National Tragedy and Uncertainty Reduction:

Adult Reaction to National Tragedy and Anxiety Reduction Strategies

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Table of Contents

Introduction ..................................................................................................................3

Literature Review ........................................................................................................5

Methods ......................................................................................................................15

Results .......................................................................................................................19

Discussion ..................................................................................................................23

Works Cited ...............................................................................................................26

Appendix ...................................................................................................................27
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INTRODUCTION

According to Oxford Dictionary, a tragedy is “an event causing great suffering, destruction, and distress, such as a serious accident, crime, or natural catastrophe” (“Tragedy”). Today’s world seems to be experiencing more “events causing great suffering” at a significantly higher rate than ever before. Just in the last year, there have been six major tragedies including the mass shooting in Aurora, Colorado, the Hurricane Sandy, the massacre at Sandy Hook Elementary School in Newtown, Connecticut, the bombings at the Boston Marathon, the fertilizer plant explosion in West, Texas, and the two-mile wide tornado in Oklahoma. And, that does not include the other 195 countries around the globe where travesties on this scale occur much more regularly than in the United States. It could be said that the events of the past year could rival all of the tragedies in recent American history.

Besides these widely covered events, The Associated Press dubbed 2012 as “The Year of the Gun”, but not for the obvious reasons like Sandy Hook, Aurora, or Oregon. Surprisingly, there was no significant difference in the number of mass shootings in American that occurred in the last year than there were in past years. In fact, the occurrence of mass shootings has dropped in the 2000’s. Criminologist Grant Duwe’s research states, “that while mass shootings rose between the 1960s and the 1990s, they actually dropped in the 2000s. And mass killings actually reached their peak in 1929, according to his data. He estimates that there were 32 in the 1980s, 42 in the 1990s and 26 in the first decade of the century” (O’Neill). So, if there was not a significant difference in the number of mass shootings, why would a respected news source like The Associated Press choose such a negative and controversial title for 2012? The answer is
Media coverage for these shootings has grown exponentially over the last year. Some scholars hypothesize that this is due to the fact that social media seems to be the “news desk” of the 21st century. Others claim that the media is so driven by advertisers, that they will cover any topic that will attract the most viewers. Regardless of the cause, it is important to note the massive growth in coverage and to explore how today’s audiences are exposed to and how they react to the newsworthy event.

It is easy to assume that all Americans who hear about these events experience feelings of sadness and anger. However, many audience members can experience feelings of anxiety in regards to the event. The occurrence and immediate aftermath of a tragedy do not tend to reveal large amounts of information. This lack of information can lead to feelings of anxiety due to the uncertainty surrounding the event. Anxiety is a normal human emotion that everyone experiences from time to time. Most humans have developed skills to cope and eliminate anxiety that differ from person to person. But, if anxiety cannot be dealt with, it can cause distress that interferes with a person’s day-to-day activities. Anxiety can cause symptoms such as feelings of panic, fear, and uneasiness, uncontrollable, obsessive thoughts, repeated thoughts or flashbacks of traumatic experiences, problems sleeping, shortness of breath, nausea, muscle tension and dizziness (WebMD). Anxiety is often caused or paired with uncertainty because the person experiencing these emotions is unable to predict or explain another person’s behavior. To cope with anxiety, people often used strategies outlined in Uncertainty Reduction Theory. Uncertainty Reduction Theory explains how humans use different strategies to gain information about an unfamiliar person or topic to reduce uncertainty and quell anxiety over the unknown. This theory is used most often in interpersonal relationships. There are three main strategies included in Uncertainty Reduction Theory. The first type of strategy is known as a passive
strategy. Passive strategies are tools humans can use to gain information or make inferences about a person. One using this strategy would most likely observe the subject from a distance without interacting in situations where the subject could be self-monitoring and in situations where the subject is disinhibited. The second strategy that could be used is called an active strategy. Active Strategies require more work for the observer. This person will often do research about the subject by directly asking questions about the subject or purposefully setting up an observational situation. The last strategy that can be utilized is an interactive strategy. Put simply, both parties communicate directly with one another to gain information (Berger). If Uncertainty Reduction Theory is applied beyond the interpersonal scope, it can be a useful tool for those having feelings of anxiety. This study will attempt to show that there is a relation between media exposure and anxiety and how audience members use Uncertainty Reduction Theory. To build on the connection of Uncertainty Reduction Theory and the media, this project will discuss research in the field of agenda setting and framing and then move to post September 11 research that attempts to explain the connection to Uncertainty Reduction Theory and the media.

