

Syracuse University

SURFACE

Syracuse University Honors Program Capstone Projects Syracuse University Honors Program Capstone Projects

Spring 5-5-2015

Mass Shootings and Mental Illness Perception

Sierra M. Korb
Syracuse University

Follow this and additional works at: https://surface.syr.edu/honors_capstone

 Part of the [Experimental Analysis of Behavior Commons](#)

Recommended Citation

Korb, Sierra M., "Mass Shootings and Mental Illness Perception" (2015). *Syracuse University Honors Program Capstone Projects*. 863.

https://surface.syr.edu/honors_capstone/863

This Honors Capstone Project is brought to you for free and open access by the Syracuse University Honors Program Capstone Projects at SURFACE. It has been accepted for inclusion in Syracuse University Honors Program Capstone Projects by an authorized administrator of SURFACE. For more information, please contact surface@syr.edu.

Mass Shootings and Mental Illness Perception

A Capstone Project Submitted in Partial Fulfillment of the
Requirements of the Renée Crown University Honors Program at
Syracuse University

Sierra M. Korb
Candidate for B.A. Degree
and Renée Crown University Honors
May 2015

Honors Capstone Project in Psychology

Capstone Project Advisor: _____
Leonard S. Newman PhD.

Capstone Project Reader: _____
Christopher B. Miller PhD.

Honors Director: _____
Stephen Kuusisto, Director

Date: May 5th 2015

© (Sierra M. Korb, April 5th 2015)

Abstract

This study focused on the relationship between mass shootings and mental illness stigma. Specifically, this study looks at how learning about mass shootings affects the extent to which people with mental illness are stigmatized. Participants were asked to read a short story and then answer survey questions about their opinions of the mentally ill. The main finding of this study was that participant's preferred greater social distance from people with mental illness after learning about mass shootings, even when it was not explicitly mentioned that the shooter was a person with mental illness.

Executive Summary

This study focused on the relationship between mass shootings and mental illness stigma. Mass shootings for the purpose of this study are defined as shootings in which two or more individuals are shot in one incident by one shooter. Stigma is defined by the American Psychological Association as “The negative reaction of people to an individual or group because of some assumed inferiority or source of difference that is degraded” (Gerrig, 2002). Specifically, this study looks at how learning about mass shootings affects the extent to which people with mental illness are stigmatized. It is a replication and extension of a previously conducted large-scale study with many similarities (McGinty, Webster, & Barry, 2013). However, an examination of the research conducted by McGinty et al. suggested that there were certain components missing. Primarily, the previous study did not test for the importance of vivid images in the media stories nor did it vary whether the shooter was explicitly labeled as being a person with mental illness. Both of these factors could play a significant role in the opinions people have of the mentally ill after a mass shooting.

This issue was studied experimentally. Participants came into the lab and read a short news story about a fictional mass shooting, and then finished a short questionnaire asking about their attitudes towards mentally ill individuals. The details in the story the individuals read varied across the four conditions. In two of the stories there were graphic images containing blood, a severely wounded individual, and the chaos of a mass shooting. The remaining two conditions did not contain any images. In addition, in both the condition that contained a graphic image and the condition that did not, half of the time the shooter was explicitly stated as being mentally ill, and half of the time the story did not state that the shooter was mentally ill.

The survey the participants answered after they read the story first addressed how the participants felt about a mentally ill individual owning a weapon. Then the participant answered

questions about how they felt about living near and associating with a mentally ill individual. Thirdly, the participants answered a varied set of questions in which they indicated how they believe most people feel about living near and associating with a mentally ill individual. Then participants then answered three questions regarding gun legislation and their personal opinions on the desirability of heavier restrictions for mentally individuals when it comes to weapons ownership. Lastly, we asked the participants several demographic questions.

The stories varied across conditions the way that they did because the purpose of the study was to see if vivid images and the label “mentally ill” would change the level of stigma the participants felt when answering the questionnaire items compared to conditions without the images or label (and a condition where the participants did not read a story about mass shooting). Of particular interest was seeing whether reading about mass shootings increase negative beliefs and feelings about people with mental illness even when a shooter is not even identified as having a mental illness. The first questions on the questionnaire regarding attitudes towards mentally ill individuals owning guns were asked first because we wanted to examine the first response the participants felt towards a mentally ill individual owning a weapon. The subsequent questions regarding their attitudes towards mentally ill individuals living and working near the participant were also asked first because of the need for a primary response to the question with the thought of the mass shooting still in their minds. The questions following that (about the social distance the participant felt other people in their community felt towards mentally ill individuals) were asked to gauge how the participant felt about their community. The legislation questions were added to see where participants stood on political topics compared to their opinions about mentally ill individuals. The demographic questions were asked to learn more about the participant and to see if there were any trends across gender and race.

