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Fear and Terrorism: A Statistical Analysis of Threat Perception

Abstract

In recent years, "newer" forms of terrorism, such as cyberterrorism and hacking, are increasingly prioritized in media and policy as individuals seek to protect themselves from an unseen threat more than other forms of terrorism. The question therefore emerges as to whether or not a disparity exists between modern terrorism in comparison with more traditional terrorism Disparity between the two forms or the *perception* of the two? Focus has been placed primarily on threat perception of traditional forms of terrorism previously, understandably so. Following the September 11th terrorist attack, individuals and organizations are increasingly concerned with threat perception of cyberterrorism and similar acts, but no examination has been conducted on the fear associated with newer means of attack. While the fear of terrorism is known, the attempt to determine if there is a disparity in the fear towards different forms of terrorism takes the current conversation a step further. The goal in examining this potential inconsistency in fear levels is to determine if the fear of the unknown, among other factors such as media portrayal, plays a role in threat perception of terrorism. The Amazon Mechanical Turk crowdsourcing service allowed for the collection of survey data which was analyzed to determine the levels of threat perception associated with both forms of terrorism and to flag indicators that could explain why the disparity may exist. A careful examination of the collected data demonstrates that there is no statistically significant disparity between forms of terrorism, but unexpected findings related to media and threat perception pose new questions in the study of fear and terrorism.

Introduction

In "Globally, People Point to ISIS and Climate Change as Leading Security Threat", Jacob Poushter and Dorothy Manevich analyze the findings of a Pew Research Center study conducted in 2017.¹ The statistics show that militant groups and cyberattacks are considered by the international public to be two of the top five threats around the world. This information was gathered from a survey conducted with participants from 38 countries around the world.² The findings indicate that there is a distinction in the levels of fear towards various forms of terror, supporting the necessity of my research to explain why this difference occurs. I am proposing to research the connection between fear and terrorism in order to determine why public sentiment towards acts of terror differ based on type and to help my reader understand the policy implications of media-driven cognitive reactions. Therefore, my research question is: Does a disparity exist between the levels of public sentiment towards one form of terrorism over another?

The current political climate around the world and within the United States is very polarized. Given the possibility of war, or at the very least some very loaded threats, it is necessary to consider the cognitive fears of the public due to the potential of these terrible acts. Terrorism has become one of the greatest fears in the American public.³ For example, some members of the general public might have heightened fears of cyberattacks in comparison to militia groups due to the exaggerated fear of the unknown.⁴ These fears eventually transform into tangible change and implications, and my specific focus is on the effects of the media in

¹ Poushter, Jacob, and Dorothy Manevich. "Globally, People Point to ISIS and Climate Change as Leading Security Threats." Pew Research Center's Global Attitudes Project. August 01, 2017. Accessed September 29, 2017. ² *Ibid.* 2.

³ Ashley Marie Nellis and Joanne Savage, "Does Watching the News Affect Fear of Terrorism? The Importance of Media Exposure on Terrorism Fear," *Crime and Deliquency* 58, no. 5 (September 2012): 749.

⁴ Gabriel Weimann, "Cyberterrorism: How Real is the Threat?" *USIP Special Report* (Washington: United States Institute of Peace, 2004), 2.

influencing the public outrage and policy changes which result from these cognitive behaviors. It is hypothesized that whether people fear one type of terrorism over another, such as militia groups versus cyberattacks, cognitive reactions will play a role in determining the policy that gets put in place as safeguards against violence. It is necessary to understand what drives these particular fears in order to assess what drives the push for policy that will "protect" against the perceived greatest terrorist threat. As a way to understand why people experience differing levels of risk aversion toward different forms of terror, it is important to take a look at the base of these varying reactions – Fear.

Three schools of thought examine the influences behind the fear directed towards terrorist attacks. Media scholars comment on the influence a variety of new mediums have on the general public's perception of risk of attacks depending on the approach of the crimes committed. Despite the position of terrorism as a non-sexual form of violence, the literature on gender finds that women still feel a greater threat of terrorism in relation to their counterparts of other genders due to societal norms. The scholarship on psychology and terrorism finds that attacks are aimed at harming the public in order to create distrust of governmental infrastructure, which has a rippling effect. These different views will form part of the greater discussion of whether or not the cognitive reactions to terrorist attacks lead to differing levels of fear.

