The device of social identity also involves the process of self-categorization because social identity produces effects associated with self-categorization, such as ethnocentrism, in-group favoritism, inter-group differentiation, conformability to in-group norms, in-group attraction, and perception of self, out-groupers, and fellow in-groupers in terms of relevant group stereotypes (Hogg, 1995). According to Turner, Hogg et al. (1987), social identity is activated when people categorize self and others into a certain social group and establish a sense of “us” versus “them.” On the basis of categorization, the process of depersonalizing the self operates in tandem with people defining themselves as members of the in-group, but not as unique individuals. This process leads people to perceive more similarities between the self and in-group members and to find the self more different from out-group members.

Mostly, self-categorization depends on a given social context that provides some situational cue reminding a group member of his or her group membership. However, some social categories are highly salient (e.g., race and gender) and can be automatically activated with a subtle cue because of their high accessibility and frequent activation (Banaji & Hardin, 1996; Branscombe & Ellemers, 1998; Devine, 1989). The high accessibility of social categories is termed as “psychological salience,” while the less accessibility of social categories is depicted as “stimulus salience” that functions as a causal antecedent of psychological salience (Oakes, 1987). For instance, race is one of the most accessible and salient social categories for most members of minority groups. Phinney and Alipuria’s (1990) study investigates the ethnic identity held by college students from four different ethnic backgrounds (e.g., White, Black, Latino and Asian) and finds that ethnic minority students considered ethnic identity substantially more important than did White students. In this view, ethnic identity is considered least important by most White students.

Additionally, social distance from a certain ethnic group is an important concept in the examination of inter-group relations because social distance has a significant influence on people's self-categorization processes (Suzuki, 1998). According to Bogard (1959), social distance is the degree of understanding a certain relationship between person and person, between person and group, and between groups. Moreover, Williams (1964) proposes that social distance is feelings of unwillingness among in-group members to accept or approve a degree of intimacy in interaction with out-group members, while Marger (1994) defines social distance as an indication of how various ethnic groups are accepted in society. In this vein, when people categorize themselves and others into different social groups, social distance dominates people's cognitive process of self-categorization. Specifically, as people have more social distance from out-group members, they identify themselves as more different from those members. In contrast, people with less social distance from out-group members identify more similarities between themselves and out-group members.

### ***Social Comparison for Self-enhancement***

The categorization process is an operation for a self-enhancement or self-esteem motive. Drawing on social comparison theory (Festinger, 1954), it is assumed that through comparison between themselves and others, people have a need to obtain a relatively positive evaluation of their attitudes and behaviors and thus of themselves. In the inter-group contexts, people attempt to evaluate the groups to which they and others belong for self-enhancement. When social identity is the salient basis of self-evaluation, the need for evaluation manifests itself as a need to maintain or secure a relatively positive social identity for the in-group (Hogg, 1995; Tajfel & Turner, 1987). Thus, it is fair to claim that the outcome of social comparisons largely determines people's social identity and self-esteem.

Additionally, social comparison takes place with groups that are similar to one's own group, and refers to dimensions that compose the group. Both the other group's similarities and dimensions define the relevance of the inter-group comparison (Trepte, 2007). Hinkle and Brown (1990) conclude three premises for social comparison. First, individuals must have internalized their group membership as a part of their self-concept. That is, they must be identified with their in-group. Second, the situation must allow social comparison. Third, the out-group must be relevant in terms of similarity and proximity.

### ***Media Research on Social Identity***

The bulk of studies have focused on individuals using media to serve their social identity needs (e.g., Abrams, 2005; Harwood, 1997, 1999a, 1999b), but few media studies have used SIT assumptions to investigate the influence of exposure to media portrayals of the out-group or in-group on viewers' perceptions and judgments. Regarding media effects scholarships on a social identity paradigm, some studies have considered racial representation in mass media as an important social identity catalyst. For instance, Fujioka's (2005) study uses SIT as a theoretical framework to look at Black viewers' responses to Black images in mass media. By investigating their perceived public perception of the in-group, the study shows that as Black images in the media are more negative, Black viewers judge the images as less accurate. The perceived negative Black images also contribute to Black viewers' assessment about how their in-group is perceived and placed in an American hierarchy by other ethnic groups. Furthermore, Fujioka (2005) finds that the perceived lower evaluation of Blacks by other ethnic groups encourages Black respondents to endorse affirmative action. That is, the negative images of the in-group serves as a threat to African American social identity, and this threat can exert an influence on their stronger group assertion.

Additional study conducted by Mastro (2003) employs SIT as a mechanism to look at the relationship between exposures to stereotypical content in electronic media and subsequent judgments. The association between White viewers' evaluations of the in-group (White) and out-group (Latino) as a result of varying stereotypical media representations is also examined. The study hypothesizes that White viewers would engage in the differentiation between themselves and the out-group in favor of their in-group, and the increasing level of racial identification would be related to increased in-group favoritism, which is expected to enhance self-esteem. Mastro (2003) finds that White viewers with exposures to negative media characterizations of criminality are less likely to allocate justification for the behavior to equivalent portrayals of Latinos than to Whites, and that self-esteem is facilitated via this comparative process.

Different from Mastro's (2003) study, Coover (2001) assesses the inter-group relationships through evaluating the influence of racial identity on White viewers' feelings, perceptions, and opinions. The study experimentally reveals racial biases that originate from Gaertner and Dovidio's (1986) concept of aversive racism, whereby the appearance of racism is avoided by an overcompensating pro-Black bias. As indicated in the results, after White participants viewed versions of the program in which the racial out-group was represented, they liked the out-group characters more than did other White participants who viewed a version in which only the in-group characters were present.

Coover's (2001) study reflects White viewers' self-presentation efforts to avoid the appearance of racial prejudice and stereotyping and explores the extent to which certain aspects of racial representation are instrumental in facilitating or attenuating out-group affiliation for White viewers. Moreover, White viewers perceive a great difference between a Black and a White character who disagree with each other, but a great similarity between a Black and a White character who agree with one another (Coover, 2001). Therefore, White viewers are pleurably

engaged by portrayals of the inter-racial harmony, especially when they are confronted with an out-group member who shared their values and beliefs.

Applying SIT into an aversive racism paradigm, Mastro, Behm-Morawitz, and Kopacz (2008) recently conducted a study to investigate the influence of exposure to television depictions of Latino on White viewers' judgments. The experimental study finds that among three media content conditions (e.g., stereotypic, ambiguous, and counterstereotypic), only in the ambiguous media condition do increases in White viewers' racial identification impact assessments of character qualification—with evaluation of the Latino character decreasing as racial identification rises. Moreover, as White viewers' level of racial identification increases in the ambiguous media context, more favorable estimation of educational attainment (i.e., stereotype adherence) are reported when exposed to the White character. However, when exposed to the Latino character, increases in White viewers' racial identification are associated with decreases in perception of the character's academic success. Also under the ambiguous media condition, as White viewers' racial identification increases, their higher level of self-esteem are reported when exposed to the Latino character. That is, the inter-group comparisons favoring the in-group may protect or enhance self-esteem by way of downward social comparisons (Mastro, Behm-Morawitz, & Kopacz, 2008).

The current study applies social identity theory as a theoretical framework to examine whether news viewers categorize their social group as different from the one to which immigrant criminals belong. It assumes that the differences between in-groupers (news viewers) and out-groupers (immigrant criminals in news stories) may affect news viewers' processing of news stories. Moreover, it uses self-esteem and social distance as moderators to investigate whether these two personality traits dominate news viewers' information-processing outlets. The study hypothesizes that the differences between the two sides may produce effects on news viewers'

subsequent stereotypical thoughts and behaviors. Specifically, it examines whether the differences between social groups may activate news viewers' cognition, affect their attitudes toward immigrants, and shape their subsequent judgments of the immigration issue.

### **Terror Management Theory**

Terror Management Theory (TMT) begins with an assumption that humans are similar to other animals in that all share a common evolutionary heritage, which includes a strong biological and psychological proclivity for self-preservation or continued existence (Greenberg, Simon et al., 1992; McGregor et al., 1998). However, humans are different from other animals. They have unique cognitive abilities that make them aware of their own existence and the possibility that their existence may end when they die. Because of the drive to stay alive, the awareness of mortality creates the potential for paralyzing terror. According to TMT, the potential for terror is primarily managed by a cultural anxiety-buffering conception that consists of a personalized version of a cultural worldview and self-esteem. Terror management theorists have defined the cultural worldview as a sense of permanence, order, and meaning; a sense of standards that enable individuals to attain a sense of personal value; and a promise of either literal or symbolic immortality. Self-esteem is the belief that one is living up to the standards and values prescribed by the cultural worldview (Greenberg, Pyszczynski, & Solomon, 1986; Greenberg, Pyszczynski et al., 1990; McGregor et al., 1998). Thus, it is fair to claim that cultural worldview and self-esteem are two important dimensions of the management of existential terror, and various social behaviors are oriented toward their maintenance and defense based upon such a cultural anxiety-buffering function.

#### ***Mortality Effects on Cultural Worldview***

According to TMT, an individual's connection with the cultural worldview is motivated by the potential for terror that is endangered by one's own mortality (Greenberg, Pyszczynski, &

Solomon, 1986). In this vein, the theory hypothesizes that reminding participants of their own death provokes increased commitment to the worldview. This position has been termed as the first mortality salience hypothesis and received considerable support from a large number of studies.

According to Arndt, Greenberg, and Cook (2002), across at least seven countries, more than 90 studies have demonstrated that a reminder to participants of their mortality increases such responses as positive evaluation of those who validate the participants' belief system and negative evaluation of those who threaten it (e.g., Rosenblatt et al., 1989), perceived compromise for the participants' beliefs (e.g., Pyszczynski et al., 1996), reluctance to violate cultural norms (e.g., Greenberg et al., 1992), stereotypic thinking and preferences (e.g., Schimel et al., 1999), and aggression against those who violate the cultural worldview (e.g., McGregor et al., 1998). Additionally, these effects occurred in response to several operationalizations to reinforce death-related thought (e.g., fear of death scales, fatal accident footage, proximity to a funeral home and subliminal death primes) and relative to different control conditions (e.g., failure, test anxiety and social exclusion).

Accordingly, the current study applies the cultural worldview hypothesis to explore whether news viewers have more hostile attitudes toward immigrants after their exposure to news stories with mortality primes. Moreover, it also assumes that mortality salience in news stories may cause news viewers to perceive that their own safety is severely threatened. Specifically, when mortality salience is heightened in news stories, news viewers may be more hostile to immigrants and more vulnerable to the perceived threats.

### ***Mortality Effects on Self-esteem***

The second mortality salience hypothesis also derived from TMT posits that self-esteem can serve an anxiety-buffering function when exposed to mortality stimuli. Branden (1969)

defined self-esteem as the experience of being competent to deal with life challenges and being worthy of happiness. In his definition, self-esteem is a basic human need. Self-esteem is formed and developed based on an individual's experience and background. It provides people an essential contribution of the life process, which leads them to a normal and healthy self-development. As stated by Arndt and Greenberg (1999), the sense of symbolic immortality is rooted in self-esteem, and self-esteem would have a significant relationship with such an accepted worldview. Specifically, while comparing participants with low self-esteem, those with high self-esteem may more successfully fulfill shared cultural standards of meaning and value. In this vein, high self-esteem establishes the individual in a meaningful cultural drama that will continue after his or her own death and provide a sense of symbolic immortality that offsets the threatening nature of death (Gailliot, Schmeichel, & Maner, 2007; Pyszczynski, Greenberg et al., 2004).

The bulk of studies have supported the idea that self-esteem reduces concerns about death. These studies demonstrate that when self-esteem is experimentally increased, participants exposed to mortality-related stimulus exhibit less anxiety, psychological arousal, preoccupation with death, and anxiety-related defensiveness (e.g., Greenberg, Pyszczynski et al., 1993; Greenberg, Solomon et al. 1992). For instance, some evidence indicates that participants seem to increase their striving for self-esteem after thinking about death (e.g., Arndt, Schmeichel, & Goldenberg, 2003; Routledge, Arndt, & Goldenberg, 2004). In other words, self-esteem is able to help protect against mortal concern. Additional evidence shows that when self-esteem is dispositionally high, mortality salience effects increase defensiveness among participants with low self-esteem but not among those with high self-esteem (Harmon-Jones et al., 1997).

On the basis of a significant association between self-esteem and mortality salience effects, the current study defines self-esteem as an important moderator in influencing news viewers' information-processing outlets. In this vein, the study assumes that news viewers with lower self-

esteem may be more affected by news stories, especially when the stories of immigrant criminals provide a mortality prime or remind news viewers to approach death thoughts. In contrast, news viewers with higher self-esteem may be less emotionally touched by news stories with mortality salience.

### ***Terror Management in Communication Research***

TMT is a young theory in social psychological scholarships, and little communication research has used TMT as its theoretical framework in the past decade. The first research conducted by Goldenberg, Pyszczynski et al. (1999) assessed the terror management explanation of the appeal of tragedy in novels. On the basis of TMT, they hypothesized that reminding participants of their mortality would increase liking for and emotional response to a tragic excerpt from a novel. In an experimental setting, participants were randomly assigned in the mortality salience condition and the non-mortality salience condition (by asking open-ended questions about either their own death or a neutral topic), and they then read one tragic excerpt and one non-tragic excerpt from Ernest Hemingway novels. The results indicated that participants in the mortality salience condition responded more emotionally to and were more touched by the tragic excerpt. Additionally, they were less enjoyable in the non-tragic excerpt and less concerned for the female character in the non-tragic excerpt than were their counterparts in the control condition (Goldenberg, Pyszczynski et al., 1999).

Additional research by Shehryar and Hunt (2005) uses a terror management perspective to look at the persuasive effects of fear appeals in anti-drinking-and-driving advertisements. On the basis of differences between the mortality consequence and non-mortality consequence, their study provides an explanation for maladaptive responses to fear appeals. The study shows that participants who are highly committed to a worldview of drinking alcohol (e.g., deriving self-esteem from drinking alcohol) reject socially acceptable attitudes toward drinking and driving

when the message that include such attitudes is accompanied by a fear appeal that contains death as a consequence, but not when fear appeals contain the fear of arrest or serious injury (Shehryar & Hunt, 2005). Thus, fear appeals that cause mortality salience in advertisements cannot effectively persuade people with higher commitment to drinking to reject drinking-and-driving behaviors, while fear appeals that play as mortality reminders in advertisements may significantly affect people with lower commitment to drinking to avoid drinking-and-driving behaviors.

Using TMT as a theoretical framework, Yum and Schench-Hamlin (2005) develop a study to investigate people's immediate and delayed reactions to the terrorist attacks of 9/11. On account of people's reactions to 9/11 as the threat to their own existence, Yum and Schench-Hamlin predict that people have a primary need to eliminate or reduce existential terror in responses to such horrific events. The data were collected two weeks after 9/11 from young adults about their proximal and distal reactions to 9/11 as well as their reasons or motives for those reactions. The results show that most participants' proximal reactions to 9/11 were shock and disbelief, whereas their distal reactions to 9/11 included performing altruistic or prosocial behavior (e.g., donation), searching for meaning or value in life (e.g., prayer), seeking or sharing information (e.g., media use), spending time in talking to other (e.g., interpersonal interaction), and making bigoted remarks about Arab Muslims (e.g., hate speech). Moreover, the study also provides support for a dual-process model of terror management. That is, concurring with TMT, the person's initial conscious awareness of mortality activates immediately psychological defense; and following some delay, as his or her mortality salience become less explicit but still accessible to the person, the implicit awareness of mortality triggers the distal terror management device (Greenberg et al., 2000; Pyszczynski, Greenberg, & Solomon, 1999).

Also, in the context of 9/11, Landau et al. (2004) examine whether a dual process model of the cognitive processes can be explained in the context of terror management. According to

Pyszczynski et al. (1999), a dual process model of the cognitive processes in mortality salience effects posits that conscious contemplation of mortality first arouses direct threat-focused proximal defenses which involve the suppression of death-related thoughts or which push the problem of death into the distant future by denying one's vulnerability to various risk factors. In Landau et al.'s (2004) study, by using the 9/11 event as a mortality reminder to look at whether mortality salience affects people's attitudes toward politicians, it hypothesizes that heightened concerns about mortality intensify the appeal of charismatic leaders. The study looks at how people's thoughts about mortality from the 9/11 terrorist attacks influence their attitudes toward current U.S. president George W. Bush. As a result, reminding people of their own mortality increases support for Bush's counterterrorism discourse with regard to 9/11. Moreover, mortality salience activated from 9/11 leads people to become more favorable toward Bush and voting for him during his campaigning for his second term in 2004, but less favorable toward Bush's electoral opponent—John Kerry and voting for him (Landau et al., 2004). In this view, the role of terror management processes is essential in influencing people's perspectives on political figures and their political decision making. More importantly, it is evident that a dual process model can be used to explain that mortality salience generates significant influences on social cognitions and behaviors.

The current study also approaches a dual process model of the cognitive processes in mortality salience effects to examine the relationship between mortality salience and judgment of the immigration issue. That is, while the cultural worldview hypothesis can be used to explain viewers' hostile attitudes toward immigrants and their vulnerability to risk, the dual process model of mortality salience may provide an explanation that the news portrayals of immigrant criminals with mortality salience may dominate news viewers' judgments of the immigration issue.

Additionally, past studies on terror management have provoked mortality salience in their research participants through both conscious and subconscious manipulations. Some studies evoked mortality salience by asking participants to write a short essay about their own death (e.g., Rosenblatt et al., 1989), while others measured the death thoughts of participants who had been exposed to mortality-related stimuli, such as walking past a funeral home and reminding of the 9/11 terrorist attacks (e.g., Pyszczynski et al., 1996; Yum & Schenck-Hamlin 2005). Both approaches evoked mortality salience in participants. That is, after writing a short essay about death, walking past a funeral home, or reminding of terrorism attacks, people's mortality thoughts were activated efficiently. On the basis of past studies that have evoked mortality thoughts in a different form of death reminders, the current study supposes that immigrant threats in TV news that cause death-related consequences in negative news also evoke mortality thoughts in news viewers. In this vein, the study uses negative news stories with mortality salience as news stimuli to examine viewers' psychological responses and their subsequent cognitions and behaviors. The following literature is to review the influences of negative news on news viewers.

### **Responses to Negative News**

News stories in all media are typically fairly short, self-contained pieces. Past studies in news perception have followed two theoretical approaches: the short-term cognitive approach and the cultivation approach. The short-term cognitive approach is examined in laboratory-type settings to measure people's memory for news materials, and the cultivation approach is investigated to look at people's media use and their understanding of news stories (Giles, 2003). In the study of learning from the news, Schneider and Laurion (1993) find that people's assessment of what they had remembered from news was fairly accurate. Regarding news components, while comparing people's memory for visual themes and verbal themes in news, Graber's (1990) study indicates that memory for visual themes are better stored than memory for

verbal themes and overall memory is better if there is a close fit between the visual and the audio component. Moreover, when the relationship between the visual and the audio component is ambiguous or when the visual and the audio portions evoke previous experience from the viewer's memory differently, comprehension and memory for the new information suffers (Grimes, 1990; 1991; Mundorf, Drew, Zillmann, & Weaver, 1990).

### *Learning from Negative News*

In terms of news content, people's memory for news with negative images is also better than their memory for news without negative images. The bulk of studies indicate that the human brain has an automatic attention response to negatively compelling stimuli, and this point is supported in particular reference to television news (e.g., Grabe & Kamhawi, 2006; Grabe, Lang, Zhao, 2003; Newhagen & Reeves, 1992; Zhou, 2004). From a biological perspective, negatively compelling images can efficiently elicit emotional arousal in viewers and cause them to immediately face dangers (Newell, 1990). From a cognitive psychological perspective, the emotional arousal elicited by those negatively compelling stimulus can shape cognition without a viewer's awareness of information processing (Lewicki, 1986). For instance, Newhagen and Reeves' (1992) study shows that negatively compelling images in television news influence how viewers process and retain news messages, causing viewers to have better memory of news after watching negative images in television news.

Additionally, Newhagen (1998) defines three primary emotional images—anger, fear, and disgust—in negative news and investigates the effects of emotional images on memory and approach-avoidance (or adaptive mechanism). The study indicates that anger-evoking images in negative news receive the highest approach scores, followed by fear-evoking images. Disgust-evoking images in negative news receive the lowest score, which implies the highest avoidance rating. Moreover, there is a strong relationship between approach-avoidance response and

memory for news content. Accordingly, viewers have the best memory for news from anger-evoking images and the worst memory for news from disgust-evoking images in television news.

Regarding visual effects in negative news, an experimental study by Zhou (2005) investigates the effects of visually arousing stories on viewers' cognitive assessment of negative news. The study indicates that visually arousing stories elicit more emotion-laden thoughts (e.g., happiness, pleasure, joy, surprise, anger, fear, anxiety, and disgust) in viewers than nonarousing stories. Additionally, viewers list significantly more internally originated thoughts (e.g., some thoughts unrelated to the stimuli) for visually arousing messages than nonarousing messages in negative news, but they do not list more modified or external thoughts (e.g., some thoughts that elaborate or correlate to the stimuli) for visually arousing stories. In this vein, the study contradicts the associative spread theory of emotion, which posits that affective components in the stimuli imbue the processing of a message.

### ***Consequences of Exposure to Negative News***

Not only do negative news stories generate different influences on viewers' emotional responses and their information processing abilities, but they also bring out many negative consequences in news viewers. Most news stories that cause viewers' negative responses include tragic and disturbing events. The bulk of studies investigate people's interests in exposure to negative news and their emotional responses to mediated tragedies and disasters, including the assassination of President Kennedy (e.g., Murphy & Moriarty, 1976; Sigel, 1965), the explosion of the Space Shuttle Challenger (e.g., Kubey & Peluso, 1990; Riffe & Stovall, 1989), the Gulf War (e.g., Hoffner & Haefner, 1993; Pan et al., 1993), and the September 11 terrorist attacks (e.g., Cho et al., 2003; Hoffner, Fujioka, Ye, & Ibrahim, 2003; Stout & Farouque, 2003). In terms of a reciprocal relationship between news media use and aroused emotionality, a study conducted by Cho and his colleagues (2003) indicates that people who frequently rely on television news are

accustomed to experiencing positive and negative emotions toward tragic and disturbing events. It appears that television news leads people to become emotionally aroused, with these activated emotional responses concurrently driving future television news use. This is particularly true for negative emotional responses to news coverage of tragic and disturbing events. The study finds a significant pattern of news media use that is activated by emotional response to negative message in news coverage, but it does not examine whether negative news causes a series of negative symptoms in influencing viewers' selective use of news media. Moreover, some studies may contradict this point by providing that news viewers under stress or in a bad mood may tend to watch less news programming on television and more of other types of programming (e.g., Anderson & Collins, 1996).