Results revealed that after reading the stories, participants had an increase in their level of bias, regardless of whether the label of “mentally ill” was used. After learning about a mass shooting, people were less willing to be near people with a mental illness even if the shooter was not identified as a person with mental illness. However the difference between conditions was not quite statistically significant (i.e., p was not less than .05). After considering the number of students who did not speak English as their first language, we decided to remove these students due to the strong possibility that they might have had difficulty with the complicated narrative they had to read and because their backgrounds might have been very different than that of the participants from the United States. After removing these participants and running an ANOVA, the p value was less than .05, yielding a statistically significant result.

Overall this study will educate clinicians, legislators, and future researchers about the nature of mental illness stigma and its association with mass shootings. Mental illness stigma is a key factor in our society that we should know more about. With the rise of mass shootings and prominence of legislation considered in reaction to these events it is important that we have facts and research to aid in the formation of legislation. This study will tell us about the level of mental illness stigma after a mass shooting, and enhance future research regarding mass shootings and mental illness stigma.

Table of Contents

Abstract.....	iii
Executive Summary.....	iv
Table of Contents.....	vii
Acknowledgements	viii
Chapter 1: Introduction.....	1
Origin of Mental Illness Stigma.....	1
Mass Shootings	2
Mass Shootings in the Media.....	3
Present Study.....	5
Chapter 2: Methods	7
Sample.....	7
Design.....	7
Procedures.....	8
Measures.....	9
Chapter 3: Results	10
Social Distance	10
Defend Self Question	11
Chapter 4: Discussion.....	13
Works Cited.....	15
Appendix	17

Acknowledgements

First and foremost, I would like to thank Dr. Leonard Newman my advisor. As my advisor you mentored me and guided me through the research and writing process, and were patient with the questions I had. Secondly, I would like to thank Dr. Christopher Miller for reviewing my work, and being patient in waiting for the final product. Lastly, I would like to thank my family and Fiancé for supporting me and listening to my ramblings about this project.

Chapter 1

Introduction

Origin of Mental Illness Stigma

It is not uncommon to encounter different types of stigma (Ottati, Bodenhausen & Newman, 2005). Stigma is defined by the American Psychological Association as “The negative reaction of people to an individual or group because of some assumed inferiority or source of difference that is degraded” (Gerrig, 2002). In order for stigma to manifest itself, one must have a specific marginalized group in society that has stereotypes associated with it. Stigma manifests itself when such stereotypes imply that the marginalized group is culturally unacceptable. (Thornicroft, 2006) In the case of this thesis, the marginalized group will be those who are deemed mentally ill. This type of stigma is prevalent in our culture (Overton & Medina, 2008) and we often see it in our everyday lives. (Hinshaw, 2007) For the purpose of this research, my goal was to understand further how mental illness stigma expresses itself after a mass shooting. More specifically, the goal is to see whether stigmatization of people with mental illness becomes more intense after a mass shooting—regardless of whether the shooter is identified as being a person with mental illness.

One way of conceptualizing and studying mental illness stigma is in terms of the social cognitive model. According to this perspective, stigma comprises of stereotypes, prejudice and discrimination. As Corrigan, Watson, & Ottati (2014) state, social psychologists view stereotypes as knowledge structures that are learned by most members of a social group. They are an efficient means of categorizing information about social groups and they represent collectively agreed upon notions of different groups. The difference between having a stereotypical belief

about a certain social group and holding prejudices against the group is that if one is prejudiced toward a certain group, one endorses *negative* stereotypes. Prejudice, in turn, results in discrimination against the social group. This discrimination is what makes up the brunt of mental illness stigma.

When one studies mental illness stigma, there are several social situations in which that social stigma might be most apparent. Mental illness stigma is based on three central ideas about a person's beliefs, competence, and responsibility, which are all components of stereotypes about the mentally ill (Otatti, Bodenhausen & Newman, 2005). A very common belief about those with mental illness is that they are dangerous (Overton & Medina, 2008). This is a common theme in many popular media stories after a tragedy has happened, as well as a common theme in popular culture, including movies, television shows, and music.(Wahl, 1995) Dangerousness is a central concept in opinions that shape mental illness stigma. This often contributes to mental illness stigma when individuals who hold these opinions avoid or talk about the mentally ill in a degrading manner. This thesis will focus on mental illness stigma and how it presents itself after a mass shooting.

