THE METRICS OF DEATH: EMOTIONS AND THE EFFECTS OF CASUALTIES ON PUBLIC OPINION IN MILITARIZED DISPUTES AND TERRORISM

A Dissertation

by

KATRINA N. MOSHER

Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2008

Major Subject: Political Science
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Approved by:
Chair of Committee, Nehemia Geva
Committee Members, Robert Harmel
Charles Hermann
Christopher M. Sprecher
Head of Department, James R. Rogers

December 2008

Major Subject: Political Science
ABSTRACT

The Metrics of Death: Emotions and the Effects of Casualties on Public Opinion in Militarized Disputes and Terrorism. (December 2008)

Katrina N. Mosher, B.A., Mansfield University of Pennsylvania

Chair of Advisory Committee: Dr. Nehemia Geva

Recent terrorist events (e.g., London, Madrid, and Bombay train bombings), as well as the attacks on September 11, 2001, have highlighted the impact casualties can have on domestic audiences. These incidents led to major foreign policy shifts, massive security expenditures, and the removal of an incumbent government (i.e., Spain). Yet, when we compare the number of those killed in terrorist events to those killed in militarized disputes, there are more negative public responses to casualties of terrorism than to militarized disputes. My dissertation examines this “over reaction” by comparing reactions to different casualty contexts. The comparison of casualties across different hostility contexts is a unique contribution to the field.

I posit a model in which the characteristics of the casualty event generate emotional reactions. The emotional response affects the way information about the event is processed by individuals, and alters individual’s support of aggressive/non-aggressive foreign policies. Furthermore, my model proposes that different types of negative emotions have different impacts on the process, as well as on the preferences for distinct foreign policies. I expect that different casualty characteristics such as the hostility context (terrorism and militarized disputes) and the characteristics of the targets (number
killed and their identity) influence the specific negative emotions experienced by individuals. Thus, variations in these characteristics should alter public preferences for foreign policies.

I use a multi-method approach to test my theoretical propositions. First, I utilize experimental methods that introduce different scenarios to the participants. Each scenario varies the casualty characteristics, and measures individual preferences for foreign policies. Second, I compiled a daily event data set that contains both terrorism and militarized dispute casualty statistics and public reaction data for Israel in 1969. This period provides wide variations along the independent variables. My results support the idea that casualty characteristics play a pivotal role in emotional responses to these events as well as in how individuals respond to casualty events. This work is unique in that it examined the role of the number of casualties in conjunction with the context in which they occur and who those casualties are.
DEDICATION

To Jonathan and Alexandra who are the lights of my life. Stay safe honey.
ACKNOWLEDGEMENTS

I would like to thank my committee chair, Dr. Geva, and my committee members, Dr. Sprecher, Dr. Harmel, and Dr. Hermann, for their guidance and support throughout the course of this research. Dr. Geva, what would I have done without your threats to call my mom or kill me. Dr. Sprecher and Jill, thank you for taking care of me while Jonathan was deployed. Dr. Lindquist thanks for your support and encouragement throughout this process. Thanks also go to my friends and colleagues, and the department faculty and staff, for making my time at Texas A&M University a great experience. In particular thank you to Lou Ellen for being a great friend. I could not have done it without you.

Finally, I want to thank my family for their years of support of my education and through the arduous process of writing this dissertation. Mom thanks for listening to my complaints over the phone through the years and always patiently saying it will be okay. Sister thanks for always knowing the right thing to say to keep my ego in check. Papason you know how great I think you are. Aunt Jeri thanks for inspiring me to follow in your footsteps. Aunt Hap thanks for all support through the years and watching Alex so that I could finish my dissertation. Strangely enough, I also want to thank Smudge my cat for his various attempts to delete or interfere with my dissertation. His editorial comments were never helpful but ultimately always funny when I needed it most. Lastly, I want to thank Jonathan and Alexandra who are the loves of my life. Stay safe honey.
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CHAPTER I
INTRODUCTION

The Puzzle and Research Question

A multitude of events over the last several years illustrates that casualties play an important role in international relations. More specifically, terrorist attacks throughout the world (e.g., Madrid, London, Jerusalem, New York, and Washington) have resulted in substantial changes in both domestic and international foreign policy. For example, the terror attacks on Washington and New York in 2001 resulted in a number of direct and indirect changes in U.S. foreign policy. The most dramatic of these changes was the war in Afghanistan against the Taliban and the war in Iraq against Saddam Hussein. Domestically these events led to the creation of a new cabinet level department (Homeland Security), the restructuring of and changes to the way security is conducted at airports and federal buildings, and the restructuring of the national intelligence community. In addition, both wars and the changes to the national government cost billions of dollars each year. These effects happened even though the number of people killed in these incidents was much smaller than the number of those killed in most wars. Indeed these types of effects are not limited to the United States. For example, the terror attacks in Madrid, Spain in March 2004 are viewed as responsible for the fall of the

This dissertation follows the style of Political Research Quarterly.
Spanish government and the withdrawal of Spanish troops from Iraq.

These terror events highlight that there is an effect of these casualties on the public, but they do not detail how that effect works. The effect of terror casualties is contrasted with the somewhat limited attention and reaction to the casualties from the wars in Afghanistan and the Second Gulf War. It seems that, the casualties from terror attacks result in immediate and stark responses (e.g., public anger, rallies, calls for action, etc.) and policy changes. The casualties from recent wars seem to result in a more limited public response and fewer policy changes. Rather than changing foreign policy in terms of involvement in the war, it has changed policies more subtly. For example, the second Bush administration’s reaction to the publishing of photos of soldiers’ flag-draped coffins demonstrates that U.S. leaders are sensitive to the potential consequences of casualties on the public. On January 21, 1991, the first Bush administration banned the release of photos of soldiers’ flag-draped caskets as they returned home from the war in Iraq (Bash, 2004). The publishing of dozens of pictures of soldiers’ caskets in 2004 caused controversy not only on whether these types of photos should be released but also about the possible political motives for reinstating the ban. Indeed, opponents argued “…the White House is trying to prevent Americans from seeing daily images of death that could sour support for the war” (Bash, 2004). From these events and the ongoing wars, it is clear that casualties are important in international relations. We can also see, however, that the impact of the casualties is often radically altered by the context in which they occur.
The contrasting impact of the contexts discussed above leaves several questions about the nature of the impact of casualties. Evidence indicates that casualties have a negative impact on leaders and the public. What is unclear is what the ‘actual’ effects of casualties are. Do casualties in different international conflict contexts truly have different impacts? If so, then what is the difference and why do these differences occur?

Objectives of the Dissertation

The objective of this work is to tackle these questions concerning the role of casualties in international relations on public responses. Two ideas are proposed to address these questions. The first idea is that the role that casualties play in international relations is more than a simple calculation of the cost (e.g., what is lost versus the benefits) of a conflict. Research on the effects of casualties on public opinion indicates that there are differences in the impacts of casualties given different contextual factors such as time, pattern of accumulation (Gartner and Segura 1998, 2000; Gartner, Segura, and Wilkening 1997; Mueller 1973), and deaths due to terrorism (Mueller 2004). These findings indicate that while all deaths represent a cost of the conflict as suggested by some studies (Bennett and Stam 1996, 1998; Stam 1996; Nincic and Nincic 1995), not all casualty costs are equivalent. Some deaths may have a greater or lesser impact than others. This implies that casualties occurring in different circumstances will have different impacts on the policy preferences of the public.

The second idea is that emotions invoked by these casualties may have an impact on foreign policy outcomes (Mueller 2004). Specifically, Mueller points to certain
instances where the reactions to the casualties were out of proportion with what should be expected from the same number of casualties in wars. The implication of this is that the ‘over reaction’ is caused by an emotional reaction to terrorism. Therefore, it is important to examine both the emotional impact of casualties as well as their value/cost. This work addresses this issue by trying to relate one of the major consequences of international conflict, casualties, to the emotional responses they trigger, and how in turn, these emotions mediate the public’s support of policies relating to international conflict.

**The Underlying Premises and Research Questions of the Dissertation**

From the above discussion, two premises are presented that will form the basis from which the research questions can be explored.

1. Casualties matter in international relations.
2. Casualties affect the public’s preferences for involvement in international relations.

There are several theoretical questions highlighted by the above premises. The literature demonstrates that casualties have an effect. The main question is “How do casualties affect international relations?” Studies (Gartner and Segura 1998, 2000; Gartner, Segura, and Wilkening 1997) reveal that casualties sometimes have a greater effect in some than in other circumstances. Additionally, it is seems that the effect of casualties may be mediated by whether the casualties occurred as part of an accumulation of or series of casualty events. Thus, the research questions in this dissertation are: (a) how do
casualties affect public responses to foreign policies, (b) what is the impact of context on the effects of casualties, and (c) what role do emotions play in the effects that casualties have?

The Plan of the Dissertation

This section briefly describes the outline of this dissertation.

Literature Review

Chapter II has two major sections that review the pertinent literature in international relations. The first section reviews the literature on casualties in international relations. Specifically, it focuses on the effects of casualties on public reactions. In addition, it focuses on the effects of casualties on the public’s support for different foreign policies. This section also examines the role of contexts in terms of terrorism versus war, on the impact of casualties on the public. Lastly, this section offers the definitions of the contexts of casualty conflicts explored in this work.

The second section of Chapter II examines the literature on the role of emotions in international relations and foreign policy decision making. In particular, this section reviews the effects of specific emotions on behavior and foreign policy preferences. In essence, different negative emotional responses to international conflict events result in different foreign policy responses and preferences.
The Theoretical Model

Chapter III combines the two distinct literatures on casualties and emotions and integrates them into a model of the role of casualties in international relations. In addition, this chapter establishes the underlying assumptions of the model and initial hypotheses to be tested in the remainder of this work. This model suggests that the characteristics of casualty events evoke distinct emotions and, therefore, have distinct effects on foreign policy preferences. In particular, the specific emotion evoked by the casualty event is expected to alter the policy preferred by individuals.

The Empirical Sections

Chapters IV, V, and VI report three experiments that test the effects of the independent variables, including the context of the event, identity of the casualties, the number of casualties on emotions, and foreign policy preferences. Because of the disparate effects of casualty numbers in the literature, one of the crucial factors that received attention in these three experiments is variations in the current number of casualties in an event as related to previous casualties. To augment the experimental results Chapter VII presents an events dataset of the effect of these variables on civilian responses to casualty’s events in Israel.

More specifically, Chapter IV reports the results of the first experiment. Experiment I addresses the effects of a single casualty event within differing conflict contexts (war and terrorism) on foreign policy preferences and emotional reactions. In addition, this experiment explores the effects of differing casualty identities.
Chapter V reports on the findings of the second experiment. Like the first experiment, Experiment II examines the role of the context, identity, and emotions on foreign policy preference formation. The primary difference revolves around the treatment of the number of casualties. Specifically, this experiment tests what is the information role of previous casualties on responses to casualty events. This is done by placing single casualty events within the context of an accumulation of previous casualty numbers. In this case, the number of current casualties is held constant.