A succinct way to analyze the connection between fear and different forms of terrorism would be through quantitative data and analysis. For this reason, an original survey will be created to collect data to be analyzed via a Large-N, statistical methodology. The means chosen specifically to format the survey is the Amazon Mechanical Turk model that will look at two forms of terrorism – cyberterrorism and traditional terrorism.⁵ The Large-N methodology would

⁵ "Amazon Mechanical Turk" Amazon Web Services, 2017, accessed December 15, 2017, <u>http://docs.aws.amazon.com/AWSMechTurk/latest/AWSMechanicalTurkGettingStartedGuide/SvcIntro.html</u>.

allow for a comparison of reactions towards two types of terrorist attacks and is expected to display a statistically significant difference by calculating percentages for side by side analysis. The hypothesis is that people will have a greater fear of the unknown, which should be displayed by a higher fear percentage of threat perception related to cyber terrorism.

The results of the statistical tests will compare cyber- and traditional terrorism to see if there is a disparity in the levels of fear directed at each. The source of the disparity, should there be one, will be analyzed in relation to the media and politics. This analysis will permit the exploration of possible connections found within the survey that suggest sources of the heightened fear levels. All of the findings will then be placed in a societal context to evaluate possible implications of the findings given the current political climate.

Literature Review

Introduction

This study involves an inquiry into the possible disparity in fear levels towards different forms of terrorism; more specifically, I will be using the Large-N methodology to gain a better understanding of potential sources of the disparity. Three schools of thought examine these influences: the media's ability to create and shape risk-aversion tendencies, the role of gender as a predictor of fear levels, and psychology as a means of understanding threats from a targeted perspective. Media scholars comment on a variety of mediums' capacities to act as influencers of the perception of risk of attacks felt by the general public depending on their approach to crimes. Despite the position of terrorism as a non-sexual form of violence, the literature on gender finds that women feel a greater threat of terrorism in relation to their counterparts of other genders due to societal norms. The literature on psychology and terrorism finds that attacks are aimed at harming the public in order to create distrust of governmental infrastructure, which has a rippling effect on the public. Establishing an explanation for the influences on fear will allow for further investigation of the correlation between different levels of fear and different forms terrorist acts.

Media and Risk Aversion Tendencies

Scholars in this school of thought emphasize the role of the media as an influencer on emotions. The media holds the power to define and shape emotions, and the one emotion most conducive to compelling people to process information systematically is fear.⁶ In an online news message evaluation study focused on public health fears from media framing, it was undeniable that the media holds the power to influence perceptions.⁷ The media holds power by framing informative news and digital media to highlight fear-inducing elements, such as death tolls, which cause heightened levels of fright. Respondents had a high percentage of risk-aversion for themselves, rather than previously hypothesized assumption that risk-aversion would be beyond the individual level and focus on the fear for the greater population.⁸ The media induces this heightened precautionary nature within the public.

Another study conducted examined similar variables, taking into consideration the role of several media-related variables in the perception of perceived risk to respondents and to others, as well as perceived fear.⁹ Instead, the results showed that risk-aversion extended beyond oneself to also encompass others. This shift can be associated with an increased power of the media to influence perception so that actual victimization possibilities are skewed within the minds of the

⁶ Hye-Jin Paek, Sang-Hwa Oh, and Thomas Hove, "How Fear-Arousing News Messages Affect Risk Perceptions and Intention to Talk About Risk," *Health Communication* 31, no. 9 (January 2016): 1051-1062. ⁷ *Ibid.*

⁸ *Ibid.* 1052.

⁹ Nellis and Savage.

public.¹⁰ Carrying on in the same vein, there are also scholarly findings which illustrate the real world presence of the media as an element which can affect perception.¹¹ One such example of this real world effect is the Italian election of 2001, which was studied to find correlations between media focus on crime and agenda setting by political prospects.¹² The results of the statistical modeling conducted show a correlation between the media framing of crimes and how the highlighted issues caused fear, resulting in a search for the candidate who could best protect against these crimes.¹³ The media's ability to distort crimes gives it unprecedented access to influence cognitive perceptions within the public. Specifically, as can be seen by almost identical assertions of scholars in this school of thought, the media has the capabilities to directly create and determine levels of fear and individual threat perception. It will be useful to implement in my own research the concept of media as an influencer, which will be possible by the creation of independent variables featuring news headlines to assess if the media has a role in determining differences in fear when examining a comparison of different forms of terrorism.

Gender and Sensitivity to Risk

While the media has a firm hold on public perception and levels of fear, a gender-based disparity in fear of victimization also influences this research. Fear of victimization is the theory that people experience fear because they believe themselves to be susceptible to being a target for violence. The idea of victimization was the focus of a study examining different values in

¹⁰ Nellis and Savage, 750.

¹¹ Anthony H. Cordesman, "Terrorism: The Thing We Have to Fear the Most is Fear Itself," (Washington, Center for Strategic and International Studies, 2016), 4.