In terms of people's psychological reactions to negative news, many studies use children as investigated participants to look at how conflict-related messages in news stories influence children's psychological developments. For instance, a study by Hoffner and Haefner (1993) investigates children's affective responses to news coverage of the Gulf War. The results show that the news coverage of the war evokes a variety of emotional responses in children. Specifically, greater exposure to televised coverage of the war seems to have heightened the concern children felt for themselves and others, as well as their experience of enduring upset. That is, frequent exposure to negative news makes the tragic effects of the war more salient to children, and the vividness of the coverage also makes it difficult for them to eliminate the war from their thoughts. The study indicates that most children report sadness as the most frequently experienced emotion after exposure to news coverage of the war. Additionally, older children feel angry more than younger ones, and they are angered by the harm and distress other people have experienced as a result of the war. The study also shows that children's fear is primarily aroused by feelings of personal vulnerability and threats to relatives or friends in explaining why they feel

frightened. Although the study indicates that the conflict-related messages in news coverage would arouse different kinds of psychological responses in children, it does not analyze whether experiences of exposure to negative news causes negative symptoms in news viewers.

According to Shaw (2000), the more conflict-traumatic related experiences children and adolescents witness or experience, the more likely they are to experience post-traumatic stress syndrome, to have a strong grief reaction, or to feel depressed. This result of experiencing conflict-related events is consistent with the concept of Post Traumatic Stress Disorder (PTSD). According to Breslau et al. (1998), the development of PTSD requires several risk factors, including anxiety, depression, neuroticism, exposure to physical violence, and mortality salience effects. Among these factors, the most powerful predictor of PTSD is exposure to physical violence, and the most frequent stressor with PTSD is the sudden and unexpected death of someone related to self.

Applying PTSD in the context of the 9/11 terrorist attacks, Schuster et al. (2001) survey the stress and coping responses of Americans three to five days after their exposure to news coverage of the attacks. The study shows that ninety percent of their respondents have experienced negative symptoms, including disturbing thoughts, difficulty concentrating, sleep problems, and anger. Moreover, the study finds a positive correlation between the amount of news viewing and the presence of negative symptoms, and it defines this correlation as a dose-response effect (Schuster et al., 2001).

From a psychiatric perspective, Stout and Faroogue's (2003) study uses an inpatient sample to investigate whether the news coverage of the September 11 attacks causes negative consequences in adults. They attempt to confirm that people who have experienced conflict-related messages may be at risk for engendering psychological trauma by examining whether common stress symptoms and exacerbations of psychosis would emerge during exposure to news

coverage of the attacks. The results for this study show that people who have watched greater amount of news viewing experience a stronger emotional response, talk more about the attacks to others, and think more about the attacks when away from televised news. Moreover, the study examines five negative emotions that are aroused by the attacks, namely fear, anxiety, anger, disgust, and sadness. The results indicate that sadness is the most commonly endorsed, followed by anger and fear. However, sadness is not significantly related to the amount of news viewing. Anger is the only emotion that is significantly related to the amount of news viewing and the other reaction variables, such as the number of stress symptoms, frequency of the attack thoughts, and amount of talking about the attacks to others.

### ***Priming Effects of Negative News***

Although visually arousing images in negative news do not trigger news viewers' associative networks of emotional thoughts, negative news stories significantly generate priming effects on news viewers. According to Roskos-Ewoldsen, Roskos-Ewoldsen, and Carpentier (2002), media priming refers to the idea that exposure to one set of stimuli can activate or bring to mind related cognitions. These activated cognitions may affect interpretations of or responses to subsequent stimuli that are relevant to the primed cognitions for a short time. Many studies on priming effects show that mass media play an important role in the formation and cultivation of negative stereotypes (e.g., Hansen & Hansen, 1988; Hansen & Krygowski, 1994). Some studies also indicate that negative news content can serve as a powerful agent in the priming of existing racial stereotypes (e.g., Power, Murphy, & Coover, 1996). Indeed, these racial stereotypes affect viewers' attitudes toward a certain social group. Accordingly, White viewers are more likely to identify someone who is Black or Hispanic as a criminal suspect than a White person after exposures to negative description of minority groups in news stories (Gibbons, Taylor, & Phillips, 2004; Oliver & Fonash, 2002).

Essentially, considerable research further suggests that racial stereotypes can also be primed without explicit stereotypical portrayals in news stories (e.g., Domke, 2001; Domke, McCoy, & Torres, 1999). Domke and his colleagues find that reading a newspaper story about crimes results in greater stereotyping of Blacks and Hispanics on such characteristics as laziness, unintelligence, and violence, but only if the newspaper story mentioned racial cues such as drive-by shootings or inner cities (Domke, McCoy, & Torres, 1999). Moreover, when racial cues are presented, primed stereotypes of Blacks and Hispanics becomes a more influential role on self-reported political attitudes and on perceptions of crime policies (Domke, 2001). In this view, more subtle framing of news stories with racial cues can activate stereotypes that are applied via associated pathways to influence viewers' judgments of the stereotyped group as well as their judgments of related political and social issues.

The activation of stereotypes is different from the application of stereotypes. As a stereotype is activated, it may not be applied to subsequent judgments and behaviors. According to Fazio's (1990) motivation and opportunity as determinants model, the activation of stereotypes is most likely to affect people's judgments and behaviors toward minority groups when the motivation and opportunity to process deliberately is absent. Some studies also confirm this model and state that while low-prejudice individuals are less inclined than high-prejudice individuals to report their behavioral appearances of activated stereotypes, the application of stereotypes is likely to occur for all individuals, because the application of stereotypes may occur when deliberative processing is disrupted, when stereotypes are activated with low awareness, or when the task at hand seems irrelevant to activated stereotypes (Devine & Monteith, 1999; Fazio & Towles-Schwen, 1999). Using this point in media priming, Valentino, Traugott, and Hutchings (2002) suggest that as racial cues in mass media become more salient, the influence of primed stereotypes on media viewers increases. However, when racial cues are too salient, viewers may

make attempts to suppress the influence of accessible stereotypes on their judgments of social and political issues. To put it simply, stereotypical portrayals in mass media may not only activate stereotypical cognitions, but also affect subsequent judgments related to these stereotypical cognitions. Moreover, implicit stereotypical portrayals in the media generate the strongest influence on media viewers, regardless of their level of racial prejudice.

## **CHAPTER THREE**

### **CURRENT STUDY**

#### **Social Influences on News Viewers**

The current study applies social identity theory and terror management theory as theoretical frameworks to examine how news viewers react to the negative portrayals of immigrant criminals in news coverage and to look at whether these portrayals generate significant influences on news viewers. By asking viewers to watch a certain kind of news story (e.g., immigrant criminal, non-immigrant criminal, mortality prime, & non-mortality prime), the study aims to examine the social influences of social identity and mortality salience on: (1) news viewers' connection to mortality thoughts; (2) their hostility toward the criminals; (3) their vulnerability to risk; and (4) their subsequent judgments of the immigration issue.

First of all, the bulk of terror management research indicates that mortality thoughts can be evoked in both conscious and subconscious ways. The current study uses negative news stories as mortality reminders to examine whether exposure to news stories with mortality salience may lead news viewers to have more cognitive associations with mortality thoughts. In terms of news learning, Newell (1990) states that negative news can efficiently elicit emotional arousal in viewers and make viewers immediately face dangers. Moreover, Lewicki (1986) finds that negative news can shape cognition without a viewer's awareness. Using the concepts of negative news influences on viewers' cognition in the current study, news viewers' mortality cognition may be activated after their exposure to negative news with mortality salience. Consequently, news viewers have more access to mortality thoughts. Therefore, the first set of hypotheses is proposed in the following.

**H1a:** News viewers with exposure to the news portrayals of out-group criminals with mortality salience have more access to mortality thoughts than those with exposure to the news portrayals of out-group criminals without mortality salience.

**H1b:** News viewers with exposure to the news portrayals of in-group criminals with mortality salience have more access to mortality thoughts than those with exposure to the news portrayals of in-group criminals without mortality salience.

Because of the nature of immigrant threats, the portrayals of immigrant threats may not only emphasize the dangerous features of threats in news media, but they also accentuate the foreign features of threats. Past studies do not investigate a relationship between mortality salience effects and social identity differences. However, news viewers may have more responses to the news portrayals of threats, when these threats are made by out-group members. In this view, the current study proposes the first research question to examine whether immigrant threats in news coverage may generate more influences on news viewers' mortality cognition.

**RQ1:** Do news viewers with exposure to the portrayals of out-group criminals with mortality salience have more access to mortality thoughts than those with exposure to the news portrayals of in-group criminals with mortality salience?

Additionally, many terror management theorists suggest that mortality salience leads people to higher intolerance with others who have a different cultural worldview (Greenberg, Simon et al., 1992) and activate people's aggression against those who violate their cultural worldview (McGregor et al., 1998). Applying these ideas into the investigation of negative news effects, news viewers with exposure to news stories with mortality salience may evaluate immigrant criminals more negatively, and then they may have more hostile attitudes toward immigrant criminals than those with exposure to news stories without mortality salience. Moreover, when the criminals are reported with mortality salience in news coverage, news

viewers with exposure to the criminals as out-group members may be more hostile to the criminals than those with exposure to the criminals as in-group members. Therefore, in terms of hostility toward the criminals, the second set of hypotheses is stated in the following.

**H2a:** News viewers with exposure to the news portrayals of out-group criminals with mortality salience are more hostile to the criminals than those with exposure to the news portrayals of out-group criminals without mortality salience.

**H2b:** News viewers with exposure to the news portrayals of out-group criminals with mortality salience are more hostile to the criminals than those with exposure to the news portrayals of in-group criminals with mortality salience.

Social identity theorists suggest that media viewers engage in the differentiation between themselves and the out-group in favor of their in-group (Mastro, 2003), and that the heightened difference between in-groupers (media viewers) and out-groupers (media characters) affects media viewers' attitudes toward media characters (Fujioka, 2005). Some scholars also suggest that as the conflicts between the in-group and the out-group are presented in group members, their risk thoughts are activated more easily (Carlton-Ford, Ender, & Tabatabai, 2007). In this view, when immigrant criminals act as a threat in news stories, news viewers, who belong to a social group as different from that of immigrant criminals, perceive that their own group is severely threatened. Using this concept in examining viewers' vulnerability to risk, exposure to the news portrayals of out-group criminals leads viewers to perceive threats as more serious, while exposure to the news portrayals of in-group criminals leads viewers to perceive less vulnerability to risk. Thus, the current study assumes that social group to which the criminals of news stories belong is an important factor in influencing news viewers' risk vulnerability. Accordingly, the third set of hypotheses is stated as follows.

**H3a:** News viewers with exposure to the news portrayals of out-group criminals without mortality salience are more inclined to perceive vulnerability to risk than those with exposure to the news portrayals of in-group criminals without mortality salience.

**H3b:** News viewers with exposure to the news portrayals of out-group criminals with mortality salience are more inclined to perceive vulnerability to risk than those with exposure to the news portrayals of in-group criminals with mortality salience.

Moreover, terror management theorists suggest that mortality salience encourages people to be more committed to their cultural norms (Greenberg et al., 1992) and more likely to protect their own nationalism (Landau et al., 2004). Specifically, the activation of mortality salience leads people to realize that their own safety is at risk, that their nationality is threatened, and then that vulnerability to risk is more easily perceived. Therefore, the fourth set of hypotheses is stated in the following.

**H4a:** News viewers with exposure to the news portrayals of out-group criminals with mortality salience are more inclined to perceive vulnerability to risk than those with exposure to the news portrayals of out-group criminals without mortality salience.

**H4b:** News viewers with exposure to the news portrayals of in-group criminals with mortality salience are more inclined to perceive vulnerability to risk than those with exposure to the news portrayals of in-group criminals without mortality salience.

In terms of media priming effects, the activated cognitions affect the interpretations of the subsequent stimuli that are relevant to the primed cognitions (Roskos-Ewoldsen, Roskos-Ewoldsen, & Carpentier, 2002). In this vein, it is fair to state that exposure to the news portrayals of out-group criminals automatically affects news viewers' judgments of the immigration issue. Thus, the study posits that news viewers with exposure to the news portrayals of out-group criminals may have more opposed attitudes toward the immigration issue than do those with

exposure to the news portrayals of in-group criminals regardless of mortality salience effects. In this view, the fifth set of hypothesis is constructed as follows.

**H5a:** News viewers with exposure to the news portrayals of out-group criminals with morality have more oppositional attitudes toward the immigration issue than do those with exposure to the news portrayals of in-group criminals with morality.

**H5b:** News viewers with exposure to the news portrayals of out-group criminals without mortality have more oppositional attitudes toward the immigration issue than do those with exposure to the news portrayals of in-group criminals without mortality.

Similarly, on the basis of the dual process model of mortality salience effects, mortality salience may generate alternative influences on subsequent social cognitions and behaviors (Pyszczynski et al., 1999). Moreover, many terror management theorists have confirmed the idea that mortality salience leads people to protect their cultural worldview (Greenberg et al., 1992) and activate their stereotypic thinking and preferences (Schimel et al., 1999). In this view, the study hypothesizes that when viewers expose new stories with mortality salience, their subsequent judgments of the immigration issue may be more negative, because the activation of terror management generates negative influences on their subsequent social cognitions and behaviors. Isolating the influences of inter-group difference to look at a single factor of mortality salience, the sixth set of hypothesis is stated in the following.

**H6a:** News viewers with exposure to the news portrayals of in-group criminals with mortality have more negative judgments of the immigration issue than others with exposure to the coverage of in-group criminals without mortality.

**H6b:** News viewers with exposure to the news portrayals of out-group criminals with mortality have more negative judgments of the immigration issue than others with exposure to the coverage of out-group criminals without mortality.

## **News Information Processing**

In addition to the investigation of social influences on news viewers, the study strives to investigate whether social identity and mortality salience may influence news viewers' information-processing outlets after their exposure to the news portrayals of criminality. By asking viewers to watch negative news stories with various features (e.g., immigrant, non-immigrant, mortality, non-mortality), the study attempts to investigate: (1) viewers' emotional responses to news coverage; (2) viewers' evaluations of news stories; and (3) viewers' perceptions of criminal acts in news stories.

On the basis of social identity theory, media viewers have different responses to media content when media viewers' social group is different from the one to which the protagonists of media content belong (Coover, 2001; Fujioka, 2005; Mastro, 2003). Moreover, according to the influences of negative news on viewers, news viewers may generate stronger arousal, especially when news stories are more conflicted with them (Grabe & Kamhawi, 2006). In this view, the study posits that news viewers have more negative emotional reactions, especially when a conflict between the in-group members as the victims and out-group members as the criminals is described in news stories.

Regarding terror management scholarships, media viewers may react more strongly to media content when the content is made with mortality salience (Goldenberg, Pyszczynski et al., 1999). Using this concept in the examination of news effects, the current study hypothesizes that viewers' emotional responses to criminal news may become more negative when news stories contain mortality primes or remind viewers to consider death in their thoughts. Moreover, the study also speculates that viewers' emotional responses to criminal news are much more pessimistic when the criminals in news stories are members who do not belong to viewers' social group. To sum up, the study proposes that social identity and mortality salience generate

significant influences on viewers' emotional responses after their exposure to news coverage of criminality. In terms of viewers' emotional responses, the seventh set of hypotheses is formed in the following.

**H7a:** The news portrayals of out-group criminals with mortality salience elicit more negative emotional responses in news viewers than those of out-group criminals without mortality salience.

**H7b:** The news portrayals of in-group criminals with mortality salience elicit more negative emotional responses in news viewers than those of in-group criminals without mortality salience.

**H7c:** The news portrayals of out-group criminals with mortality salience elicit more negative emotional responses in news viewers than those of in-group criminals with mortality salience.

**H7d:** The news portrayals of out-group criminals without mortality salience elicit more negative emotional responses in news viewers than those of in-group criminals without mortality salience.

The study also looks at the influences of social identity and mortality salience on viewers' evaluations of news stories. Because of social identity assumptions, viewers categorize themselves as in-group members and identify the immigrant criminals of news coverage as out-group members while exposure to news coverage. As the difference between in-group and out-group members is reported, news stories about the conflicts between out-group members and in-group members may generate influences on viewers' news perceptions and evaluations.

Meanwhile, some studies have confirmed a significant relationship between negative news stories and viewers' evaluations of news stories (e.g., Grabe, Lang, & Zhao, 2003). Thus, the study

presumes that news viewers believe that news stories about immigrant criminals are newsworthy and evaluate these news stories more important to them.

Also applying terror management concept into the investigation of news evaluations, the study posits that mortality salience in news stories generates influences on viewers' evaluations of news stories. Moreover, when viewers recognize the differences between themselves and immigrant criminals in news stories, and the criminals are out-group members who provide mortality primes in news stories, news viewers may evaluate these stories with mortality salience more important than others without mortality salience. To put it simply, the study assumes that social identity and mortality salience generate significant influences on viewers' news evaluations after their exposure to news coverage of criminality. Thus, the eighth set of hypotheses is provided in terms of viewers' evaluations of criminal news in the following.

**H8a:** The news portrayals of out-group criminals with mortality salience make viewers evaluate news as more newsworthy than those of out-group criminals without mortality salience.

**H8b:** The news portrayals of in-group criminals with mortality salience make viewers evaluate news as more newsworthy than those of in-group criminals without mortality salience.

**H8c:** The news portrayals of out-group criminals with mortality salience make viewers evaluate news as more newsworthy than those of in-group criminals with mortality salience.

**H8d:** The news portrayals of out-group criminals with non-mortality salience make viewers evaluate news as more newsworthy than those of in-group criminals without mortality salience.

In addition to viewers' emotional responses to and evaluations of negative news stories, the study also examines the influences of social identity and mortality salience on viewers' perceptions of criminality. Specifically, it looks at how news viewers process criminal acts in news stories. On the basis of social identity theory and terror management theory, the study

assumes that social identity and mortality salience effects have a positive relationship with viewers' perceptions of criminal acts in news coverage. That is, as negative news stories contain immigrant criminals and mortality primes, the criminal acts in news stories are perceived as more severe events. Thus, in terms of perceptions of criminal acts in news coverage, the ninth set of hypotheses is provided in the following.

**H9a:** The news portrayals of out-group criminals with mortality salience cause viewers to perceive criminal acts in news coverage as more severe than those of out-group criminals without mortality salience.

**H9b:** The news portrayals of in-group criminals with mortality salience cause viewers to perceive criminal acts in news coverage as more severe than those of in-group criminals without mortality salience.

**H9c:** The news portrayals of out-group criminals with mortality salience cause viewers to perceive criminal acts in news coverage as more severe than those of in-group criminals with mortality salience.

**H9d:** The news portrayals of out-group criminals without mortality salience cause viewers to perceive criminal acts in news coverage as more severe than those of in-group criminals without mortality salience.

### **Self-esteem and Social Distance**

The current study attempts to examine whether the personality traits significantly influence news viewers' information-processing outlets. The two personality traits— self-esteem and social distance— are used as the investigated covariates in this study. Based upon social identity theory and terror management theory, self-esteem plays an important role in the processes of categorizing the self and others (Abrams & Hogg, 1988; Tajfel & Turner, 1986) as well as managing terror for mortality primes (Gailliot, Schmeichel, & Maner, 2007; Pyszczynski,

Greenberg et al., 2004). People with higher self-esteem are more inclined to identify differences between the self and others, while people with lower self-esteem are more easily touched by mortality primes. In this vein, viewers with higher self-esteem may be more influenced by immigrant criminals in news stories, but be less affected by mortality primes in news stories. Moreover, regarding a positive relationship between self-esteem and social group identity, the study assumes that self-esteem is a significant role in influencing viewers' responses to news coverage of criminality when the group to which the criminals of new stories belong is different from the one to which news viewers belong. Based upon social identity theory and terror management theory, the tenth set of hypothesis is formed as follows.

**H10a:** News viewers' self-esteem is an important factor in influencing their emotional responses after exposure to news coverage of out-group criminals with mortality primes.

**H10b:** News viewers' self-esteem is an important factor in influencing their news evaluations after exposure to news coverage of out-group criminals with mortality primes.

**H10c:** News viewers' self-esteem is an important factor in influencing their perceptions of the criminal acts in news coverage after exposure to news coverage of out-group criminals with mortality primes.

Specifically, in terms of the assumption of a negative relationship between self-esteem and mortality salience, news viewers' self-esteem may be interactive with mortality primes in news coverage, which generates significant influences on viewers' responses to news coverage with mortality salience. The eleventh set of hypothesis is provided as follows.

**H11a:** There are interaction effects between news viewers' self-esteem and mortality salience in news coverage on viewers' emotional responses to news coverage.

**H11b:** There are interaction effects between news viewers' self-esteem and mortality salience in news coverage on viewers' evaluations of news stories.

**H11c:** There are interaction effects between news viewers' self-esteem and mortality salience in news coverage on viewers' perceptions of the criminal acts in news coverage.

Additionally, the bulk of media research has examined the perspectives of media viewers (in-group members) on media protagonists (out-group members) in society identity scholarships (Coover, 2001; Mastro, Behm-Morawitz, & Kopacz, 2008), but no research has used social distance as a covariate to examine whether social distance affects media viewers' information-processing outlets. Based upon social distance in inter-group relations, people with more social distance from out-group members may identify more differences between themselves and out-group members. Using this concept in the current study, when news viewers have more social distance from out-group members, they may be more touched by the criminal acts that are featured by out-group members, because of the heightened differences between themselves and immigrant criminals. In this vein, a relationship should significantly exist between social distance and the inter-group difference. Because of this relationship, social distance from immigrants is a significant factor in influencing news viewers' responses to the news coverage of criminality when the group to which the criminals of new stories belong is different from the one to which viewers belong. Therefore, the twelfth set of hypothesis is offered in the following.

**H12a:** News viewers' social distance from immigrants is an important factor to their emotional responses to news coverage after exposure to news coverage of out-group criminals with mortality primes.

**H12b:** News viewers' social distance from immigrants is an important factor to their evaluations of news stories after exposure to news coverage of out-group criminals with mortality primes.

**H12c:** News viewers' social distance from immigrants is an important to viewers' perceptions of the criminal acts after exposure to news coverage of out-group criminals with mortality primes.

On the other hand, based on terror management theory, mortality salience increases identification with the in-group (Greenberg, Schimel et al., 2001). Social distance from the out-group may also serve as a factor in influencing viewers' identification processes. In this view, the study assumes that viewers who are highly committed to their own cultural worldview may be related to social distance from immigrants, and then they may be more directly influenced by mortality salience in news stories. The study attempts to look at whether social distance from immigrants plays a significant role in dominating viewers' reactions to news stories that contain mortality primes. Therefore, the second, third and fourth research questions are proposed in the following.

**RQ2:** Does news viewers' social distance from immigrants generate significant influences on their emotional responses to news coverage with mortality salience?

**RQ3:** Does news viewers' social distance from immigrants generate significant influences on their evaluations of news stories with mortality salience?

**RQ4:** Does news viewers' social distance from immigrants generate significant influences on their perceptions of criminal acts in news stories with mortality salience?