Mass Shootings

Because of recent events in the United States, mass shootings have been a common household (and academic) topic. The phenomenon of mass shootings has generated massive amounts of data. A mass shooting is categorized as a mass shooting if the event involves an active shooter who shoots three or more people in a single event. According to Stanford University's database on mass shootings, in the United States nearly 65% of victims of mass shootings come from a mass shooting perpetrated by a mentally ill individual, which is double that of shootings committed by those without a history of mental illness. Mass shootings happen in a variety of

settings. However, the majority of mass shootings occur on a college and university campus or on in a secondary school location. Not very far behind, mass shootings are also often located at government facilities, companies, residential homes and neighborhoods, as well as primary schools. This equates to approximately 40% being located in school setting whereas 20% are located in business related facilities (Stanford Geospatial Center, 2012). This is important to discuss because of how people perceive the environments of shootings. Some people may believe that a mass shooting on a college campus or in a school is indicative of a more heinous crime than if it were to happen in a business-related faculty. The age of a shooter seems to also play a significant factor in the lethality of the shooting. About 30% of shootings are perpetrated by people who were in there 20's at the time of the shooting. These shootings result in the most fatalities and injuries. The oldest individual to commit a mass shooting was 70 years old and the youngest individual was 12 years old. (Stanford Geospatial Center, 2012). Age is a significant factor due to the onset of mental illness. Mental illness usually occurs in an individual around age 20 -24 ("Mental Illness Exacts Heavy Toll, Beginning in Youth", 2005)

Media Coverage of Mass Shootings

Mass Shootings are not a very common phenomenon. In recent years there have been some highly fatal mass shootings, which have resulted in sensationalization in the media. This is not to say mass shootings aren't newsworthy; however, the topic in the media is often overemphasized compared to the number of shootings that happen in the United States on a daily basis. This is especially true when it comes to the presence of mental illness in the shooter.

If we look to Canadian research, we find that in newspaper coverage of mental illness from 2005-2010 the mentally ill were portrayed in a negative way as opposed to their non-mentally ill counterparts. Whitley and Berry (2013) examined articles that mentioned terms such

as mental health, mental illness, schizophrenia, or schizophrenic. It was found that danger, violence, and criminality were direct themes in 40% of the newspaper articles. Treatment for the perpetrators' mental illness was discussed in only 19% of newspaper articles. In only 18% was recovery or rehabilitation a theme. It was also found that in 71% of the articles, journalists failed to contextualize mental health issues or events. Also the voices of people with a mental illness or experts on mental illness were lacking from these articles. Of the articles viewed, only 17% included the voice of a mentally ill individual, and 25% of the articles included the voice of an expert in the field (Whitley & Berry, 2013).

One of the most recent studies that demonstrates changed attitudes after a mass shooting in the United States is one conducted by McGinty, Webster, and Barry (2013). McGinty and colleagues used a large-scale national survey to test the effects of media messages. Participants were assigned to one of three groups that read different 1-2 paragraph long news stories; there was also a no exposure control group. The three news stories presented in the study differed. The first story presented discussed a mass-shooting event perpetrated by a mentally ill individual who used a large-capacity magazine. The second story used the same shooting and proposed a gun restriction policy for persons with serious mental illness. Lastly, the third story used the same shooting and proposed a ban on large-capacity magazines. After reading the stories, the participants answered questions regarding their opinions about and attitudes toward mentally ill individuals, their support for a ban on large-capacity magazines, and support for gun restrictions for the seriously mentally ill. The results for these two dependant variables were not statistically significant. Participants in the no exposure (control) condition answered the same questions without reading the news story beforehand.

The results from this study indicated that reading the news story had a significant effect on participants' attitudes. Thirty six percent of respondents were unwilling to work closely with a person with serious mental illness and 30% were unwilling to have such a person as a neighbor. Additionally, forty percent of respondents believed that persons with a serious mental illness are likely to be far more dangerous than the general population. All three stories heightened negative attitudes towards individuals with serious mental illness compared to the control group. This study found that news media portrayals of a mass shooting by persons with a serious mental illness play a critical role in influencing both negative attitudes toward persons with a mental illness as well as support for gun control policies. The study also highlighted a heightened desire for social distance from persons with serious mental illness, and elevated perceptions of their dangerousness.