¹² Paolo R. Graziano and Marco Percoco, "Agenda Setting and the Political Economy of Fear: How Crime News Influences Voters' Beliefs," *International Political Science* (September 2016): 1-14, accessed October 12, 2017, <u>https://doi.org/10.1177/0192512116656947</u>

¹³ *Ibid*, 10.

relation to gender and the association with terror as a non-sexual form of victimization.¹⁴ One phone survey found a significant connection between gender and the perception of needing to fear something which might happen, indicating higher levels of risk-aversion in respondents identifying as female.¹⁵ The author of the article further explored the origin of the perception that one must fear for themselves, and offers the conclusion that a large portion of this gender-based disparity is related to societal norms framing women as more vulnerable than individuals identifying as male. This suggests a distinct lack of psychological driver based solely on gender and leading to increased fear.

The gender factor, and the vulnerability implicitly applied to fear dependent on gender, can be examined by an analysis of multiple minority groups to determine what correlations might exist. A study conducted in California took this intersectional approach in order to analyze if female gender identification creates a prevalent minority group associated with higher fear levels.¹⁶ The survey results show that there is additional evidence of gender not being a sole indicator of fear levels as educational-level, ethnicity, and gender all intersect when determining levels of fear in response to media exposure.¹⁷ This shows an intersection of the scholarly findings which support the claims that non-sexual forms of violence will only have gender as a major indicator of risk aversion or fear of victimization in relation to multiple other factors.

This review of the research indicates that gender is not the sole source of fear within any particular sector of the public.¹⁸ Thus, it is necessary to uncover the source of the assumption that

¹⁴ Ashley Marie Nellis, "Gender Differences in Fear of Terrorism," *Journal of Contemporary Criminal Justice* 25, no. 3 (August 2009): 322-340.

¹⁵ *Ibid*, 335.

¹⁶ Valerie Callanan and Jared S. Rosenberger, "Media, Gender, and Fear of Crime," *Criminal Justice Review* 40, no.
3 (September 2015): 322-339.

¹⁷ Ibid.

¹⁸ Mark Warr, "Fear of Victimization: Why Are Women and the Elderly More Afraid?" *Social Science Quarterly* 65, no. 3 (September 1984): 681-702.

gender has a causal relationship with fear levels. Variables similar to those of the two previous studies were examined in order to better determine why females display an increased level of fear.¹⁹ The researchers found that women do have a heightened fear, but not due to psychological associations with fear as found in the phone surveys.²⁰ The findings concluded that the increased source of fear derives from societal processes which hold women as more vulnerable to violence, causing increased levels of fear and anxiety.²¹ It should therefore come as no surprise that gender only has an indirect link to fear levels for terrorism. Moving forward, it will be interesting to use gender as a variable in my research's surveys to further explore the lack of influence an individual's gender has on levels of fear.

Psychology of a Threat Society

Scholars emphasizing the role of psychology address the common misconception that the main targets of terrorism are infrastructure and governments, redirecting the literature to a discussion of the effects on the true objectives: the general populations in target areas.²² The actual targets tend to be a country's populations because fear from the masses will have a greater influence in favor of the terrorists – with consequences ranging from policy change to a frightening lack of trust in the targeted population's government.²³ This point is highlighted in the analyses of two studies which found that counts of terrorism influence cognitive reactions, resulting in raised fear responses and an overestimation future attacks.²⁴ Emotions, such as fear,

¹⁹ *Ibid*.

²⁰ Carmen P. McLean and Emily R. Anderson, "Brave Men and Timid women? A Review of the Gender Differences in Fear and Anxiety" *Clinical Psychology Review* 29 (May 2009): 496-505.

²¹ *Ibid*, 504.

²² Alex Braithwaite, "The Logic of Public Fear in Terrorism and Counter-Terrorism," *Journal of Police and Criminal Psychology* 28, no. 2 (June 2013): 95.

²³ *Ibid*, 96.

²⁴ *Ibid*, 95-101.

are the most concentrated home of psychological processes influencing the levels of threat perception. An analysis of current literature on this psychological phenomenon agrees with the previous analysis by demonstrating that threat is in fact assessed at different levels by the human mind.²⁵ By focusing specifically on the perceptions of British Muslims on the "war on terror," it is found that heightened emotions are emphasized by media framing and shared assumptions of the level of threat a terrorist group holds.²⁶ This information highlights the roles of emotions as determinants of different reactions stemming from a triggered psychological reaction.