### **Summary of Current Study**

The current study proposes twelve hypotheses and four research questions to investigate the various influences of social identity and mortality salience on news viewers. First of all, the study strives to examine social influences on news viewers. By manipulating the features of immigrant criminals and mortality primes as two operationalizations in news stories, four dependent variables are investigated in the following: (1) viewers' connection to mortality

thoughts; (2) viewers' hostility toward the criminals and their relatives; (3) viewer's vulnerability to risk; and (4) viewers' judgments of the immigration issue. Moreover, the current study also examines the influences of social identity and morality salience on news viewers' information-processing outcomes. By asking news viewers to watch a series of news stories with different features, three dependent variables are measured in the following: (5) viewers' emotional responses to news coverage; (6) viewers' evaluations of news stories; and (7) viewers' perceptions of criminal acts in news stories. Finally, the current study considers self-esteem and social distance from immigrants as two covariates in influencing news viewers' information-processing outlets when they are exposed to news stories with various features. Therefore, two personality traits are investigated: (8) the influence of self-esteem; and (9) the influence of social distance from immigrant.

## **CHAPTER FOUR**

### **PILOT STUDY**

#### **Overview**

This pilot study was designed to examine whether mortality thoughts could be evoked in news viewers after exposure to news stories with mortality primes. Moreover, this study was used to investigate whether news viewers categorized themselves as in-group members and the criminals in news stories as out-group members, after their exposure to the portrayals of immigrant criminals. This pilot study was conducted using participants not included in the sample of the later experiments to ensure the effectiveness of the evocation of mortality salience and social identity. All participants were recruited from communication-related classes in a U.S. public university and were participating in this experiment for course credits. Specifically, a total of 71 undergraduate students participated in this study, but only students with American citizenships were included in the data analysis. Therefore, 69 students were included in the final analysis, with 43 females and 26 males.

#### **Method**

##### ***Stimulus Materials***

To verify whether mortality thoughts were activated in news viewers as well as whether news viewers were able to categorize their social group as different from that of criminals, the pilot study was conducted in order to check the manipulations of experimental stimuli. Four types of criminal news stories were identified, with five news stories about immigrant criminals with mortality primes, five news stories about immigrant criminals with the absence of mortality primes, five news stories about American criminals with mortality primes, and five news stories

about American criminals with the absence of mortality primes. All out-group criminals in news stories were Latino immigrants, while all in-group criminals in news stories were Americans. Additionally, a total of 20 news stories used as news stimuli in the pilot study were obtained from the *Vanderbilt Television News Achieve* and the abstracts of 20 news stories were included in Appendix A.

### ***Mortality Salience Evocation***

To test the hypotheses and research questions related to mortality salience effects, it is important to determine whether the news coverage of criminality that resulted in a death consequence evoked mortality thoughts in news viewers. Terror management researchers have evoked mortality salience through both conscious and subconscious manipulations. For instance, Rosenblatt et al. (1989) evoked mortality salience by asking participants to write a short essay about their own death. In contrast, Pyszczynski et al. (1996) measured the mortality salience of pedestrians who had just walked past a funeral home. According to the results, both approaches can evoke mortality salience among participants. Based on past studies that have evoked mortality salience in different forms of death reminders, the current study supposes that immigrant threats that cause death-related consequences in news coverage also evoke mortality salience among news viewers.

The pilot study was designed to evaluate whether news stories contained mortality primes and whether these stories evoked mortality thoughts in news viewers. Specifically, participants were asked 10 questions, with five questions related to mortality primes in the news stories. The five questions included: (1) “Does the news story overemphasize death?” (2) “Does the news story remind you of someone’s absence in the world?” (3) “Does the news story make other viewers face their own loss in the world immediately?” (4) “Does the news story make you think that there should be a funeral after the criminal event in the story?” and (5) “Does the news story

cause you to feel that the loss in the world is very depressing?” On the other hand, to reduce participants’ bias and increase internal validity in the pilot study, participants were also asked another five questions that were not related to mortality primes, including: (1) “Does the news story make you think of your long-term goals?” (2) “Does the news story make you feel excited?” (3) “Does the news story warn you to pay more attention to your own safety?” (4) “Does the news story overemphasize violence?” and (5) “Does the news story inform you that the criminal problem is becoming more serious in the United States?” The answers to these questions ranged from “strongly disagree” at one to “strongly agree” at seven, and only the answers to the questions related to mortality primes were used for the evaluation of mortality salience in the story. The used scores were summed and averaged. Higher scores on this measure meant that the feature of mortality prime was more salient in the story. Cronbach’s  $\alpha$  with the current sample was .82

### ***Social Group Difference Evocation***

Similarly, it is important to examine whether news viewers were able to identify a social group difference between themselves and depicted criminals in news stories. Most social identity researchers have used racial identity as a social identity approach (Coover, 2001; Fujioka, 2005; Mastro, 2003). That is, they have examined how White viewers perceive differences between themselves and minority groups after their exposure to the portrayals of minorities in mass media. Because the current study focuses on immigrant threats, it may not only consider racial identity, but also use nationality identity as a social identity approach to examine whether immigrant criminals in news coverage are identified as out-group members by most American participants. Regarding nationality and race differences, the study supposes that Americans identify their social group as different from the one to which immigrant criminals in news stories belong after their exposure to the news portrayals of immigrant criminals.

In this pilot study, participants also answered a series of questions about their own identity and the criminals' identity. They were asked to classify their nationality and the criminals' nationality (e.g., the United States, or Other), and to identify their race/ethnicity and the criminals' race/ethnicity (e.g., Asian American, African American/Black, Caucasian/White, Latino/Hispanic, or Other). In terms of nationality and race/ethnicity, more differences between participants and depicted criminals in news stories indicated that news stories were able to make participants categorize themselves as social group members and the criminals as other group members.

### ***Procedure***

A total of 71 participants were randomly assigned to four groups, with each group having 16 to 18 participants and watching news stories with different features (e.g., immigrant criminal, non-immigrant criminal, mortality prime, & non-mortality prime). In the first group, the participants watched the first set of 10 stories. The first set included five describing immigrant criminals with mortality primes and other five reporting immigrant criminals without mortality primes. In the second group, the participants watched the second set of 10 stories. The second set consisted of five reporting American criminals with mortality primes and five covering American criminals without mortality primes. In the third group, the participants watched the third set of 10 stories. The third set included the five reporting immigrant criminals with mortality primes (that had been used in the first group) and the five covering American criminals with mortality primes (that had been used in the second group). Finally, in the fourth group, the participants watched the fourth set of 10 stories. The fourth set consisted of the five describing immigrant criminals without mortality primes (that had been used in the first group) and the other five reporting American criminals without mortality primes (that had been used in the second group). Each

group consisting of 16 to 18 participants was run in a classroom. All presentations of 10 news stories in each group were played from a Digital Video Disc (DVD) on a classroom projector.

At the beginning of the pilot study, participants read and signed an informed consent (Appendix B). An experimenter explained that participants were going to watch 10 news stories about criminal events and be asked a series of questions about mortality primes and social identity in news stories (Appendix C) right after their exposure to each of them. More specifically, at the end of each news story, the DVD was paused, and participants were given a maximum of three minutes to answer the questions. The questionnaire of the pilot study was included in Appendix. This procedure was repeated until all 10 news stories were presented, and participants completed all answers. After participants answered all questions, they were given debriefing letters that outlined the objective of this study and provided contact information about the researcher of this study. Finally, participants were informed that they could contact the Institutional Review Board if they felt in any way troubled as a result of participation in this study.

## **Results**

As shown in Table 4.1, the average mean of inter-group difference in 20 news stories was 3.26. Ten news stories with mean scores of social group difference more than 3.26 were defined as the news stories describing out-group criminals, and others with mean scores of inter-group difference less than 3.26 were identified as those stories covering in-group criminals. Table 4.1 also showed the mean scores of mortality salience in 20 news stories. News stories with highest scores as well as lowest scores are selected as news stimuli in the later experiments.

Table 4.1

*Selection of News Stories as Experimental Stimuli*

News Code	Social Group Difference		Social Group Categorization	Mortality Salience Evocation		Selected for Experiment 1	Selected for Experiment 2
	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		
1	4.56	.50	Out-group	4.73	.70	Condition 1	Condition 1
2	4.43	.50	Out-group	3.02	1.15	--	--
3	3.62	1.37	Out-group	3.88	.76	--	--
4	4.20	.97	Out-group	3.71	.98	--	--
5	4.38	.66	Out-group	2.31	1.04	Condition 2	Condition 2
6	4.55	.50	Out-group	3.53	1.01	--	--
7	4.70	.46	Out-group	4.62	.68	Condition 1	Condition 1
8	4.55	.50	Out-group	2.98	1.41	Condition 2	--
9	4.45	.55	Out-group	2.97	1.14	Condition 2	Condition 2
10	3.96	1.16	Out-group	4.05	.94	Condition 1	--
11	2.09	.87	In-group	2.10	.76	Condition 4	--
12	2.19	1.18	In-group	4.12	1.10	--	--
13	2.57	1.23	In-group	1.84	.81	Condition 4	Condition 4
14	2.13	1.24	In-group	2.52	1.04	--	--
15	1.96	1.02	In-group	4.61	.87	Condition 3	Condition 3
16	1.82	.77	In-group	3.36	1.19	--	--
17	1.91	.66	In-group	2.69	1.00	--	--
18	1.67	.68	In-group	4.33	1.00	Condition 3	Condition 3
19	1.80	.82	In-group	4.16	1.18	Condition 3	--
20	2.08	1.01	In-group	1.83	.75	Condition 4	Condition 4
Average	3.26			3.39			

*Note.* Condition 1: Out-group criminals with mortality primes; Condition 2: Out-group criminals with non-mortality primes; Condition 3: In-group criminals with mortality primes; Condition 4: In-group criminals with non-mortality prime

For Experiment 1, twelve news stories would be selected as news stimuli: (1) new story one, seven, and 10 were selected as experimental stimuli that covered out-group criminals with mortality primes; (2) news story five, eight, and nine were selected as experimental stimuli that described out-group criminals without morality primes; (3) news story 15, 18, and 19 were selected as experimental stimuli that depicted in-group criminals with mortality primes; and (4) news story 11, 13, and 20 were selected as experimental stimuli that portrayed in-group criminals without mortality primes. Manipulation of news stimuli was successful for four experimental conditions. In terms of mortality salience evocation, the ANOVA results demonstrated that there were significant differences among four types of experimental stimuli,  $F(3, 410) = 164.14, p < .001$ . More specifically, the Bonferroni Post Hoc tests indicated that the stories of out-group criminals with mortality primes ( $M = 4.47, SD = .83$ ) had significantly higher scores on mortality salience evocation ( $p < .001$ ) than did those of out-group without mortality primes ( $M = 2.75, SD = 1.23$ ). Similarly, the stories of in-group criminals with mortality primes ( $M = 4.37, SD = 1.03$ ) were more significant ( $p < .001$ ) than those of in-group without mortality primes ( $M = 1.92, SD = .77$ ). Regarding social group difference, the ANOVA results also showed significant differences among four types of experimental stimuli,  $F(3, 410) = 284.72, p < .001$ . Moreover, the Bonferroni Post Hoc tests showed that the stories of out-group criminals with mortality primes ( $M = 4.41, SD = .84$ ) had significantly higher scores on social group difference evocation ( $p < .001$ ) than the stories of in-group criminals with mortality primes ( $M = 1.85, SD = .87$ ). On the other hand, the stories of out-group criminals without mortality primes ( $M = 4.49, SD = .59$ ) also had significantly higher scores on social group difference evocation ( $p < .001$ ) than the stories of in-group criminals without mortality primes ( $M = 2.17, SD = 1.05$ ).

For Experiment 2, eight news stories were selected. Based on the selections of news stimuli in Experiment 1, news stories with higher scores as well as lower scores were selected in

Experiment 2. Therefore, news story 8, 10, 11, and 19 were excluded. Specifically, the selected news stories included: (1) new story 1 and 7 selected as news stimuli of out- group criminals with mortality; (2) news story 5 and 9 selected as news stimuli of out-group criminals without morality; (3) news story 15 and 18 selected as news stimuli of in-group criminals with mortality; and (4) news story 13 and 20 selected as news stimuli of in-group criminals without mortality. Regarding mortality salience, the ANOVA results further demonstrated significant differences among four types of news stimuli,  $F(3, 272) = 164.37, p < .001$ . Moreover, the Bonferroni Post Hoc tests showed that the stimuli of out-group criminals with mortality primes ( $M = 4.68, SD = .68$ ) were much higher in mortality salience evocation ( $p < .001$ ) than did those of out-group without mortality primes ( $M = 2.64, SD = 1.13$ ), while the stimuli of in-group criminals with mortality primes ( $M = 4.47, SD = .94$ ) were significantly higher ( $p < .001$ ), than those of in-group without mortality primes ( $M = 1.83, SD = .77$ ). Additionally, in terms of social group difference, the ANOVA results also demonstrated significant differences among four types of experimental stimuli,  $F(3, 272) = 218.08, p < .001$ . Moreover, the Bonferroni Post Hoc tests showed that the stories of out-group criminals with mortality primes ( $M = 4.69, SD = .49$ ) were significantly higher on social group difference evocation ( $p < .001$ ) than the stories of in-group criminals with mortality primes ( $M = 1.87, SD = .91$ ), while the stories of out-group criminals without mortality primes ( $M = 4.44, SD = .63$ ) also were significantly higher on social group difference evocation ( $p < .001$ ) than the stories of in-group criminals without mortality primes ( $M = 2.21, SD = 1.12$ ).

## **CHAPTER FIVE**

### **EXPERIMENT 1**

#### **Overview**

Experiment 1 was designed to test the social influences of mortality salience and social group difference on news viewers' access to mortality (H1a, H1b, and RQ1), hostility (H2a and H2b), risk vulnerability (H3a, H3b, H4a, and H4b), and issue judgment (H5a, H5b, H6a, and H6b). A 2 (mortality evocation versus non-mortality evocation) x 2 (in-group criminals versus out-group criminals) between-subjects experiment was formulated with two operationalized variables and four measured variables. Specifically, there were four conditions in this experiment. Participants were divided into the four conditions, with each condition exposed to only one type of news stimuli. Four dependent variables were measured to explore participants' connection to mortality thoughts, their hostility toward the criminals, their vulnerability to risk, and their subsequent judgments of the immigration issue after exposure to the new stories.

#### **Method**

##### ***Stimulus Materials***

To use news stories with and without mortality salience as experimental stimuli, twelve news stories were selected from 20 news stories that had been tested in the pilot study. Because the pilot study demonstrated the effectiveness of mortality salience and social group difference in news stories, the 12 stories were divided into four types. Each type of news stories distributed in each condition included three news stories: (1) the first type about out-group criminals with mortality salience; (2) the second type covering out-group criminals without mortality salience; (3) the third type describing in-group criminals with mortality salience; and (4) the fourth type

reporting in-group criminals without mortality salience. In each condition participants were only exposed to three news stories. Social group difference and mortality salience in news stories were operated as two between-subjects factors in this experiment.

### ***Measures***

*Accesses to mortality thoughts.* Studies have used a word fragment completion task to test whether experimental stimuli can evoke mortality cognition in participants (Bassili & Smith, 1986; Greenberg et al., 1994). This experiment used the same task to examine whether news stories can make news viewers more connected to mortality thoughts. Specifically, the task required participants to fill in blanks to complete a total of 22 incomplete words. Six of the 22 word fragments were such that they could be completed by either death-related or by neutral words. That is, “de\_ \_” can be completed as *dead*, *desk*, or *debt*; “gr\_ \_e” can be completed as *grave*, *grace*, or *grape*; “ki\_ \_ed” can be completed as *killed*, or *kissed*; “coff\_ \_” can be completed as *coffin*, *coffer*, or *coffee*; “sku\_ \_” can be completed as *skull*, *skunk*, or *skulk*; and “mu\_ \_er “ can be completed as *murder*, *mucker*, or *mummer*. Three of the 22 word fragments can be completed only with death-related words, namely “corp\_ \_” completed as *corpse*, “bur\_ \_d” completed as *buried* or “fun\_ \_al” completed as *funeral*. The other 13 fragment words can be completed only with neutral words, such as “tr\_ \_” completed as *tree*, or *tram* and “flo\_ \_r” completed as *flour*, or *flower*. The number of death-related words completed by each participant was summed, and the means were compared across experimental conditions. Higher means suggested that news stories provided greater accessibility of death-related thoughts, which provided an evidence of the influences of negative news on news viewers’ mortality cognition.

*Hostility toward the criminals.* To measure participants’ hostility toward the criminals in news stories, the experiment used an alternative approach to look at their intents to harm others. The approach was devised in a context where participants had a chance to determine the amount

of hot sauce to be consumed by their opponent who hated spicy food. The approach has been used to measure participants' aggressive intentions in social psychology scholarship because of its face-valid measurement and appropriateness to human subjects committees in university (McGregor et al., 1998).

Adapting the above approach in this experiment, participants were asked to assume that the criminals hated hot sauce. Then, participants were given an opportunity to punish the criminals by allocating a certain kind of hot sauce to the criminals. Specifically, participants were asked: "What kind of hot sauce do you make the criminals consume?" The answer was labeled a seven-point scale, ranging from "not hot at all (or I do not want to punish them)" at zero to "deadly spicy" at six. Immediately, participants were asked: "How many bottles of hot sauce do you treat the criminals to consume?" The answer was also labeled a seven-point scale, ranging from "no bottle (or I do not want to punish them)" at zero to "as many bottles as I can allocate" at six. The two scores were summed and averaged. Higher scores on this measure suggested that participants were more likely to be hostile toward the criminals in news stories.

Using the same approach to measure participants' hostility toward the criminals' relatives, participants were given an opportunity to treat the criminals' families or friends. They were asked the following questions: "What kind of hot sauce do you choose to treat their family or friends to consume?" and "How many bottles of hot sauce do you treat their family or friends to consume?" The answers were also labeled two seven-point scales, separately ranging from "not spicy at all (or I do not want to punish them)" at zero to "deadly spicy" at six, and from "no bottle (or I do not want to punish them)" at zero to "as many bottles as I can allocate" at six. Similarly, the two scores were summed and averaged. Participants with higher scores were more likely to be hostile toward the criminals' relatives.

*Risk vulnerability.* The experiment used five questions to measure participants' own risk vulnerability. This measurement looked at whether participants' safety was threatened by their perceived risk. Specifically, they were asked the following questions: (1) "How do you rate your personal safety?" (2) "How do you rate the safety of your family?" (3) "How do you rate the safety of your friends?" (4) "How do you rate the safety of the state where you live?" and (5) "How do you rate the safety of the United States?" The first three questions are used to measure participants' perceived threats on a personal level, while the last two questions were employed to investigate their perceived threats on a national level. The answers were labeled seven-point scales, ranging from "very poor" at zero to "very excellent" at six. All scores were summed and averaged. Participants with higher scores had less vulnerability to risk than others with lower scores. Cronbach's  $\alpha$  with the current sample was .80.

*Judgment of the immigration issue.* Seven statements are devised to measure participants' judgments of the immigration issue. These statements are frequently discussed among policy makers to look at whether immigrants should receive their rights when they stay in the United States. Participants are asked to indicate their judgments about the following statements: (1) "U.S. national security is destroyed by immigrants." (2) "Illegal immigrants have human rights to gain legal status for staying in US." (3) "U.S. government has a responsibility of taking care of refugees' lives in the United States." (4) "Immigrants' children have equal rights to receive education in the United States." (5) "Immigrants should apply monetary aids from the financial institutes in the United States." (6) "Immigrants should receive health cares in the United States if they are seriously ill." and (7) "Immigrants are trouble makers to U.S. society." Their judgments of the above statements were labeled seven-point scales, ranging from "strongly disagree" at zero to "strongly agree" at six. The second to sixth answers in the scales were reversed scores. All

scores were summed and averaged. Higher scores suggested that participants had more negative judgments of the immigration issue. Cronbach's  $\alpha$  with the current sample was .86.

### ***Participants***

In Experiment 1, the sample consisted of 119 undergraduate students, who were not tested in the pilot study and the latter experiment. These students were recruited from communication-related classes in a U.S. public university, and were given a course credit after participating in this experiment. All participants were randomly assigned to four conditions: (1) 31 in the first condition; (2) 30 in the second condition; (3) 29 in the third condition; and (4) 29 in the fourth condition. Participants in each condition watched only one type of the four stimulus types. The age of participants ranged from 19 to 28 years, with a mean of 20.91. Eighty-one females and 42 males participated in this experiment. Among these participants, 103 were Caucasians, 14 were African-Americans, and two were Latinos, and only participants with the U.S. citizenships were included in the final analysis.

### ***Procedure***

Before Experiment 1 was conducted, participants were assigned to four conditions. Participants in each condition were asked to watch three news stories in one stimulus type. Specifically, the first condition was exposed to news stories that covered out-group criminals with mortality salience, the second condition watched news stories that reported out-group criminals without mortality salience, the third condition watched news stories about in-group criminal with mortality salience, and the fourth condition was exposed to news stories about in-group criminals without mortality salience. Each condition was run in a classroom. Each presentation of three news stories to one condition was played from a Digital Video Disc (DVD) on a classroom projector.

At the beginning of Experiment 1, participants read and signed an informed consent form (Appendix B). An experimenter explained that participants were going to watch three news stories about criminal events. After that, they were given a maximum of 30 minutes to complete a word fragment completion task and answer a series of questions (Appendix D). When participants completed a task and all answers, they were given debriefing letters that outlined the objective of this experiment and provided contact information about the researcher of this experiment. Moreover, participants were informed that they could contact the Institutional Review Board if they felt in any way troubled as a result of participation in this experiment.

## Results

### *Mortality Thoughts*

This study predicted that the news portrayals of criminals with mortality salience would make news viewers access mortality thoughts more easily. The GLM results indicated that mortality salience in the news coverage generated a main effect on viewers' mortality thoughts,  $F(1, 115) = 90.40, p < .001, \eta^2 = .44$ , but social group difference did not produce a main effect on viewers' mortality thoughts,  $F(1, 115) = .124, p = .718, \eta^2 = .001$ . Moreover, there were no interaction effects between mortality salience and social group difference,  $F(1, 115) = .124, p = .718, \eta^2 = .41$ .

*H1a, H1b and RQ1.* The Bonferroni Post Hoc tests showed in Table 5.1, which confirmed that H1a was supported,  $t(58) = 6.71, p < .01$ . That is, viewers who were exposed to the news coverage of out-group criminals with mortality primes had more access to mortality thoughts ( $M = 6.32, SD = 1.08$ ) than did others with exposure to the news coverage of out-group criminals without mortality primes ( $M = 4.14, SD = 1.43$ ). The results also confirmed H1b,  $t(57) = 6.76, p < .01$ , indicating that news viewers who watched the coverage of in-group criminals with

mortality primes did produce more mortality thoughts ( $M = 6.17$ ,  $SD = 1.09$ ) than those who were exposed to the coverage of in-group criminals without mortality primes ( $M = 4.14$ ,  $SD = 1.22$ ).