Chapter VI reports the results of the third experiment. This study examines the role of the number of both current and previous casualties. In Experiment III, both current and previous casualties vary, allowing a more complete understanding of the role of numbers on emotional reactions and foreign policy preference formation. This experiment, like the first two, also examines the effects of numbers in different international contexts (war and terrorism) and identities of casualties.

Chapter VII analyses and reports on the daily events data set collected on a daily basis from the Jerusalem Post. Specifically, casualty events in Israel from January to December 1969 are examined. This period marks the beginning and a major portion of the “War of Attrition” which lasted from March 1969 until the fall of 1970. This case allows for the examination of the contexts of terrorism and war, two types of casualties (civilians and soldiers), and variations in the number of casualties. In addition, this period also marks a time of increased terrorism from a variety of sources. Few instances in history offer the variation in the independent variables that this case offers. At various points in history, a nation may experience a terrorist attack or a war, but few nations
experience both at the same time. Thus, Israel in this period offers a unique opportunity to examine these variables simultaneously. In addition, the Jerusalem Post is written in English, allowing for coding of civilian reactions to events that would otherwise be more complicated for a non-Hebrew speaker.

A Multi-method Approach

This combination of methods tests the variables of the model with both experiments and event datasets strengthen the robustness of the empirical findings in two ways. First, the results of the experiments establish the internal validity of the model. Secondly, an event dataset was compiled that strengthens the external validity of the model. Unlike other studies, this dataset examines public reactions to casualties in the context of both terrorism and war. Thus, project is a unique addition to the literature on casualties.

Conclusion

Chapter VIII summarizes and discusses the findings and implications of the above studies. It first summarizes the findings, and then discusses the theoretical, policy, and methodological implications of these findings. Finally, Chapter VIII offers suggestions for future research regarding the effects of casualties on public reactions to casualty events.
CHAPTER II

CASUALTY SENSITIVITY AND EMOTIONS
IN INTERNATIONAL RELATIONS

Introduction

On January 21, 1991, the first Bush administration banned the release of photos of soldiers’ flag-draped caskets as they returned home from the war in Iraq (Bash, 2004). While this ban has not always been upheld, the recent publication of dozens of pictures of soldiers’ caskets has re-ignited the debate over whether or not these pictures should be released. In further support of this policy, the Senate voted to uphold this ban. Furthermore, opponents of the ban argued “…the White House is trying to prevent Americans from seeing daily images of death that could sour support for the war.” (Bash, 2004).

What seems clear from this policy and reactions to it is that the national leadership of the U.S. assumes that casualties have an impact on the public’s support of U.S. foreign policies. Work by Kull and Ramsey (2001) indicates that U.S. elites perceive the American public as unwilling to tolerate casualties. This is despite the fact that there has been little evidence of this intolerance in U.S. public opinion polls (Kull and Ramsey 2001, p. 205). Indeed, over half of the respondents to Kull and Ramsey’s survey of foreign policy experts (2001, p. 206) would go so far as to say, “The majority of Americans want the U.S. to disengage from the world.” Thus, decision makers often wish to hide casualties from the public. However, at nearly the same time as this ban on
photos was occurring, military briefings in Iraq began to publicize the number of U.S. soldiers’ casualties in comparison to the number of insurgent casualties. Not only does this policy contradict leaders’ beliefs that the public will not tolerate casualties, it is in direct opposition to a history of public relations failure of reporting the number of casualties in the Vietnam War. Boettcher and Cobb (2006) propose that this policy is done in a desperate attempt to give some quantifiable measure of success of the military conflict and/or put U.S. casualties in the context of higher insurgent casualties, thus making U.S. losses appear less dramatic. Thus, when decision makers cannot avoid casualties they seek to frame them in as positive a light as possible.

Both the banning of photos and casualty ratio policies clearly demonstrate that leaders are highly concerned with responses to casualties. What is not clear from the above policies is how casualties actually affect the public. Are casualties simply a measure of the cost of the conflict or do decision makers avoid the presentation of casualties in order to avoid negative emotional reactions by the public as in the Vietnam era?

This chapter is divided into two major sections. The first section addresses the role of the casualties in international relations literature while the second section examines the affect of negative emotions in the political psychology literature. The remainder of the first section is dedicated to exploring the literature on the role of casualties in international relations. The first sub-section presents a broad overview of the literature in international relations. The second sub-section examines the effects of a pattern of casualty accumulation on the public. The third sub-section focuses on the use
An Overview of Casualties in International Relations

Casualties as a major consequence of international interaction play an important role in the international relations literature. Studies frequently examine the relationships between international conflicts and casualties. Indeed, many of these studies use casualties as a proxy measure for the level of conflict. The Correlates of War Project\(^1\) and its attendant data sets are the primary examples of the type of work that uses casualties in this way. Projects range from studies of interstate war, intrastate war, and alliances, to the impact of intergovernmental organizations and culture. Thus, these studies have focused on broader international interactions among and within nations rather than the specific impact of casualties on a given country’s public.

Despite this general focus on larger international impacts, three basic lines of casualty research focus on public reactions. The first line of research focuses on what factors affect the sensitivity of the public to casualties. Thus, casualty sensitivity is the

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\(^1\) For more information about these studies or to view the data available from this and related projects, go to http://www.correlatesofwar.org/.
dependent variable. Casualty sensitivity is then used to determine the level of support for the use of force. The second set of research treats casualties as an independent variable. In this line, researchers examine the pattern of casualty accumulation on the public’s support for the use of force. The final stream of research treats casualties as a cost of a given international conflict. The first set of literature offers insight into how the impact of casualties is altered by other factors. It does not address the central questions of this work nor how casualties directly affect public reactions and preferences. Therefore, after a brief discussion of this set of literature I will focus on changes in the variables that are related to the effects of the casualties. A more extensive review of these streams of literature is in the following sub-sections of this chapter.

The first stream of research examines the relationship between factors that affect sensitivity to casualties, including the underlying or central principle or objective for which the conflict has been undertaken. In this stream of research, this central principle or objective is identified as the “principle policy objective (PPO)” (Jentleson 1992; Jentleson and Britton 1998; Larson 1996; Gelpi, Feaver, and Reifler 2006). Alternatively put, the objectives are specific factors (e.g., policy objective, elite support, etc.) that will affect the sensitivity of the public to casualties as a function of the utility (benefits minus cost) of the conflict. For example, Jentleson (1992) and Jentleson and Britton (1998) propose that the level of support for a conflict depends on the underlying objective of the policy. Those policies that focus on using force to stop aggressive actions against a specific country or its allies will achieve the most support. In this category, the public is willing to support high levels of casualties. Alternatively, if the primary objective of the
use of force is humanitarian or involves regime change, the public will be less likely to
tolerate casualties. Other factors may also affect sensitivity of casualties. These factors
include domestic elite support of the conflict (Larson 1996), how elites shape public
perceptions of the conflict (Zaller 1992; Delli-Carpini and Keeter 1996; Berinsky 2005),
the involvement of other nations in support of the nation’s actions (Kull, Destler, and
Ramsey 1997), and whether or not the public thinks the use of force will achieve its
goals (Feaver and Gelpi 2004; Kull and Ramsey 2001). Though this research does not
examine the direct effect of casualties on public reactions, it does indicate that sensitivity
to casualties may be related to the context in which they occur. The following sections
will explore more fully the second and third streams of research.

The Effect of Patterns of Casualty Accumulation

As discussed above, there are several streams of research on the impact of
casualties in international relations. One major stream of research is the examination of
the patterns of casualty accumulations on the public’s level of support for conflict and/or
support for different policy responses during conflicts. These studies explicitly explore
the direct effects that casualties have in conflict scenarios. These studies have focused on
the effects of patterns of casualty accumulations during different periods of the conflict.
Early work in the field focused on the initial phase of a conflict, in which early casualties
are recognized but the public focuses on showing solidarity with their leaders. This
phenomenon is known as the “rally around the flag affect” (Verba et. al. 1967; Waltz
1967; Mueller 1973). In this early phase, casualties do not present a problem for elites
involved in a conflict. However, scholars noted that this rallying affect is not permanent, and they focused on two separate phases of conflict and the role that casualties play in each. During the initial phase of a conflict, the public generally reflects high levels of support for the conflict. Following this period, however, support for a conflict is based on the pattern of casualty accumulation. Specifically, Mueller (1973; 1994), Gartner and Segura (1998, 2000), and Gartner, Segura, and Wilkening (1997) argue and find support for the idea that casualties do not always affect the public’s support for foreign policies in the same way. For instance, Mueller (1973) suggests that during earlier phases of the conflict, small numbers of casualties adversely affect the public’s opinion of and support for continuing the conflict. As the conflict continues and the number of casualties mounts, it takes more and more casualties to effect the public’s opinion of the conflict.\(^2\)

Essentially, the public becomes habituated to casualties. For instance, it seems that now the nightly news rarely gives a detailed account of all those who died during a day or week as they used to do at the beginning of the second Gulf War. Only when the number of dead from one or several incidents is high or an important official is killed, will the media report the circumstances of how individuals were killed. Alternatively, Gartner and Segura (1998) hypothesize that initially the public will “rally around the flag” during a conflict but the costs of war, including casualties, begins to depress support for the conflict.\(^3\) In addition, they propose that the pattern of casualty accumulation throughout

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\(^2\) Mueller tests this idea by examining the casualties in the Vietnam and Korean Wars. A later study (Mueller 2006) comparing Vietnam, Korea, and the Second Gulf War indicates that this pattern of responses to casualties is also apparent in the Second Gulf War. Gelpi (2006) believes Mueller overstates the importance of the number of casualties in this war.

\(^3\) The authors use the Vietnam and Korean Wars as examples to test this idea.
the length of the conflict determines the level of support for the conflict. If most of the casualties in a conflict happen early in the conflict and the rate of casualties remains the same or decreases, then the total number of casualties (cumulative) will be the best predictor of the decreasing support for the conflict. On the other hand, if the casualties are spread out over the course of the conflict, then the rate of increase or decrease in casualties (marginal) predicts the level of support for the conflict. The implication is that casualties do not always have the same effect.