Placed within the context of a "risk society," terrorism finds its success in the damage and fear it inflicts to civilians. With the heightened emotions resulting from an attack, the terrorist groups will be successful in undermining "the neo-liberal promise that the nation state is capable of securing the safety of its citizens."²⁷ Specifically, if considered in conjunction with a fear of the unknown, new technological advances within a society will further push for elevated fear perception and a more easily misdirected distrust of state protections. The impact of psychological impacts can be felt within a target population, but can also extend beyond the target area to a general distrust of all systems outside of the main attack zone.²⁸The primary takeaway from this school of thought is the significant role of the psychological processes controlling fear. This fear drives the multiple processes of how humans react to acts of violence, leading to individuals displaying a high risk aversion which often extends beyond themselves and to others. According to these findings, it is important to include a variable in which

 ²⁵ Shamila Ahmed, "The Emotionalization of the 'War on Terror'; Counter-terrorism, fear, risk, insecurity, and helplessness," *Criminology & Criminal Justice Review* 15, no. 5: 545-560.
 ²⁶ *Ibid*, 556.

²⁷ Gabe Mythen, "Terrorism: Risk and Regulation" in *Understanding the Risk Society: Crime, Security, and Justice* (New York: Palgrave MacMillan, 2014), 92.

²⁸ Katarzyna Jasko, Malgorzata Kossowska, and Maciej Sekerdej, "Psychological Determinants of the Threat of Terrorism and Preferred Approaches to Count-terrorism: The Case of Poland" in *The Political Psychology of Terrorism Fears*, ed. Samuel Justin Sinclair and Daniel Antonius (New York: Oxford University Press, 2013), 184.

respondents could indicate whether they have fear for themselves or fear for others and whether or not the two levels differ, especially in previous "target areas".

Conclusion

The different scholarly sources commenting on the relationship between fear and violence, specifically terrorism, define the approach of my research. They lay the foundation from which to examine fear specifically at different levels depending on the type of terrorism with which a person might be presented. By examining the different schools of thought that comment on the topic of fear, the media, gender, and psychology, I can further develop questions to be used in the study I will conduct. The examples referenced within this work also give examples of how to model my study. Many of the definitions of the independent variables, such as gender, come from literature examined by multiple scholars. As mentioned previously, it may also be useful to compare the levels of fear perception of an individual for themselves and for others to determine if there is a connection between this and the type of terrorism feared. Each explanation from the different schools of thought provides different facets from which to look at my subject matter, but all conclude that fear is at the center of human reactions to terrorism.

Methodology

Overview

In order to analyze the connection between fear and different forms of terrorism, the Large-N, statistical methodology was selected as the means to determine if a disparity exists between the forms of terrorism. This method was chosen because it permitted for data collection via experimental survey distribution. The survey was created using the Qualtrics software, and

was distributed via the Amazon Mechanical Turk system.²⁹ The procedure to collect responses will consist of an online survey for which respondents will receive a small monetary reward in exchange for their participation. The survey will consist of two sets of news headlines designed specifically to highlight the two forms of terrorism being examined for this project: cyber terrorism and traditional physical terrorism. The benefit of this particular method is that it will allow for clear data which can be compared to find which form of terrorism people find to be more threatening of the two. It also allows for ease in determining correlations between the independent variable findings and the general identification questions, such as age and gender, to find overlap which can be analyzed to support or find alternatives to the literature informing the project.

Cases

The cases for analysis will be the survey responses to the original survey designed for this project. Responses will be generated by way of survey distribution through the Amazon Mechanical Turk system which will open the survey to "workers" who opt-in to participating in the project in exchange for a small monetary reward. It will be impossible to find control questions that can manage the responses received due to a broad variety of respondent locations and a limited survey design. Instead, the control for this project comes from the data to be analyzed which will be collected in a randomized treatment applied upon survey distribution. Every individual will see a different form of the survey, with a news set highlighting either physical terrorism or cyber terrorism. The means used to randomize the survey will account for the validity of the survey as there will be no coercion towards one news set or the other.

²⁹ "Amazon Mechanical Turk" Amazon Web Services, 2017, accessed December 15, 2017, <u>http://docs.aws.amazon.com/AWSMechTurk/latest/AWSMechanicalTurkGettingStartedGuide/SvcIntro.html</u>.

Variables

The independent variable will be the two lists that will feature news headlines related to pressing problems faced internationally, and the respondents will see only one of the two lists. The headlines in each condition hold three identical headlines with a fourth headline providing the independent variable. The response to the independent variable will be the choice of options on a Likert scale ranging from "Not Fearful at All" to "Extremely Fearful". Possible outcomes from what version of the independent variable the respondent views will be analyzed to find the median of all responses. The dependent variable will then be the median to each independent variable version which will be examined side by side to determine where the greatest fear lies and if there is a large gap between fear directed at each form or terrorism.