LITERATURE REVIEW

It is no secret that the media has the ability to structure issues that it shares with the public. Communication scholars have been aware of this concept for a long period of time but Walter Lippmann, an American journalist, was the first to formalize this idea. Lippmann’s view is known as the pseudo-environment. He believed that the public does not respond to the actual events that take place in a given environment. Instead, he claims that they respond to the “pictures in our heads”. Lippmann said,
“For the real environment is altogether too big, too complex and too fleeting for direct acquaintance. We are not equipped to deal with so much subtlety, so much variety, so many permutation and combinations. And altogether we have to act in that environment, we have to reconstruct it on a simpler model before we can manage with it” (Lippmann 16).

Mainstream media creates and presents that simpler model Lippmann referred to. By doing this, they set the agenda for their readers or viewers. Lippmann’s “pseudo-environment” led to the development of the closely related agenda setting and framing. (Littlejohn 341).

**Agenda Setting**

Agenda Setting, developed by Donald Shaw and Maxwell McCombs, is the concept that claims that depictions given by the media have the potential to affect what events an audience will be exposed to and how viewers or readers process and think about that certain event. In simpler terms, agenda setting “establishes the salient issues or images in the minds of the public” (Littlejohn 341). Media outlets participate in agenda setting because they must be discriminatory in what they choose to report on. They are constantly faced with decisions about what and what not to report and how to report said events.

To better understand how agenda setting works, it is important to grasp the two levels of agenda setting. The first level of agenda setting concerns itself with establishing the difference between important and unimportant issues. The second level determines what aspects or facts about these issues that are important. Second-level agenda setting is crucial because it has the potential to shape how the public views or thinks about certain issues or topics. Gun control is a perfect example to explain first and second level agenda setting. The first level of agenda setting in regards to gun control is simply the fact that news stations choose to discuss and cover topics
relating to the issue. Second-level agenda setting is normally what differentiates one station from another. Stations also tend to differentiate on this level due to aspects such as an overriding tendency to focus on one attribute of an event or topic. Second level, in regards to gun control, would be the facts, stories or research a media outlets shares with its audience.

Another important aspect of agenda setting is a concept known as priming. Media priming takes place when repeated attention is given to an issues or topic. The theory of priming claims that images in the media can stimulate related thoughts for audience members. When priming occurs, a certain issues or topic will become a constant topic of thought for the audience and those thoughts might be under influence from the media. There are three important characteristics of priming. The first characteristic states that the effect of a prime will naturally disintegrate over time. This is especially true if no additional activation source for the prime is present. Recent primes have a much greater effect on judgment and behavior in comparison to distant primes. Second, stronger primes normally have a stronger effect on a person’s judgment and behavior. Stronger primes also “result in higher activation levels in the target item, which will take more time to dissipate that a target item whose activation level is lower due to a weaker prime” (Nabi 179). Lastly, primes will have a stronger effect on ambiguous situations (Nabi 179).

According to Littlejohn and Foss, agenda setting is a three-part process. The first step in this process is to set the media agenda. Media agenda is the important and order that issues should be discussed in the media. Media agenda has to interact with its audience at some point, which segues to the second step, public agenda. Public agenda is created by the way that the media agenda affects or relates to public opinion. Lastly, the public agenda lets lawmakers know
what the public deems important therefore forming the policy agenda. In summary, media agenda influences public agenda which then impacts policy agenda (Littlejohn 342).

**Framing**

Partnering with agenda setting to form public opinion about an event is a concept known as framing. Media framing references “the process of putting a news story together, in including the ways in which a story is organized and structured” (Littlejohn 344). This concept is important because the framing of an event has a direct impact on how the event is interpreted. Framing teams with agenda setting by telling the audience how to comprehend the issues or events that agenda setting has already deemed as important. Framing was first applied to mass communication when Todd Gitlin was studying the way CBS made the 1960’s student movement seem insignificant. The media’s depiction of an event frames it so viewer’s interpretations are inhibited. (Littlejohn 344). Media outlets have various devices at their disposal that they can use to create this constraint including headlines, audio and visual components, and metaphors.

Pattie M. Valkenburg, Holli A. Semetko, and Claes H. De Vreese conducted and documented a study, *The Effects of News Frames on Readers Thoughts and Recall*, on framing in the media that perfectly demonstrates the effects of framing. The authors administered a study that explored if and how journalistic news frames affects readers’ thoughts about and recall of two issues. 187 participants were randomly assigned one of four framing conditions that included conflict, human interest, attribution of responsibility, and economic consequences; they also included a control condition. The participants were each presented with two different newspaper articles that were concerned with two socially and politically relevant issues in Europe. The topics were concerned with crime and the introduction of the Euro. The stories all
had identical core components but the title, introduction and conclusion were varied to represent a frame. The results of the study stated “that frames did play a significant role in the readers’ thought-listing responses and they defined the ways that readers presented information about both issues” (Valkenburg 550).

The authors define a media frame was “a particular way in which journalists compose a news story to optimize audience accessibility” (Valkenburg 550). Research into media frames has been focuses on prevalent frames and how particular issues are frames. The research in this article is assuming that “journalists unavoidable from or structure their representations of political events to make them accessible to a large audience” (Valkenburg 550). Because reporters have a limited amount of time to give information or tell a story, they use frames to simplify or give some meaning to events and sustain interest.