In addition, RQ1 asked whether social group difference would influence news viewers to have different levels of mortality thoughts when they were exposed to the portrayals of criminals with mortality primes. The results further showed that although there was a difference of mortality thoughts between news viewers with exposure to the portrayals of out-group criminals with mortality primes ( $M = 6.32$ ,  $SD = 1.08$ ) and those with exposure to the portrayals of in-group criminals with mortality primes ( $M = 6.17$ ,  $SD = 1.09$ ), the difference between the two sides was insignificant,  $t(59) = .56$ ,  $p = .58$ . Therefore, social group difference between news viewers and depicted criminals in the coverage did not strongly encourage viewers to access mortality thoughts.

Table 5.1  
*Multiple Comparisons of Mortality Thoughts*

Condition	Comparative Condition	Bonferroni	Mean Difference	<i>t</i>
Condition 1 ( <i>N</i> =33; <i>M</i> =6.32)	Condition 2	.79	2.18**	6.71
	Condition 3	.81	.15	.56
	Condition 4	.81	2.18**	7.38
Condition 2 ( <i>N</i> =31; <i>M</i> =4.14)	Condition 1	.79	-2.18**	-6.71
	Condition 3	.82	-2.03**	-6.15
	Condition 4	.82	.00	.00
Condition 3 ( <i>N</i> =29; <i>M</i> =6.17)	Condition 1	.81	-.15	-.56
	Condition 2	.82	2.03**	6.15
	Condition 4	.83	2.03**	6.76
Condition 4 ( <i>N</i> =29; <i>M</i> =4.14)	Condition 1	.81	-2.18**	-7.38
	Condition 2	.82	.00	.00
	Condition 3	.83	-2.03**	-6.76

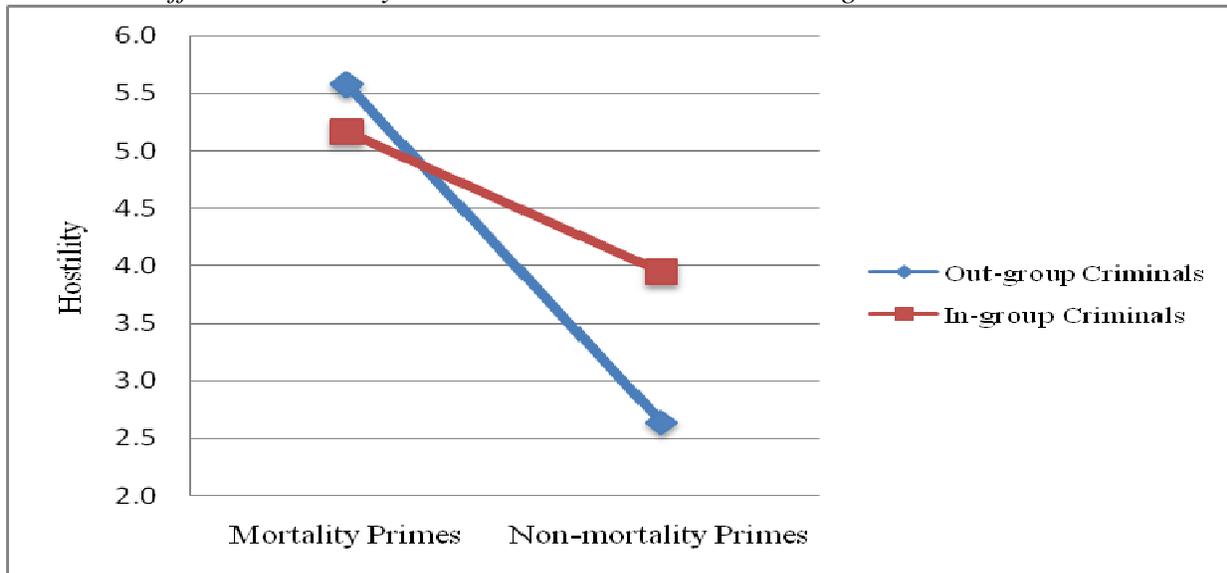
*Note.* Condition 1: Out-group criminals with mortality primes; Condition 2: Out-group criminals with non-mortality primes; Condition 3: In-group criminals with mortality primes; Condition 4: In-group criminals with non-mortality primes; *MSE*=1.459; \*\**p*<.01, \**p*<.05

### ***Hostility toward the Criminals***

In terms of viewers' hostility toward the criminals in the news coverage, the GLM results indicated that mortality salience in the coverage had a main effect on news viewers' hostility toward the criminals in the coverage,  $F(1, 115) = 81.83, p < .001, \eta^2 = .42$ , but social group difference only partially generate a main effect on viewers' hostility toward the criminals in the coverage,  $F(1, 115) = 3.80, p = .054, \eta^2 = .032$ . Moreover, the GLM results found interaction effects between mortality salience and social group difference on viewers' hostility toward the

criminals in the coverage,  $F(1, 115) = 14.05, p < .001, \eta^2 = .11$ . Figure 5.1 showed how the interactions between the two sides significantly generated influences on news viewers' hostility.

Figure 5.1  
*Interaction Effects on Hostility toward Criminals in News Coverage*



*H2a and H2b.* According to the Bonferroni Post Hoc tests in Table 5.2, there was a significant difference of hostility toward the criminals in the coverage between news viewers with exposure to the news coverage of out-group criminals with mortality primes and those with exposure to that of out-group criminals without mortality primes,  $t(58) = 9.58, p < .01$ . Moreover, the results also demonstrated that news viewers with exposure to the coverage of out-group criminals with mortality primes reported more hostility toward the criminals ( $M = 5.58, SD = .67$ ) than did those with exposure to the news coverage of out-group without mortality primes ( $M = 2.64, SD = 1.56$ ). In this vein, H2a was supported. However, the results did not support H2b,  $t(59) = 1.42, p = .16$ , which indicated that viewers with exposure to the coverage of out-group criminals with mortality primes did not report more hostility toward the criminals in the coverage ( $M = 5.58, SD = .67$ ) than those with exposure to that of in-group criminals with mortality primes

( $M = 5.17$ ,  $SD = 1.48$ ). Therefore, social group difference would not significantly lead news viewers to become more hostile when they watched the news stories with mortality primes.

Table 5.2  
*Multiple Comparisons of Hostility toward Criminals in Coverage*

Condition	Comparative Condition	Bonferroni	Mean Difference	<i>t</i>
Condition 1 ( $N=33$ ; $M=5.58$ )	Condition 2	.82	2.94**	9.58
	Condition 3	.84	.41	1.42
	Condition 4	.84	1.63**	6.86
Condition 2 ( $N=31$ ; $M=2.64$ )	Condition 1	.82	-2.94**	-9.58
	Condition 3	.85	-2.53**	-6.39
	Condition 4	.85	-1.31**	-3.66
Condition 3 ( $N=29$ ; $M=5.17$ )	Condition 1	.84	-.41	-1.42
	Condition 2	.85	2.53**	6.39
	Condition 4	.86	1.22**	3.55
Condition 4 ( $N=29$ ; $M=3.95$ )	Condition 1	.84	-1.63**	-6.86
	Condition 2	.85	1.31**	3.66
	Condition 3	.86	-1.22**	-3.55

*Note.* Condition 1=Out-group criminals with mortality primes; Condition 2=Out-group criminals with non-mortality primes; Condition 3=In-group criminals with mortality primes; Condition 4=In-group criminals with non-mortality primes;  $MSE = 1.572$ ; \*\* $p < .01$ , \* $p < .05$ .

### **Risk Vulnerability**

Regarding news viewers' risk vulnerability, the GLM results indicated that both social group difference,  $F(1, 115) = 3.36$ ,  $p = .069$ ,  $\eta^2 = .028$ , and mortality salience,  $F(1, 115) = .95$ ,  $p = .333$ ,  $\eta^2 = .008$ , did not generate main effects on news viewers' risk vulnerability. Moreover, interaction effects on viewers' risk vulnerability were not found,  $F(1, 115) = .073$ ,  $p = .787$ ,  $\eta^2 = .001$ .

*H3a and H3b.* The statistical results showed H3a was not supported,  $t(56) = 1.03, p = .31$ , since news viewers with exposure to the coverage of out-group criminals without mortality primes ( $M = 3.74, SD = .71$ ) did not report more vulnerability to the risk than did those with exposure to the coverage of in-group criminals without mortality primes ( $M = 3.53, SD = .82$ ). Similarly, the results demonstrated that H3b was not confirmed,  $t(59) = 1.61, p = .11$ , meaning that news viewers with exposure to the coverage of out-group criminals with mortality primes ( $M = 3.65, SD = .66$ ) did not perceive risk as more vulnerable than did others with exposure to the coverage of in-group criminals with mortality primes ( $M = 3.37, SD = .69$ ). Thus, there was evidence that social group difference between news viewers and the criminals in news coverage did not generate significant influences on viewers' risk vulnerability.

*H4a and H4b.* The results demonstrated that H4a was not confirmed,  $t(58) = -.52, p = .60$ . That is, news viewers with exposure to the coverage of out-group criminals with mortality primes ( $M = 3.67, SD = .66$ ) were not more inclined to perceive vulnerability to risk than those with exposure to the coverage of out-group criminals without mortality primes ( $M = 3.74, SD = .71$ ). Additionally, H4b was not supported as well,  $t(57) = -.84, p = .41$ . The results also showed that news viewers with exposure to the coverage of in-group criminals with mortality primes ( $M = 3.37, SD = .68$ ) did not report more vulnerability to risk than did those with exposure to the coverage of in-group criminals without mortality primes ( $M = 3.53, SD = .82$ ). Therefore, it is fair to state that mortality salience in the news coverage did not lead news viewers to be more inclined to perceive vulnerability to risk.

### ***Issue Judgment***

In terms of the influences of social group difference and mortality salience on news viewers' judgments of the immigration issue, the GLM results showed that social group difference had a main effect on news viewers' judgments on the immigration issue,  $F(1, 115)$

=12.61,  $p < .01$ ,  $\eta^2 = .099$ , while mortality salience in the news coverage also generated a main effect on viewers' judgments on the immigration issue,  $F(1, 115) = 21.02$ ,  $p < .001$ ,  $\eta^2 = .155$ . However, the results did not find interaction effects between social group difference and mortality salience on news viewers' judgments of the immigration issue,  $F(1, 115) = .634$ ,  $p = .427$ ,  $\eta^2 = .005$ .

*H5a and H5b.* The Bonferroni Post Hoc tests in Table 5.3 demonstrated that although news viewers with exposure to the coverage of out-group criminals with mortality primes ( $M = 3.73$ ,  $SD = .82$ ) had more negative attitudes toward the immigration issue than did those with exposure to the coverage of in-group with mortality primes ( $M = 3.24$ ,  $SD = .92$ ), the difference between the two sides partially reached significance,  $t(59) = 2.19$ ,  $p = .051$ . In this vein, H5a was moderately supported. In addition, Table 2.3 showed that it was significant,  $t(56) = 2.77$ ,  $p = .008$ , that viewers with exposure to the news coverage of out-group criminals without mortality primes ( $M = 3.05$ ,  $SD = 1.11$ ) judged the immigration issue more negatively than did those with exposure to the coverage of in-group without mortality primes ( $M = 2.28$ ,  $SD = 1.01$ ). Therefore, H5b was confirmed.

*H6a and H6b.* Table 5.3 also showed that news viewers with exposure to the coverage of in-group criminals with mortality primes ( $M = 3.24$ ,  $SD = .92$ ) did judge the immigration issue more negatively than others with exposure to the coverage of in-group criminals without mortality primes ( $M = 2.28$ ,  $SD = 1.01$ ). The difference between the two sides did reach significance,  $t(57) = 3.79$ ,  $p < .001$ . Moreover, it was significant,  $t(58) = 2.69$ ,  $p = .009$ , that news viewers with exposure to the coverage of out-group criminals with mortality primes ( $M = 3.73$ ,  $SD = .82$ ) had more negative attitudes toward the immigration issue than those with exposure to the coverage of out-group criminals without mortality primes ( $M = 3.05$ ,  $SD = 1.11$ ). Therefore, both H6a and H6b were conclusively confirmed in this experiment.

Table 5.3  
*Multiple Comparisons of Judgment of the Immigration Issue*

Condition	Comparative Condition	Bonferroni	Mean Difference	<i>t</i>
Condition 1 ( <i>N</i> =33; <i>M</i> =3.73)	Condition 2	.64	.67*	2.69
	Condition 3	.65	.49	2.19
	Condition 4	.65	1.45**	6.09
Condition 2 ( <i>N</i> =31; <i>M</i> =3.05)	Condition 1	.64	-.67*	-.27
	Condition 3	.66	-.18	-.69
	Condition 4	.66	.77**	2.77
Condition 3 ( <i>N</i> =29; <i>M</i> =3.24)	Condition 1	.65	-.49	-2.19
	Condition 2	.66	.18	.69
	Condition 4	.67	.96**	3.79
Condition 4 ( <i>N</i> =29; <i>M</i> =2.28)	Condition 1	.65	-1.45**	-6.09
	Condition 2	.66	-.77**	-2.77
	Condition 3	.67	-.96**	-3.79

*Note.* Condition 1=Out-group criminals with mortality primes; Condition 2=Out-group criminals with non-mortality primes; Condition 3=In-group criminals with mortality primes; Condition 4=In-group criminals with non-mortality primes; *MSE*=.941; \*\**p*<.01, \**p*<.05.

## Discussion

Experiment 1 revealed that mortality thoughts in news viewers were mainly activated by mortality content in the news stories, while social group difference did not promote viewers' mortality thoughts. Even in the mortality conditions, when the criminals in the news coverage were out-group members to viewers, social group difference effects did not cause more mortality thoughts in viewers. There was evidence that TV news with mortality primes can play an important role in cultivating viewers' mortality thoughts. Therefore, terror management theory can be used to explain mortality salience effects on news viewers.

In terms of hostility toward the criminals in the news coverage, mortality salience effects were found in relation to news viewers' hostility toward the criminals. That is, TV news with mortality primes powerfully caused viewers' hostile attitudes toward the criminals in the news coverage. However, social group difference did not generate significant influences on viewers' hostility toward the criminals. Therefore, Experiment 1 confirmed the terror management theory assumption that mortality salience effects activated people's hostile attitudes. Moreover, Experiment 1 found interaction effects between mortality salience and social group difference on news viewers' hostility toward the criminals. Specifically, in the mortality conditions, although out-group criminals in the news coverage produced more hostility than in-group criminals, the difference between the two sides was insignificant. On the other hand, in the non-mortality conditions, in-group criminals in the coverage strongly generated more hostility than out-group criminals. It seemed that when mortality primes were not presented in the coverage, news viewers might be more hostile toward the criminals who belonged to the viewers' social group, but not those who were different from the viewers' social group. A possible reason may lie in the context of an aversive racism paradigm (Mastro, Behm-Morawitz, & Kopacz, 2008). That is, American viewers with exposure to the coverage of out-group criminals may not only increase their national identification, but also produce their unacknowledged negative attitudes toward the immigrant criminals in the news coverage. Therefore, they may report less hostile attitudes toward the criminals. Another possible explanation could be that American viewers may realize the news stories of American criminals were close to their lives. In terms of the features of news stories, the stories covering American criminals without mortality primes (e.g., robbery and stealing) could be perceived to happen more frequently in viewers' everyday lives than those stories about immigrant criminals without mortality primes (e.g., border crossing and

identification stealing). Thus, American viewers may be more hostile toward American criminals than immigrant criminals in the non-mortality conditions.

Regarding risk vulnerability, Experiment 1 did not find that mortality salience and social group difference generated significant influences on news viewers' risk vulnerability. In terms of social group difference effects on viewers' vulnerability to risk, although out-group criminals produced more risk vulnerability than in-group criminals in the mortality and non-mortality conditions, the difference between out-group criminals and in-group criminals in the news coverage did not reach significance. Simply put, the study did not find that the social group to which the criminals belonged was an important factor in dominating news viewers' risk vulnerability. Similarly, the study did not prove that mortality salience effects were significant to viewers' risk vulnerability, indicating that mortality primes did not lead news viewers to more risk vulnerability than non-mortality primes. In this vein, Experiment 1 did not provide any evidence that mortality salience could activate people to realize that their safety was at risk, that their nationality was threatened, and then that risk vulnerability was more easily perceived.

Experiment 1 provided a significant finding that mortality salience in TV news caused news viewers to have more negative judgment of the immigration issue. News viewers would have more negative judgment of the immigration issue after their exposure to the coverage of immigrant criminals with mortality primes. More importantly, news viewers had more negative judgment of the immigration issue after their exposure to the coverage of American criminals with mortality primes. Therefore, the mortality salience assumption can be confirmed in TV news that when viewers were exposed to mortality primes in TV news, the activation of self-protection and terror management would result in news viewers' aggressions against others with a different cultural worldview (McGregor et al. 1998; Rosenblatt et al., 1989; Schimel et al., 1999). From this perspective, Experiment 1 seemed to indicate that when news viewers' mortality thoughts

were activated by TV news, their negative attitudes would automatically be triggered toward the immigration issue. Furthermore, when mortality content in TV news was emphasized more strongly, viewers' mortality thoughts were activated more easily, and then their attitudes toward immigrants became more negative.

In terms of the influences of social group difference on viewers' judgment of the immigration issue, Experiment 1 also demonstrated that the social group to which the criminals in the news coverage belonged was an important factor in viewers' judgment on the immigration issue. More specifically, in the mortality conditions, the coverage of immigrant criminals activated news viewers to have more negative attitudes toward the immigration issue than that of American criminals. Similarly, in the non-mortality conditions, the coverage of immigrant criminals also did activate viewers' negative judgment on the immigration issue more powerfully than that of American criminals. Therefore, the theory of priming effects in negative news (Roskos-Ewoldsen, Roskos-Ewoldsen & Carpentier, 2002) can be applied to explain that immigrant criminals in the coverage would be important primes in affecting viewers' interpretations of the immigration issue.

To sum up, Experiment 1 found that mortality primes in the news coverage activated (1) viewers' mortality thoughts, (2) increasingly hostile attitudes toward the criminals, and (3) more negative judgments on the immigration issue. It could be explained that while exposed to mortality primes in TV news, news viewers would attempt to manage their terror, and automatically produce the activation of self-protection and aggression against immigrants and immigrant-related issues. In this vein, terror management theory was applied to clarify the social influences of mortality salience in TV news on news viewers. Additionally, Experiment 1 only found the social influences of social group difference on news viewers' judgment of the immigration issue, but not on their hostility and risk vulnerability. Simply put, viewers may hold

negative attitudes toward the immigration issue because immigrant criminals in the coverage were stereotyped as negative primes in news viewers, which activated viewers' negative perspectives on the immigration issue. Therefore, Experiment 1 confirmed the assumptions of terror management theory and priming theory in TV news effects research.

## **CHAPTER SIX**

### **EXPERIMENT 2**

#### **Overview**

Experiment 2 was designed to examine the influences of mortality salience and inter-group difference on news viewers' information-processing outcomes. A repeated measures 2 (mortality evocation vs. non-mortality evocation) x 2 (in-group criminals vs. out-group criminals) x 4 (presentation orders) mixed design experiment with the two personality covariates (e.g., self-esteem and social distance) was conducted in Experiment 2. That is, this experiment used mortality salience and social group difference as two operationalized variables to examine participants' information-processing outcomes: Emotions (H7a, H7b, H7c, and H7d), news evaluations (H8a, H8b, H8c, and H8d), and crime perceptions (H9a, H9b, H9c, and H9d). Moreover, the experiment explored whether the levels of self-esteem (H10a, H10b, H10c, H10d, H11a, H11b, H11c, and H11d) and social distance from immigrants (H12a, H12b, H12c, H12d, RQ2, RQ3, and RQ4) played important roles in moderating viewers' emotions, news evaluations, and crime perceptions. Therefore, viewers' emotional responses to news stories, evaluations of news stories and perceptions of the crimes in news stories were investigated as measured variables in this experiment.

#### **Method**

##### ***Stimulus Materials***

Eight news stories identified as four types of news stories were used as news stimuli in Experiment 2. These eight news stories were selected from the stories that had been examined in the pilot test and Experiment 1 to ensure their effectiveness of mortality salience and social

identity difference. Specifically, these news stories included: (1) two about out-group criminals with mortality salience; (2) two about out-group criminals without mortality salience; (3) two about in-group criminals with mortality salience; and (4) two about in-group without mortality salience. Four presentation orders were created to control order effects, and each story was randomly selected for the presentation in each order. Order of presentation was the only between-subjects factor in Experiment 2. All participants watched eight news stories that had different operationalized variables (e.g., mortality salience and social identity difference) in a different presentation order. Thus, participants served as their own control.

### ***Measures***

*Self-esteem.* To measure participants' self-esteem as a moderator in the information-processing process, this experiment used Rosenberg's (1965) self-esteem scale. This scale contains 10 items, with each question having five possible responses from "strongly agree" to "strongly disagree." Five of these items have positive wording (e.g., "I feel I am a person of worth," "I feel I have a number of good qualities," "I am able to do things as well as most people," "I take a positive attitude toward myself," "On the whole I am satisfied with myself."). Five of them have negative wording (e.g., "I am inclined to think that I am a failure," "I feel I do not have much to be proud of," "I wish I could have more respect for myself," "I certainly feel useless at times," and "I am not able to do things as well as most people."). All scores were summed and averaged. Higher scores on this measure indicated higher self-esteem. Cronbach's  $\alpha$  with the current sample was .88.

*Social distance from immigrants.* Byrnes and Kiger's (1988) social distance scale was adapted to measure participants' social distance from immigrants. Byrnes and Kiger's scale was designed to measure social rejection and willingness to interact with and accept Blacks in various social roles. Eight items were included in this measure, each answered on seven-point Likert-type

agree-disagree scales. In this experiment, eight items were adapted to measure participants' social distance from immigrants. Specifically, participants were asked to answer eight items about their preferred distance from immigrants on a scale from "strongly uncomfortable" to "strongly comfortable" (e.g., I believe I would be happy to have an immigrant... "as a governor of my state," "as a superior of my working place," "as my personal physician," "rent my home from me," "as my spiritual counselor," "as my roommate," "as someone I would date," "as a dance partner."). All scores were summed and averaged. Higher scores meant low social distance from immigrants. Cronbach's  $\alpha$  with the current sample was .90.