News Set A
Search Engine Shut Down by Ransomware locking User Data
Scientists Claim Climate Change to sink islands in 2020
US Debt to increase by 3% in next Two Years
NGO report on increased damage by Refugee Crisis

News Set B
SIS-Claimed Suicide Bomber Kills 200 in Major City
Scientists Claim Climate Change to sink islands in 2020
US Debt to increase by 3% in next Two Years
NGO report on increased damage by Refugee Crisis

Due to the method of distribution for the survey in order to have a variety of responses, some general questions will be included to categorize the responses. These questions will introduce the survey and will cover gender identity and age. These questions will also be used after initial testing to determine if the gender or age have any influence on the levels of fear individuals hold towards different forms of terrorism.

The remaining questions are in response to the independent variable of the two news sets which will be presented following a Likert scale used to rate fear. Following the section rating fear, there will be follow-up questions split to cover two distinct interest areas related to the theory found in the literature: media and perception of a threat society. The two categories of questions will work to find if there is a specific factor inducing the fear towards these two distinct forms of terrorism.

Hypothesis

The hypothesis driving this research project is that people will have a greater fear of the unknown (News Set A) which will lead to a higher percentage of threat perception related to cyber terrorism. The hypothesis is modeled after the Pollock method for quantitative analysis.³⁰ Null Hypothesis (H₀):

In a comparison of individuals, those having a higher percentage of threat perception from cyber terrorism will not have a high percentage of threat perception from militia terrorism.

Research Hypothesis (H_A)

In a comparison of individuals, those having a high percentage of threat perception from cyber terrorism will have as high percentage of threat perception from militia terrorism.

³⁰ Philip H. Pollock III, "Ch. 3: "Proposing Explanations, Framing Hypotheses, and Making Comparisons" In *The Essentials of Political Analysis,* 5th ed., (Los Angeles: Sage, 2012), 54-56.

Methods of Analysis and Research Considerations

The findings of the survey will be analyzed using SPSS. The Likert scale used to rate fear will be examined to determine if there is a difference of means to the responses of fear depending on which set of headlines a participant sees (on a scale of 0 -100, with "0" being "Not Fearful at All" and "100" being "Extremely Fearful"). The significance of the two responses will then we be viewed side by side to determine if there is a disparity, and if so which form has greater associated threat perception based on responses. Following the initial examination of whether or not there exists a disparity between the two forms of terrorism as hypothesized, the responses to the follow-up questions to the independent variables will then allow for correlations to determine possible sources of the perceptions of fear towards the two forms of terrorism.

The resulting findings from the survey and analysis will allow for an understanding of the of fear levels towards the specific forms of terrorism. A statistical approach is the best method of analysis for this project as it will allow for quantifiable linkages between the responses to the dependent variable and the independent variable questions to determine if a true disparity exists. It is entirely possible for the primary hypothesis of the fear of the unknown driving elevated threat perception towards cyberterrorism to be wrong, and so falsifiability is addressed in this project.

Analysis

The original survey created for this project sought to explain whether or not a disparity existed between traditional forms of terrorism versus modern forms, such as cyberterrorism and hacking. The hypotheses leading this project were shown to be false, but the content of the data raises some new considerations in relation to the literature. The following section will review the

method used to gather the data that was analyzed, as well as what the statistical analyses found in the responses to the survey. The findings will then be explained in terms of the research question and the puzzle at the core of this project. Though the hypotheses were proven false, the implications the alternative information found will be explained for their worth in the study of threat perception and terrorism. Finally, the limitations and future work that can be done within this puzzle will be considered through reflection on what we learned from this research.

Means of Data Collection

An original survey was created using the survey software Qualtrics with the aim of collecting data that would reveal if a disparity existed between traditional and modern forms of terrorism. The questions within the survey were set up to capture general demographics, as well as more specific information to connect the research to the literature. The central portion of the survey focused on capturing threat perception of respondents towards the two forms of terrorism by placing one of two sets of headlines before them. The levels of threat perception were captured by asking respondents to identify how much fear they felt towards the headlines they viewed on a hundred-point scale, with zero being "Not Fearful at All" and a hundred being "Extremely Fearful." The survey was distributed via the workplace platform of Amazon Mechanical Turk, which made the survey available to "workers" around the globe who completed the survey in exchange for a small monetary reward. The tests of the survey data were run through SPSS statistical tests, and the findings were gathered through linear regressions and t-tests.