The first frame that was utilized is the audience frame. An audience frame is “a schema of interpretations that enables individuals to perceive, organize and make sense of incoming information (Valkenburg 551). Research on audience frames discusses how specific frames impact viewer’s or reader’s perceptions of an issue. The experiment in this article contributes to this research because it investigates how certain frames can establish similar audience frames and effect recall. The second frame the authors discuss a conflict frame. A conflict frame “emphasizes conflict between individuals, groups or institutions” (Valkenburg 551). This frame is often related to a concept called strategy coverage. Strategy coverage centers on winning and losing, features the language of wards, game and competition, and also emphasizes the performance and style of an individual. The next frame is deals with human interest. The human-interest frame “brings an individual’s story or an emotional angle to the presentation of an event, issue or problem” (Valkenburg 551). By personalizing an issue, there is a narrative
aspect added to the news. Today’s market is all about instantaneous information, which makes the market even more competitive. This puts pressure on journalists and their editors to find new ways to capture audience attention. By utilizing the human-interest frame, the stories seem more personal, dramatic and emotional; therefore, they attract a larger audience. Valkenburg addresses the responsibility frame next. The responsibility frame “presents an issues or problem in such a way as to attribute responsibility for causing or solving a problem to the government or to an individual or to a group” (Valkenburg 552). The American media is attributed with forming public understanding or opinion of who is responsible for creating or fixing key social problems. The last frame the authors use is the economic consequences frame. The economic consequences frame “presents an event, problem or issues in the terms of the economic consequences it will have on an individual, group, institution, region, or country” (Valkenburg 552). Money is often the most pressing and most important thing on an audience’s mind. So, it is no surprise that news is often framed in terms of actual or potential economic impact on the audience. Like the human-interest frame, this frame is used by media outlets to make the issue more relevant and interesting to their audience. There is constant controversy and contradiction over framing. Some claim that framing has “no discernible effect” on audience perceptions but others argue that there is a large influence on the audience.

Previous research on this topic observes the influence of anywhere from one to three frames. The research in this article attempts to fill the gaps left by previous experiments. First, they investigated the impact of four different frames. Second, the subjects were presented with real issues that were popular in the media during the time of the experiment. Third, the experiment offered two stories instead of one in order to “investigate the potential generalizability of the framing effects across issues” (Valkenburg 554). In summary, the study
wanted to observe which of the four frames could influence reader’s thoughts about two issues presented.

The study also took note of the impact frames could potentially have on the reader’s ability to remember or recall the information presented in the story. According to the authors, it is just as believable that media frames influence recall in audience members in the same way they can influence the audience member’s thoughts. Because there is a decent amount of controversy surrounding the previous research on this topic, Valkenburg and her coauthors drafted a research question to guide their experiment.

Research Question 1: Does exposure to differently framed news stories influence readers’ ability to recall the information presented in these stories?

The sample for this experiment is 187 undergraduate students from the University of Amsterdam in social and behavioral sciences classes. The participants were 67% females and 33% males that were in the 19 to 29 age range. This experiment used a 2 x 5 mixed design. The two is the news story (crime vs. euro) and the five was the framing conditions (conflict vs. human interest vs. responsibility vs. economic consequences vs. control). The news story was varied with the subject and the framing condition was a between-subject factor. Subjects were assigned a control condition randomly. The results were measured with thought-listing responses. The researchers then categorized all of the keywords. These keywords were given to independent coders and subjected to a content analysis method that used yes or no questions. To measure recollection, the participants were given six multiple-choice questions that were designed for each of the two stories. At the end of this research, the authors were able to conclude “the way in which the news stories were framed had a significant effect on readers’ thoughts on both issues” (Valkenburg 565). The study also shed light on issue-specific framing
effects. For the crime story, participants reported more conflict and human-interest thoughts. The participants exposed to the euro story reported more thoughts that centered on economic consequences. Lastly, the recall test varied significantly depending on the story. The euro story had no significant recall difference between frames. But, the frame of the crime story had a significant affect on the recollection of details. In conclusion to the study, Valkenburg and her colleagues stated “Our study suggests that news frames can exert a significant effect on readers’ thoughts about and recall of issues in the news in the short term” (Valkenburg 567).