Present Study

The present study is a replication and extension of the study conducted by McGinty, Webster, and Barry (2013). I noticed when formulating ideas for my current research that images were left out of McGinty and colleagues' work. I suspected that graphic images might play a role in mental illness stigma over and above what the news outlets were actually reporting. (Posavac, Posavac, Posavac, 1998) Formally, I hypothesized that the usage of images could increase the stigma seen and felt after a mass shooting. It would also be reasonable to hypothesize that including the term "mentally ill" would increase stigma; a more intriguing possibility, though, is that labeling the shooter in those terms would be irrelevant, and that even a story that did not explicitly use the label would result in more stigma (so strong is the association between mass shootings and mental illness).

This study includes graphic images in some conditions in an attempt to see if they heighten the level of stigma individuals feel after a mass shooting. In total, I included two conditions that contained images and two that did not. In an attempt to see if explicitly reporting that a perpetrator of a mass shooting is mentally ill affects stigma, in two of the conditions the shooter was labeled mentally ill and in two the individual was not labeled mentally ill. Thus, the study had a 2X2 design involving two between-subjects variables. Condition one contained a story with pictures and the person was labeled as mentally ill; condition two contained no pictures and the person was labeled as mentally ill; condition three contained no pictures and the shooter was not labeled; and condition four contained pictures and the shooter was not labeled. In addition, participants in a separate control condition did not read a news report.

When creating the survey I wanted to touch on a couple of key components of mental illness stigma. The first was social distance (or how willing an individual would be willing to have a mentally ill individual in their community). The second was how credible people with mental illness are seen after a mass shooting. The third component was how dangerous an individual with a mental illness is perceived after a mass shooting. The last one was whether or not a mentally ill individual should be allowed to own weapons.

The goal of making these changes to the previously published one was to deepen our understanding of how mental illness stigma is affected by news reports of mass shootings. I felt that when viewing a media article about something as tragic as a mass shooting, there are graphic images that I view change and shape my opinions. With this being said I also hypothesized that images affect other people, and may affect the stigma that is felt after a mass shooting.

Explicitly stating and labeling a person as mentally ill may shape the way people's opinions develop after a mass shooting. However, as previously noted, I was also interested in

seeing if reading about a mass shooting would have a negative impact on attitudes toward people with mental illness even when the media report did *not* explicitly state that the shooter was a person with mental illness. This phenomenon would be consistent with what past research has called the *confirmation bias*. Confirmation bias is the tendency to search for, interpret, or recall information in a way that confirms one's beliefs or hypothesis. (Brycz, Wyszomirska-Gora, Bartal, Wisniewski, 2014) Considering that opinions often shape people's views on legislation related to certain groups such as the mentally ill, I also looked at the effects of my manipulations on people's positions on proposed gun-related laws.

Chapter 2

Methods

Sample

Both male and female participants participated in the study. Although I had no specific hypotheses about sex differences, I planned to examine whether participants might have different views varying by sex. The sample was comprised of students taking an introductory psychology course for credit at Syracuse University. The students received credit for participating in this study. The age range of this study was 18-58 years old. Overall more women than men participated, with N= 35 for men and N=68 for women (and one participant who did not report gender) for a total N=104.

Design

The study had two phases. First the participants read a fictitious news story about a shooting, and secondly, they completed a survey I created. In the control condition, the first step was skipped and the students only completed the survey. In order to prevent demand effects (i.e.,

the participant finding out what type of research we were conducting) we ran the participants for the control condition separate from the other four conditions. The experimental design in this study is based on the experimental design described by McGinty, Webster, and Barry (2013).

However, in this study there were two conditions in which three pictures (reproduced in black and white) were included and two conditions in which the label of mentally ill was added to the shooter's background. In the first condition, pictures and the label of mentally ill were used. In the second condition, no pictures and the label of mentally ill were used. In the third condition, the label of mentally ill was removed and there were no pictures. Lastly, in the fourth condition, there were pictures and the label was also removed. The first picture contained an ATF agent walking over a bloody sidewalk. The second picture contained three police officers carrying a severely wounded individual. The third and final picture contained a triage area with severely wounded individuals (see Appendix).

Procedures

As mentioned above, the experiment was split into two main sections. When the participants entered the lab they were required to sign a consent form. After doing so, the cover story for the experiment was that we were showing the participants a news story posted online of a recent mass shooting in a park in Indianapolis. After the students read the article (see Appendix) they were given the survey packet. The students were told to answer each question to the best of their ability and to follow the bolded directions. The consent form, questions in the survey as well as the stories used for each condition can be found in the appendices of this document.