In addition to the above debate concerning the effect that patterns of casualty accumulation has on policy preferences, recent studies suggest that specific contexts in which the casualties occur also affects the impact of those casualties. Specifically, Mueller (2004; 2006) explores the overreactions of the U.S public and leadership to terrorist attacks. Mueller compares the number of those who die in extremely rare accidents, such as being struck by lightning, to the probability of American citizens being killed or injured because of a terrorist attack. Excluding the terrorist attacks on September 11, 2001, an American citizen is more likely to die from these rare or unusual types of accidents than from a terrorist attack. According to Mueller (2004; 2006), despite the relatively low level of cost (in terms of human lives), the response to these acts of terror is often swift, high-priced, and extensive. In Israel, the response to terrorist attacks is often raids and/or bombings of targets within the occupied territories as well as the construction of a massive and expensive wall to separate themselves from the Palestinians. In the United States, the September 11 attacks resulted directly in one war
(i.e., Afghanistan) and another indirectly (Second Gulf War). In both examples, millions if not billions of dollars have been spent on security to counter these threats.

One implication of the above studies is that there are several ways that casualties can have an impact. In particular, these studies imply that in addition to the gradual accumulation of casualties throughout the course of a conflict, individual incidents in which casualties occur can have independent or separate effects in international relations. The distinction between marginal and cumulative casualties encapsulates this idea by focusing on the impact of variations or deviations in the rate of casualties. The suggestion here is that a particular event during a war or conflict can, by itself, affect the public’s reactions to and support of a conflict. The fact that the effect of casualty events can be mediated by patterns of casualty accumulation, as the above studies of war reveals, implies that the context in which casualties occur also matters. This idea is further supported by Mueller’s (2004) finding that casualties resulting from terrorism have a greater impact than might be predicted by models based on war and militarized dispute casualties. These prior studies highlight the nature of the questions posed by the present researcher: What are the effects of casualties within the context of a larger conflict and independent of a larger conflict? In addition, what are the effects of casualties within the context of terrorism and within the context of war?

Casualties as a Measure of the Cost of an International Conflict

The above discussion reveals that there are several possible ways that casualties can have an effect on international relations. The literature thus far has shown us that it
is important to explore the role of casualties because casualties in different contexts and times have unique effects. Another important reason for examining this impact is that casualties are commonly used as a representation of national cost as well as a measure of the success or failure of the current foreign policy during times of international conflict, militarized disputes, and terrorism. For instance, Bennett and Stam’s examinations of democratic involvement in war employ casualties as a measure of the cost of conflict and war (Bennet and Stam 1996, 1998; Stam 1996). They theorize that the higher the anticipated costs (i.e., casualties), the less likely democracies are to be involved in a conflict (e.g., they choose not to be involved in conflicts that are expected to be extremely costly), and the less likely they are to remain in the conflicts once they become involved. The implication of this approach is that if the cost becomes and/or is anticipated to be too high, then disengagement from the conflict will occur. In a related treatment of casualties as a cost, Nincic and Nincic (1995) hypothesize that the public views casualties as a consumer views something about to be purchased. In this case, casualties are used as a measure of the intensity of the conflict. The calculation of the public is that the higher the intensity of the conflict, the higher the cost (casualties), and therefore, the lower the benefits and the lower the likelihood of success. Alternatively, the government views costs (i.e., casualties) up to a certain point as an investment that will eventually lead to a payoff or benefit. If public opposition becomes too high, then the cost of continuing a conflict will outweigh the benefits of continuing the conflict. The implication is that casualties are perceived at least in part by leaders through the lens of public responses to them. In addition, while the public is “...inclined to compare
present costs with currently apparent benefits, and to establish a ledger accordingly” (Nincic and Nincic 1995, p. 416), the government as an investor in foreign policy views cost in terms of potential future benefits. These benefits may be the stated aim of the military action or other benefits such as increased prestige or continuing international credibility.

One consequence of the use of casualties as a cost is that how casualties are translated (i.e., perceived, aggregated, and interpreted) into costs will affect the likelihood of continuation of the conflict. If each casualty does not equal every other casualty, then the costs of conflict are difficult to calculate. In addition, if decision makers and the public use casualties as part of their cost/benefit analysis, then examining the effects of different levels/numbers of casualties is necessary in order to determine how close these two sets of calculations are to one another. In addition, it is possible that the current calculation of the cost is influenced by perceptions of potential future (anticipated) casualties. Finally, the context or background in which the casualties occurred, including but not limited to war versus terrorism may influence the way in which costs are interpreted. Casualties in a war as discussed earlier may be more easily accepted as part of the cost necessary to achieve some national goal while victims of terrorism appear much more unpalatable to the public.

From the above discussions, we see that it is unclear, for multiple reasons, what the exact calculation of the cost of casualties is. We are left with the question: do the context, identity, number of casualties, and other characteristics of casualties have differing consequences for decision-making and policy formation? By examining the
effects of casualties, some light may be shed into the “black box” of casualties allowing for a few of these questions to be answered.

_Terrorism and Public Responses_

In recent years, research in political psychology has begun to examine how the public reacts to terrorism. Many of these studies have revolved around the idea that terrorism may cause increased perceptions of anxiety and/or threat (Huddy et. al. 2005). These studies have shown that in response to the terrorist attacks of September 11, individuals who responded with an increase in anxiety perceive greater risks, which in turn reduces the propensity of individuals to prefer taking military action against the terrorists. Alternatively, an increased perception of threat results in increasing belligerence and willingness to use military force. These findings are in line with more general research on the consequences of anxiety (Lerner et. al. 2003; Lerner and Keltner 2000, 2001; Raghunathan and Pham 1999) and external threat (Hermann, Tetlock, Visser 1999; Jentleson 1992; Jentleson and Britton 1998). Other studies showed that following these attacks Americans believed that there is an increased likelihood of future attacks (Huddy et. al. 2002). Huddy et al. 2002 examined the role of threat to the individuals versus threat to the group from terrorism. The suggestion here is that terrorism offers a personal direct threat to the individual in a way that other national threats such as war do not pose for the average individual. In Huddy et al.’s words “By design, there is something personally disturbing, immediate, vivid, and frightening about the threat of terrorism” (2002, p. 287). Thus, terrorism presents a unique threat to
individuals in the public (Greenberg, et. al. 1992; Jacobson and Bar-Tal, 1995).

Responses to a variety of public opinion polls seem to support the feel of unique threat.

A study by Huddy, Khatib, and Capelos (2002) found that there were distinct differences between support for a variety of policies before and after the September 11 attacks, including increased perception of vulnerability to terrorist attacks. These findings do indeed indicate that the effect of terrorism on the public is dissimilar to other national threats such as war. What is not clear is the specific role casualties play in these reactions. Mueller’s studies (2004; 2006) indicate that there is an ‘overreaction’ to terrorism. These studies indicate that the threat induced by terrorism is different from other national threats. The following sub-section more closely examines these differences and defines these contexts.

*The Impact of the Context of the Casualties*

The previous sub-section suggested the importance of context in the interpretation of casualties. The present study examines the distinction between militarized disputes and terrorism. Defining either terrorism or war is not an easy task because of the complex nature of these concepts. Terrorism in particular is difficult to define because it is a ‘disputed concept’. It has been defined in a variety ways according to who was defining it (i.e., scholars, governments, and terrorists) (Crenshaw 2000; Schmid 1992). However, most definitions of terrorism focus on the use of the threat of violence to obtain some goal (political, religious, or ideological). In essence, terrorists want to cause terror or fear in order to motivate their audience into doing what they
want. The main idea is that the violence or the threat of violence, usually against non-combatants, causes the audience (the public) to demand that decision makers change their policies or introduce a new policy option (Enders and Sandler 1999; Hoffman 1994; Mickolus 1982; Schmid and Jongman 1988). The hope of the terrorists is that decision makers may give in to the threats to stop the violence and fear.

In this study, the major difficulty in using definitions of conflicts from mainstream international relations literature is that they use the number of casualties in a conflict as the definition. Thus, using these definitions would make the number of casualties both the dependent and independent variables. However, some scholars have distinguished between terrorism and militarized disputes along dimensions other than the use of casualties. Specifically, Crenshaw (2000) posits that an important distinction between terrorism and other types of conflict (e.g. guerilla wars, civil wars, and interstate disputes) is the “territorial dimension” or territorial claims or demands, which is not present in terrorism. According to this conception of terrorism, claims or demands for territory identify the conflict as some form of inter or intrastate conflict (militarized disputes) being carried out by other means. Another distinction between terrorism and interstate conflicts is the idea that militarized disputes are carried out by groups with organized and trained forces (military forces or armies) (Cioffi-Revilla 2000). These elements can be combined to create definitions of terrorism and militarized disputes. Here terrorism is defined as violence carried out primarily against noncombatants to

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4 For instance, Singer’s (1980) *The Correlates of War II: Testing Some Realpolitik Models* presents early results of the Correlates of War project, which is the primary source of this type of conflict definition. For an additional list of example of studies that use this kind of measure, see the Correlates of War website: [http://www.correlatesofwar.org/](http://www.correlatesofwar.org/).
instill fear in the target audience to achieve some political, ideological, or religious goal. Alternatively, militarized disputes are defined as an organized conflict between or among states. The acquisition of or protection of territory is seen as an important motivating factor in militarized disputes. However, this distinction omits another salient instance of international violence, which is insurgency. While often insurgency is referred to by the target's nation as part of terrorism, it is of importance to identify its special characteristics.

For the purposes of this work, it is necessary to clarify the differences between contexts, specifically militarized actions (disputes), insurgency, and terrorism, in interpretations of casualties. The difference in these three contexts addresses the following aspects: the initiator or the actor, the intended target, and the objective of the action. Table 1 explicitly identifies these differences. The definitions in Table 1 will allow the differentiation between the contexts of casualties.5

Distinguishing between the effects of different casualty contexts is particularly relevant since the September 11 attacks. In the aftermath of the destruction of the World Trade Center in New York and severe damage to the Pentagon on that day, the concept of terrorism has been interwoven with the concept of war (militarized disputes). This new “War on Terrorism,” which led to military involvement in Afghanistan and Iraq, has made it more important than ever to determine what role casualties play in determining

5 The experimental section, however, will merge the terrorism and insurgency contexts. This is done because many governments label insurgent groups as terrorists, making it difficult, in an experimental setting, to distinguish meaningfully between these contexts.
reactions to international casualties. Does it matter if the casualties occurred as the result of terrorism? Does it matter that the casualties were the result of militarized disputes?

Table 1: Definitions of Contexts of International Violence

<table>
<thead>
<tr>
<th>Actor</th>
<th>Primary Human Targets</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Militarized dispute</td>
<td>Members of a nation’s security forces who are executing that nation’s orders</td>
<td>Mainly members of the enemy’s security forces – but at times paramilitary forces. Civilians are rarely targeted and may be considered as collateral damage</td>
</tr>
<tr>
<td>Terrorism</td>
<td>Members of groups in political, social, or religious opposition to the regime (whether it is national or foreign – occupying regime).</td>
<td>Mainly civilians of the enemy (or of nations affiliated with the enemy). Yet, targets may include members of the security forces of the enemy.</td>
</tr>
<tr>
<td>Insurgency</td>
<td>Members of groups in political opposition to the regime (whether it is national or foreign – regime).</td>
<td>Mainly, official members of the regime – military civilian workers, political leaders.</td>
</tr>
</tbody>
</table>

Section Conclusion

This section has examined the role of casualties within the international relations literature. What is illustrated in the chapter is that casualties do not always have the same effect on the public. Additionally, this study linked different impacts of casualties with differences in the context in which the casualties occurred. In order to clarify these links,
definitions of each context are offered including terrorism, militarized disputes, and insurgency.