**Uncertainty Reduction Theory**

The most important theory to understand through the duration of this project is uncertainty reduction theory. Charles Berger developed uncertainty reduction theory as an interpersonal strategy, but for the purposes of this paper, it will be applied to an individual’s personal reaction to tragedy. Uncertainty reduction theory concerns itself with the process of how individuals gain knowledge about other people or events. When humans encounter an unknown situation or individual, there normally is a very strong need to reduce the uncertainty around this person or event. The basic solution for this need is to seek out more information about the person or event. Berger believes that people have a natural affinity against uncertainty. Therefore, they will seek out information to reduce uncertainty and predict behavior. (Littlejohn 180). For example, imagine the meeting between complete strangers at a social event. Besides the first name, neither party knows anything about the other. In other words, they are uncertain. This can create some anxiety due to fear or embarrassment. The two parties might begin to self disclose to gain more information about the other person and therefore, reduce uncertainty about that person. Once both parties have exchanged some form of information about each other, one or both of the parties might begin to predict the behavior of the other. Suppose one of the parties
disclosed that they had just returned from a funeral. The other party might then predict that the person will be sad for the duration of the event and might partake in other behaviors that would seem normal after a sad event. To explain this concept better in regards to the topic of this project, consider the Columbine shootings. On April 20th, 1999, two armed students attacked Columbine High School in Colorado. Eric Harris and Dylan Klebold, two senior students from Columbine High, murdered 12 students and one teacher, injured 21 other students and then committed suicide. The pair also had a complicated attack plan that included a firebomb, 99 explosive devices and car bombs. The massacre at Columbine is the deadliest mass murder every committed at an American high school and is regarded as the start of a long series of high profile shootings across the country (Rosenburg). Needless to say, the nation was in a state of shock and panic after Columbine. Everyone was searching for answers. There was a massive amount of uncertainty surrounding the event. No one knew why these young men had committed such a violent act and the lack of answers created a high level of anxiety across the nation. Immediately following the event, there was a large-scale investigation into the background of Eric Harris and Dylan Klebold. The information that was presented to the public seemed to put the anxiety at ease.

The application of Uncertainty Reduction Theory to national tragedies is not easily found in Uncertainty Reduction Theory Research. But, Information Seeking and Emotional Reactions to the September 11 Terrorist Attacks by Michael P. Boyle, Mike Schmierbach, Cory L. Armstrong, Douglas M. McLeod, Dhavan V. Shah, and Zhongdang Pan attempts to explore this application. This article takes the stance that individuals were motivated to seek information about the September 11 terrorist attacks to reduce uncertainty about what happened. According to a panel survey, a negative emotional response was a strong predictor of efforts to pursue more
information. The research that inspired this article states that traumatic or tragic events that are experienced through the media can create strong negative emotional reactions. But, these claims have also pointed out a large gap in the research. There has been little research done on whether emotional reactions can spark efforts to learn more about the event and if this relates to an increase in media use. This study considers the connection between emotional reactions to the September 11 terrorist attacks, attempts to learn about the attack and how media use changed in the 4-month period following the event. By evaluating this relationship, the researchers incorporate past research on personal reactions to traumatic events with research into facts that can influence media use.

This project will attempt to connect certain consequences of agenda setting and framing to recovery strategies, specifically Uncertainty Reduction Theory. The following research questions will be tested during this study.

**RQ₁:** How does perception of an event’s proximity to self influence a person’s likeliness to “follow” a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event?

**RQ₂:** How does perception of how tragic an event is influence a person’s likeliness to “follow” a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event?

**RQ₃:** How does perception of an event’s impact on a person’s daily life influence a person’s likeliness to “follow” a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event?

**RQ₄:** Does a person’s affinity to “follow” a story relate to reported feelings of anxiety and uncertainty in relation to an event?
METHODS

Materials

In order to test the relationship between media exposure and anxiety and then compare those results to strategies proposed in the Uncertainty Reduction Theory, a survey, created with SurveyMonkey.com, was open from May 27, 2013 to June 2, 2013. Participants were recruited to partake in the survey via social media.

Material Preparation

The survey had several preparation steps before it was distributed to participants. First, there was a large amount of research completed to determine if a study of this fashion had been administered and if so, what the potential problems with that survey were. Second, the survey was conceptualized by the researcher and based on the four research questions. Third, the researcher reviewed a list of potential questions and different answer collection methods with the study’s advisor. Fourth, the researcher’s university, California Polytechnic University- San Luis Obispo, requires that the Cal Poly Human Subjects Committee review all surveys that will be published. Therefore, the researcher drafted and submitted an informed consent form, a protocol for the research, and a list of the survey questions to the Cal Poly Human Subjects Committee. After approval from this committee, the survey was then formatted to an online survey through SurveyMonkey.com. Lastly, the researcher sent a preview of the survey to her advisor for critique and then corrected those critiques before allowing anyone to take part in the survey.

Participants

151 subjects participated in the survey. All participants were recruited via social media. All of the participants were friends or followers of Erica Turnlund on Facebook or Twitter and
over the age of 18. The survey did not request any personal information from the participants in order to ensure complete anonymity.