*Emotional responses.* This experiment used 11 items to measure participant's affective responses to each news story on seven-point scales. Each scale was labeled "not at all" at one and "very much" at seven. Three of the items that were positive statements included: (1) "it is entertaining;" (2) "it makes me feel good;" and (3) "it is interesting." Eight of the items are negative statements, including: (4) "it scared me;" (5) "it makes me nervous;" (6) "it depresses me;" (7) "it worries me;" (8) "it makes me sad;" (9) "it disturbs me;" (10) "it is upsetting;" and (11) "it is frightening." Participants were asked to indicate how the news story made them feel after exposure to each news story. Three items that were positive statements in the scales were reversed scored. All scores were averaged and ranged from one (positive emotional response) to seven (negative emotional response). Cronbach's  $\alpha$  with the current sample was .95.

*Evaluations of news stories.* The experiment used five questions to investigate viewers' evaluations of news stories. Participants were asked the following questions: (1) "How important is the criminal news?" (2) "How stimulating is the criminal news?" (3) "How appealing is the criminal news?" (4) "How accurate is the criminal news?" and (5) "How informative is the criminal news?" Each question had seven possible responses from "not at all" at one to "extremely important/newsworthy/appealing/accurate/informative" at seven. All scores in the

scales were summed and averaged. Participants with higher scores on this measure indicated they evaluated news stories as more newsworthy. Cronbach's  $\alpha$  with the current sample was .96.

*Perceptions of criminal acts.* Four questions were designed to investigate severe perceptions of criminal acts in news coverage, including: (1) "How severe is the criminal act in news coverage?" (2) "How likely is it that the criminal act will get worse?" (3) "How likely is it that the criminal act will become a real threat near you?" (4) "How likely is it that you or your family might become a victim in such a criminal act?" The answer to the first question was labeled a scale ranging from "not at all" at one to "extremely severe" at seven. The answers to the other three questions were labeled scales ranging from "not at all" at one to "extremely likely" at seven. All scores were summed and averaged. Participants with higher scores on this measure perceived news events as more severe. Cronbach's  $\alpha$  with the current sample was .93.

### ***Participants***

The sample consisted of 106 undergraduate students in Experiment 2, which had not been investigated in the pilot test and Experiment 1. They were recruited from communication-related classes in a U.S. public university participating in this experiment for course credit. Participants were randomly assigned into four groups for different experimental orders. Approximately, 25 to 28 participants would watch all eight news stories in one of four news presentation orders. The age of participants in this experiment ranged from 19 to 30 years, with a mean age of 20.71. There were 75 females and 34 males with 94 Caucasians and 12 African-Americans in Experiment 2. Only participants holding the U.S. citizenships were included in the final analysis.

### ***Procedure***

After participants were randomly assigned to one of four experimental orders, the experiment was run in a group of eight to ten in an experimental lab. All presentations of news stories to them were played from the four Digital Video Discs (DVDs) on a 28-inch color

monitor. Participants first read and signed an informed consent (Appendix B) and were seated about six ft from the monitor. An experimenter explained that participants needed to fill out the first questionnaire that included the self-esteem scale and social distance scale at the beginning of the experiment, and then participants watched eight news stories and were asked a series of questions immediately after each of them (Appendix E). More specifically, at the end of each news story, the DVD was paused and participants were given a maximum of three minutes to answer the questions. This procedure was repeated until all eight news stories were presented and participants completed all answers.

At the end of Experiment 2, participants were given debriefing letters that outlined the objective of this experiment and provided contact information about the researcher of this experiment. Participants were also informed that they could contact the Institutional Review Board if they felt in any way troubled as a result of participation in this experiment.

## **Results**

### ***Emotional Responses***

To examine the effects of mortality salience and social group difference on news viewers' emotional responses, the GLM results indicated that mortality salience in the news coverage of criminals produced a main effect on viewers' emotions,  $F(1, 102) = 653.74, p < .001, \eta^2 = .87$ , but social group difference did not generate significant influences on viewers' emotions,  $F(1, 102) = .561, p = .45, \eta^2 = .005$ . That is, mortality salience in the coverage significantly produced more negative emotions in news viewers, but social group difference in the coverage did not produce the same influences on news viewers' emotions. Also, the presentation order of news stories did not generate any influence on viewers' emotional responses,  $F(3, 102) = .763, p = .517, \eta^2 = .022$ . Moreover, the results showed interaction effects between mortality salience and social group difference on news viewers' emotions,  $F(1, 102) = 31.06, p < .001, \eta^2 = .23$ . Figure 6.1 showed

how the interactions between the two sides generated significant influences on news viewers' emotional responses. Moreover, Figure 6.2 indicated variance in viewers' emotional responses.

Figure 6.1  
*Interaction Effects on Emotional Responses*

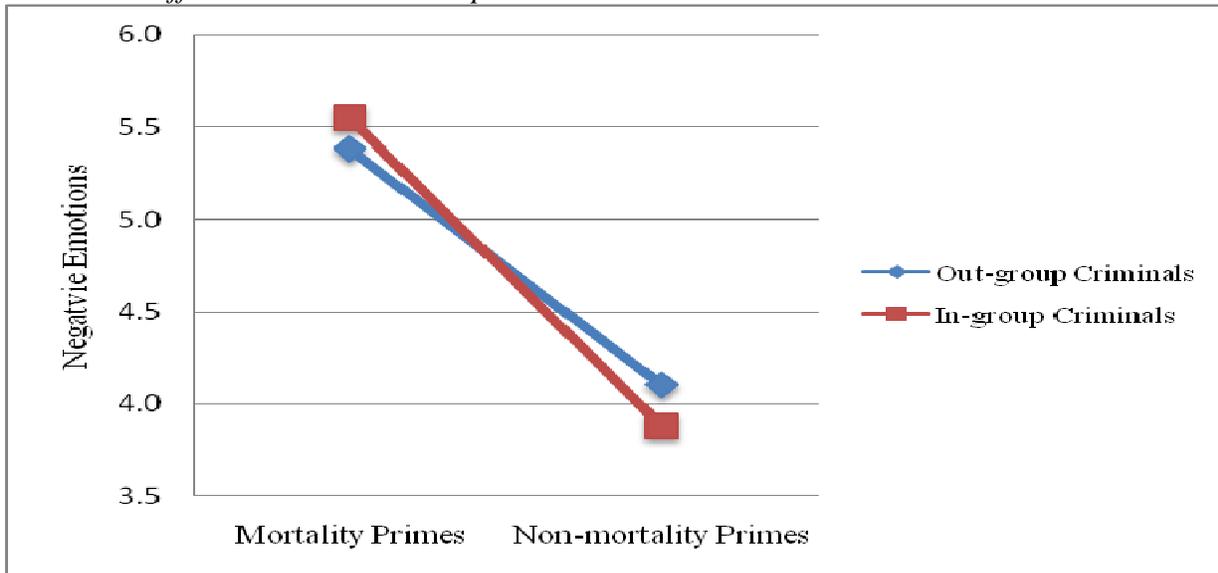
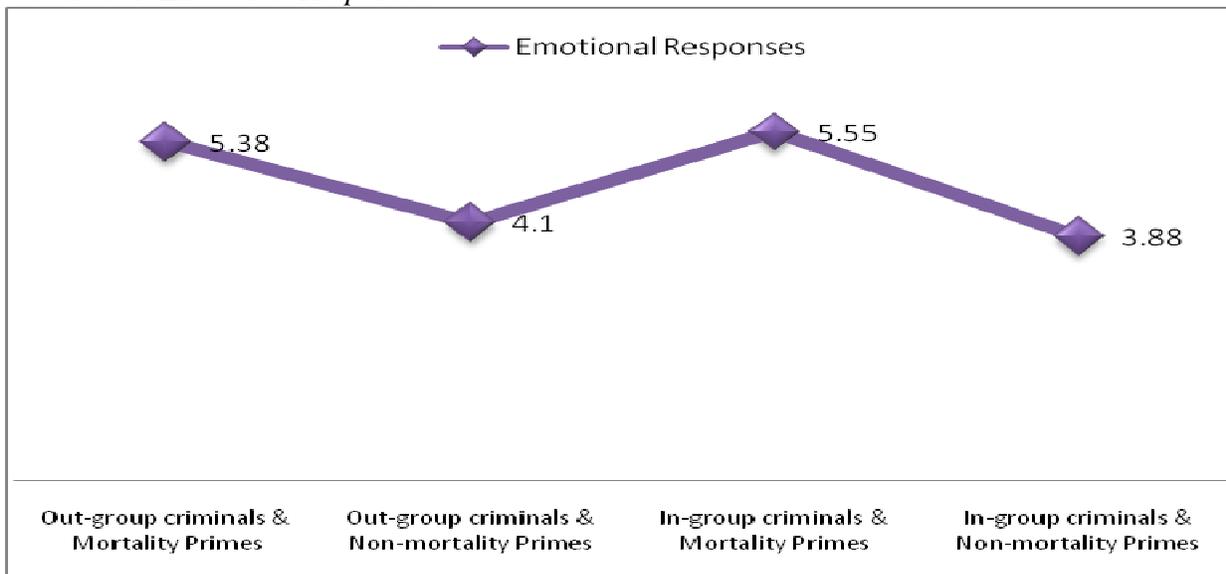


Figure 6.2  
*Variance in Emotional Responses*



*H7a, H7b, H7c, and H7d.* The Bonferroni Post Hoc tests in Table 6.1 supported H7a,  $t(105) = 20.57, p < .001$ , which meant the coverage of out-group criminals with mortality primes

( $M = 5.38$ ,  $SD = .69$ ) did elicit more negative emotional responses in news viewers than that of out-group criminals without mortality primes ( $M = 4.10$ ,  $SD = .78$ ). In addition, H7b was also confirmed,  $t(105) = 22.28$ ,  $p < .001$ , that the coverage of in-group criminals with morality primes ( $M = 5.55$ ,  $SD = .73$ ) did produce more negative emotional responses in news viewers than that of in-group criminals without mortality primes ( $M = 3.88$ ,  $SD = .83$ ). However, H7c was not supported. Although the statistical results demonstrated a significant difference between the two sides,  $t(105) = -4.14$ ,  $p < .001$ , the coverage of out-group criminals with mortality primes ( $M = 5.38$ ,  $SD = .69$ ) did not elicit more negative emotions in news viewers than that of in-group criminals with mortality primes ( $M = 5.55$ ,  $SD = .73$ ). Rather, in-group criminals in the coverage activated more negative emotional responses in news viewers than out-group criminals in the coverage. Moreover, H7d was confirmed,  $t(105) = 4.06$ ,  $p < .001$ , that the coverage of out-group criminals without mortality primes ( $M = 4.10$ ,  $SD = .79$ ) did significantly produced more negative emotions in news viewers than that of in-group criminals without mortality primes ( $M = 3.88$ ,  $SD = .83$ ).

Table 6.1  
*Multiple Comparisons of Emotional Responses*

News Type	Comparative Condition	Bonferroni	Mean Difference	<i>t</i>
Condition 1 ( <i>M</i> =5.38)	Condition 2	.121	1.28**	20.57
	Condition 3	.121	-.170**	-4.14
	Condition 4	.121	1.50**	21.41
Condition 2 ( <i>M</i> =4.10)	Condition 1	.121	-1.28**	-20.57
	Condition 3	.121	-1.45**	-21.94
	Condition 4	.121	.22**	4.06
Condition 3 ( <i>M</i> =5.55)	Condition 1	.121	.170**	4.14
	Condition 2	.121	1.45**	21.94
	Condition 4	.121	1.67**	22.28
Condition 4 ( <i>M</i> =3.88)	Condition 1	.121	-1.50**	-21.41
	Condition 2	.121	-.22**	-4.06
	Condition 3	.121	-1.67**	-22.28

*Note.* Condition 1=Out-group criminals with mortality primes; Condition 2=Out-group criminals with non-mortality primes; Condition 3=In-group criminals with mortality primes; Condition 4=In-group criminals with non-mortality primes; *MSE*=.128; \*\**p*<.01, \**p*<.05.

### ***News Evaluations***

Regarding the effects of mortality salience and social group difference on viewers' news evaluations, the GLM results indicated that mortality salience in the coverage generated a main effect on viewer's news evaluations,  $F(1, 102) = .32.50, p < .001, \eta^2 = .242$ , but social group difference evocation in the coverage did not generate a main effect on viewers' news evaluations,  $F(1, 102) = .976, p = .326, \eta^2 = .009$ . In addition, the presentation order of news stories did not produced any influence on viewers' news evaluations,  $F(3, 102) = 1.99, p = .120, \eta^2 = .055$ . The results did find interaction effects between mortality salience and social group difference on

viewers' news evaluations,  $F(1, 102) = 7.00, p < .01, \eta^2 = .064$ . Figure 6.3 showed how the interactions produced significant influences on news evaluations. Moreover, Figure 6.4 demonstrated variance in viewers' news evaluations.

Figure 6.3  
*Interaction Effects on Evaluations of News Stories*

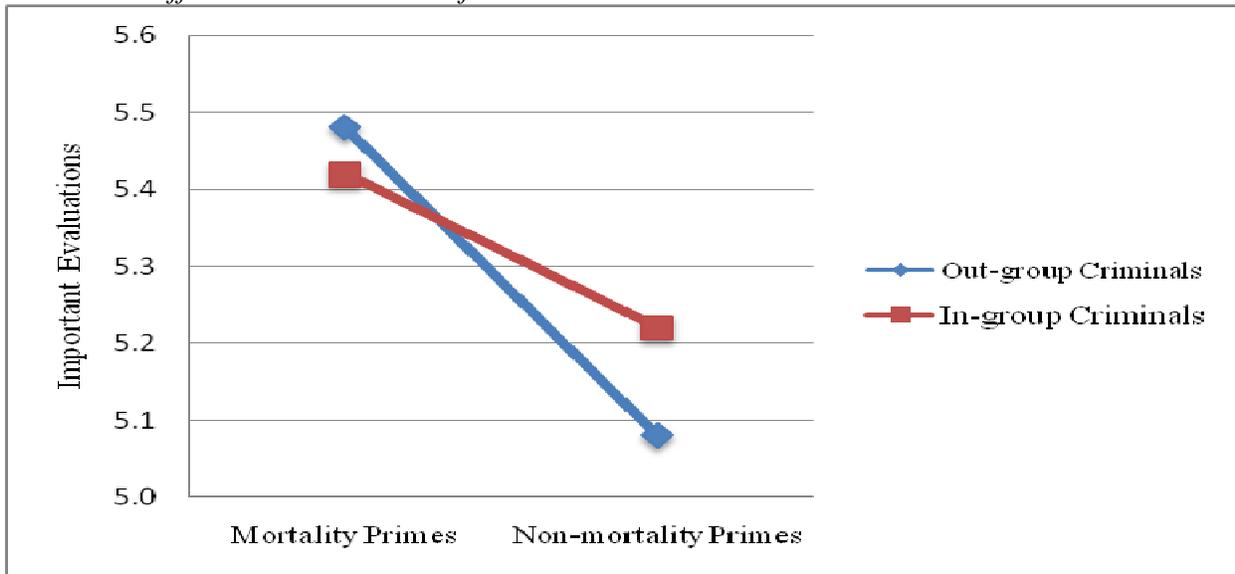
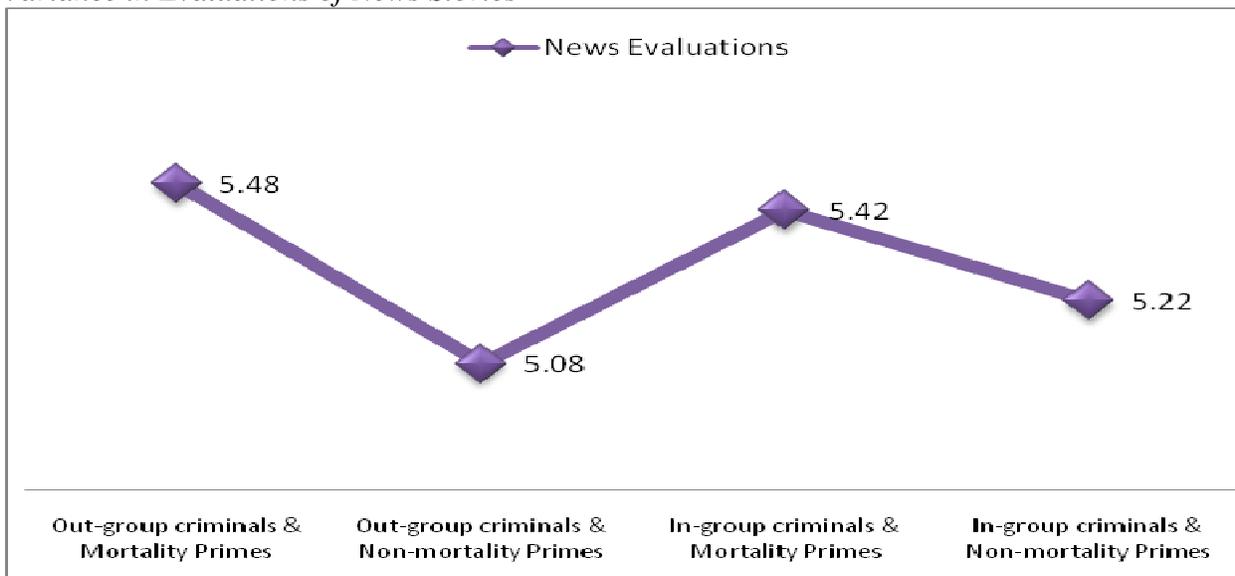


Figure 6.4  
*Variance in Evaluations of News Stories*



*H8a, H8b, H8c, and H8d.* According to the Bonferroni Post Hoc results in Table 6.2, H8a was supported,  $t(105) = 6.71, p < .01$ , that the coverage of out-group criminals with mortality primes ( $M = 5.48, SD = .91$ ) made news viewers evaluate the news as more newsworthy than did that of out-group without mortality primes ( $M = 5.08, SD = .88$ ). In addition, H8b was also supported,  $t(105) = 2.90, p < .01$ , which meant the coverage of in-group criminals with mortality primes ( $M = 5.42, SD = .94$ ) did make news viewers evaluate the news as more newsworthy than that of in-group criminals without mortality primes ( $M = 5.22, SD = .62$ ). However, H8c was not supported,  $t(105) = 1.02, p = .311$ . In other words, the coverage of out-group criminals with mortality salience ( $M = 5.48, SD = .91$ ) did not significantly activate more newsworthy evaluations of news stories in news viewers than that of in-group criminals with mortality salience ( $M = 5.42, SD = .94$ ).

Table 6.2  
*Multiple Comparisons of Evaluations of News Stories*

News Type	Comparative Condition	Bonferroni	Mean Difference	<i>t</i>
Condition 1 ( <i>M</i> =5.48)	Condition 2	.123	.40**	6.71
	Condition 3	.123	.06	1.02
	Condition 4	.123	.26**	3.99
Condition 2 ( <i>M</i> =5.08)	Condition 1	.123	-.40**	-6.71
	Condition 3	.123	-.34**	-4.68
	Condition 4	.123	-.14*	-2.37
Condition 3 ( <i>M</i> =5.42)	Condition 1	.123	-.06	-1.02
	Condition 2	.123	.34**	4.68
	Condition 4	.123	.20**	2.90
Condition 4 ( <i>M</i> =5.22)	Condition 1	.123	-.26**	-3.99
	Condition 2	.123	.14*	2.37
	Condition 3	.123	-.20**	-2.90

*Note.* Condition 1=Out-group criminals with mortality primes; Condition 2=Out-group criminals with non-mortality primes; Condition 3=In-group criminals with mortality primes; Condition 4=In-group criminals with non-mortality primes; *MSE*=.145; \*\**p*<.01, \**p*<.05.

Similarly, the results did not support H8d. Although the difference between in-group and out-group criminal condition reached significance,  $t(105) = -2.37, p < .05$ , the coverage of out-group criminals without mortality primes ( $M = 5.08, SD = .88$ ) did not encourage news viewers to evaluate the news as more newsworthy than that of in-group criminals without primes ( $M = 5.22, SD = .66$ ). Therefore, social group difference did generate significant influences on viewers' news evaluations when mortality salience was absent in the news coverage, but in-group criminals in the coverage caused viewers to have more important evaluations of news stories. Simply put, the results pointed out that mortality primes in the coverage made news viewers to evaluate the news

as more newsworthy, but social group difference did not make viewers evaluate the news as more newsworthy. Moreover, when mortality salience disappeared in the coverage of criminals, social group difference may have different influences on viewers' news evaluations.

### ***Crime Perceptions***

In terms of the effects of mortality salience and social group difference on news viewers' perceptions of the criminal acts in the coverage, the GLM results demonstrated that mortality salience significantly influenced viewers' perceptions of the criminal act in the news coverage,  $F(1, 102) = 23.89, p < .001, \eta^2 = .190$ . Moreover, the news coverage of criminals with mortality primes caused viewers to perceive the criminal acts in the coverage as more severe than that of criminals without mortality primes. The GLM results also indicated that social group difference generated significant influences on viewers' perceptions of the criminal acts in the coverage,  $F(1, 102) = 16.07, p < .001, \eta^2 = .136$ . However, the results showed that the coverage of in-group criminals made viewers to perceive the criminal acts as more severe than that of out-group criminals. In addition, the presentation order of news stories was not significant to viewers' perceptions of the criminal acts in the coverage,  $F(3, 102) = .201, p = .895, \eta^2 = .006$ . Moreover, The GLM results also found that the interactions between mortality salience and social group difference affected news viewers' perceptions of the criminal acts in the coverage,  $F(1, 102) = 26.18, p < .001, \eta^2 = .204$ . Figure 6.5 showed how the interactions between the two sides generated influences on viewers' perceptions of the criminal acts in the coverage. Additionally, Figure 6.6 indicated variance in viewers' perceptions of the criminal acts in the coverage.