After the students completed the survey, they were told to wait until their peers finished, since the students were run in groups of four. After everyone was done, participants were

debriefed. The students were told the news story was fictitious and that they were participants in a social psychology experiment studying the level of stigma after a mass shooting. I allowed questions about the research to be asked, and then the participants were dismissed.

Measures

In this study first and foremost we were trying to find out if mental illness stigma increased after a mass shooting, echoing past research. However, we were also looking to see if labels and images played a role in attitudes toward the mentally ill after a mass shooting. The survey I created helped us do that by asking questions associated with Likert, semantic differential, and rating scales.

The first set of two questions asked participants about their opinions on mentally ill individuals owning weapons. Secondly, we asked participants how they felt about living near and working with a mentally ill individual. These four questions were asked on a likert scale of 1 (Disagree) to 7 (Agree). These questions were asked first because we wanted to make sure the participants answered the questions with the images from the mass-shooting story still fresh in their minds.

The next set of nine questions asked participants how they believed most people felt about mentally ill individuals in their community. This section is based on a study by Link, Struening, Cullen, Shrout & Dohrenwend (1989). These questions touched upon the perception of social distance and dangerousness. They ranged from “I think most people take the opinion of someone who has been treated for a mental illness less seriously” to “I think most people hesitate to entrust their child with someone who has been treated for a mental illness.” Responses to these questions were provided on a 4-point rating scale ranging from disagree to agree. These questions were asked to determine how participants felt about their community and to gauge

whether or not they felt their community held the same attitudes as their own regarding the mentally ill.

Following the previous questions, participants were asked to rate their opinions on pieces of legislation regarding gun ownership, how much ammunition should be allowed to be held at one time, and how willing people would be to have teachers carrying weapons in a school setting. Responses to these questions were provided on a semantic differential 7-point scale ranging from 1 (strongly oppose) to 7 (strongly support). These questions were asked to determine how participants would rate their political inclinations compared to their level of stigma.

The final series of questions were demographic questions to learn more about the population who were taking the survey. The first questions asked participants about gun usage and gun ownership. The second set of questions asked about age and gender. They were followed by questions asking if English was their primary language, and what their race was.

Chapter 3

Results

Extensive preliminary analyses revealed no effects of pictures. Thus, the results that follow are based on analyses that did not include the pictures variable.

Social Distance

Analysis of the two social distance questions regarding if the participant would like to work close or live near a mentally ill individual showed these questions to be highly correlated $r(104) = .63, p < .001$. Therefore we combined these two questions to form one social distance measure. The condition means for this variable can be found in Table 1.

Table 1

Condition	N	Mean	Std. Deviation
-1.00 (control)	16	5.4063	1.39306
.00 (no label)	32	4.2188	1.67975
1.00 (Label)	38	4.4342	1.39095
Total	86	4.5349	1.54880

A one-way ANOVA revealed that the difference between conditions, $F(2,101) = 2.29$, $p = .107$, was not quite statistically significant (i.e., p was not less than .05). However, after considering the number of students who did not speak English as their first language, we decided to remove these students due to the strong possibility that they might have had difficulty with the complicated narrative they had to read and because their backgrounds might have been very different than that of the participants from the United States. The analysis with the 86 remaining participants revealed a significant difference between conditions, $F(2, 83) = 3.47$, $p < .05$. The control condition that differed from both of the other conditions ($p = .012$ compared to the no label and $p = .033$ control compared to the label condition). The label condition and the no label condition did not significantly differ ($p = .553$). There were no differences involving gender of participants.

In short, we found that after reading the stories participants had an increase in their level of bias, regardless of whether the label of “mentally ill” was used. Thus, after learning about a mass shooting, people are less willing to be near people with a mental illness—again, even if the shooter is not identified as a person with mental illness.

Defend Self Question

When participants were asked the Likert scale question regarding whether the dangers posed by people with a mental illness outweigh their right to defend themselves, after being presented with the condition *without* the label of mentally ill, people were more likely to agree with the above statement relative to the control condition (see Table 2). In other words, their bias increased. However when the label was added, participants were no different than the control condition. These differences were again not significant until we removed the non-native speakers of English, $F(2,83) = 6.92, p < .05$, with $p < .005$ for both of the post-hoc comparisons involving the no-label condition. This suggests that when the issues of violence and mental illness issue are salient, such as they were in the labels condition, people could be aware of how this may bias their attitudes on directly related matters. However, as revealed by the results for social distance, their general unease of people with mental illness still increases.