**Research Protocol**

The survey’s subjects voluntarily participated in a nine-question survey constructed through SurveyMonkey.com that requested information about their feelings about certain national tragedies and how they react following a national tragedy. The first question was a simple confirmation that the participant had read and agreed to the informed consent form for the survey. Questions two through 4 requested that the participants rate three mass shootings, Columbine, Virginia Tech, and Sandy Hook, on three separate conditions. The first of these conditions was “proximity to self” with one being the lowest proximity to self and five being the highest proximity to self. The second condition was perceived “level of tragedy”. For this question, one was the least tragic and five was the most tragic. The last condition was “impact on daily life” with one being no impact on daily life and five being high impact on daily life. Questions five through eight were statements that participants were asked to state their level of agreement from strongly disagree to strongly agree with an option of being neutral. The levels of agreement were alternated on each question to encourage the participants to carefully read each statement and answer option. The statements from questions five through eight stated: “When I hear about a national tragedy, I do further research on the topic”, “When I hear about a national tragedy, I tend to “follow” the story”, “When I hear about a national tragedy, I feel anxious or nervous immediately following the news”, and “More information on the event, or an explanation of it, tends to ease my anxiety or nervousness”. The survey was concluded with a yes or no question that ensured the mental health of the participants, “I understand that if I experience feelings of grief or distress following this survey or tragedy I can contact Cal Poly’s
Counseling Center at (805)-756-2511 or to contact my local therapist”. The survey reached 151 responses when it was closed and the data was collected on June 2, 2013.

**Measures**

**Proximity:** To measure perceived proximity, the participants were asked to “Please rate the following events based on proximity to self, with one being the lowest proximity to self and five being the highest proximity to self” (See Appendix Figure 1). The events the participants were asked to rate included the Columbine Shooting, the Virginia Tech Shooting and the Sandy Hook Shooting. Proximity for the Columbine Shooting had a mean of 2.37 and a standard deviation of 1.27. Proximity for the Virginia Tech Shooting had a mean of 2.40 and a standard deviation of 1.24. Proximity for the Sandy Hook Shooting had a mean of 2.78 and a standard deviation of 1.43.

**Tragedy:** To measure perceived tragedy, the participants were asked to “Please rate the following events based on your perception of level of tragedy, with one being the least tragic and five being the most tragic” (See Appendix Figure 2). The events the participants were asked to rate included the Columbine Shooting, the Virginia Tech Shooting and the Sandy Hook Shooting. Level of tragedy for the Columbine Shooting had a mean of 4.32 and a standard deviation of 0.78. Level of tragedy for the Virginia Tech Shooting had a mean of 4.12 and a standard deviation of 0.95. Level of tragedy for the Sandy Hook Shooting had a mean of 4.81 and a standard deviation of 0.61.

**Impact on Daily Life:** To measure perceived impact on daily life, the participants were asked to “Please rate the following events based on its impact on your daily life in the months following the event, with one being no impact and five being large impact” (See Appendix Figure 3). The events the participants were asked to rate included the Columbine Shooting, the
Virginia Tech Shooting and the Sandy Hook Shooting. Impact on daily life for the Columbine Shooting had a mean of 2.16 and a standard deviation of 1.13. Impact on daily life for the Virginia Tech Shooting had a mean of 2.17 and a standard deviation of 1.16. Impact on daily life for the Sandy Hook Shooting had a mean of 2.90 and a standard deviation of 1.35.

**Research:** To measure the amount of research participants will complete after being informed of a national tragedy, the participants were asked to share their level of agreement to the statement “When I hear about a national tragedy, I do further research on the topic” (See Appendix Figure 4). The participants revealed their level of agreement on a five-point scale ranging from strongly disagree at one to strongly agree at five. The mean for this question was 3.98 and the standard deviation was 0.90.

**“Follow” the Story:** To measure the amount the participants tend to follow a story after they are informed of a national tragedy, the participants were asked to share their level of agreement to the statement “When I hear about a national tragedy, I tend to ‘follow’ the story” (See Appendix Figure 5). The participants revealed their level of agreement on a five-point scale ranging from strongly agree at one to strongly disagree at five. The mean for this question was 2.02 and the standard deviation was 0.97.

**Emotional Response:**

To measure the level of anxiety or nervousness participants felt after being informed of a national tragedy, the participants were asked to share their level of agreement to the statement “When I hear about a national tragedy, I feel anxious or nervous immediately following the news” (See Appendix Figure 6). The participants revealed their level of agreement on a five-point scale ranging from strongly disagree at one to strongly agree at five. The mean for this question was 3.41 and the standard deviation was 0.99.
**Information and Emotional Response:**

To evaluate the impact of information regarding the tragedy on emotional responses participants had after being informed of a national tragedy, the participants were asked to share their level of agreement to the statement “More information on the event, or an explanation of the event tends to ease my anxiety or nervousness” (See Appendix Figure 7). The participants revealed their level of agreement on a five-point scale ranging from strongly agree at one to strongly disagree at five. The mean for this question was 2.93 and the standard deviation was 0.87.