				Sig. (2-	Mean	Std. Error
		t	df	tailed)	Difference	Difference
Q: On a scale	Equal	-1.204	324	.230	-3.54634	2.94656
of 0-100, how	variances					
fearful are you	assumed					
of this set of	Equal	-1.203	322.550	.230	-3.54634	2.94786
new headlines?	variances not					
	assumed					

Table 1. The table shows the results of an independent samples t-test. The results show that there is no statistical significance between the two "treats."

Findings

325 responses were recorded to the survey in Qualtrics as "complete," meaning all questions had been answered fully. The majority of respondents were male (180 responses), and the average age of all respondents was 36. 157 respondents viewed the headlines highlighting cyberterrorism, or "treat 0," and 167 respondents viewed the headlines highlighting traditional terrorism, or "treat 1," as seen in Table 4 in the Appendix.

In order to gather the data in Table 1, an "independent samples t-test" was run to determine if there was a disparity in the fear levels towards the two forms of terrorism as described in the two separate "treats." The data in the table demonstrates that there is no statistical significance between the recorded threat perception levels towards the two forms of terrorism given that the significance of both responses is 0.230.

Each question was then run through a linear regression against the "treat" variable, and the findings of this test is found in Table 3 in the Appendix. The last column demonstrates the

significance, or "p-values," for each question correlated to the "treat" response question in which respondents rated their threat perception on a hundred-point scale. A level of significance is anything less than 0.05. It can be seen that there are only two questions to which the responses were statistically significant for the research. The responses to "Do you follow news media or media personnel on social media platforms (ex: Twitter and/or Facebook)?" have a p-value of 0.033, which means that people who follow news on social media score 6.850 points lower on the measurement of fear. For the question which asked "Who do you fear most for at the hands of terrorist attacks?" the p-value was 0.010. The p-value means that for every lower response, with fear for oneself being the smallest option, the reported level of fear on the hundred-point scale was higher. Simply put, this means that if you fear more for yourself you have a higher level of fear than if you feared more for others.

What do these Findings Mean?

The research question for this project seeks to find out whether or not a disparity exists in fear towards the two forms of terrorism being studied, traditional and modern terrorism. No disparity between the levels of threat perception towards each form of terrorism as indicated in Table 1. The null and alternative hypotheses for this research project have been proven false since there is no statistical significance between the two forms of terrorism. Since no difference can be found in the fear towards either form of terrorism, there is no way to prove whether the underlying hypothesis of a fear of the unknown as the key puzzle driving the research is real. The expectation for this project and its hypotheses were not met, but similar faults were found in other expected outcomes of the survey.

The questions in the survey which linked back to the gender, media, and threat society literature camps had similar outcomes to the central question of the research. The gender question sought to determine if the claims made by the gender theorists that women are inherently more fearful of violence at multiple levels, and specifically towards terrorism, were true. As seen in Table 3, there is no evidence that supports this as there is no statistical significance that would show that the levels of threat perception of women are higher than that of men. Similarly, two of the three questions which linked the research question to the literature on media and threat societies had no evidence to support that they at all influence the score of how fearful respondents were of the news headlines they viewed. The two questions which did have a level of statistical significance provide interesting implications which were not expected.



Implications

Graph 1. The histogram shows the level of response to the question "Do you follow news media or media personnel on social platforms?" The responses show that those who follow news on social media have a skew toward lower scores of fear towards the "treat" they viewed.



Graph 2. The graph shows responses to the question "Who do you fear most for at the hands of terrorist attacks?" The responses show that those with higher fear levels are more fearful for themselves and their families.

The unexpected findings of the research stood out greatly because they illustrate both disagreement and support for the respective literature, but pose questions about societal and policy impacts. In the question related to the use of social media, it was found that respondents who followed news mediums on social media had lower perceptions of fear. This is in stark contrast with the media influencer literature which has an overarching claim of media dominance in manipulating fear levels to be elevated. Instead, the tests and data support the stance that perhaps those using social media are more informed by a variety of sources which would lead to reduced fear levels. The fear of the unknown is therefore dispelled because social media users can access instantaneous news updates to keep them aware of and prepared for possible danger. These findings contradict the literature, but have the greater implication that perhaps the media does not have as important a role as it is perceived to.

The question asking respondents who they had greatest fear towards at the hands of terrorist attacks had much different findings than the media one. The findings were that people had greater threat perception levels if they feared for their families, and the highest levels of fear recorded were of those who feared for themselves the most. These findings are in line with the literature on a threat society in which people fear for those closest to them when it comes to violence. This could have significant results in terms of policy because people could advocate for greater protections against terrorism at the local level rather than the federal level since it would provide more direct protection. The data also has interesting implications as a society because it shows that people who fear for others generally are not very fearful, and might not advocate as much for federal protections. The findings support a more self-centered approach to threat perceptions of terrorism, but what that means for public safety advocacy should be examined further in future research.