Figure 6.5  
Interaction Effects on Perceptions of Criminal Acts in News Coverage

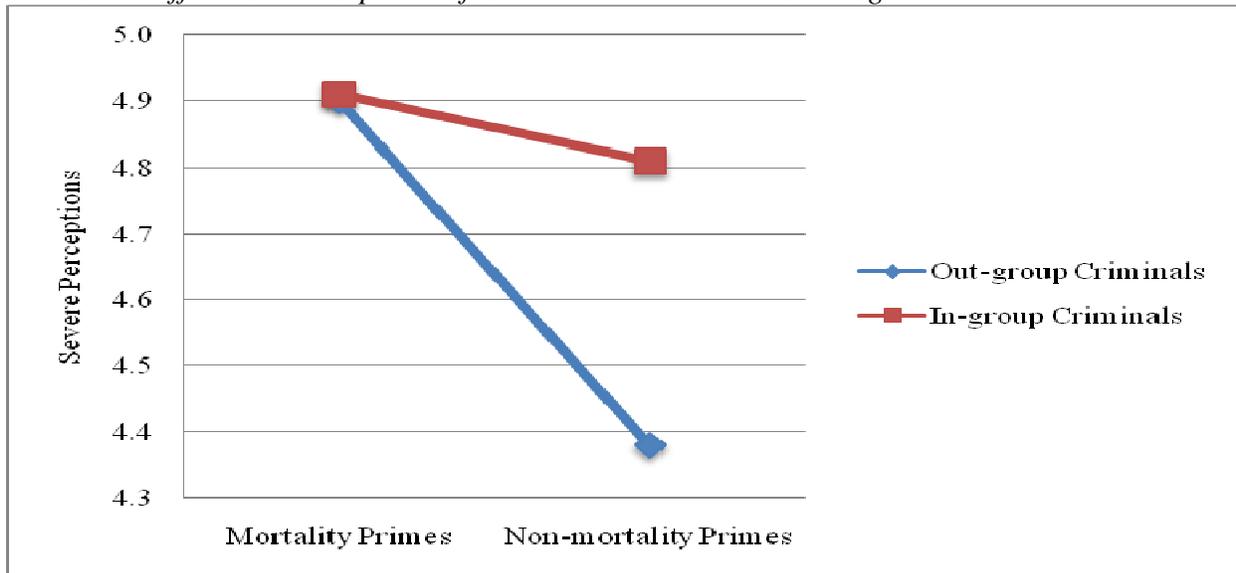
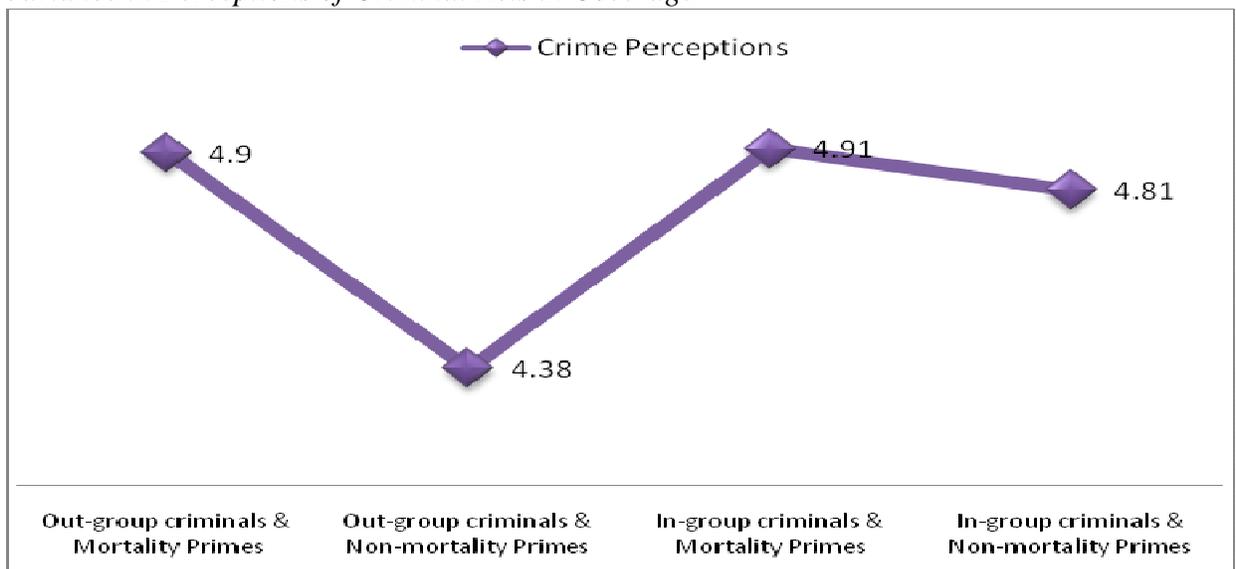


Figure 6.6  
Variance in Perceptions of Criminal Acts in Coverage



*H9a, H9b, H9c, and H9d.* The Bonferroni Post Hoc tests showed in Table 6.3 that H9a was supported,  $t(105) = 6.39, p < .01$ . That is, the coverage of out-group criminals with mortality primes ( $M = 4.90, SD = .92$ ) did significantly cause news viewer to perceive the criminal acts in the coverage as more severe than that of out-group criminals without mortality primes ( $M = 4.38,$

$SD = 1.00$ ). In addition, H9b was not supported,  $t(105) = 1.38, p = .17$ . Although the coverage of in-group criminals with mortality primes ( $M = 4.91, SD = .99$ ) caused news viewers to perceive the criminal acts as more severe than that of in-group criminals without mortality primes ( $M = 4.81, SD = .74$ ), the difference between the two sides was insignificant. Moreover, H9c was not supported,  $t(105) = -.22, p = .83$ . That is, the coverage of out-group criminals with mortality salience ( $M = 4.90, SD = .92$ ) did not make news viewers to perceive the criminal acts as more severe events than that of in-group criminals with mortality primes ( $M = 4.91, SD = .99$ ), which meant that the influences of social group difference on viewers' perceptions of the criminal acts were not found when mortality primes existed in the news coverage. Finally, the results did not support H9d. Although the difference between the coverage of in-group criminals without mortality primes and that of out-group criminals without mortality primes was significantly found,  $t(105) = -5.17, p < .01$ , the coverage of in-group criminals without mortality primes ( $M = 4.81, SD = .74$ ) activated news viewers to perceive the criminal acts as more severe than that of out-group criminals without mortality primes ( $M = 4.38, SD = 1.00$ ). Therefore, when mortality primes were absent in the news coverage, the in-group criminals seemed to significantly activate more severe perceptions of the criminal acts in news viewers.

Table 6.3  
*Multiple Comparisons of Perceptions of Criminal Acts in Coverage*

News Type	Comparative Condition	Bonferroni	Mean Difference	<i>t</i>
Condition 1 ( <i>M</i> =4.90)	Condition 2	.137	.52**	6.39
	Condition 3	.137	-.01	-.22
	Condition 4	.137	.09	1.38
Condition 2 ( <i>M</i> =4.38)	Condition 1	.137	-.52**	-6.39
	Condition 3	.137	-.53**	-5.09
	Condition 4	.137	-.43**	-5.17
Condition 3 ( <i>M</i> =4.91)	Condition 1	.137	.01	.22
	Condition 2	.137	.53**	5.09
	Condition 4	.137	.10	1.38
Condition 4 ( <i>M</i> =4.81)	Condition 1	.137	-.09	-1.38
	Condition 2	.137	.43**	5.17
	Condition 3	.137	-.10	-1.38

*Note.* Condition 1=Out-group criminals with mortality primes; Condition 2=Out-group criminals with non-mortality primes; Condition 3=In-group criminals with mortality primes; Condition 4=In-group criminals with non-mortality primes; *MSE*=.179; \*\**p*<.01, \**p*<.05.

### ***Self-esteem***

*H10a, H10b, and H10c.* To explore the influences of news viewers' self-esteem on news viewer's information-processing outcomes, the GLM results showed that viewers' self-esteem did not generate main effects on their emotional responses to TV news,  $F(1, 103)=2.63, p=.108, \eta^2=.025$ . Therefore, H10a was not supported. Moreover, the results also indicated that viewers' self-esteem did not have main effects on their evaluations of news stories,  $F(1, 103)=1.53, p=.219, \eta^2=.015$ . That is, H10b was also not supported. Finally, the results demonstrated that self-

esteem was not an important factor in affecting news viewers' perceptions of criminal acts in news coverage,  $F(1, 103) = .001, p = .972, \eta^2 < .001$ , which meant H10c was not confirmed either.

*H11a, H11b, and H11c.* Regarding interaction effects between news viewers' self-esteem and mortality salience in the coverage, the GLM results indicated that interaction effects between viewers' self-esteem and mortality salience in news coverage were partially significant to viewers' emotions,  $F(1, 103) = 3.55, p = .062, \eta^2 = .033$ , which indicated that H11a was not confirmed. However, the results indicated that H11b was not supported that interaction effects between viewers' self-esteem and mortality salience were not significant to viewers' news evaluations,  $F(1, 103) = .347, p = .557, \eta^2 = .003$ . Finally, the results also indicated that interaction effects between self-esteem and mortality salience did not activate viewers' perceptions of criminal acts in news coverage,  $F(1, 103) = .116, p = .735, \eta^2 < .001$ , which meant H11c was not supported.

### ***Social Distance from Immigrants***

*H12a, H12b, and H12c.* Concerning the influences of news viewers' social distance from immigrants, the GLM results demonstrated that viewers' social distance from immigrants was not a significant factor in their emotional responses,  $F(1, 103) = .161, p = .689, \eta^2 = .002$ . In this vein, H12a was not supported. In addition, the results also indicated that social distance from immigrants did not produce main effects on viewers' evaluations of news stories,  $F(1, 103) = 2.86, p = .094, \eta^2 = .027$ , which meant H12b was not confirmed. Finally, the results showed that H12c was not supported, indicating that social distance from immigrants did not dominate news viewers' perceptions of the criminal acts in the news coverage,  $F(1, 103) = 1.127, p = .29, \eta^2 = .011$ .

*RQ2, RQ3, and RQ4.* The GLM results indicated that interaction effects between viewers' social distance from immigrants and social group difference did not dominate viewers' emotional

responses to the news coverage,  $F(1, 103) = .658, p = .437, \eta^2 = .006$ , news evaluations,  $F(1, 103) = .227, p = .634, \eta^2 = .002$ , as well as perceptions of criminal acts in news coverage,  $F(1, 103) = .783, p = .378, \eta^2 = .008$ . Therefore, there was evidence that there were no interaction effects between social distance from immigrants and social group difference on viewers' information-processing outcomes.

## **Discussion**

Experiment 2 found that news viewers' emotional responses were significantly related to mortality primes in TV news. It is obvious that news viewers in the mortality conditions had more negative emotional responses to TV news than those in the non-mortality conditions. However, Experiment 2 did not demonstrate that social group difference between news viewers and the criminals in the coverage was an important factor in influencing viewers' emotional responses. It is fair to state that news viewers' emotions were not influenced by the social group to which the criminals belonged. Experiment 2 also indicated the interactions between mortality salience and social group difference had significant influences on viewers' emotional responses to TV news. More specifically, while mortality primes elicited more negative emotions in both out-group criminal and in-group criminal conditions, the social group to which the criminals belonged did not make significant differences in news viewers' negative emotions in both mortality and non-mortality conditions. Therefore, the experiment proved that mortality content in TV news could be an important factor in influencing viewers' emotional responses, but a conflict between in-groupers and out-groupers in TV news did not elicit more negative emotions in news viewers.

Similarly, Experiment 2 indicated that mortality salience effects in TV news dominated viewers' evaluations of news stories, but did not find that social group difference could produce significant influences on their evaluations. There was evidence that news viewers may evaluate

news stories as more important when the stories contained more mortally-oriented content. Specifically, in both in-group and out-group criminal conditions, mortality salience effects were significant to viewers' news evaluations. Regarding the influences of social group difference, in the mortality conditions, although out-group criminals in the stories made viewers to evaluate the stories as more important than did in-group criminals, the difference was not significant. However, in the non-mortality conditions, the coverage of in-group criminals did make more important evaluations of news stories than that of out-group criminals.

Experiment 2 also found interaction effects between mortality salience and social group difference on viewers' evaluations of news stories. Again, a slight difference between the coverage of in-group criminals and that of out-group criminals was found in the mortality conditions, but significant difference between the two sides was found in the non-mortality conditions. In other words, when mortality primes were presented in the coverage, out-group criminals in the coverage elicited more important evaluations of news stories in news viewers. Otherwise, when mortality primes were absent in the coverage, news viewers would evaluate the stories about in-group criminals as more important to themselves than those about out-group criminals. Therefore, the coverage of out-group criminals was not an important issue to news viewers when the coverage did not include mortally-oriented content. Then, news viewers may be inclined to evaluate the coverage of in-group criminals as more newsworthy to themselves. A possible explanation could be that in-group criminals were near news viewers, and such crimes committed by in-group criminals may happen more frequently in viewers' lives.

Concerning viewers' perceptions of the criminal acts in the stories, Experiment 2 found that mortality salience in TV news was an important factor in viewers' perceptions of the criminal acts. Specifically, in the out-group criminal conditions, mortality salience did activate viewers to perceive the criminal acts in the coverage as more severe. However, in the in-group

criminal conditions, mortality salience did not encourage viewers to have more severe perceptions of the criminal acts in the coverage. It could explain that mortality salience effects in TV news could be strengthened when TV news with mortally-oriented content describing the out-group criminals. In such a situation, news viewers would perceive the criminal acts as more severe events.

In addition, social group difference was found to be another significant factor in influencing viewers' perceptions of the criminal acts. In the mortality conditions, no difference between the coverage of in-group criminals and that of out-group criminals existed. However, in the non-mortality conditions, the difference between the two sides was found to be significant. Moreover, the coverage of in-group criminals made viewers to have substantially more severe perceptions of the criminal acts than that of out-group criminals. In this vein, when mortality salience was not presented to news viewers, viewers could perceive the criminal acts committed by their in-groupers as more severe. It could also be explained that the criminal acts committed by viewers' in-groupers may be closer to news viewers, so that they would think that these criminal acts in the coverage looked crueler to them.

Experiment 2 also found interaction effects between mortality salience and social group difference on viewers' perceptions of the criminal acts in the coverage. This indicated that mortality salience and social group difference were interactive to generate different levels of effects on viewers' perceptions of the criminal acts. Again, mortality salience effect could become more powerful on viewers' perceptions when TV news reported out-group criminals, and the coverage of in-group criminals may be perceived as more severe than that of out-group criminals when mortally materials were absent in the coverage.

In terms of the influences of self-esteem on news viewers' information-processing outcomes, Experiment 2 demonstrated viewers' self-esteem did not generate significant

influences on their emotional responses, evaluations of news stories, and perceptions of the criminal acts in the coverage. Although terror management theorists stated that people with higher self-esteem were immune to mortality salience effects (Gailliot, Schmeichel, & Maner, 2007; Pyszczynski, Greenberg et al., 2004), Experiment 2 did not find any relationship of viewers' self-esteem with their information-processing outcomes. Specifically, viewers' self-esteem did not produce any significant influence on their emotional responses, evaluations of news stories, and perceptions of the criminal acts in the stories. Therefore, although self-esteem could reduce people's concerns about death, indicating that people with higher self-esteem could be invulnerable to the social influences of mortality salience, this assumption was not confirmed by news viewers' information-processing of TV news. In addition, while the relationship between self-esteem and information-processing outcomes did not emerge, interaction effects between self-esteem and mortality salience in TV news were partially found on news viewers' emotional responses. That is, viewers' self-esteem may moderately interact with mortality primes in TV news in order to decrease the power of mortality salience effects on viewers' emotional responses, but such interaction effects were not conclusively powerful.

Regarding social distance from immigrants, Experiment 2 did not find any significant influence of social distance on viewers' information-processing outcomes. Although previous research indicated that the perspectives of media viewers on media protagonists would affect how media viewers processed media messages (Coover, 2001; Mastro, Behm-Morawitz, & Kopacz, 2008), Experiment 2 revealed that the perspectives of news viewers on their out-group members did not significantly affect either their emotional responses to the coverage of out-group criminals, evaluations of news stories about out-group criminals, or perceptions of the criminal acts committed by out-group criminals. Moreover, social distance from immigrants did not completely interact with the social group to which the criminals in the coverage belonged in order

to moderate the power of social group difference effects. That is, there may not be interaction effects between social distance and social group difference on viewers' information-processing outcomes in Experiment 2.

In brief, Experiment 2 found that (1) mortality salience in TV news would significantly activate viewers to have more negative emotional responses, more newsworthy evaluations of news stories, and more severe perceptions of the criminal acts in the stories; (2) the coverage of in-group criminals would significantly encourage viewers to have more severe perceptions of the criminal acts than that of out-group criminals; (3) the interactions between mortality salience and social group difference produced significant influences on viewers' emotional responses, evaluations of news stories, and perceptions of the criminal acts; and (4) the interactions between self-esteem and mortality salience partially generated influences on viewers' emotional responses. Therefore, Experiment 2 indicated that mortality salience effects in TV news were more powerful than social group difference effects in terms of emotions, news evaluations, and crime perceptions. Moreover, out-group criminal in the news coverage did not always look more hostile to viewers. News viewers may purposely process some news information closely related to themselves, but not react to news stories based upon the social group to which the protagonists in the news coverage belonged. Finally, although self-esteem did not significantly interact with mortality salience in TV news, it still played a role in moderating the power of mortality salience effects on viewers to some extent.

## **CHAPTER SEVEN**

### **CONCLUSIONS**

#### **General Discussion**

This study consisted of two experiments to explore social and psychological effects of mortality salience and social group difference in TV news. The study found that terror management theory can be used to explain social and psychological effects of TV news on news viewers. After exposure to mortality primes in TV news, viewers' mortality thoughts were evoked to increase their hostility and negative judgment on the immigration issue. The study confirmed the terror management assumption that reminding participants of death provoked increased hostility and aggression against others with a different cultural worldview (Greenberg, Pyszczynski, & Solomon, 1986; Greenberg, Pyszczynski et al., 1990; McGregor et al., 1998). This important finding provided evidence that viewers with exposure to TV news with mortality primes had more hostile attitudes toward the criminals in the coverage, and they further showed more negative judgments of the immigration issue. Therefore, when news reporters placed mortality-related materials in their news stories, news viewers with exposure to such news would be more inclined to hold negative perspectives on immigrants in the United States. Consequently, the conflicts between Americans and immigrants may continue to cause a series of social turbulence in U.S. Moreover, immigration in U.S. would be incessantly treated as severe threats by most Americans and their government if news media frequently provided more mortality primes to news viewers.

However, mortality primes in TV news did not lead viewers to be more inclined to perceive risk vulnerability. That is, news viewers did not report that their own safety was

seriously threatened after exposure to mortality primes in TV news. A possible explanation could be that mortality primes in the news coverage only activated viewers' mortality thoughts, but did not remind them of their own death. Therefore, viewers might not clearly consider the possibility that their own society was at risk; so that therefore they were not more vulnerable to risk.

Additionally, the study did not find social group difference as a vital factor in viewers' mortality thoughts, hostility, and risk vulnerability, but did recognize social group difference as a significant factor in viewers' judgments of the immigration issue. It is reasonable that news viewers were led by the social group to which the criminals belonged in TV news to have more negative perspectives on the immigration issue, because social group difference was the most relevant prime to the judgment of immigration issue. In this vein, the study confirmed the priming effects assumption. This meant that the social group to which the criminals belonged in negative news became an important primer for negative judgments of the immigration issue (Gibbons, Taylor, & Phillips, 2004; Oliver & Fonash, 2002). Thus, the study demonstrated that exposure to everyday news about criminals murdering Americans would trigger viewers' mortality thoughts, which resulted in their hostility toward the criminals and aggression against others with different cultural norms. Moreover, when TV news reported immigrants as criminals, TV news would become an essential prime for viewers to judge the immigration issue more negatively, no matter whether TV news included any mortality material.

Furthermore, the study explored effects of mortality salience and social group difference on viewers' information-processing outcomes. The study did find that mortality primes in TV news activated more negative emotions, more newsworthy evaluations of news stories, and more severe perceptions of crimes in the news coverage. Obviously, news reporters were more likely to incorporate more mortality materials in their stories because the features of mortality materials could make the stories sell more easily. Therefore, it could be assumed that when more mortality

materials were placed in TV news, more mortality thoughts would be activated in Americans, which may directly result in the activation of hostility toward immigrants and negative perspectives on the immigration issue. On the other hand, social group difference was found as the only factor in viewers' severe perceptions of crimes in the coverage. More interestingly, immigrant criminals in the coverage did not make American viewers to have more severe perceptions of crimes than American criminals. The study contradicted the social identity assumption that the social group to which people belonged was related to their increased in-group favoritism (Mastro, 2003), but found that the crimes committed by in-group criminals were perceived as more severe events than those committed by out-group criminals. A possible explanation could be that American viewers might realize that the crimes committed by their in-group members were more relevant to themselves. In such a situation, viewers would not perceive the crimes in TV news based on the social group to which the criminals belonged. More possibly, viewers may intentionally perceive the crimes in TV news based upon their needs of news information. Although it is possible that immigrant criminals looked more brutal to American viewers on the basis of a social identity paradigm, American viewers indeed were concerned more about what kind of crime their in-group members committed in their society.

Although the study did not find social group difference as a very vital factor in viewers' information-processing outcomes, social group difference was frequently interactive with mortality salience in TV news, which generated some significant influences on information-processing outcomes. In other words, the social group to which the criminals belonged in TV news did not directly affect viewers' emotions and news evaluations, but news viewers may refer to the social group of the criminals to produce their emotional responses, news evaluations, and crime perceptions, while exposed to mortality primes in TV news. In this vein, the social group of the criminals may still play an important role in viewers' processing of mortality content in TV

news. That is, the social group to which the criminals belonged in TV news might moderately generate influences on news viewers' information-processing outcomes when mortality primes were placed in TV news.

Finally, the study contradicted the assumptions that self-esteem and social distance from immigrants were two critical covariates in moderating the effects of mortality salience and social group difference. According to the terror management hypothesis, when self-esteem was increased, participants with exposure to mortality-related stimulus would exhibit less anxiety, psychological arousal, and preoccupation with death, and anxiety-related defensiveness (Greenberg, Pyszczynski et al., 1993; Greenberg, Solomon et al. 1992). However, the study did not find any significant relationship of self-esteem with viewers' emotions, news evaluations, and crime perceptions after exposure to mortality primes in TV news. Rather, viewers' self-esteem may be interactive with mortality salience in TV news to affect viewers' emotional responses to TV news to some extent. Although the interactions between self-esteem and mortality salience in TV news were not found to be entirely significant ( $p = .062$ ), they provided some possibility that viewers' emotional responses to TV news could be partially led by interaction effects between self-esteem and mortality salience. Otherwise, social distance from immigrants was not found as an important covariate in viewers' information-processing outcomes. Moreover, social distance did not significantly interact with the social group of the criminals in TV news in order to moderate the effects of social group difference. In other words, social distance from immigrants can not be considered as an essential personality trait while viewers were responding to TV news of the immigrant criminals. Therefore, the study provided evidence that news viewers' information-processing outcomes of TV news about immigrant criminals were led neither by the social group of the criminals in TV news nor by viewers' social distance from immigrants. The

level of severity of American viewers' information processing of TV news could be due to the proximity of TV news to viewers' everyday lives.

### **Future Research**

This study provided some evidence that mortality salience in TV news made news viewers to have more negative consequences in terms of social and psychological effects. Although the findings in this study had been confirmed based upon terror management theory, mortality salience in TV news could produce more social and psychological effects on news viewers. For instance, terror management theorists stated that mortality-related stimulus resulted in the activation of participant's self-protection, psychological arousal, and anxiety-related defensiveness. Specifically, future research can be conducted to explore whether mortality salience in the mass media may encourage media audiences to increase their potential toward nationalism, speed up their arousal and attention, and produce defensiveness in moderating their anxiety caused by mortality salience. Moreover, past research on mortality salience effects did not focus on the relationships between media's mortality effects and viewers' physiological responses as well as their physiological responses to mortality primes in the media and their sequent stereotypical cognitions and behaviors. Future research can look at mortality salience effects on audiences' physiological responses (e.g., heart rate and skin conductance) to mortality materials in the media and also explore interaction effects between mortality salience in the media and audiences' physiological reactions on audiences' self-protection and anxiety-related defensiveness.