One of the important elements not discussed in this section is the potential impact of emotions on responses to casualties in international conflict events. More specifically, one of the primary elements of the contexts of terrorism and insurgency is the imposition of terror or fear on the audience. In essence, terrorist believe that by invoking emotion they will achieve their social, religious, or political goals. If emotions have an impact in the context of terrorism, it is possible that they will have an impact in other contexts. The following section explores the interactions of casualties and contexts with emotions.

Casualties and Emotions

“The death of one man is a tragedy. The death of millions is a statistic.” Joseph Stalin

Introduction

Stalin’s quote reveals that there are two ideas underlying the impact of casualties. The first idea is that there is an emotional element to casualties. That is, some casualties evoke an emotional response that has an impact on responses to events associated with casualties. The second idea is that casualties may not all have the same impact. The use of casualties in international relations as a measure of cost or level of conflict implies that casualties in a given conflict have the same impact. The above quote then illustrates that not all casualties have the same impact on individuals. The question at the center of this work is when do casualties move from being a “tragedy” or an
emotional event, to being a “statistic” or calculation of the cost of a conflict? This section of the chapter seeks to examine the role of emotions in the impact of casualties in international conflict events. The first sub-section examines the role of emotions in political science. The second sub-section considers the Valence Model of emotions versus examining the contribution of specific emotions.

Why Should We Examine Emotions in International Relations?

Emotions play an important role within international relations. However, there are not many studies on the actual effects of emotions in international relations. In the early development of political philosophy, emotions--specifically fear--are the main motivating forces for wars (Thucydides [431-404 BC] 1998). Later, philosophers viewed the fear of a “war of all against all” (Hobbes [1651] 2003), or chaos, as the reason that individuals have accepted the concept of a ruler and permit limits to be placed on their freedom. More recent realist theoretical traditions, according to Crawford (2000), accept fear as an underlying reason for international behavior. However, this tradition in international relations does not directly address or explore how these emotions interact with the needs and actions of international actors (Crawford 2000). Nuclear deterrence theory is one example of literature within international relations that specifically assumes that fear plays an underlying role in influencing choice. For example, Blight (1990) examines the adaptive role of fear on decision makers during the Cuban Missile Crisis.
Despite this tacit recognition of the influence of emotions in the literature, very few if any studies have explored the actual impact of emotions on international relations. Instead, studies have focused on the logic and reasoning underlying international interactions. The rational choice (Bueno de Mesquita 1981; Bueno de Mesquita and Lalman 1990, 1992) and “cold” cognition (Janis and Mann 1977) approaches are examples of approaches which have until recently dominated the study of international relations. These types of approaches have treated decision makers as if they make decisions without emotions. An example of this type of approach was Bennett and Stam’s treatment of casualties as costs, as previously discussed (Bennett and Stam 1996, 1998; Stam 1996). Alternatively, some scholars within the rational choice approach have searched for ways of explaining incidents or events that did not fit within what would be considered a rational or “cold” cognitive calculation (Janis and Mann 1977). Most notable of these attempts to introduce human frailty back into the calculator are Simon’s (1993; 1995) “bounded rationality” model and Jervis’s (1980) cognitive discussion of misperception. Neta Crawford (2000) attempted to bring emotions back in by formulating a model for others to build off and test. In spite of these attempts, emotions have for the most part been relegated to the categorization of irrationality.

It was not until recent work in American politics by Marcus and Mackuen (1993) that the idea that emotions may not be just irrationality began to gain some acceptance in the wider field of political science. Marcus, Neuman, and Mackuen’s Affective Intelligence Model (2000; see also Marcus 2000) and Marcus et al. (1995) explore the effect different affective or emotional states have on the process of reaching a decision.
This model posits that negative emotions such as anxiety and apathy activate cognitive processing. Essentially these scholars demonstrate that negative emotions alert a decision maker that something is wrong and that it may be time to reevaluate the current surrounding. Rather than leading to worse or short-circuited decision-making, these negative emotions lead to more information processing and therefore “better” decision-making.

*Why Study Negative Emotions Rather Than Umbrella Emotions?*

In previous sections (on casualties), I discussed the “overreaction” of individuals to terrorism as compared to reaction to militarized disputes. Both of these types of events may evoke negative emotions, yet the literature indicates that terrorism has a different impact. How then might literature on emotions in choice and judgment explain the differing impacts? Given that both types of events have negative emotional impacts, it seems likely that the emotional effects are complex. In this section, I will examine the role of emotion in the political psychology literature as well as the role of specific negative emotions.

Just as emotions are emerging in political science as an important concept, the way we think about emotions is also undergoing a shift as well. The predominant model of emotions has been the idea of the valence of the emotions. Specifically, emotions have been split into two groups, positive and negative emotions. Each category contains a variety of emotions and these emotions are expected to act in a similar fashion on judgment and choice (Clore, Schwarz, and Conway 1994; Forgas 1995; Schwarz 1990;
Russell 1983, 1989). Advances in neurosciences, however, allowed for greater mapping and understanding of how different portions of the brain interact and produce thought and emotions (Carver 2004; Gray 1987). Marcus, Neuman, and Mackuen’s (2000: see also Marcus 2000) and Marcus and Mackuen’s (1993) reintroduction of emotions into political science tapped into this research. What emerged in their work is that the formation of emotions is more complex than previously had been considered. Indeed, rather than positive and negative emotions emerging from a simple “approach avoidance system,” emotions are the result of multiple interacting sections of the brain.

Specifically, Marcus, Neuman, and Mackuen’s (2000) and Marcus and Mackuen (1993) propose that the emotions are generated in the brain by two interconnected processes. These two processes, the disposition and surveillance systems, are based in the neurological structures of the human brain, specifically in the limbic system. The surveillance system within the limbic system, also called the Behavioral Inhibition System (BIS) (Marcus et. al. 1995), monitors the environment surrounding the individual for new, unique, or threatening occurrences to the decision maker. When any of these are detected, the decision maker feels greater anxiety and directs greater attention to the current situation. The disposition system, also called Behavioral Approach System (BAS), monitors current task performance against previously learned behaviors for task failure or mistakes. The level of success of the current task determines how enthusiastic or gloomy an individual feels about the current situation. The more enthusiastic an individual is, the more likely that person is to continue what he or she is currently doing. These two systems combine to determine when and how much attention
is given to a situation or task before the conscious mind ever receives the incoming information about the situation or environment.

Research by scholars in psychology supports Marcus, Neuman, and Mackuen (1993) in their findings that not all negative emotions have the same effect (Bower 1991; Eysenck 1992; Huddy, Feldman, and Cassese 2007; Keltner, Ellsworth, and Edwards 1993, Lazerus 1991; Lerner and Keltner 2001; Lerner et al. 2003; Ortony, Clore, and Collins 1988; Roseman 1984; Scherer 1988; Smith and Ellsworth 1985; Weiner, Graham and Chandler 1982). This evolution in how scholars think about emotions and their role in judgment has caused political scientists, and international relation scholars specifically, to take a closer look at the role of negative emotions. Several studies have explored various subjects including: the effects of negative emotions on information processing (Geva and Skorick 2003; Geva, Redd, and Mosher 2004; Geva and Mosher 2005a, Geva and Mosher 2005b; Redd, Geva, Mosher 2004), the perceptions of threats of terrorism (Lerner et al. 2003), the role of casualties in terrorism on policy preferences (Mosher 2004; Mueller 2004), and casualties and the public’s tolerance of pain in order to achieve their foreign policy aims (Bragg and Geva 2004).

From the above discussion, we can see that emotions are more than positive and negative. In addition, different negative or positive emotions are evoked by different interacting processes in the brain. Thus, different emotions have fundamentally different impacts. These findings seem to indicate that not all emotions (specifically negative emotions) are “created” equal. If emotions do not all have the same impact on the decision process, then this is likely to affect the decision outcome. Indeed a difference in
the type of negative emotion experienced by an individual might explain the difference in reactions to terrorism and war discussed earlier. Given the probability that different negative emotions have different impacts on international outcomes, this work seeks to examine emotions and the role they play in international relations. However, rather than examining rationality/irrationality, this work examines “reasoning” or the effects of emotions on decision-making required by foreign policy choices (Crawford 2000). More specifically, this work will combine the study of casualties with the possible impact of different types of negative emotions on foreign policy choice.

Specific Negative Emotions

The current literature in political science and social psychology indicates that specific negative emotions have different effects on information processing, judgments, and decisions. The question is what the literature tells us about the effects of negative emotions. This section will explore some of these effects. This section will also analyze some potential causes and consequences of these emotions identified in both fields. More specifically, this section seeks to answer three questions.

1. What are these negative emotions?
2. What effects do these emotions have on responses to casualty events?
3. What triggers these negative emotions?

Much of the research concerning the effects of specific negative emotion began with Smith and Ellsworth’s (1985) work on the dimensions that result in specific positive and negative emotions. The authors combined the work of many scholars on
which dimensions best describe the elements that evoke specific emotions. The specific dimensions/elements they examined include pleasantness, anticipated effort, certainty, attential activity, self other responsibility/control, perceived obstacle, and situational control. Many other scholars have added to and refined these elements or dimensions to include personal relevance, agency/control, and uncertainty (Keltner, Elsworth, and Edwards 1993; Lerner and Keltner 2000, 2001). In this perspective, if the underlying causes of emotions differ then, the negative emotion experienced by an individual also differs. The three main elements or dimensions and what each entails are described in the following paragraphs.

Control. Control can be defined as “the degree to which events seem to be brought about by individual agency vs. situational agency” (Lerner and Keltner 2000). There are two types of control, human or situational control. Human/Agency Control implies that the individual experiencing the emotion believes he or she is in control of or responsible for the situation or that some other group or “agent” is in control of or responsible for the event or situation invoking the emotions. Who is viewed as responsible for an incident determines which negative emotion is evoked. For instance, if an individual feels that he or she is responsible for a negative event, then he or she is likely to feel guilt (Keltner, Elsworth, and Edwards 1993). Situational Control implies that external forces such as fate or luck are responsible for the event or situation invoking the emotions (Keltner, Elsworth, and Edwards 1993; Lerner and Keltner 2000; Smith and Ellsworth 1985).
Certainty. Certainty can be defined as “the degree to which future events seem predictable and comprehensible vs. unpredictable and incomprehensible” (Lerner and Keltner 2000, p. 479). The dimension asks does the individual understand the situation and what is likely to happen in the future (Keltner, Elsworth, and Edwards 1993; Lerner and Keltner 2000; Smith and Ellsworth 1985).