**RESULTS**

The first research question tested was RQ1, “How does perception of an event’s proximity to self influence a person’s likeliness to ‘follow’ a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event?” To test this question, the proximity reported for each event was compared using a bivariate correlation test to the following: a person’s likeliness to “follow” a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event.

**Columbine Shooting:** The correlation test for reported proximity to self for the Columbine shooting and tendency to “follow” a story revealed that the significance level, p, was equal to 0.10 and r was equal to -0.15. Therefore, those factors are not significantly correlated. The reported proximity to self for the Columbine shooting and feelings of anxiety and nervousness are also not significantly correlated because the significance level, p, is equal to 0.84 and r is equal to 0.02. But, the reported proximity to self for the Columbine shooting and likeliness to seek out more information about an event are significantly correlated because the significance level, p, is equal to 0.39 and r is equal to 0.07.
**Virginia Tech Shooting:** The correlation tests for the Virginia Tech shooting and the three variables all reported that there was no significant correlation. The reported proximity to self for the Virginia Tech shooting and tendency to “follow” a story are not significantly correlated because the significance level, $p$, is equal to 0.70 and $r$ equals 0.03. The reported proximity to self for the Virginia Tech shooting and feelings of anxiety and nervousness are not significantly correlated because $p$ is equal to 0.78 and $r$ is equal to 0.03. The reported proximity to self for the Virginia Tech shooting and likeliness to seek out more information about an event are not significantly correlated because the significance level, $p$, is equal to 0.35 and $r$ is equal to 0.39.

**Sandy Hook Shooting:** The correlation tests for the Sandy Hook shooting and the three variables all reported that there was no significant correlation. The reported proximity to self for the Sandy Hook shooting and tendency to “follow” a story are not significantly correlated because $p$ equals 0.82 and $r$ equals -0.20. The reported proximity to self for the Sandy Hook shooting and feelings of anxiety and nervousness are not significantly correlated because the significance level is equal to 0.60 and $r$ is equal to 0.05. The reported proximity to self for the Sandy Hook shooting and likeliness to seek out more information about an event are not significantly correlated because $p$ is equal to 0.00 and $r$ is equal to 0.16.

The second research question tested was RQ$_2$, “How does perception of how tragic an event is influence a person’s likeliness to ‘follow’ a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event?” To test this question, the level of tragedy reported for each event was compared using a bivariate correlation test to the following: a person’s likeliness to “follow” a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event.
Columbine Shooting: The correlation tests for the Columbine shooting and the three variables all reported that there was no significant correlation. The reported level of tragedy for the Columbine shooting and tendency to “follow” a story are not significantly correlated because $p$ is equal to 0.69 and $r$ is equal to 0.04. The reported level of tragedy for the Columbine shooting and feelings of anxiety and nervousness are not significantly correlated because $r$ is equal to 0.08 and the significance level, $p$, is equal to 0.40. The reported level of tragedy for the Columbine shooting and likeliness to seek out more information about an event are not significantly correlated because $r$ equals 0.15 and $p$ equals 0.10.

Virginia Tech Shooting: The correlation tests for the Virginia Tech shooting and the three variables all reported that there was no significant correlation. The reported level of tragedy for the Virginia Tech shooting and tendency to “follow” a story are not significantly correlated because $r$ equals 0.11 and $p$ equals 0.21. The reported level of tragedy for the Virginia Tech shooting and feelings of anxiety and nervousness are not significantly correlated because $r$ equals 0.05 and $p$ equals 0.56. The reported level of tragedy for the Virginia Tech shooting and likeliness to seek out more information about an event are not significantly correlated because $r$ equals 0.07 and $p$ equals 0.44.

Sandy Hook Shooting: The correlation tests for the Sandy Hook shooting and the three variables all reported that there was no significant correlation. The reported level of tragedy for the Sandy Hook shooting and tendency to “follow” a story are not significantly correlated because $r$ equals 0.01 and $p$ equals 0.95. The reported level of tragedy for the Sandy Hook shooting and feelings of anxiety and nervousness are not significantly correlated because $r$ equals -0.01 and $p$ equals 0.93. The reported level of tragedy for the Sandy Hook shooting and
likeliness to seek out more information about an event are not significantly correlated because \( r \) equals 0.08 and \( p \) equals 0.39.

The third research question tested was RQ3, “How does perception of an event’s impact on a person’s daily life influence a person’s likeliness to ‘follow’ a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event?” To test this question, the perceived impact on daily life reported for each event was compared using a bivariate correlation test to the following: a person’s likeliness to “follow” a story, feelings of anxiety or nervousness, and likeliness to seek out more information on the event.