Additionally, the study found interaction effects between mortality salience and social group difference on news viewers, but did not demonstrate more direct and solid influences of social group difference on news viewers. As stated in the general discussion, one possible explanation could be due to the proximity of the criminal acts in TV news. However, it may also

be due to the aversive racism assumption, which indicated that news viewers were unwilling to indicate their discrimination against immigrants. In this vein, future research can use other approaches to measure whether the social group to which the protagonists belonged in the media can generate viewers' unconsciously stereotypical thinking and behavior toward the protagonists. To measure viewers' implicit stereotypes on immigrants, future research could use a cognitive science approach (e.g., the matching task and lexical decision task) to look at whether social group difference and social distance from immigrants did not generate any significant influence on viewers after exposure to TV news of immigrant criminals.

## REFERENCES

- Abrams, J. (2005). *Television activity among African Americans: Is it related to perceptions of out-group vitality?* Paper presented to the Mass Communication Division of the International Communication Association at the annual meeting, New York.
- Abrams, D., & Hogg, M. A. (1988). Comments on the motivational status of self-esteem in social identity and inter-group discrimination. *European Journal of Social Psychology, 18*, 317-334.
- Anderson, D. R., & Collins, P. A. (1996). Stressful life events and television viewing. *Communication Research, 23*, 243-260.
- Arndt, J., Cook, A., & Routledge, C. (2004). The blueprint of terror management: Understanding the cognitive architecture of psychological defense against the awareness of death. In J. Greenberg, S. L., Koole, and T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp.35-53). New York: Guilford.
- Arndt, J., & Greenberg, J. (1999). The effects of a self-esteem boost and mortality salience on responses to boost relevant and irrelevant worldview threats. *Personality and Social Psychological Bulletin, 25*, 1331-1341.
- Arndt, J., Greenberg, J., & Cook, A. (2002). Mortality salience and the spreading activation of worldview-relevant constructs: Exploring the cognitive architecture of terror management. *Journal of Experimental Psychology: General, 131*, 307-324.
- Arndt, J., Schimel, J., & Goldenberg, J. L. (2003). Death can be good for your health: Fitness intentions as a proximal and distal defense against mortality salience. *Journal of Applied Social Psychology, 33*, 1726-1746.
- Banaji, M.R., & Hardin, C. D. (1996). Automatic stereotype. *Psychological Science, 7*, 136-141.
- Bassili, J. N., & Smith, M. C. (1986). On the spontaneity of trait attribution: Coverging evidence for the role of cognitive strategy. *Journal of Personality and Social Psychology, 50* (2), 239-245.
- Bogard, E. S. (1959). *Social distance*. Yellow Spring, OH: Antioch.
- Branden, N. (1969). *The psychology of self-esteem*. New York: Bantam.
- Branscombe, N. R., & Ellemers, N. S. (1998). Coping with group-based discrimination: Individualistic versus group-level strategies. In J. K. Swim, C. Stangnor (Eds.), *Prejudice:*

*The target's perspective* (pp.243-266). New York: Academic.

Breslau, N., Kessler, R. C., Chilcoat, H. D., Schultz, L. R., Davis, G. C., & Andreski, M. A. (1998). Trauma and posttraumatic stress disorder in the community. *AGP*, 55, 626-632.

Byrnes, D., & Kiger, G. (1988). Contemporary measures of attitudes toward blacks. *Educational and Psychological Measurement*, 48, 107-119.

Carlton-Ford, S., Ender, M. G., & Tabatabai, A. (2007). Iraqi adolescent: Self-regard, self-derogation, and perceived threat in war. *Journal of Adolescence*, 31, 53-75.

Cho, J., Boyle, M. P., Keum, H., Shevy, M. D., McLeod, D. M., Shah, D. V., & Pan, Z. (2003). Media, terrorism, and emotionality: Emotional differences in media content and public reactions to the September 11<sup>th</sup> terrorist attacks. *Journal of Broadcasting and Electronic Media*, 47(3), 309-327.

Coover, G. E. (2001). Television and social identity: Race representation as "white" accommodation. *Journal of Broadcasting and Electronic Media*, 45 (3), 413-430.

Crandall, C. S. (1991). Multiple stigma and AIDS: Medical stigma and attitudes toward homosexuals and IV-drug users in AIDS-related stigmatization. *Journal of Community and Applied Social Psychology*, 1, 165-172.

Devine, P. G. (1989). Stereotypes and prejudices: Their automatic and controlled components. *Journal of Personality and Social Psychology*, 56, 5-18.

Devine, P. G., & Monteith, M. J. (1999). Automaticity and control in stereotyping. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp.97-116). New York: Guilford.

Dixon, T. L., & Linz, D. (2000). Overrepresentation and underrepresentation of African Americans and Latinos as lawbreakers on television news. *Journal of Communication*, 50, 131-154.

Fazio, R. H. (1990). Multiple processes by which attitudes guide behavior: The MODE model as an integrative framework. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp.75-109). San Diego, CA: Academic.

Fazio, R. H., & Towles-Schwen, T. (1999). The MODE model of attitude-behavior processes. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp.97-116). New York: Guilford.

Festinger, L. (1954). A theory of social comparison process. *Human Relations*, 7, 117-140.

Fujioka, Y. (2005). Black media images as a perceived threat to African American ethnic identity: Coping responses, perceived public perception, and attitudes towards affirmative action.

*Journal of Broadcasting and Electronic Media*, 49 (4), 450-467.

Gaertner, S. L., & Dovidio, J. (1986). The aversive form of racism. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, discrimination, and racism* (pp. 61-89). New York: Academic Press.

Gailliot, M. T., Schmeichel, B. J., & Maner, J. K. (2007). Differentiating the effects of self-control and self-esteem on reactions to mortality salience. *Journal of Experimental Social Psychology*, 43, 894-901.

Gibbons, J. A., Taylor, C., & Phillips, J. (2004). Gender and racial stereotypes in the mass media. In W. R. Walker (Ed.), *Cognitive technology: Transforming thought and society*. Jefferson, NC: McFarland & Associates.

Giles, D. (2003). *Media psychology*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Goldenberg, J. L., Pyszczynski, T., Johnson, K. D., Greenberg, J., & Solomon, S. (1999). The appeal of tragedy: The effects of mortality salience on emotional response. *Media Psychology*, 1, 313-329.

Gorman, A., & Blankstein, A. (2007, October 3). Massive sweep deports hundreds; More than 1,300 are arrested as U.S. officials target immigrant criminals in Southland. *The Los Angeles Time*, pp. A1.

Grabe, M., & Kamhawi, R. (2006). Hard wired for negative news? Gender differences in processing broadcast news. *Communication Research*, 33(5), 346-369.

Grabe, M., Lang, A., & Zhao, X. (2003). News content and form: Implications for memory and audience evaluations. *Communication Research*, 30 (4), 387-413.

Graber, D. A. (1990). Seeing is remembering: How visuals contribute to learning from television news. *Journal of Communication*, 40(3), 134-155.

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.

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

Greenberg, J., Simon, L., Pyszczynski, T., Solomon, S., & Chatel, D. (1992). Terror management and tolerance: Does mortality salience always intensify negative reactions to others who threaten one's worldview? *Journal of Personality and Social Psychology*, 63, 212-220.

Greenberg, J., Solomon, S., Pyszczynski, T., Rosenblatt, A., Burling, J., Lyon, D., Pinel, E., & Simon, L. (1992). Assessing the terror management analysis of self-esteem: Converging

- evidence of an anxiety-buffering function. *Journal of Personality and Social Psychology*, 63, 913-922.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: a terror management theory. In R. F. Baumeister (Ed.), *Public self and private self* (pp.189-212). New York: Springer-Verlag.
- Greenberg, J., Pyszczynski, T., Solomon, S., Pinel, E., Simon, L., & Jordan, K. (1993). Effects of self-esteem on vulnerability-denying defensive distortions: Further evidence of an anxiety-buffering function of self-esteem. *Journal of Experimental Social Psychology*, 29, 229-251.
- 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.
- 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.
- Grimes, T. (1990). Audio-video correspondence and its role in attention and memory. *Educational Technology, Research, and Development*, 38, 15-25.
- Grimes, T. (1991). Mild auditory-visual dissonance in television news may exceed viewer attentional capacity. *Human Communication Research*, 17, 268-298.
- Hansen, C. H., & Hansen, R. D. (1988). How rock music videos can change what is seen when boy meets girl: Priming stereotypic appraisal of social interaction. *Sex Role*, 19, 287-316.
- Hansen, C. H., & Krygowski, W. (1994). Arousal-augmented priming effects: Rock music videos and sex object schemas. *Communication Research*, 21, 24-47.
- Harmon-Jones, E., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., & McGregor, H. (1997). Terror management theory and self-esteem: Evidence that increased self-esteem reduces mortality salience effects. *Journal of Personality and Social Psychology*, 72, 24-36.
- Harwood, J. (1997). Viewing age: Lifespan identity and television viewing choice. *Journal of Broadcasting and Electronic Media*, 41, 203-213.
- Harwood, J. (1999a). Age identification, social identity gratification, and television viewing. *Journal of Broadcasting and Electronic Media*, 43, 123-136.
- Harwood, J. (1999b). Age identity and television viewing preference. *Communication Reports*, 12, 85-90.
- Hoffner, C., Fujioka, Y., Ye, J., & Ibrahim, A. (2003). *Why we watched: Factors affecting exposure to TV news coverage of September 11*. Paper presented to the 53<sup>rd</sup> Annual

Conference of International Communication Association, San Diego, CA.

- Hoffner, C. & Haefner, M. J. (1993). Children's affective responses to news coverage of the war. In B. S. Greenberg, & W. Gantz (Eds.), *Desert storm and the mass media* (pp. 253-263). Cresskill, NJ: Hampton Press.
- Hogg, M. A. (2007). Intergroup relations. In J. Delamater (Ed.), *Handbook of social psychology* (pp. 479-502). New York: Springer.
- Hogg, M. A. (1995). Social identity theory. In A. S. R. Manstead & M. Hewstone (Eds.), *The Blackwell encyclopedia of social psychology* (pp. 555-560). Oxford, UK: Blackwell.
- Kubey, R. W., & Peluso, T. (1990). Emotional response as a cause of interpersonal news diffusion: The case of the space shuttle tragedy. *Journal of Broadcasting and Electronic Media*, 34(1), 69-76.
- Landau, M. J., Solomon, S., Greenberg, J., Cohen, F., Pyszczynski, T., Arndt, J., Miller, C. H., Ogilvie, D. M., & Cook, A. (2004). Deliver us from evil: The effects of mortality salience and reminders of 9/11 on support for President George W. Bush. *Personality and Social Psychology Bulletin*, 30, 1136-1150.
- Lewicki, P. (1986). *Nonconscious social information processing*. Orlando, FL: Academic.
- Marger, M. N. (1994). *Race and ethnic relations: American and global perspectives* (3<sup>rd</sup> ed.). Belmont, CA: Wadsworth.
- Mastro, D. E. (2003). A social identity approach to understanding the impact of television messages. *Communication Monograph*, 70 (2), 98-113.
- Mastro, D. E., & Behm-Morawitz, E., & Kopacz, M. A. (2008). Exposure to television portrayals of Latinos: The implications of aversive racism and social identity theory. *Human Communication Research*, 34, 1-27.
- Mastro, D. E., & Greenberg, B. S. (2000). The portrayal of racial minorities on prime time television. *Journal of Broadcasting and Electronic Media*, 44, 690-703.
- McGregor, H., Lieberman, J. D, Solomon, S., Greenberg, J., Arndt, J., Simon, L., & Pyszczynski, T. (1998). Terror management and aggression: Evidence that mortality salience motivates aggression against worldview threatening others. *Journal of Personality and Social Psychology*, 74, p. 590-605.
- Mundorf, N., Drew, D., Zillmann, D., & Weaver, J. (1990). Effects of disturbing news on recall of subsequently presented news. *Communication Research*, 17, 601-615.
- Murphy, L. B., & Moriarty, A. E. (1976). *Vulnerability, coping, and growth from infancy to adolescence*. New Haven, CT: Yale University Press.

- Newell, A. (1990). *Unified theories of cognition*. Cambridge, MA: Harvard University.
- Newhagen, J. E., & Reeves, B. (1992). This evening bad news: Effects of compelling negative television news images on memory. *Journal of Communication*, 42 (2), 25-41.
- Oakes, P. (1987). The salience of social categories. In J. C. Turner (Ed.), *Recovering the social group: A self-categorization theory* (pp. 117-141). Oxford: Basil Blackwell.
- Oliver, M. B., & Fonash, D. (2002). Race and crime in the news: Whites' identification and misidentification of violent and nonviolent criminal suspects. *Media Psychology*, 4, 137-156.
- Pan, Z., Ostman, R. E., Moy, P., & Reynolds, P. (1993). Audience evaluations of U.S. news media performance in the Gulf war. In B. S. Greenberg, & W. Gantz (Eds.), *Desert storm and the mass media* (pp. 213-231). Cresskill, NJ: Hampton Press.
- Phinney, J. S., & Alipuria, L. L. (1990). Ethnic identity in college students from four ethnic groups. *Journal of Adolescence*, 13, 171-183.
- Power, J. G., Murphy, S. T., & Coover, G. (1996). Priming prejudice: How stereotypes and counter-stereotypes influence attribution of responsibility and credibility among ingroups and outgroups. *Human Communication Research*, 23, 36-58.
- Pyszczynski, T., Greenberg, J., & Solomon, S. (1999). A dual-process model of defense against conscious and unconscious death-related thoughts: An extension of terror management theory. *Psychological Review*, 106, 835-845.
- 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., Wicklund, R. A., Floresky, S., Gauch, G., Koch, S., Solomon, S., & Greenberg, J. (1996). Whistling in the dark: Exaggerated estimates of social consensus in response to incidental reminders of mortality. *Psychological Science*, 7, 332-336.
- Riffe, D., & Stovall, J. G. (1989). Diffusion of news of the Shuttle disaster: What role for emotional response? *Journalism Quarterly*, 66, 551-556.
- 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.
- Roskos-Ewoldsen, D. R., Roskos-Ewoldsen, B., & Carpentier, F. D. (2002). Media priming: A synthesis. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and*

- research* (pp. 97-120). Hillsdale, NJ: Lawrence Erlbaum Associates.
- 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.
- Salant, T. J., Weeks, J. R., Feferman, E., Berman, J., Eisenberg, D. (2008). *Undocumented immigrant in U.S.-Mexico border: The costs of law enforcement and criminal justice service*. Tucson, AZ: University of Arizona, Institute for Local Government.
- Schneider, S. L., & Laurion, S. K. (1993). Do we know what we've learned from listening to the news? *Memory and Cognition*, *21*, 198-209.
- Schimmel, J., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., Waxmonski, 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*, 905-926.
- Schuster, M. A., Stein, B. D., Jaycox, L. H., Collins, R. L., et al. (2001). A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New England Journal of Medicine*, *345*, 1507-1512.
- Shaw, J. A. (2000). Children, adolescents, and trauma. *Psychiatric Quarterly*, *6*, 245-258.
- Shehryar, O., & Hunt, D. M. (2005). A terror management perspective on the persuasiveness of fear appeals. *Journal of Consumer Psychology*, *15*, 275-287.
- Sigel, R. S. (1965). Television and the reactions of schoolchildren to the assassination. In B. S. Greenberg & E. B. Parker (Eds.), *The Kennedy assassination and the American public* (pp. 199-219). Stanford, CA: Stanford University Press.
- Solomon, S., Greenberg, J., & Pyszczynski, T. (2004). The cultural animal: Twenty years of terror management theory and research. In J. Greenberg, S. L., Koole, & T. Pyszczynski (Eds.), *Handbook of experimental existential psychology* (pp.13-34). New York: Guilford.
- Stout, R. G., & Faroogue, R. S. (2003). Negative symptoms, anger, and social support: Response of an inpatient sample to news coverage of the September 11 terrorist attacks. *Psychiatric Quarterly*, *74* (3), 237-250.
- Suzuki, S. (1998). In-group and out-group communication patterns in international organizations: Implications for social identity theory. *Communication Research*, *25* (2), 154-182.
- Tajfel, H., Billing, M., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behavior. *European Journal of Social Psychology*, *1*, 149-177.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviors. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (2<sup>nd</sup> ed., pp. 7-24).

Chicago: Nelson-Hall.

Turner, J. C., Hogg, M. A., Oaks, P. J., Reicher, S. D., Wetherell, M.S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Basil Blackwell.

Valentino, N. A., Traugott, M. W., & Hutchings, V. L. (2002). Group cues and ideological constraint: A replication of political advertising effects studies in the lab and in the field. *Political Communication, 19*, 29-48.

Williams, R. M., Jr. (1964). *Stranger next door: Ethnic relations in American communities*. Englewood Cliffs, NJ: Prentice Hall.

Yum, Y., & Schenck-Hamlin, W. (2005). Reactions to 9/11 as a function of terror management and perspective taking. *Journal of Social Psychology, 145*, 265-286.

Zhou, S. (2005). Effects of arousing visuals and redundancy on cognitive assessment of television news. *Journal of Broadcasting and Electronic Media, 49* (1), 23-42.

Zhou, S. (2004). Effects of visual intensity and audiovisual redundancy in bad news. *Media Psychology, 6*, 237-256.

**APPENDIX A**

**Abstracts of News Stories**

**News Code: 1**

**CNN Evening News, Friday, Mar 28, 2008**

**Headline: Los Angeles, California / Shaw Murder Case**

---

(Studio: Anderson Cooper) Report introduced.

(Los Angeles and studio: Kara Finnstrom) The new developments in the murder in Los Angeles of high school athlete Jamiel Shaw in a gang violence shooting featured; photos and courtroom sketches by Bill Robles shown of Pedro Espinosa†, an illegal immigrant who shot Shaw one day after being released from prison. [Father and mother Jamiel and Anita SHAW - speak about their son's murder.] Mr. Shaw shown speaking at the funeral. The military's plan to re-station Anita Shaw closer to home discussed.

---

Begin Time: 05:44:00 pm

End Time: 05:46:10 pm

Duration: 02:10

Reporter: Schieffer, Bob; Whitaker, Bill

---

**News Code: 2**

**CBS Evening News, Tuesday, May 27, 2003**

**Headline: Eye on America (Dangerous Journey)**

---

Studio: Harry Smith) Report introduced.

(Nogales, Mexico: Sandra Hughes) Mexican & Central American women & children risking their lives to cross the border into the US alone featured; details given about tightened security after September 11, discouraging illegal workers already in the US from going home. [Mexican immigrant "ARELEY" {thru translator} - says she was scared.] [Human rights attorney Isabel GARCIA†- says there is no other lawful avenue for the families to rejoin.] [INS executive associate commissioner Johnny WILLIAMS†- comments on the perilous immigrant smuggling trade.]

---

Begin Time: 05:51:00 pm

End Time: 05:53:50 pm

Duration: 02:50

Reporter: Smith, Harry; Hughes, Sandra

---

**News Code: 3**

**CNN Evening News, Thursday, May 23, 2002**

**Headline: Washington, DC / Levy's Death**

---

Studio: Aaron Brown) Report introduced.

(Washington: Kathleen Koch) The investigation into the death of Washington, DC, intern Chandra Levy, who disappeared last year, featured; details given about a possible link to the cases of assaults by Salvadoran immigrant Ingmar Guandique, who is now in prison; scenes shown from the park where Levy's body was found. [US Park Police Sgt. Scott FEAR - says Guandique was convicted of assault.] [DC police Chief Charles RAMSEY - says we will talk to Guandique again.] The issue of determining the cause of death from the bone fragments discussed.

---

Begin Time: 09:03:40 pm

End Time: 09:08:00 pm

Duration: 04:20

Reporter: Brown, Aaron; Koch, Kathleen

---

**News Code: 4**

**ABC Evening News, Wednesday Jul 14, 1999**

**Headline: Murder / Resendez-Ramirez Case**

---

(Studio: Peter Jennings) Report introduced.

(Houston: Mike von Fremd) The murder case against Rafael Resendez-Ramirez featured; scenes shown from his courtroom appearance while the investigation is outlined. [Assistant distract attorney Devon ANDERSON - lists the defense's options.] [Defense attorney Allen TANNER - describes Resendez-Ramirez's tired condition.] (Studio: Peter Jennings, Terry Moran) The possibility that Resendez- Ramirez's mental state will be raised in his defense discussed.

---

Begin Time: 05:30:30 pm

End Time: 05:34:00 pm

Duration: 03:30

Reporter: Jennings, Peter; Moran, Terry;  
von Fremd, Mike

---

**News Code: 5**

**CBS Evening News, Saturday Jul 19, 2008**

**Headline: Weekend Journal (Postville, Iowa: Immigration Raid)**

---

(Studio: Forrest Sawyer) The aftermath of the immigration raid in Postville, Iowa, on undocumented workers at the Agraprocessors plant featured; scenes shown from the raid that removed undocumented workers and one-third of the town's population; details given about the plight of the illegal immigrant families who await trial. [US Immigration and Customs Enforcement Richard ROCHA†- comments on the fraud crimes.] [Waitress Nancy MEYER†- reacts; talks about the American dream.] [St. Bridget Catholic Church Sister Mary McCAULEY†, Paul REAL†- talk about helping the immigrant families.] [Undocumented worker Maria LOPEZ†- { thru translator } comments on what the foreman told them about buying papers.] [Agraprocessors manager Chaim ABRAHAM†- comments on the situation.]

---

Begin Time: 05:48:50 pm

End Time: 05:53:10 pm

Duration: 04:20

Reporter: Sawyer, Forrest

---

**News Code: 6**

**CBS Evening News, Wednesday Aug 16, 2006**

**Headline: Mexico / Drug Lord Arrest**

---

(Studio: Bob Schieffer) Report introduced.

(Los Angeles: Bill Whitaker) The arrest of Mexican drug lord Javier Arellano-Felix† featured; details given about the criminal activities of the Arellano-Felix family; scenes shown of a smuggling tunnel under the border. [DEA Michael BRAUN†- says we've taken the head off the snake.] [Baja California, Mexico, Attorney General Antonio Martinez LUNA†- notes the other members of the gang want to lead the organization.]

---

Begin Time: 05:44:00 pm

End Time: 05:46:10 pm

Duration: 02:10

Reporter: Schieffer, Bob; Whitaker, Bill

---

**News Code: 7**

**CNN Evening News, Monday Aug 13, 2007**

**Headline: Newark, New Jersey / Schoolyard Murders**

---

(Studio: Anderson Cooper) Keeping Them Honest story introduced.