Perceived Obstacle/Personal Relevance. Perceived Obstacle/Personal Relevance can be defined as “the perception of something standing in the way, even if the goal was previously unconscious” (Huddy, Feldman, and Cassese 2007, 4). This is often referred to as personal relevance because the event is directly or indirectly related to the individual or their goals (Huddy, Feldman, and Cassese 2007).

Within the context of these key elements, the study of discrete or specific negative emotions has focused on four emotions: anger, fear, anxiety, and sadness/depression. Each of these emotions varies in how each of the above elements/dimensions affects them. Therefore, the following section will establish “how” these emotions are triggered. In addition, the effects of these emotions once they have been triggered will be examined, based on studies to date. It should be noted some emotions have received more scholarly attention than others have and thus will have more detail.

Anger

How is anger triggered? Anger is triggered by the frustration of personally relevant goals in which a human agent is seen as responsible for the event and certainty
about the negative event is high. In particular, the central causes of anger are a certainty that a negative event will prevent individuals from achieving their goals. Therefore, events that cause anger are personally relevant to the individual (Carver 2004; Huddy, Feldman, and Cassese 2007; Lazerus 1991; Stein, Trabasso, and Liwag 2000). In addition, individuals view the frustration of their goals as caused by a specific person or representative who is considered “unjust or illegitimate” by these individuals (Clore and Centerbar 2004; Huddy, Feldman, and Cassese 2007; Keltner, Elsworth, and Edwards 1993; Ortony, Clore, and Collins 1988; Shaver et al. 1987; Smith and Ellsworth 1985; Weiss, Suckow, and Cropanzano 1999). In essence, anger is more likely when there is someone to blame and possibly to take action against.

What effects does anger have? Once anger is evoked by the above causes, it has several important effects on individuals. The main effect is that angry individuals use a simplified or heuristic decision-making process (Bodenhausen, Sheppard, and Kramer 1994). Essentially, decision makers take shortcuts and are biased in the way they process incoming information. Specifically, angry individuals are predisposed to believe negative information in both current situations as well as in events that shortly follow. Several researchers found similar biases in studies of negative emotions during international crisis events (Geva, Mosher, and Redd 2004; Geva Redd, and Mosher 2004; Redd, Geva, and Mosher 2004). Secondly, angry individuals are more likely to be optimistic in their assessment of risk in a given situation (Huddy, Feldman, and Cassese 2007; Lerner and Keltner 2000, 2001). This is true even after the initial cause of the emotion is no longer relevant to the current situation (Lerner and Keltner 2001). Thus,
we might expect more aggressive or risky behavior in angry individuals because they are more likely to believe these risky behaviors will be successful. Mosher (2004) found support for of this effect in international relations conflict events. This study found that angry individuals were more likely to support aggressive foreign policies than non-aggressive foreign policies.

*Fear*

**How is fear triggered?** The three elements that trigger fear are threat, situational control, and severe uncertainty. Fear is triggered by incidents resulting from a threat beyond the control of the individual (i.e., situational control) with severe uncertainty about the outcome (Bower 1991; Eysenck 1992; Huddy, Feldman, and Cassese 2007; Lazerus 1991; Lerner and Keltner 2001; Ortony, Clore, and Collins 1988; Roseman 1984; Scherer 1988; Smith and Ellsworth 1985; Weiner, Graham, and Chandler 1982). The first element of fear is threat or indication that something undesirable is going to happen. We might think of this threat as similar to a “perceived obstacle” or a frustration of personal goals. However, with fear when the word ‘threat’ is used we are often referring to something more basic. Specifically, common forms of threats that cause fear are physical threats to the individual or loved ones. Thus, these events or threats are personally directed. For instance, Mosher and Geva (2006b) show that in terrorist attacks individuals expressed the greatest level of fear of attacks in their hometowns as opposed to in other locations.
The second element that causes fear is the type of control individuals have over the current situation. In the case of fear, the control element is characterized by situational control or a lack of personal control of the ongoing situation. There is no a specific human agent whom the individual perceives as responsible for the event; instead, the threat or negative consequences are the result of a given situation. For example, most damage caused by a natural disaster such as a hurricane is beyond the control of any individual. The third element or dimension of fear is the severe uncertainty of outcomes (Smith and Ellsworth 1985). The individual has no or very little idea about what is ultimately going to happen in the current situation.

What are the effects of fear? Once fear is triggered by the above elements or dimensions, there are several basic effects. The classic effect of fear on individuals is to either avoid or prevent what the individual fears from occurring. Therefore, fearful individuals try to avoid future threats by preparing for future incidents (Huddy, Feldman, and Cassese 2007, p. 3). This also means individuals are more likely to assess a situation as risky and to make a choice that avoids risk or is a ‘sure thing’ rather than making a choice that involves uncertainty and risk (Lerner and Keltner 2000, 2001).

Sadness

How is sadness triggered? Sadness is the result of events that are not personally relevant, represent extreme situational control, and have mild uncertainty (Ellsworth and Smith 1988; Keltner, Ellsworth, and Edwards 1993; Smith and Ellsworth 1985). Thus, sadness, unlike fear and anger, is a reaction to something that is not of vital importance
physically or in terms of goals to the individual. In addition, the individual views the situation as beyond any human ability to control or effect. Examples of these types of events, often termed “acts of God,” could range from a tree falling on your neighbor’s car to the tsunami that hit Indonesia in December of 2004. To the average American, such events are not personally relevant and are beyond his or her control. Finally, although the individual may have some idea about the event, it is not entirely clear what happened or what will happen. Thus while there was widespread carnage in Indonesia because of the tsunami, the outcome and effects of that event are unlikely to be ever known.

**What are the effects of sadness?** Of all the negative emotions, once triggered sadness has the least biasing effect on judgment and choice task. Saddened individuals process information in a fairly unbiased, detailed, and systematic manner (Bodenhausen, Sheppard, and Kramer 1994; Huddy, Feldman, and Cassese 2007; Sinclair 1988). Saddened individuals are willing to undertake “a more thoughtful cost benefit analysis…” (Bodenhausen, Sheppard, and Kramer 1994, p. 48). Schaller and Cialdini (1990) make a similar observation. This is in marked contrast to fearful and angry individuals, but is consistent with the idea that saddened or depressed people are seeking to relieve their symptoms or solve the problem (Schwartz 1990). In addition, studies of international crisis events also indicate that individuals who express greater levels of sadness than anger are more likely to choose more pacifistic policy options (Mosher 2004). Finally, experimental results demonstrate that when sadness is experimentally
triggered, it is more likely than the other negative emotions to have the same effect (i.e. no effect) as a neutral emotional condition.

**Anxiety**

Although anxiety is treated in this study as a distinct emotion, some scholars use anxiety and fear as interchangeable concepts (Huddy et. al. 2005). Because of this disagreement in the literature, the use of the concept of anxiety in the remainder of this work will be cautious.

**How is anxiety triggered?** Anxiety plays a unique role in the negative emotions arena. In particular, anxiety is the result of a negative event or threat in that is personally relevant to the individual (Bower 1991; Eysenck 1992; Huddy, Feldman, and Cassese 2007; Lazerus 1991; Lerner and Keltner 2001; Ortony, Clore, and Collins 1988; Roseman 1984; Scherer 1988; Smith and Ellsworth 1985; Weiner, Graham, and Chandler 1982). Secondly, the individual has little control over the given situation. Anxiety arises from an external personal threat and little situational control (Bower 1991; Eysenck 1992; Huddy, Feldman, and Cassese 2007).

**What are the effects of anxiety?** Anxiety results in “heightened sensitivity and attention to threat, overestimation of threat, and more careful information processing” (Huddy, Feldman, and Cassese 2007, p. 4). Marcus, Neuman, and Mackuen (2000) and Marcus and Mackuen (1993) posit that anxiety serves as monitoring emotion that alerts individuals to that there is a unique or threatening event happening. Unlike those who
are angry, those anxious individuals are less willing to take risks (Huddy, Feldman, and Cassese 2007; Lerner and Keltner 2000, 2001).

Section Conclusion

This section examined the political psychology literature on the impact of negative emotions. Specifically, it focused on the discrete effects of individual negative emotions. The literature reveals that sadness, anger, fear, and anxiety each has unique effects on behavior, information processing, and decision making. Chapter III presents a model of how I expect these unique emotional effects to interact with the characteristics of casualty events (literature reviewed in section one) to produce foreign policy preferences.
CHAPTER III

THE MODEL: CASUALTIES AND EMOTIONS

Introduction

Worldwide terrorist attacks and the wars that resulted from these events have increasingly brought the consequences of these events, casualties, to the public’s attention since September 11, 2001. Whether it is the destruction of the Twin Towers in New York, the burning of the Pentagon in Washington, or pictures of flag draped coffins returning from Iraq and Afghanistan, few people dispute the impact these images have had. Specifically, these images and the heart-rending stories that accompany them have an emotional impact. Indeed these attacks seem to fit the definition of “tragedy” discussed in the last chapter. Yet, as the last chapter also demonstrates, the number of casualties can act as a cognitive measure, or as a “statistic,” of the costs of a conflict. Whether they are considered as “statistics” or “tragedies,” these casualties have important impacts on the public. Furthermore, the political decision makers (elites) pay attention to the reactions of their constituency. Indeed elites have been shown to react dramatically to counter expected negative public responses (e.g., protests, falling support for leaders, government change) (Kull and Ramsey 2001). Thus, I seek to determine how individual members of the public respond to these events. More specifically, this chapter presents a model of how I expect negative emotions and cognitive calculations of these types of casualty events (CE) to affect the public’s formation of foreign policy.
preferences. This chapter also presents several hypotheses that will be tested in the following chapters.

The Model

In the model below, I propose that different casualty characteristics evoke different emotions that may indirectly influence different foreign policy preferences. The role of casualties is viewed here as more than an ingredient in a simple calculation of the costs of the conflict. Instead, casualty characteristics are expected to interact with the cognitive and emotional decision-making mechanisms, producing distinct effects on policy preferences (see Figure 1 below). When casualty characteristics affect mainly the cognitive mechanism, I label them as part of the Direct Effects. Indirect Effects occur when emotional mechanisms (specifically negative emotions) are activated, and in some cases overshadow (bias) the cognitive mechanism. The dominance of a particular mechanism affects the perceptions of the event and consequently the public’s foreign policy preferences. I will briefly review the more general effects of the model before detailing the specific relationships of the casualty characteristics with each mechanism.
When *Direct Effects* dominate, characteristics of the casualty events have specific effects on the cognitive or cost/benefit calculations of responses to the event. In essence, responses to these casualty events are driven primarily by calculations of how effective\(^6\) the available policy options are likely to be. Thus, if a particular casualty characteristic has mainly a direct effect, then individuals examine the options (in this study, the use of force, negotiation/diplomacy, and do nothing/withdrawal) and determine which policy options will be the most effective in resolving the crisis. The less effective a policy is expected to be, the lower the overall preference for that policy should be.