Table 2

Condition	N	Mean	Std. Deviation
-1.00 (control)	16	3.75	1.390
.00 (no label)	32	5.00	1.481
1.00 (Label)	38	3.92	1.260
Total	86	4.29	1.462

Other Results

None of the manipulations had any effect on answers to the first question, which simply asked if mentally ill individuals should own weapons. The overall mean response was 2.0 (out of 7); thus, there were floor effects. This means that participants overall were against people with

mental illness owning guns no matter what condition they were in (an interesting finding in and of itself).

Analyses of how participants believed most people felt about mentally ill individuals in their community and the last set of questions addressing gun legislation revealed no significant main effects or interactions.

Chapter 4

Discussion

Overall this study showed an interaction between mental illness stigma and social distance. The participants in this study showed a direct trend of wanting to distance themselves from those that are mentally ill after a mass shooting—even when the shooter was not explicitly identified as being a person with mental illness. Furthermore, the participants in this study were hesitant to take away guns from mentally ill individuals if they were labeled as mentally ill. This suggests participants were acutely aware of the biases that could affect their decisions.

This project is significant in the current social context due to the prominence of mass shootings in the United States over the past years. The more we know socially about a mass shooting, the better researchers and law makers can make informed decisions regarding future research and future legislation. It is well known that after mass shootings happen gun legislation is a prominent topic in the media and often legislation is changed to address the tragedy of the mass shooting. Mass shootings and the topic of gun legislation is are the subjects of a prominent and often heated debate in the United States and a problem that is not yet solved. This research aims to contribute to the discussion about mass shootings and help researchers and legislators

better understand how this phenomenon occurs and how we as a society can best combat mass shootings.

Furthermore, mental illness stigma is a social phenomenon that often does not go unnoticed by those who are mentally ill or caregivers of mentally ill individuals. The perception that society does not want mentally ill individuals is a very real perception to mentally ill individuals and is often disconcerting. Mental illness stigma is a phenomenon that as a society we must know more about. If mental illness stigma does increase after a mass shooting we can better combat the stigma the mentally ill and their caregivers experience after a mass shooting. This research will help psychologists be more aware of the social climate in which their patients live.

Works Cited

- Barry, S. (2002). The effect of magazine viewing on body image, mood, and weight control thoughts and behaviors in women. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 63(3-B), 1568-1568. Retrieved April 15, 2015, from PsychInfo.
- Brycz, H., Wyszomirska-Góra, M., Bar-Tal, Y., & Wiśniewski, P. (2014). The effect of metacognitive self on confirmation bias revealed in relation to community and competence. *Polish Psychological Bulletin*, 45(3), 306-311. Retrieved April 12, 2015, from PsychInfo.
- Corrigan, P., Watson, A., & Ottati, V. (2003). From Whence Comes Mental Illness Stigma? *International Journal of Social Psychiatry*, 49(2), 142-157. Retrieved November 9, 2014, from PsychInfo.
- Gerrig, R., & Zimbardo, P. (2002, January 1). Glossary of Psychological Terms. Retrieved February 8, 2015, from <http://www.apa.org/research/action/glossary.aspx?tab=18>
- Hinshaw, S. P. (2007). *The mark of shame: Stigma of mental illness and an agenda for change*. New York: Oxford University Press.
- Link, B., Struening, E., Cullen, F., Shrout, P., & Dohrenwend, B. (1989). A Modified Labeling Theory Approach to Mental Disorders: An Empirical Assessment. *American Sociological Review*, 400-423.
- Mental Illness Exact Heavy Toll, Beginning in Youth. (2005, June 6). Retrieved December 21, 2014, from <http://www.nimh.nih.gov/news/science-news/2005/mental-illness-exacts-heavy-toll-beginning-in-youth.shtml>
- McGinty, E., Webster, D., & Barry, C. (2013). Effects of News Media Messages About Mass Shootings on Attitudes Toward Persons With Serious Mental Illness and Public Support for Gun Control Policies. *American Journal of Psychiatry*, 170(5), 494-494. Retrieved September 15, 2013, from PsychInfo.
- Ottati, V., Bodenhausen, G. V., & Newman, L. S. (2005). Social Psychological Models of Mental Illness Stigma. In P. W. Corrigan (Ed), *On the stigma of mental illness: Practical strategies for research and social change* (pp. 99-128). Washington, DC, US: American Psychological Association.
- Overton, S., & Medina, S. (2008). The Stigma of Mental Illness. *Journal of Counseling and Development*, 86, 143-151.