(Newark: Jason Carroll) The aftermath of the murder of three people in a Newark schoolyard featured; scenes shown of the funerals for the slain college students and of suspect Jose Carranza in court; details given about why Carranza, an illegal immigrant, was not in jail or deported. [Victim's father James HARVEY - raises questions.] [Mayor Cory BOOKER - says Carranza should not have been on the streets.] [Former ICE attorney Victor CERDA†, Newark councilman Ron RICE†- comment on the system.]

---

Begin Time: 09:47:40 pm

End Time: 09:51:20 pm

Duration: 03:40

Reporter: Cooper, Anderson; Carroll, Jason

---

**News Code: 8**

**NBC Evening News Tuesday Dec 12, 2006**

**Headline: Illegal Immigration / INS Raids**

---

(Studio: Brian Williams) Report introduced.

(Washington: Pete Williams) The federal raids on Swift and Co. meat packing plants targeting illegal immigrants involved in an identity theft ring reviewed; scenes and map shown; details given of the lack of a system to discover when stolen identities are used to get jobs. [Immigration and Customs Enforcement Greg PALMORE†- states anyone who doesn't have a valid status will be taken into custody.] [WOMAN – says this is not right.] [Immigration reform advocate Steven CAMAROTA†- notes a crackdown would deny the business community access to illegal alien labor.]

---

Begin Time: 05:37:00 pm

End Time: 05:39:00 pm

Duration: 02:00

Reporter: Williams, Brian; Williams, Pete

---

**News Code: 9****CBS Evening News, Thursday Sep 18, 1997****Headline: Mexico-US Relations / Drug War**

---

(Studio: Dan Rather) Report introduced.

(Washington: Jim Stewart) The Justice Department's planned announcement of a declaration of war on Mexican drug gangs next week previewed; scenes shown from drug busts; details given of indictments against drug gang leader from the Arellano family. [FBI deputy director Bill ESPOSITO - tells of the crackdown against the Arellano organization.]

---

Begin Time: 05:30:40 pm

End Time: 05:33:50 pm

Duration: 03:10

Reporter: Rather, Dan; Stewart, Jim

---

**News Code: 10****CNN Evening News, Saturday Dec 13, 1997****Headline: Mexico / Death Penalty**

---

(Studio: Jeanne Meserve) Report introduced.

(Washington: Jonathan Karl) The complication of the extradition of murderer Jose Loise Deltoro from Mexico due to the Mexican government's disagreement over the United States death penalty option in Florida featured; details given of the brutal murder committed by Deltoro in Florida. [Mexican Embassy spokesman Gustavo Gonzales BAEZ, Representative Dan MILLER, Attorney General Janet RENO, Amnesty International Samuel JORDAN - talk about the death penalty issue.]

---

Begin Time: 05:00:30 pm

End Time: 05:03:10 pm

Duration: 02:40

Reporter: Karl, Jonathan; Meserve, Jeanne

---

**News Code: 11****CBS Evening News, Wednesday Mar 13, 2002****Headline: Eye on America (Identity Theft) Part II**

---

(Studio: Dan Rather) Report introduced.

(Los Angeles: Jerry Bowen) Reasons why identity thieves almost never face prosecution examined; scenes shown of police in California raiding a suspected identity thief's home. [California POLICEMAN - says he has enough evidence to prosecute a woman.] [Identity Theft Detail Sgt. Bob BERARDI - says identity theft is an easy crime to commit.] [Identity theft victim Heidi ANDERSON - says credit card companies do not care to prosecute.] [Identity thief Stephen MASSEY - says identity theft will not stop until the thieves are held accountable; tells potential victims to "shred everything".]

---

Begin Time: 05:54:40 pm

End Time: 05:57:50 pm

Duration: 03:10

Reporter: Bowen, Jerry; Rather, Dan

---

**News Code: 12****CNN Evening News, Saturday Apr 07, 2007****Headline: Domestic Violence / CNN Center Shooting / Grigsby Interview**

---

Excerpts shown from the movie "Fear."

(Studio: Veronica de la Cruz) The shooting death of Clara Riddles†† inside the CNN Center in Atlanta by her ex-boyfriend Arthur Mann††, whose criminal past was unknown to her family, noted; scenes shown. [Victim's mother Shirley RIDDLES†- say we all thought it was okay.] NOTE: audio problem. Live in-studio interview held with Georgia Coalition Against Domestic Violence Nancy Grigsby† about dangerous boyfriends and signs of domestic violence. [GRIGSBY – outlines danger signs; says domestic violence is an epidemic; calls for more focus on helping men; explains what women can do to get help.]

---

Begin Time: 09:29:40 pm

End Time: 09:33:30 pm

Duration: 03:50

Reporter: la, Veronica de

---

**News Code: 13****NBC Evening News, Wednesday Mar 31, 2004****Headline: Atlanta, Georgia / Bank Robbery**

---

(Studio: Tom Brokaw) Report introduced.

(Atlanta: Don Teague) The role of Master Police Officers Bijan Hunter† and Darrell Lewis†, “computer geeks” from the DeKalb County, Georgia, police department, in capturing “Perimeter Bandit” Grayling Bolston††, who had robbed at least a dozen Atlanta area banks, featured; surveillance pictures shown; details given about how local law enforcement is playing a bigger role in solving crimes normally handled by the FBI, which is stretched thin due to homeland security duties. [FBI special agent Steve LAZARUS†- says the bandit was more prolific than most.] [HUNTER, LEWIS – describe the arrest.]

---

Begin Time: 05:56:20 pm

End Time: 05:59:00 pm

Duration: 02:40

Reporter: Brokaw, Tom; Teague, Don

---

**News Code: 14****ABC Evening News, Wednesday Apr 05, 2006****Headline: Sex Crimes / Doyle Arrest**

---

(Studio: Elizabeth Vargas) Report introduced.

(Washington: Pierre Thomas) The arrest of Department of Homeland Security deputy press secretary Brian Doyle for Internet sex crimes featured; details given of Doyle's sexually explicit conversation via computer with an undercover officer posing as a teenage girl. [NEIGHBOR, Polk County, Florida, Sheriff Grady JUDD†- react to Doyle's arrest.] Recent arrests in child pornography cases reviewed; photos shown of three men. [National Center for Missing & Exploited Children Ernie ALLEN†- cites the sheer scale of this massive problem.] [Immigration & Customs Enforcement Julie MYERS†- promises to find the exploiters.]

---

Begin Time: 05:35:30 pm

End Time: 05:37:40 pm

Duration: 02:10

Reporter: Vargas, Elizabeth; Thomas, Pierre

---

**News Code: 15****ABC Evening News, Sunday Jun 24, 2007****Headline: Canton, Ohio / Missing Mom / Davis Murder**

---

(Studio: Dan Harris) Report introduced.

(Canton, Ohio: Gigi Stone) The latest developments in the murder of pregnant Ohio mother Jessie Davis reviewed; details given about the arrest of Myisha Ferrell on obstruction of justice charges and of the case against Jessie's boyfriend Bobby Cutts; photos shown. [Lisa CHANGET†, Mayor Janet Weir CREIGHTON†, Avery FRIEDMAN†- comment on what happened in the case.] How homicide is a leading cause of the death of pregnant women noted. [Jacquelyn CAMPBELL†- talks about maternal mortality.]

---

Begin Time: 00:05:00 am

End Time: 00:07:10 am

Duration: 02:10

Reporter: Harris, Dan; Stone, Gigi

---

**News Code: 16****CBS Evening News, Wednesday Jul 06, 2005****Headline: Inside Story (Groene Kidnapping)**

---

(Studio: John Roberts) Report introduced.

(Coeur d'Alene, Idaho: John Blackstone) The question of why Joseph Duncan, who kidnapped Dylan & Shasta Groene in Idaho, was free despite his long history of sexual molestation examined; details given of Duncan's record of sex crimes; doctors' evaluations quoted. [University of Southern California Dr. Astrid Heppenstall HEGER†- says Americans always believe there is hope.] [North Dakota NEIGHBOR – comments.] [Father Steve GROENE†- says people like this should not be allowed in public.]

---

Begin Time: 05:44:00 pm

End Time: 05:46:30 pm

Duration: 02:30

Reporter: Roberts, John; Blackstone, John

---

**News Code: 17**

**CBS Evening News, Tuesday Aug 28, 2007**

**Headline: Boy Scouts / Abuse Charges**

---

(Studio: Katie Couric) Report introduced.

(Los Angeles: Sandra Hughes) Revelations about sexual abuse by Boy Scout leaders reviewed; statement from the Boy Scouts of America quoted; photo shown of former child abuse prevention program leader Douglas Smith†, who was convicted for trafficking child pornography on the Internet. [Abuse victims Matt STEWART†, Tom STEWART†- comment on being abused as boys.] [In deposition video, former troop leader Bruce PHELPS††- admits having sexual contact with the Stewart brothers.] [Stewarts' attorney Timothy KOSNOFF†- notes Scout leaders were tossed out for child molestation every 2-3 days.]

---

Begin Time: 05:34:10 pm

End Time: 05:36:50 pm

Duration: 02:40

Reporter: Couric, Katie; Hughes, Sandra

---

**News Code: 18**

**FOX Evening News, Wednesday Aug 17, 2005**

**Headline: Wichita, Kansas / BTK Serial Killings / Radar Sentencing**

---

(Studio: Shepard Smith) Report introduced.

(Wichita: Carol McKinley) The sentencing hearing in Wichita, Kansas, for BTK serial killer Dennis Rader reviewed; scenes shown from the courtroom; details given about today's testimony, which included graphic details of his crimes; disturbing photos of Rader shown. [Victims' son/brother Charlie OTERO†- says testifying tomorrow will be the hardest thing he's ever done.]

---

Begin Time: 06:04:00 pm

End Time: 06:06:20 pm

Duration: 02:20

Reporter: Smith, Shepard; McKinley, Carol

---

**News Code: 19**

**CNN Evening News, Monday Dec 17, 2007**

**Headline: Crime and Punishment (Serial Murders)**

---

(Studio: Anderson Cooper) Report introduced.

(Carbondale, Illinois and Cape Girardeau, Missouri: David Mattingly) The serial murders in Missouri, Illinois and two other states that stumped the cops until Timothy Krajcir†† was caught featured; photos shown of the killer, who studied criminal justice at and graduated from Southern Illinois University and of his victims; details given about how DNA evidence eventually tied him to the murders in four states. [Cape Girardeau police Chief Carl KENNISON†- comments on the difficulties of the investigation.] [Carbondale police Lt. Paul ECHOLS†- comments on the crimes.]

---

Begin Time: 09:27:20 pm

End Time: 09:30:50 pm

Duration: 03:30

Reporter: Cooper, Anderson; Mattingly, David

---

**News Code: 20**

**CNN Evening News, Saturday Dec 17, 2005**

**Headline: Modesto, California / Robbery Attempt**

---

(Studio: Carol Lin) Report introduced.

(No location given: Cornell Barnard) The thwarting of a robbery in Modesto, California, by store manger Edward Petrossi†, who has a black belt in 6 martial arts, featured; surveillance video shown of would-be robber Corey Funk†† entering the Quik Stop market & Petrossi kicking him out of the store. [PETROSSI - describes what happened.]

---

Begin Time: 09:35:30 pm

End Time: 09:37:30 pm

Duration: 02:00

Reporter: Lin, Carol; Barnard, Cornell

---

## **APPENDIX B**

### **Informed Consent Form**

## INFORMED CONSENT STATEMENT

*Experimental Tests of Terror Management in Psychological Responses to News Coverage of Immigrant Threats and Implications of Hostility, Risk Vulnerability and Issue Judgment*  
(IRB#08-OR-178)

You are invited to participate in a research study. The purpose of this study is to learn more about how viewers process news information and receive news messages related to their attitude toward characters in news stories and their perspectives of immigration issues.

### **INFORMATION**

This study will take approximately 30 minutes. During that time you will be given news stories. After you are exposed to each of them, I will ask you several questions about your evaluation of news story and your perception of news event in news story. After answers are completed, I will also ask you the questions in relations to your attitude toward characters in news stories and your perspectives of immigration issues. I am conducting an investigation of news viewers' evaluation and perception of news stories and their attitude toward characters in news stories. I would appreciate it very much if you could help me by participating in this experiment.

### **CONFIDENTIALITY**

The information you provide in this study will be kept completely confidential. I will immediately eliminate any connection with your identity by removing this front page on this study.

### **COMPENSATION**

For participating you will receive either (a) credit toward a class requirement or (b) extra credit for your class.

### **CONTACT**

If you have any questions at any time, please feel free to ask Po-Lin Pan, Doctoral Student in the College of Communication and Information Sciences, at (419) 320-1631. You may also contact the advisor of this research project, Dr. Shuhua Zhou, at (205) 348-8653, if you have any other questions or concerns. Additionally, you may also you may contact Ms. Tanta Myles, the University of Alabama Research Compliance Officer, at 205-348-5152, if you have any questions about your rights as a research participant.

### **PARTICIPATION**

Your participation in this study is completely voluntary; you may withdraw from the study at any time without any penalty and without loss of benefits. If you withdraw from the study, you will not have to complete or return the questionnaire to me if you do not want; and your data will be destroyed.

### **CONSENT**

I have read and understand the above information. I agree to participate in this study. I certify I am at least 19 years of age.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

University of Alabama IRB  
CONSENT FORM APPROVED:08-04-08  
EXPIRATION DATE: 08-04-09

**APPENDIX C**

**Questionnaire for Pilot Study**

Student Name: \_\_\_\_\_ Student ID: \_\_\_\_\_  
 Gender:  Male  Female Nationality:  USA  Other \_\_\_\_\_

*Please Respond to the Following Questions Regarding the News Story*

	<i>Extremely Disagree</i>	<i>Disagree</i>	<i>Somewhat Disagree</i>	<i>Neutral</i>	<i>Somewhat Agree</i>	<i>Agree</i>	<i>Extremely Agree</i>
1. Does the news story overemphasize death?	1	2	3	4	5	6	7
2. Does the news story make you feel exciting?	1	2	3	4	5	6	7
3. Does the news story remind you of someone's absence in the world?	1	2	3	4	5	6	7
4. Does the news story warn you to pay more attention to your own safety?	1	2	3	4	5	6	7
5. Does the news story make other viewers face their own loss in the world immediately?	1	2	3	4	5	6	7
6. Does the news story overemphasize violence?	1	2	3	4	5	6	7
7. Does the news story make you think that there should be a funeral after the criminal event in the story?	1	2	3	4	5	6	7
8. Does the news story inform you that the criminal problem is becoming more serious in the United States?	1	2	3	4	5	6	7
9. Does the news story cause you to feel that the loss in the world is very depressing?	1	2	3	4	5	6	7
10. Does the news story make you think of the funding for our society safety?	1	2	3	4	5	6	7

Could you please classify the nationality of the criminal in the news story?

USA  Other \_\_\_\_\_

In terms of "Nationality," how different between you and the criminal in the news story?

Very Different  Different  Neutral  Not Different  Not Different At All

Could you also please identify the ethnicity/race of the criminal in the news story?

Asian American  African American/Black  Caucasian/White  Latino/Hispanic  Other \_\_\_\_\_

In terms of "Ethnicity/Race," how different between you and the criminal in the news story?

Very Different  Different  Neutral  Not Different  Not Different At All

## **APPENDIX D**

### **Questionnaire for Experiment 1**

NO: \_\_\_\_\_  
 Student Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_  
 Gender:  Male  Female Age: \_\_\_\_\_  
 Nationality:  USA  Other, please specify: \_\_\_\_\_  
 Race:  White/Caucasian  Black/African-American  Hispanic/Latino  
 Asian American  Native American  Other \_\_\_\_\_

Please complete a task that fills in 22 incomplete words. For example,

Foo\_\_ \_\_all: Football

T\_\_ \_\_k: Task

- |                  |                   |
|------------------|-------------------|
| 1. De__ __:      | 2. Le__ __ure:    |
| 3. Vic__ __m:    | 4. Corp__ __:     |
| 5. Flo__ __r:    | 6. Ki__ __ed:     |
| 7. G__ __bage:   | 8. Tr__ __:       |
| 9. Coff__ __:    | 10. Aud__ __nce:  |
| 11. Ju__ __ment: | 12. Cere__ __ny:  |
| 13. Gr__ __e:    | 14. Voi__ __:     |
| 15. Mi__ __ile:  | 16. Sku__ __:     |
| 17. Bur__ __d:   | 18. Comp__ __ion: |
| 19. Fict__ __n:  | 20. Mu__ __er:    |
| 20. B__ __st:    | 22. Fu__ __ral:   |

Please assume that the criminals in TV news stories you have watched hate hot sauce very strongly. Now you have an opportunity to punish the criminals by allocating “a certain kind of hot sauce to the criminals.” Then please answer the following questions:

1. What kind of hot sauce do you make the criminals in TV news to consume? (Please Mark the Number that represents the Levels of Hot)

Not Hot at All	Mild	Slightly Hot	Moderately Hot	Very Hot	Extremely Hot	Deadly Hot
0	1	2	3	4	5	6
☺	☹	☹☹	☹☹☹	☹☹☹☹	☹☹☹☹☹	☹☹☹☹☹☹

2. After choosing a certain kind of hot sauce, how many bottles of the hot sauce do you treat the criminals to consume? (Please Mark the Number that represents how many bottles you like to treat the criminals)

0	1	2	3	4	5	6
No Punishment						

Moreover, you are given an opportunity to treat the criminals’ families, relatives or friends. In the same way, they hate hot sauce very strongly. Now you are also asked to punish them by allocating “a certain kind of hot sauce to the criminals.”

3. What kind of hot sauce do you make the criminals’ relatives to consume? (Please Mark the Number that represents the Levels of Hot)

Not Hot at All	Mild	Slightly Hot	Moderately Hot	Very Hot	Extremely Hot	Deadly Hot
0	1	2	3	4	5	6
☺	☹	☹☹	☹☹☹	☹☹☹☹	☹☹☹☹☹	☹☹☹☹☹☹

4. After choosing a certain kind of hot sauce, how many bottles of the hot sauce do you treat them to consume? (Please Mark the Number that represents how many bottles you like to treat the criminals)

0	1	2	3	4	5	6
No Punishment						

*Please Go to the Next Page*

5. Please answer a series of questions by circling the Number that represents You Thought about the “Safety.”

	Extremely Poor	Very Poor	Poor	Neutral	Excellent	Very Excellent	Extremely Excellent
1. How do you rate your personal safety?	0	1	2	3	4	5	6
2. How do you rate the safety of your family	0	1	2	3	4	5	6
3. How do you rate the safety of your friends	0	1	2	3	4	5	6
4. How do you rate the safety of the city where you live?	0	1	2	3	4	5	6
5. How do you rate the safety of the United States?	0	1	2	3	4	5	6

6. Please rate the following statements by circling the number that can represent your opinion.

	Extremely Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Extremely Agree
1. U.S. national security is destroyed by immigrants.	0	1	2	3	4	5	6
2. Illegal immigrants have human rights to gain legal status for staying in US.	0	1	2	3	4	5	6
3. U.S. government has a responsibility of taking care of refugees’ lives in the United States.	0	1	2	3	4	5	6
4. Immigrants’ children have equal rights to receive education in the United States.	0	1	2	3	4	5	6
5. Immigrants should apply monetary aids from the financial institutes in the United States.	0	1	2	3	4	5	6
6. Immigrants should receive health cares in the United States if they are seriously ill.	0	1	2	3	4	5	6
7. Immigrants are trouble makers to U.S. society.	0	1	2	3	4	5	6

## **APPENDIX E**

### **Questionnaire for Experiment 2**

NO:

Student Name: \_\_\_\_\_ Student ID: \_\_\_\_\_

Gender:  Male  Female Age: \_\_\_\_\_

Nationality:  USA  Other, please specify: \_\_\_\_\_

Race:  White/Caucasian  Black/African-American  Hispanic/Latino  
 Asian American  Native American  Other \_\_\_\_\_

Please respond to the following statements by circling the number that can represent you own personality.

Statements	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
1. I feel I am a person of worth.	1	2	3	4	5
2. I am inclined to think that I am a failure.	1	2	3	4	5
3. I feel I have a number of good qualities.	1	2	3	4	5
4. I feel I do not have much to be proud of.	1	2	3	4	5
5. I am able to do things as well as most people.	1	2	3	4	5
6. I wish I could have more respect for myself.	1	2	3	4	5
7. I take a positive attitude toward myself.	1	2	3	4	5
8. I certainly feel useless at times.	1	2	3	4	5
9. On the whole I am satisfied with myself.	1	2	3	4	5
10. I am not able to do things as well as most people.	1	2	3	4	5

Please think of your relationship with the Immigrants in the United States by responding to the following situations.

I believe I would be happy to have an "Immigrant".....	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Somewhat Disagree</i>	<i>Neutral</i>	<i>Somewhat Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
as a governor of my state.	1	2	3	4	5	6	7
as a superior of my working place.	1	2	3	4	5	6	7
as my personal physician.	1	2	3	4	5	6	7
rent my home from me.	1	2	3	4	5	6	7
as my spiritual counselor.	1	2	3	4	5	6	7
as my roommate.	1	2	3	4	5	6	7
as someone I would date.	1	2	3	4	5	6	7
as a dance partner.	1	2	3	4	5	6	7

Please respond to the following statements based on your feeling of the news story.

The News Story—	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
is “entertaining.”	1	2	3	4	5	6	7
“scares” me.	1	2	3	4	5	6	7
makes me “nervous.”	1	2	3	4	5	6	7
“depresses” me.	1	2	3	4	5	6	7
makes me “feel good.”	1	2	3	4	5	6	7
“worries” me	1	2	3	4	5	6	7
makes me” sad.”	1	2	3	4	5	6	7
“disturbs” me.	1	2	3	4	5	6	7
is “interesting.”	1	2	3	4	5	6	7
is “upsetting.”	1	2	3	4	5	6	7
is “frightening.”	1	2	3	4	5	6	7

Please evaluate the news story you have just watched by circling the number that can represent the level of your opinion on the following questions.

How important is the criminal news?								
Not Important at all	1	2	3	4	5	6	7	Extremely Important
How stimulating is the criminal news?								
Not Stimulating at all	1	2	3	4	5	6	7	Extremely Stimulating
How appealing is the criminal news?								
Not Appealing at all	1	2	3	4	5	6	7	Extremely Appealing
How accurate is the criminal news?								
Not Accurate at all	1	2	3	4	5	6	7	Extremely Accurate
How informative is the criminal news?								
Not Informative at all	1	2	3	4	5	6	7	Extremely Informative

Please evaluate the criminal act in the news story you have just watched by circling the number that can represent the level of you opinion on the following questions.

How severe is the criminal act in the news story?								
Not at all	1	2	3	4	5	6	7	Extremely Severe
How likely is it that the criminal act will get worse?								
Not at all	1	2	3	4	5	6	7	Extremely Likely
How likely is it that the criminal act will become a real threat near you?								
Not at all	1	2	3	4	5	6	7	Extremely Likely
How likely is it that you or your family might become a victim in such a criminal act?								
Not at all	1	2	3	4	5	6	7	Extremely Likely