Other characteristics of a CE may evoke primarily negative emotional responses. Specifically, I expect that different casualty characteristics will evoke different negative emotions. Each negative emotion in turn alters interpretations of the event, and consequently, what policy responses are preferred. In essence, by altering the perception

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\(^6\) The most effective policy response implies ensuring success/victory in war and stopping attacks in terrorism.
of the event these characteristics alter the cost/benefit analysis by changing the weight of parts of the information. Furthermore, in some cases the emotionally affected interpretation may remove a policy option from consideration even before the cost/benefit analysis occurs. Whether or not preliminary elimination of options or differential weighting of information occurs is dependent in this model on the specific negative emotion that dominates an individual’s response to the CE. Essentially, while several negative emotions may occur (or be reported), the one that most colors an individual’s response determines how the cognitive and emotional mechanisms will interact. In the literature on emotions reviewed in the previous chapter, three negative emotions were related to behavioral responses: sadness, anger, and fear. Because of this focus in the literature, I will concentrate on the effects of these three emotions on foreign policy preferences. The specific impacts of the casualty characteristics are addressed in the following sections.

**The Direct and Indirect Effects of Casualty Characteristics**

The general model depicted in Figure 1 above implies that different casualty characteristics alter responses to casualty events. The question is what characteristics of casualties are most likely to alter responses to these events. The literature in Chapter II emphasizes three characteristics of casualty events that alter the impact of the event on policy preferences of the public. These include the context, identity, and the number of casualties. In this section, I will examine the specific effects of these casualty characteristics on the cognitive and emotional mechanisms. Specifically, I will examine
which characteristics I expect to have a greater direct impact and which characteristics I expect to have a more pronounced indirect impact through the emotions they evoke.

**Direct Effects**

As discussed previously, when a casualty event occurs, the characteristics of that event alters its interpretation and the policy preferences that individuals form. In much of the literature on casualties, the primary effects scholars focused on are cognitive calculations of the cost/benefits of the conflict (Bennett and Stam 1996, 1998; Nincic and Nincic 1995; Stam 1996). Although much of this literature focused on the number of casualties, I expect that the context and the identity of the casualties also have an impact on the cognitive mechanism. Below I will describe how each of these characteristics in this model affects these calculations, individually and together.

**Context**

In Chapter II, I examined the literature on casualties and noted that one of the most important factors in determining the impact of a casualty event is the context of that event. In fact, some scholars attributed the difference in reaction to casualties primarily to the context of the event, particularly if it is a change in context from war to terrorism. In essence, the context is king. The question here is what effect does the context of the casualty event [CE] have on the cognitive mechanism? Assuming that the calculations of costs/benefits are altered by the context of the event, the question then becomes how they are affected by the context of the event.
I propose that the context of the casualty event affects these calculations by setting expectations for the other casualty characteristics and the likelihood of the success or failure of different policies. The context gives us information about who the target of these event usually are, how severe (in terms of numbers) the event will be, and potentially how likely an individual is to be affected by the event. In essence, individuals are likely to be aware that terrorism and war have different consequences. For instance, a terrorist attack may be an isolated incident or part of a string of other sporadic attacks, but in war generally there will be more casualty events. Individuals are more familiar with wars because there have been more wars, while terrorism is relatively rare and has only recently emerged as a worldwide phenomenon. Thus, even the non-expert public has some personal knowledge of, and expectations about, how to address war as a context. Even experts argue about how terrorism is defined, what causes it, and how to respond to it. Individuals are therefore less likely to have personal knowledge or expectations of how terrorism can be dealt with successfully. Given this personal knowledge base, these contexts [war and terrorism] lead individuals to expect those who are killed in war to be soldiers, while civilians are expected to be targets of terrorism.7

7 It should be noted that governments have specifically targeted civilians during war. In essence governments have also used terror as a tactic. For instance, the Allied forces bombed Dresden, Germany in World War II, killing tens of thousands. This attack was seen by some as an attack on a cultural center of Germany, fleeing refugees, and wounded soldiers rather than primarily focusing on the weapons factories in the area (Addison and Crang 2006). Alternatively, the Blitz on Britain by Nazi Germany early in World War II is a more explicit example of governments intentionally targeting civilians. This attack, which focused heavily on London, was a sustained effort to demoralize the public and weaken the country for invasion. In essence, governments have also used terror as a tactic. Despite these instances, generally civilians are not the intended targets of governments in wars. In recognition of this the 1949 Geneva Convention recognized the importance of protecting civilians during wars. Thus, here I treat terrorism and war as distinct.
The context therefore tells individuals what they should expect from an event and allows them to see if the other characteristics of the event match these expectations.

**War.** It may be easier for individuals to calculate the most effective responses to casualty events during war than to do so for similar events during terrorist attacks. This may be because there are more instances of casualty events in war, and therefore, more opportunity for individuals to observe the consequences of these events and to calculate which responses are most effective. Indeed, individuals may build expectations about how governments behave in response to attacks in war. 8 Therefore, during war it is probable that individuals will have the information to calculate what the best response to casualty events. In addition, in war individuals may realize that there are advantages to perusing policy responses other than the use of force. For example, when attacked, individuals will expect their leaders to defend the country (use force). However, individuals may also support negotiation with an adversary if the opponent has the advantage or the central issue in the conflict is not of high salience to them. In addition, previous experience with neighboring countries and familiarity with how similar conflicts have turned out in the past gives individuals a basis from which to judge what may work in the current conflict. This is not the case in terrorism. In war, there may be many intangibles to calculate but there are many examples of what works and what does not work in specific instances. In terrorism, there are fewer examples as to whether the

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8 I expect that governments/decision makers will use different criteria than the public on foreign policy preferences since they may have different information and goals than the public. Because of this distinction here when I refer to “individual responses” above I am referring to the public/citizens not government decision makers.
use of force is actually an effective policy. Thus, war offers a clearer case for assessing the utilities of different policies than terrorism.

**Terrorism.** The context of terrorism offers hurdles that war does not to how individuals calculate the utilities of different responses to these events. I will offer several reasons why this is the case and then offer more detailed discussions of each reason. First, terrorist attacks are rare and appear to occur at random. Secondly, it is not always clear that any policy response to terrorism can be actually expected to ‘stop’ terrorism. Indeed, research on terrorism and more ‘common sense’ approaches to addressing terrorism result in seemingly opposing policy prescriptions. Thirdly, terrorism seems to cause an emotional ‘overreaction’ to CEs that alters casualty calculations (addressed in the *Indirect Effect* section). Each of these issues complicates attempts to respond to terrorism even for experts, let alone the less informed public.

As stated above, terrorist attacks are rare and make calculating the best response to these events difficult.⁹ This is especially true in the United States. Although the attacks on September 11 were vivid and caused substantial damage, the average American is more likely to be struck by lightning than be killed by terrorists (Mueller 2004). In addition, even when these attacks do occur, they rarely kill a large number of people especially in comparison to the number of those that can be and are killed in the context of war. With little experience with these types of attacks, it is difficult for an individual to gauge how grave the current casualty event is over time. In addition,

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⁹ This work focuses primarily on the American public’s responses to terror events. It is possible that states or cultures with more experience with terrorism (e.g. Israel, Great Britan/Northern Ireland, or Sri Lanka) may have different responses. Chapter 7 in part explores this but future work should explore this impact.
terrorists seemingly attack at random\textsuperscript{10}, which makes it difficult for the public to determine the correct policy to prevent future attacks. \textsuperscript{11}

To complicate the calculation of responses to terrorism even further, many experts in the field of terrorism and counterterrorism have difficulty agreeing on the definition of terrorism (Crenshaw 2007). For instance, they disagree on whether to limit acts of terror in their studies to: (1) domestic or international, (2) political, secular, or religious motivations, or (3) suicide or regular terrorism, etc. This means that the cases they include in their studies are different and the statistics they present to the public do not always coincide with one another. If scholars cannot agree on the ‘facts,’ it is even more difficult for individuals to build factual foundations for expectations of future casualty events caused by terrorism. Without this basis, it is therefore difficult to calculate what the actual costs and benefits of each policy may be.

The second reason that the public may find difficulties in calculating foreign policy preferences in the context of terrorism is that ‘common sense’ approaches to terrorism and what some studies (Pape 2003, 2005) show as effective in ‘stopping’ terrorism lead to conflicting policy proscriptions. The ‘common sense’ approach in response to a terrorist attack is that you should not negotiate with terrorists. The idea behind this approach is that negotiating with terrorists encourages other groups to take similar actions. By negotiating with terrorists, you reward their bad behavior. Thus, for

\textsuperscript{10} Sandler (2003) points out that the apparent randomness of these attacks is the result of terrorists switching from sites of attacks, which are currently heavily guarded, to more vulnerable sites. Therefore though these attacks seem random to the public and possibly the government they are not.

\textsuperscript{11} There are nations in which terrorist attacks are more common. However, the studies in this work examine primarily U.S. public responses. A case study of Israel is also included that will help explore this factor. It may also be that culture or familiarity with terrorist attacks may be important casualty characteristics, which need to be further explored.
those who hold this belief, the costs of negotiating with terrorists are far greater than any concessions that might emerge from the negotiations. They believe that in addition to these concessions, they will face more terrorist attacks from other groups trying to reap the same rewards as the first group. For those who take this approach, the only appropriate response to terrorism is punishment. Some studies (Friedland and Merari 1985; Huddy et. al. 2005) support this idea by showing that when terrorist attacks occur, people want to make the terrorist pay for the damage they have inflicted. Specifically, these studies show that in response to terrorism, attitudes harden, support for counterterrorism measures increases (Friedland and Merari 1985), perceptions of threat increase, and support for military actions increases (Huddy et. al. 2005). Hardening attitudes and this perspective combine to make negotiation unpalatable and costly, leaving only the use of force and withdrawal/do nothing as potential alternatives. The use of force allows for inflicting costs on terrorists, while doing nothing at least does not encourage terrorists.