Limitations

In the ideal world, the time to complete a project of this type would be limitless. The puzzle at hand, fear towards terrorism, has so many facets to be unpacked, whether it be the actual sources or the fear divisions over a broader variety of terrorism categories. Clearly, as seen by the data which proved the overarching hypotheses of the project to be false, there is not a disparity in the fear towards the two forms of terrorism. It is possible that the format of the survey impacted the results. Perhaps if both forms of terrorism were shown, people would respond differently with their fear levels. Additionally, a next step that could expand the scope of this project would be to test for more forms of terrorism and to more strongly specify the categories in one survey, to see if perhaps threat perceptions are more nuanced. Further

limitations which this research encountered include a lack of specificity in terms of region since the survey was distributed randomly around the globe through a workplace service. The lack of regional limits to the research could have skewed the results, and should be considered for future work in a similar realm.

Future Research

It would be helpful to take the lessons learned from this first survey and apply it to perhaps a longer study, or interviews, to take another angle to examine threat perception towards terrorism. This project did not take into account race and ethnicity that could provide another lens to apply to find differences in fear levels towards terrorism and violence. Especially at the micro level, looking at ethnicity could provide insight into terrorism at regional levels rather than at the global scale which this survey undertook.

Conclusion

To determine if there is a causal link between fear and terrorism, this research explored the question of whether or not a disparity exists between the levels of threat perception towards different forms of terrorism. This informed the research question: Does a disparity exist between the levels of public sentiment towards one form of terrorism over another? A Large-N statistical design was used and found no statistically significant disparity in fear levels between the two forms of terrorism based on individual responses to survey questions. Despite the unsupported hypothesis, the survey was able to challenge the media and threat society literature in finding that social media results in lowered fear levels and people are focused on an individual level of safety, respectively. The implication of these findings is that an underlying fear of the unknown associated with cyberterrorism might not have the necessary influence on society to alter fear perception. Additionally, the results from this project suggest that the media's reputation of negatively influencing society's perception is not founded in truth; the future of security advocacy could shift as people turn towards a more personal security oriented mindset. These results suggest future research into

Bibliography

- Ahmed, Shamila. "The Emotionalization of the 'War on Terror'; Counter-terrorism, fear, risk, insecurity, and helplessness," *Criminology & Criminal Justice Review* 15, no. 5: 545-560.
- "Amazon Mechanical Turk" Amazon Web Services, 2017, accessed December 15, 2017,

http://docs.aws.amazon.com/AWSMechTurk/latest/AWSMechanicalTurkGettingStarted Guide/SvcIntro.html.

- Braithwaite, Alex. "The Logic of Public Fear in Terrorism and Counter-Terrorism," *Journal of Police and Criminal Psychology* 28, no. 2 (June 2013): 95-101.
- Callanan, Valerie and Jared S. Rosenberger. "Media, Gender, and Fear of Crime," *Criminal Justice Review* 40, no. 3 (September 2015): 322-339
- Cordesman, Anthony H. "Terrorism: The Thing We Have to Fear the Most is Fear Itself," (Washington, Center for Strategic and International Studies, 2016), 4.
- Graziano, Paolo R. and Marco Percoco. "Agenda Setting and the Political Economy of Fear: How Crime News Influences Voters' Beliefs," *International Political Science* (September 2016): 1-14, accessed October 12, 2017,

https://doi.org/10.1177/0192512116656947

- Jasko, Katarzyna, Malgorzata Kossowska, and Maciej Sekerdej. "Psychological Determinants of the Threat of Terrorism and Preferred Approaches to Count-terrorism: The Case of Poland" in *The Political Psychology of Terrorism Fears*, ed. Samuel Justin Sinclair and Daniel Antonius (New York City: Oxford University Press, 2013), 170-192.
- McLean, Carmen P. and Emily R. Anderson. "Brave Men and Timid women? A Review of the Gender Differences in Fear and Anxiety" Clinical Psychology Review 29 (May 2009): 496-505.