Stanford Geospatial Center. (2012, December 1). Mass Shootings in America. Retrieved March 5, 2015, from <https://library.stanford.edu/projects/mass-shootings-america>

Thornicroft, G. (2006). *Shunned: Discrimination against people with mental illness*. New York: Oxford University Press.

Wahl, O. F. (1995). *Media madness: Public images of mental illness*. New Brunswick, NJ: Rutgers University Press.

Whitley, R., & Berry, S. (2013). Trends in Newspaper Coverage of Mental Illness in Canada 2005-2010. *The Canadian Journal of Psychiatry*, 58(2), 107-112. Retrieved October 13, 2014, from PsychInfo.

Appendix

Consent Form



PSYCHOLOGY DEPARTMENT
430 HUNTINGTON HALL
SYRACUSE UNIVERSITY
SYRACUSE, NY 13244

You have been asked to participate in a study that is part of a research project entitled:
THINKING ABOUT CURRENT EVENTS

You are being invited to participate in a research study. Involvement in the study is voluntary, so you may choose to participate or not. This form which will be given to each participant, will explain the study to you and please feel free to ask questions about the research if you have any. In this study, you will be asked to read a short news article and then answer some questions. This will take approximately 30 minutes of your time.

Although there are no direct benefits to you of participating in this research, by participating, you may make an important contribution to our understanding of the factors affecting people's responses to important current events. The risks to you of participating in this study are minimal; you might find some of the material you read to be upsetting. But this risk is similar to those you might face in everyday life.

If, however, you find any aspect of the research to be upsetting and would like help managing your feelings, we would be happy to help you schedule an appointment at the SU Counseling Center, 200 Walnut Place, 443-4715 (<http://counselingcenter.syr.edu/>).

Participation in this study is voluntary, and you may withdraw your consent to participate at any time without penalty. In exchange for your participation, you will receive a half hour of credit to be counted as part of your requirements for Introductory Psychology (PSY 205). If at some point during the course of the experiment you wish to withdraw, you will still be given a half-hour of credit.

You have the right to receive a copy of any consent form that you sign and of any written documentation that is used in obtaining your consent. Your responses are confidential. Your name will not be linked to the responses that you provide in this study. Materials will be identified only by participant numbers, not by names. If our data are requested by other researchers, it will be shared with them without any names or other personally identifying information.

If you have questions, concerns, or complaints about this research, or want answers to any other pertinent questions about this research, please contact **Dr. Leonard Newman** at **(315) 443-4633**. For questions about your rights as a research participant, or if you have questions, concerns, or complaints that you wish to address to someone other than the investigator, you may contact the **Institutional Review Board** at **(315) 443-3013**.

If you do not want to take part, you have the right to refuse to take part, without penalty. If you decide to take part and later no longer wish to continue, you have the right to withdraw from the study at any time, without penalty.

All of my questions have been answered, I am 18 years of age or older, and I wish to participate in this research study.

Signature of participant

Date

Printed name of participant

Signature of researcher

Date

Printed name of researcher

Graphic Stories

The gunman who opened fire in an Indianapolis park yesterday morning has been identified as Indianapolis resident Jake Robinson, age 30. According to police, the shooter has a history of serious mental illness. Mr. Robinson's motivation for opening fire in Smith Park in central Indianapolis is unclear. Witnesses said Mr. Robinson arrived at the park around 7:30 am and appeared agitated, pacing up and down and talking to himself. At approximately 8:15 a.m Mr. Robinson took a gun out of his bag and



began to shoot. Three adults passing through the park on their way to work were shot and killed. Three more adults and two children were wounded. The police officer leading the investigation said that Jake Robinson used a semiautomatic weapon to shoot

about 30 bullets in a row before a security guard from a nearby building tackled him. Little is known about Mr. Robinson, who lived alone and appears to have no immediate family. Mr. Robinson's cousin, who lives in South Carolina, said Mr. Robinson was hospitalized for mental illness last year.