In contrast to the ‘common sense’ approach, studies on terrorism indicate that the use of force may in fact increase the costs of terrorism (Pape 2003, 2005). Crackdowns on terrorists groups are expensive and do not necessarily stop terrorism. In some cases, these actions further entrench support for these groups and/or further radicalize the groups and their more moderate supporters. Ultimately, Pape’s studies indicate that not negotiating with terrorists’ leaves only continued violence and retreat as options for

12 Martha Crenshaw (2007) offers a summary of this and other studies that both agree and disagree with this finding. Primarily, scholars’ disagreements revolve around case selections and definitional issues, further highlighting the difficulties mentioned earlier.
terrorists. With fewer options available, the costs of continuing the violence may be the only acceptable option left to these groups. If this is the case, then a cycle of terrorist attacks and retaliation by governments is likely to occur. Ultimately, societies using only force against terrorists may end up paying an extremely high cost. These costs may be out of proportion to the costs of negotiations with terrorists, especially if their demands are limited to less central issues to nations. Indeed these studies (Pape 2003, 2005) indicate that in many cases, when faced with entrenched terrorist groups, many nations end up negotiating and/or acceding to at least some of the terrorists’ demands. This is the case even if they start from a non-negotiation stance.

One example given in this research is the PLO and the eventual creation of the Palestinian Authority. An alternative example might be the hijacking by Palestinian and German terrorists of an Air France Airbus flight from Athens that carried over one hundred Israelis.\(^{13}\) The hijackers eventually forced the pilots to land in Uganda. Given the unfriendly relationship of Uganda with Israel and the lack of readily available military options, the Israelis’ were forced to open negotiations with the terrorists. Eventually Israel launched a raid that freed the hostages. These examples illustrate that international terrorist events occur in complex environments and may force nations to negotiate with the terrorists.

From this discussion, it is easy to see why the common sense approach can be more appealing, but in terms of actual costs, it may not be an effective approach. Furthermore, the debate covered in the news media (Bass 2005) surrounding Israel's

\(^{13}\) For a more in depth discussion of this incident, see Stevenson and Dan (1976).
2005 Unilateral Disengagement Plan of withdrawal from the Gaza Strip indicates that some of the Israeli public has begun to believe the cycles of attacks and retaliation may result in too high a cost. Thus, while the public may not be aware of the scholarly work that indicates that not negotiating with terrorists is detrimental, this debate indicates that some of the public believes this to be the case.

In addition, recent examples lend support to the above studies, indicating that it may necessary in some cases to negotiate with terrorists. Individuals are thus faced with conflicting impulses and their corresponding costs. The first impulse is to ensure that terrorists pay for their attacks and make certain they are not encouraged to commit similar acts. The second impulse is to negotiate with the terrorists and potentially pay lower costs in terms of money and lives. When stated in this fashion the calculation of policy preferences seems simple: negotiation leads to lower costs. However, negotiation does not guarantee that the terrorism will be “stopped.” Some studies (Pape 2003, 2005) indicate that while many countries end up negotiating, these nations will not necessarily like the outcome or find the demands of the terrorists acceptable. In addition, this calculation of cost does not take into account the impact of negative emotions like anger and fear on these calculations (discussed in the next section). Given these impulses and the potential impact of negative emotions, the policy options/choice set and consequences of these policy options are clearer and more easily defined in war than during acts of terrorism. Therefore, it is more difficult to calculate the costs and benefits in dealing with terrorism than it is in war.
As discussed above, I expect that the context of the casualty events to alter expectations about the effectiveness of different policy responses. Essentially, in the context of war, the calculations of costs and the effectiveness of each policy are more straightforward than in the context of terrorism. Given these effects, I also expect that differences in the context of these casualty events may also alter the impact of the identity and number of casualties. Below I will explore these potential interactions as well as the independent effects of both of these variables.

**Identity**

The identity of casualties plays an important role in determining the effects a casualty event has on responses to that event. However, the real impact of a casualty event is difficult to decipher without taking the context of the event into account. This is because the context in which the casualties occur also determines who is likely to be the target of the attack. Thus, without the context of the event, it is difficult to calculate the direct effects of the identity of the casualties. The fact that civilians are killed in terrorist events is important, but may become more important if they occurred during war and thus are unexpected. Therefore, what can we expect the responses to different casualty identities in terrorism versus war to be?

There are two primary purposes of terrorism\(^{14}\). The first purpose is to draw attention to a cause. The second purpose is to show that the terrorists will do whatever they have to in order to achieve their goals. How do terrorist achieve these goals?

\(^{14}\) For examples of discussions of the purposes/goals of terrorism, see Enders and Sandler (2002, 2005).
Terrorists realize that democratic elites have little incentive to meet the demands of small portions of the populations. Therefore, they target civilians in the hope that civilians will be unwilling to accept the costs of not giving the terrorists what they want. Thus, civilians become both the targets of the attack (the message) and the intended audience of the message. In essence, terrorists target civilians to get them to react. They want the public to react and put pressure on the government to meet the terrorists’ demands. Targeting soldiers may not achieve the same purpose; therefore, they are generally not the expected victims.

Alternatively, in war the primary targets of each nation in a conflict are their opponent’s soldiers and their defenses. This is not to say that civilians are not killed or targeted, but they are not generally considered a ‘legitimate’ target. To achieve the nation’s goals, you must win victories against the opposing military and, therefore, the focus of expectations is on dead soldiers. In addition, the purpose of the conflict is to achieve military objectives and not necessarily to get the remaining soldiers to alter their government’s policies. On the other hand, terrorism’s goal is to force an audience to protest the conflict or change their votes in an election, although this may also happen because of war. In war, the soldiers’ deaths are the cost of the conflict. Specifically, the loss of soldiers diminishes the capability of a nation to achieve its national goals. However, this cost is expected and often accounted for in advance by decision makers (Bennett and Stam 1996). When civilians are killed in the course of a war, they are considered collateral damage, which must be included in the cost of the conflict. In
contrast to soldiers’ deaths, however, civilian deaths are not necessarily an expected cost and therefore may accrue a greater cost or have more weight than the deaths of soldiers.

Thus, we can see that there are specific identities of casualties expected in war versus terrorism. In terrorism, we expect more civilian casualties than military casualties. In war, soldiers are the typical casualty. I therefore expect that alterations in the identity of the casualties will alter the costs of the conflict. In essence, the fact that the costs of the conflict differ from expectations will increase the sensitivity of individuals to utilities of the conflict and, ultimately, will alter preferences for different policy responses. More specifically, I expect that:

*Proposition 1a*: The identity of the casualty affects the impact of the casualty-event on foreign policy preferences.

*Proposition 1b*: This effect is qualified by an interaction of identity and context. When the casualties are different from what is expected in a given context this will alter costs of the conflict and therefore foreign policy preferences.

**Number of Casualties**

There has been some research (Gartner and Segura 1998, 2000; Gartner, Segura, and Wilkening 1997; Mueller 1973; 1994) on the independent effects of the number of casualties on responses to casualty events. These studies indicate that the number of casualties in an event has an impact on foreign policy preferences. Specifically, as the
number of casualties increases, the higher the cost of the conflict and the more likely preferences are to lean toward removing the state from the costs of the conflict (i.e., withdrawal). In addition, the number of previous or accumulated casualties may affect responses to current casualties by demonstrating how the current event compares to previous events. For instance, if there are more current casualties than previous casualties, this indicates the situation is getting worse and costs of the conflict are increasing. Therefore, the number of casualties helps individuals determine not only the current costs of the conflict, but also potential future costs. Individuals may therefore alter their policy response.

Though the effect of the number of casualties is distinct from the context of the event, it also seems possible that there will be an interactive effect. As do the identities of the casualties, the context of the event adds more information about the costs of the conflict. The information added by the context of the event to the number of casualties revolves around how rare these events are in particular contexts. In essence, casualty events in war occur in regular, distinguishable patterns. These war casualty events also occur more frequently than do casualty events associated with terrorism. Thus, more is known about what to expect from these types of events and the number of casualties can be used more easily as a measure of the costs of the conflict. In addition, these types of events have been studied in a way casualties in terrorism have not. These studies (Gartner and Segura 1998, 2000; Gartner, Segura, and Wilkening 1997; Mueller 1973, 1994;) support the basic idea that the higher the number of casualties, the lower the support the use of force. Despite these studies, there is little work on the relationship
between the single casualty event and previous casualty accumulation. Given this gap, one of the purposes of the following chapters is to examine this relationship more closely within the contexts of war and terrorism, as well as to examine the role of this interaction in general. Specifically, this work asks if the change in context of the event alters the effects of the number of current casualties and previous casualties.

In contrast to war, casualty events in terrorism are rare and thus it is more difficult to establish the pattern of casualty accumulation. This makes these events more jarring and less predictable, which likely increases the salience of the number of casualties. In war, there may be a reported casualty event every few days, which in a way allows individuals to become habituated to these attacks. When an event occurs, unless the number of people killed is wildly different from previous attacks, it will receive less attention. With terrorism, there are few previous opportunities to become familiar with this type of attack. Therefore, it seems likely that the number of casualties will weigh more heavily than they might otherwise under similar circumstances. In addition to these factors, few studies have examined the impact of numbers of casualties killed in terrorist attacks, so there are few sources from which to draw information about the impact of numbers of casualties. Nevertheless, given that the intent of terrorism is to increase the salience of the casualties, it seems possible that casualty numbers from terrorist attacks have a greater impact on foreign policy preferences than casualty numbers from war. Specifically, if terrorists are successful in increasing the salience of the number of casualties and thus the costs, then increases in the number of casualties should result in a greater propensity to support nonbelligerent foreign policies.
Indirect Effects

As discussed above, the emotional mechanism can have distinct effects on the calculation of costs and benefits preformed by the cognitive mechanism. In the cognitive mechanism, individuals attempt to weigh and measure the consequences of different policies in response to the current casualty event. Depending on the specific emotion that dominates an individual’s response, the emotional mechanism can enhance and/or alter these calculations. Of specific interest in this study are the roles of sadness, anger, and fear on responses to these events. Based on the literature discussed in the previous chapter, these emotions have distinct effects on an individual’s behaviors and policy preferences.

When dominant, anger is likely to alter how the situation is perceived and thus how the individual responds to the event. Calculations of the costs and benefits of a specific policy response are minimal. Specifically, individuals may consider little additional information before responding to a crisis or they may lend more weight to information that favors certain types of responses. In addition, anger has a tendency to increase the sense in individuals that some illegitimate actor has done something to them or something for which they care. They are therefore generally unwilling to consider not responding to the event and are less willing to consider more pacifistic policy responses. As the literature has shown, angry individuals tend toward aggressive behavioral responses (Bodenhausen, Shepard, and Kramer 1994). In essence, anger eliminates some policy options and sets the decision threshold (or point at which an individual will
choose that option over the remaining options) for non-aggressive responses higher than they might otherwise be. Thus, I expect:

**Proposition 2:** When anger is the dominant emotion individuals will be more likely to prefer aggressive or belligerent policy options.