- Mythen, Gabe, "Terrorism: Risk and Regulation" in Understanding the Risk Society: Crime, Security, and Justice (New York: Palgrave MacMillan, 2014), 91-107.
- Nellis, Ashley Marie. "Gender Differences in Fear of Terrorism," *Journal of Contemporary Criminal Justice* 25, no. 3 (August 2009): 322-340.
- Nellis, Ashley Marie and Joanne Savage. "Does Watching the News Affect Fear of Terrorism? The Importance of Media Exposure on Terrorism Fear," *Crime and Deliquency* 58, no. 5 (September 2012): 748-768.
- Pollock III, Philip H., "Ch. 3: "Proposing Explanations, Framing Hypotheses, and Making Comparisons" In The Essentials of Political Analysis, 5th ed., (Los Angeles: Sage, 2012), 54-56.
- Poushter, Jacob, and Dorothy Manevich. "Globally, People Point to ISIS and Climate Change as Leading Security Threats." Pew Research Center's Global Attitudes Project. August 01, 2017. Accessed September 29, 2017. <u>http://www.pewglobal.org/2017/08/01/globally-</u> people-point-to-isis-and-climate-changeas-leading-security-threats/pg_2017-0801 global-threats 00/
- Paek, Hye-Jin, Sang-Hwa Oh, and Thomas Hove, "How Fear-Arousing News Messages Affect Risk Perceptions and Intention to Talk About Risk," Health Communication 31, no. 9 (January 2016): 1051-1062.
- Warr, Mark. "Fear of Victimization: Why Are Women and the Elderly More Afraid?" *Social Science Quarterly* 65, no. 3 (September 1).
- Weimann, Gabriel. "Cyberterrorism: How Real is the Threat?" USIP Special Report (Washington: United States Institute of Peace, 2004), 2.

Appendix

Survey

- I. General Identification Questions
 - 1. What is your gender identity?
 - a. Male
 - b. Female
 - c. Other:_____
 - 2. Age: What is your age?
 - a. Age: _____

Independent Variable Prompt:

News Set A

Google Shut Down by Ransomware locking User Data

Scientists Claim Climate Change to sink islands in 2020

US Debt to increase by 3% in next Two Years

NGO report on increased damage by Refugee Crisis

News Set B ISIS-Claimed Suicide Bomber Kills 200 in Major City Scientists Claim Climate Change to sink islands in 2020 US Debt to increase by 3% in next Two Years NGO report on increased damage by Refugee Crisis

II. Response to Independent Variable (will only be seeing one news set)

On a scale of 0-100, how fearful are you of this news set? "0" being "Not Fearful at All" and "100" being "Extremely Fearful"

III. Media

- 1. How often do you read the newspaper or an online news source?
 - a. Every day
 - b. Every couple days
 - c. Every week
 - d. Not often
 - e. Never
- 2. How often to do you watch broadcast news either on television or online?
 - a. Multiple times a day
 - b. Every day
 - c. Every couple days
 - d. Every week
 - e. Not often
 - f. Never
- 3. Do you follow news media or media personnel on social media platforms (ex: Twitter and/or Facebook)?
 - a. Yes
 - b. No
 - c.

- IV. Psychology and Threat Society
 - 1. Do you consider yourself a fearful person?
 - a. Yes
 - b. No
 - c. Sometimes
 - d. Other: _____
 - 2. Who do you fear most for at the hands of terrorist attacks?
 - a. Myself
 - b. My family
 - c. Others
 - 3. Do you perceive yourself to be a possible victim of violence?
 - a. Yes
 - b. No
 - c. Sometimes

Tables

Coefficients

	Unstandardized		Standardized		
	Coefficients		Coefficients		
		Std.			
Question	В	Error	Beta	t	Sig.
treat	3.430	2.870	.065	1.195	.233
What is your Gender Identity? -	2.036	3.001	.039	.678	.498
Selected Choice					
What is your age?	239	.126	115	-1.897	.059
How often do you read the newspaper	-1.138	1.491	045	763	.446
or an online news source?					
How often do you watch broadcast	-1.178	1.088	066	-1.083	.280
news either on television or online?					
Do you follow news media or media	-6.850	3.194	126	-2.144	.033
personnel on social media platforms					
(ex: Twitter and/or Facebook)?					
Do you consider yourself a fearful	.313	2.133	.008	.147	.883
person?					

Do you perceive yourself to be a	577	2.206	015	261	.794
possible victim of violence?					
Who do you fear most for at the	-6.737	2.598	148	-2.593	.010
hands of terrorist attacks? - Selected					
Choice					

Table 4. The table shows all the significance and Beta (B) levels for each question in the survey

 in relation to the "treat" of the surveys.

treat

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	0	159	48.6	48.8	48.8
	1	167	51.1	51.2	100.0
	Total	326	99.7	100.0	
Missing	System	1	.3		
Total		327	100.0		

Table 5. The table shows the number of responses to each "treat" in the survey which

 determined which set of headlines respondents saw. "Treat 0" displayed the headlines

 highlighting cyberterrorism, and "treat 1" displayed the headlines highlighting traditional

 terrorism.