The gunman who opened fire in an Indianapolis park yesterday morning has been identified as Indianapolis resident Jake Robinson, age 30. According to police, the shooter has a history of serious mental illness. Mr. Robinson's motivation for opening fire in Smith Park in central Indianapolis is unclear. Witnesses said Mr. Robinson arrived at the park around 7:30 am and appeared agitated, pacing up and down and talking to himself. At approximately 8:15 a.m Mr. Robinson took a gun out of his bag and began to shoot. Three adults passing through the park on their way to work were shot and killed. Three more adults and two children were wounded. The police officer leading the investigation said that Jake Robinson used a semiautomatic weapon to shoot about 30 bullets in a row before a security guard from a nearby building tackled him. Little is known about Mr. Robinson, who lived alone and appears to have no immediate family. Mr. Robinson's cousin, who lives in South Carolina, said Mr. Robinson was hospitalized for mental illness last year.

The gunman who opened fire in an Indianapolis park yesterday morning has been identified as Indianapolis resident Jake Robinson, age 30. Mr. Robinson's motivation for opening fire in Smith Park in central Indianapolis is unclear.

Witnesses said Mr. Robinson arrived at the park around 7:30 am and appeared agitated, pacing up and down the sidewalk. At approximately 8:15 am Mr. Robinson took a gun out of his bag and began to shoot. Three adults passing through the park on their way to work were shot and killed. Three more adults and two children were wounded. The police officer



leading the investigation said that Jake Robinson used a semiautomatic weapon to shoot about 30 bullets in a row before a security guard from a nearby building tackled him. Little is known about Mr. Robinson, who lived alone and appears to have no immediate

family. Mr. Robinson's cousin who lives in South Carolina said Mr. Robinson has not been in contact with his family since last year.



The gunman who opened fire in an Indianapolis park yesterday morning has been identified as Indianapolis resident Jake Robinson, age 30. Mr. Robinson's motivation for opening fire in Smith Park in central Indianapolis is unclear. Witnesses said Mr. Robinson arrived at the park around 7:30 am and appeared agitated, pacing up and down the sidewalk. At approximately 8:15 am Mr. Robinson took a gun out of his bag and began to shoot. Three adults passing through the park on their way to work were shot and killed. Three more adults and two children were wounded. The police officer leading the investigation said that Jake Robinson used a semiautomatic weapon to shoot about 30 bullets in a row before a security guard from a nearby building tackled him. Little is known about Mr. Robinson, who lived alone and appears to have no immediate family. Mr. Robinson's cousin who lives in South Carolina said Mr. Robinson has not been in contact with his family since last year.

I think that most people hesitate to do business with someone who has been treated for a mental illness.

Disagree Somewhat disagree somewhat agree agree

I think that most people think badly of someone who has been treated for a mental illness.

Disagree Somewhat disagree somewhat agree agree

I think that most people consider mental illness to be a sign of personal weakness.

Disagree Somewhat disagree somewhat agree agree

I think that most people hesitate to entrust their child with someone who has been treated for a mental illness.

Disagree Somewhat disagree somewhat agree agree

I think that most people do not even take a look at an application from someone who has been treated for a mental illness.

Disagree Somewhat disagree somewhat agree agree

I think that most people do not enter into a relationship with someone who has been treated for a mental illness.

Disagree Somewhat disagree somewhat agree agree

I think that most people feel uneasy when someone who has been treated for a mental illness moves into the neighborhood.

Disagree Somewhat disagree somewhat agree agree

Please Circle one of the following Choices:

Would you support or oppose increasing federal funding to pay for a background check system to identify people with serious mental illness in order to prevent them from purchasing a firearm?

1 2 3 4 5 6 7
 Strongly Oppose Neutral Strongly Support

High –capacity gun magazines or clips can hold many rounds of ammunition, so a shooter can fire more rounds without manually reloading. Would you support or oppose a nationwide ban on the sale of high-capacity gun magazines that hold more than 10 rounds of ammunition?

1 2 3 4 5 6 7
 Strongly Oppose Neutral Strongly Support

Would you Support or Oppose teachers in schools to carry a concealed weapon during school hours to protect the classroom in the event of a shooting?

1 2 3 4 5 6 7
 Strongly Oppose Neutral Strongly Support

Did the story mention any animals being wounded?

Yes No

Did the story state the shooter was mentally ill?

Yes No

Please answer the following questions by circling one and only one answer

Have you ever personally owned a gun?

Yes No

Do you currently own a gun?

Yes No

What is your age in years? _____

What is your gender?

Male Female

Is English your first language?

Yes No

Please indicate your ethnicity by placing a check next to the appropriate description:

- _____ American Indian or Alaskan Native
- _____ Asian or Pacific Islander
- _____ Black/African American, not of Hispanic origin
- _____ Latino/a or Hispanic
- _____ Caucasian/White, not of Hispanic origin
- _____ Other (please specify): _____