**Columbine Shooting:** The correlation tests for the Columbine shooting and the three variables all reported that there was one significant correlation. The reported impact on daily life for the Columbine shooting and tendency to “follow” a story are significantly correlated because \( r \) equals -0.44 and \( P \) equals 0.01. The reported impact on daily life for the Columbine shooting and feelings of anxiety and nervousness are not significantly correlated because \( r \) equals 0.12 and \( p \) equals 0.19. The reported impact on daily life for the Columbine shooting and likeliness to seek out more information about an event are not significantly correlated because \( r \) equals 0.02 and \( p \) equals 0.83.

**Virginia Tech Shooting:** The correlation tests for the Virginia Tech shooting and the three variables all reported that there was one significant correlation. The reported impact on daily life for the Virginia Tech shooting and tendency to “follow” a story are not significantly correlated because \( r \) equals -0.12 and \( P \) equals 0.19. The reported impact on daily life for the Virginia Tech shooting and feelings of anxiety and nervousness are significantly correlated because \( r \) equals 0.19 and \( P \) equals 0.04. The reported impact on daily life for the Virginia Tech shooting and
Turnlund 23

likeliness to seek out more information about an event are not significantly correlated because $r$ equals 0.36 and $P$ equals 0.00.

Sandy Hook Shooting: The correlation tests for the Sandy Hook shooting and the three variables all reported that there were two significant correlations. The reported impact on daily life for the Sandy Hook shooting and tendency to “follow” a story are significantly correlated because $r$ equals -0.19 and $p$ equals 0.04. The reported impact on daily life for the Sandy Hook shooting and feelings of anxiety and nervousness are significantly correlated because $r$ equals 0.30 and $p$ equals 0.01. The reported impact on daily life for the Sandy Hook shooting and likeliness to seek out more information about an event are not significantly correlated because $r$ equals 0.27 and $p$ equals 0.01.

The last question tested was RQ4, “Does a person’s affinity to “follow” a story relate to reported feelings of anxiety and uncertainty in relation to an event?” To determine if there was a significant relation between these two variables, a correlation test was run. The test yielded that $r$ equals -0.024 and $P$ equals 0.793. The result of this test showed that there was no significant relation between “following” a story and feelings of anxiety or uncertainty.

DISCUSSION

The purpose of this study was to establish a connection between Uncertainty Reduction Theory and media exposure. It attempted to prove that an interpersonal theory, Uncertainty Reduction Theory, can be applied to a wider scope and assist in other situations of anxiety beyond the interpersonal realm. Using three different national tragedies, a survey was distributed to prove the connection between different elements that can lead to the use Uncertainty Reduction Theory and reactions after the national tragedy. After the results of the study, it was shown that there was not a significant use of Uncertainty Reduction Theory after
exposure to a national tragedy. I still believe that there is a significant use for Uncertainty Reduction Theory for those experiencing feelings of anxiety outside of the interpersonal scope. In the following sections, I will discuss the limitations of this research and suggestions for future research to better establish the true results of this study.

*Limitations*

There are some limitations for this research. The first limitation on this research is time because of the time the survey was open and the allotted time for research due to the school year. The researcher only had 10 weeks to complete the entire project. Because of this, the survey was only open for 5 days and only distributed to 151 participants. If there was no limit on time, the survey might have been able to have been distributed to exponentially more participants and possibly distributed in person instead of simply online. The second limitation on this research was the distribution method. Participants were solicited over Erica Turnlund’s personal Facebook and Twitter accounts. The audience from those platforms that had the potential to participate in this survey was predominately white upper and middle class. The survey did not request any personal information about the participants, but it is safe to assume that there was very little diversity between participants. Another limitation was the type of research done. The study only used an online survey to solicit answers. Therefore, the participants were unable to ask questions about the survey or clarify a question that was unclear to them. Lastly, the participants were not given an outlet to fully describe their feelings in regards to national tragedies. The survey was somewhat limiting in responses because it did not allow the participant to fully explain their answer.
Suggestions for Future Research

If future research were to be done on this topic, I would recommend that the researcher pay attention to the following areas that lacked in this study. First, I would distribute the survey in several different ways by using a physical survey, a one-on-one interview, and online survey. This way, the researcher could clarify any possible questions from participants and gather explanations to certain participant’s answers. Second, The researcher should also expand the diversity of the participants in all aspects during the surveys, including gender, race, age and religion. Like previously noted, a majority of the participants surveyed were white and upper middle class. This could have skewed the research due to the lack of diversity. Third, I would allow at least 20 weeks for the duration of the study. By expanding the time frame the research is done in, the researcher can explore more research, do more in depth surveys, and provide a more detailed critique of past research and his or her own results. Lastly, I would consider rewording some of the survey questions or allowing for a free answer section. Some of the questions asked were limiting in their answer range and could have also changed the true results of the study.


Appendix

Figure 1

2. Please rate the following events based on proximity to self, with 1 being the lowest proximity to self and 5 being the highest proximity to self.

<table>
<thead>
<tr>
<th>Event</th>
<th>Rating Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbine Shooting:</td>
<td>34.3% (46)</td>
</tr>
<tr>
<td></td>
<td>20.9% (28)</td>
</tr>
<tr>
<td></td>
<td>25.4% (34)</td>
</tr>
<tr>
<td></td>
<td>11.9% (16)</td>
</tr>
<tr>
<td></td>
<td>7.5% (10)</td>
</tr>
<tr>
<td></td>
<td>134</td>
</tr>
<tr>
<td>Virginia Tech Shooting:</td>
<td>30.6% (41)</td>
</tr>
<tr>
<td></td>
<td>25.4% (34)</td>
</tr>
<tr>
<td></td>
<td>23.9% (32)</td>
</tr>
<tr>
<td></td>
<td>13.4% (18)</td>
</tr>
<tr>
<td></td>
<td>6.7% (9)</td>
</tr>
<tr>
<td></td>
<td>134</td>
</tr>
<tr>
<td>Sandy Hook Shooting:</td>
<td>29.1% (39)</td>
</tr>
<tr>
<td></td>
<td>11.9% (16)</td>
</tr>
<tr>
<td></td>
<td>26.1% (35)</td>
</tr>
<tr>
<td></td>
<td>17.2% (23)</td>
</tr>
<tr>
<td></td>
<td>15.7% (21)</td>
</tr>
<tr>
<td></td>
<td>134</td>
</tr>
</tbody>
</table>

answered question: 134

skipped question: 17
Figure 2

3. Please rate the following events based on your perception of level of tragedy, with 1 being the least tragic and 5 being the most tragic:

<table>
<thead>
<tr>
<th>Event</th>
<th>Rating Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Columbine Shooting:</td>
<td>0.8% (1)</td>
</tr>
<tr>
<td>Virginia Tech Shooting:</td>
<td>1.5% (2)</td>
</tr>
<tr>
<td>Sandy Hook Shooting:</td>
<td>1.5% (2)</td>
</tr>
</tbody>
</table>

answered question 130
skipped question 21
Figure 3

4. Please rate the following events based on its impact on your daily life in the months following the event, with 1 being no impact and 5 being large impact

<table>
<thead>
<tr>
<th>Event</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Rating Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbine Shooting:</td>
<td>36.2% (46)</td>
<td>27.6% (36)</td>
<td>25.2% (32)</td>
<td>6.3% (8)</td>
<td>4.7% (6)</td>
<td>127</td>
</tr>
<tr>
<td>Virginia Tech Shooting:</td>
<td>35.4% (45)</td>
<td>30.7% (39)</td>
<td>19.7% (25)</td>
<td>9.4% (12)</td>
<td>4.7% (6)</td>
<td>127</td>
</tr>
<tr>
<td>Sandy Hook Shooting:</td>
<td>18.9% (24)</td>
<td>21.3% (27)</td>
<td>29.1% (37)</td>
<td>12.6% (16)</td>
<td>18.1% (23)</td>
<td>127</td>
</tr>
</tbody>
</table>

answered question 127

skipped question 24
<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>3.1%</td>
<td>4</td>
</tr>
<tr>
<td>Disagree</td>
<td>2.4%</td>
<td>3</td>
</tr>
<tr>
<td>Neutral</td>
<td>15.0%</td>
<td>19</td>
</tr>
<tr>
<td>Agree</td>
<td>52.8%</td>
<td>67</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>26.5%</td>
<td>34</td>
</tr>
</tbody>
</table>

**Figure 4**

When I hear about a national tragedy, I do further research on the topic.
Figure 5

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>28.3%</td>
<td>36</td>
</tr>
<tr>
<td>Agree</td>
<td>53.5%</td>
<td>68</td>
</tr>
<tr>
<td>Neutral</td>
<td>11.8%</td>
<td>15</td>
</tr>
<tr>
<td>Disagree</td>
<td>0.8%</td>
<td>1</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>5.5%</td>
<td>7</td>
</tr>
</tbody>
</table>

answered question 127
skipped question 24
Figure 6

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>2.4%</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>17.3%</td>
<td>22</td>
</tr>
<tr>
<td>Neutral</td>
<td>28.3%</td>
<td>36</td>
</tr>
<tr>
<td>Agree</td>
<td>40.2%</td>
<td>51</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>11.8%</td>
<td>15</td>
</tr>
</tbody>
</table>

- answered question: 127
- skipped question: 24
Figure 7

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>1.6%</td>
<td>2</td>
</tr>
<tr>
<td>Agree</td>
<td>32.3%</td>
<td>41</td>
</tr>
<tr>
<td>Neutral</td>
<td>41.7%</td>
<td>53</td>
</tr>
<tr>
<td>Disagree</td>
<td>20.5%</td>
<td>26</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3.9%</td>
<td>5</td>
</tr>
</tbody>
</table>

Total answered question: 127
Total skipped question: 24

More information on the event, or an explanation of the event, tends to ease my anxiety or nervousness