Sadness, when dominant, is likely to enhance a more systematic analysis of information and, importantly for this study, a willingness to be restrained in the individuals’ policy responses. Fundamentally, sad individuals will be less likely to seek revenge than are angry individuals, who may rely on such a policy even if it will not solve the conflict. This occurs because the people saddened by the situation do not find the consequences of the casualty event personally relevant to them. In essence, it happened to someone else in another location and the individuals personally do not have something to protect. They may also consider in their calculations that the perpetrators had a legitimate reason for the action they took or the victims placed themselves in danger. This adds some weight to the benefits of negotiation and withdrawal.

Alternatively, angry individuals feel that they or something they care about has been attacked by someone who has no right or grounds to do so. Therefore, they want to punish the perpetrators while saddened individuals do not. Saddened individuals merely want the casualty events to stop if possible. Of the three emotions, sadness is more likely to cause more attention to be paid to the calculations of the costs and benefits of the situation. Sadness is also the least likely to result in biased information processing. Put
differently, even though sadness is a distinct negative emotion, it will result in the same outcome as if no negative emotion were evoked. It will have a non-emotional impact resulting in reliance on the cognitive mechanism. Thus, I propose that:

**Proposition 3:** When sadness is the dominant emotion individuals will be more likely to choose a policy option that will be most effective in responding to the situation.

Fear is the result of the perception of some personal threat. Individuals feel that something about the situation is endangering them, their friends and family, or something they cherish. Individuals often believe that there is little or nothing they can do to stop the threat. In response to these events, individuals seek to prevent or avoid whatever is seen as the cause of the threat. Like anger, individuals are more likely to consider little additional information before responding to a crisis or they may lend more weight to information that favors certain types of responses. In addition, it may be more likely that if there are calculations of the costs and benefits, that the costs of belligerent policies will weigh more heavily than any benefits. In essence, fearful individuals want fewer risks and to withdrawal from the situation. Therefore, they are more likely to eliminate risky policy options from their choice set than non-fearful individuals are. Therefore, I expect:
**Proposition 4:** When fear is the dominant emotion individuals will be more likely to support policies that withdraw from the situation and less likely to support belligerent policies.

In addition to these behavior effects of specific emotions, I expect that these emotions are associated with different casualty characteristics. Specifically, I expect that different characteristics of casualty events evoke different emotions and therefore different policy preferences. As with the cognitive mechanism, the characteristics of interest here are the context, the identity, and the number of casualties.

**Context**

In this model, the context in which the casualty event occurs is pivotal to understanding how individuals respond to these events. As discussed above, the context plays an important role in calculations of the costs of the casualty event. I propose that the context of the casualty event plays an even more important role in determining whether emotion dominates, and which emotion dominates the emotional mechanism. In effect, altering the context of the casualty event will fundamentally alter the emotion that dominates reactions and policy preferences. This idea is a primary driver behind Mueller’s (2004, 2007) proposition that there is an overreaction to terrorist attacks in comparison to attacks in the context of the war. More specifically, while fear, anger, and sadness are central emotions to deaths in both terrorism and war, each context evokes different dominant emotions. This occurs because the underlying premise of terrorism is
to evoke strong emotional response, and fear in particular. Thus, rather than target places to achieve strategic goals, terrorism targets people. In war, the intent is to achieve certain military objects, which may include fear. However, evoking these strong negative emotions is not the central driving purpose of war as it is in terrorism.\textsuperscript{15} Therefore, it seems reasonable to expect that contexts of war and terrorism evoke different emotional responses. Indeed, it seems likely that:

\textit{Proposition 5}: The overall impact of each negative emotion should be amplified in the context of terrorism and depressed in the context of war.

The question is how these emotional responses differ and what effects do they have on policy preference formation.

\textbf{War.} Several factors determine what negative emotion dominates during war. The first factor most likely to affect the emotional response is the distance of the event from the individual. Specifically, as long as the war is at a distance from those responding to an event, individuals are unlikely to feel they are endangered by the war. When a war is taking place at a distance individuals are therefore unlikely to feel fear. The second set of factors that I expect to affect emotional responses is the identity and number of casualties. In general, given the distance factor and the repetitious nature of

\textsuperscript{15} Inflicting fear or terror has been used as a tactic by governments (e.g., London Bombings in WWII or Mutually Assured Destruction in nuclear deterrence). Responses to individual instances or casualty events in war in which this tactic is employed may be altered. However, I would argue that the targets and audience of war remain fundamentally different (decision makers rather than the public). To confirm this, it will be necessary to examine both different contexts with different tactics and target audiences. In this study, my focus is on the more general effects of the contexts of war and terrorism on public reaction rather than differentiating the impacts of different tactics in war on the public and decision makers.
casualty events in a war, I expect that sadness will be the dominant emotion expressed during war. If, however, the war hits closer to home and/or the number of casualties demonstrate a change in the status quo of the war, anger may emerge as the dominant emotion. I also expect that the identity of the casualties will affect the dominance of anger. In the context of war, civilian casualties are both unexpected and ‘illegitimate’ targets of attack. Thus, it seems plausible that individuals are more likely to be angry when civilians are killed than when soldiers are killed. Given, however, that I generally expect sadness to dominate responses to casualties’ events in war, I expect that policy preference formation will be based on a careful evaluation of the costs and benefits of the different policy options available.

Terrorism. Overall, the intent of terrorism is to create an emotional ‘overreaction’ to these types of casualty events so that individuals will force their government to accede to the demands of the terrorists. This idea is supported by the findings in the literature that terrorist attacks seem to evoke a greater sense of threat than war (Huddy 2003). Thus, in the context of terrorism, I expect to see anger and fear as the dominant emotions, rather than sadness. Specifically, when anger dominates we might expect a greater preference for belligerent policies, while dominant fear is more likely to result in greater preferences for withdrawal from the conflict.

In addition to this more general effect, I expect, as with war, there are a number of factors that will affect emotional responses to terrorism. However, because the entire purpose of terrorism is to evoke or increase the negative emotions that individuals experience, I expect that the interaction of these variables with terrorism will have a
different effect than in war. First, I expect that the distance of the individual from the event may modify this ‘overreaction’ to terrorism, although not to the extent it does in war. Specifically, between fear and anger, fear is most likely of these two emotions to be diminished by distance in both terrorism and war because distance offers a greater margin of safety. Individuals might believe that because something happened far away from them, they will not be targeted for any future attacks. However, as September 11 demonstrated, an attack thousands of miles away can still spread fear throughout a nation. Getting the public to fear further attacks is, after all, the intent of terrorism. If fear of future terrorist attacks dominates, regardless of distance, the careful calculations of the cognitive mechanism will be overwhelmed by the need to find a policy that removes the danger. As I expect fear to occur more often in terrorism, I expect that:

*Proposition 6:* There will be greater levels of fear in the context of terrorism than war.

In terms of anger, I expect that the distance of the casualty event will have little effect on anger. Instead of altering levels of anger, I expect that the distance from the casualty event may alter whether fear or anger is the dominant emotion. This in turn will alter which policy individuals prefer. Anger plays a role in terrorism because it is perpetrated by illegitimate actors on the lives of the public or individuals to whom they can relate. This increased sense of illegitimate threat can only be overwhelmed by fear, which pushes individuals to flee the conflict. Furthermore, I believe that this anger
response lies at the heart of the contradiction between the long-standing policy of not negotiating with terrorists and the apparent failure of the use of force to stop terrorism. Rather than calculate what the best response to the crisis is, individuals are angered by these attacks and seek revenge. Put differently, instead of attempting to achieve the optimal solution to the crisis, these individuals want to inflict similar pain or costs on the terrorists. To do this, individuals will discount information that indicates that negotiation or withdrawal is a better option. They will focus instead on information that supports their desire to use force. The cognitive mechanism thus is overwhelmed or biased by support for the belligerent or punitive policies. Thus, anger resulting from terrorist attacks can lead to fundamentally different foreign policy preferences than we might expect based on cognitive interpretations.

Identity

In the cognitive mechanism, the effect of the identities of the casualties happens primarily in conjunction with the context of the casualty event. The casualty event sets expectations about who was most likely to be killed. When the casualty event identities are of the unexpected group, this alters the calculations of the costs of the conflict. In the emotional mechanism, the identities of the casualties may emphasize or decrease the effects of the context. They may also have a separate effect on emotional responses to casualty events. This independent effect centers on the meaning or role of each identity. Specifically, soldiers are put at risk by the nature of their jobs. They train for the possibility that they will be injured or killed in the line of duty as a normal course of
events. If there is an ongoing conflict, we generally expect that soldiers will be killed during the course of that conflict. Therefore, when soldiers are killed, it is not necessarily a ‘shock’ but a normal expense of national security. For this reason, it seems plausible that the dominant emotional response to the death of soldiers will be sadness rather than anger or fear.

Alternatively, civilians are by definition ‘noncombatants’ and thus ‘illegitimate’ and unexpected targets of attack. The ‘shock’ of civilians being killed results in higher levels of all three negative emotions. I expect, however, that sadness will not be the dominant emotion when civilians are killed. Instead, anger and fear are likely to be the dominant responses to casualty events. Fear is likely to be higher when civilians are the targets because the public can envision themselves and their family members as victims of future attacks. In essence, the death of civilians hits closer to home for most individuals than do the deaths of soldiers. Anger is also likely to be higher for the deaths of civilians as opposed to soldiers because they are not considered legitimate targets of attack.

Finally, although identity has an independent emotional impact, I expect that the dominance of fear or anger depend partially on the context in which these emotions occur. Specifically, when the identity interacts with the context, the propensities of that context are increased or decreased. Thus, if we think about civilians killed during terrorist attacks, both factors cause anger. This in turn may cause anger to be the dominant emotional response and push an individual toward belligerent policies and away from other policies. Alternatively, in the case of war civilian casualties may cause
both anger and sadness. Whichever of these emotions dominates will then determine how individuals calculate their responses.

**Number of Casualties**

Unlike the context and the identity of the casualties, the effects of the number of casualties on emotional responses are unclear. There are studies (Gartner and Segura 1998, 2000; Gartner, Segura, and Wilkening 1997; Mueller 1994, 1973) in the context of war that indicate that an increasing number of casualties can lead to policy change, but these studies do not address the emotional impacts on responses to these events. In the case of terrorism, studies emphasize the nature of the emotional impact but do not necessarily address the impacts of the number of casualties (Mueller 2004; 2006). Instead, these studies indicate that there is an ‘overreaction’ to terrorism in comparison to a similar number of deaths in war. Thus, though we might expect the number of casualties to have an emotional impact it is unclear what that effect might be. I explore this gap in the literature in empirical studies discussed in the following chapter.

**Conclusion**

This chapter examined how different casualty characteristics interact with the cognitive and emotional mechanisms to produce different foreign policy preferences in individuals. I proposed that the context of the casualty events is dominant. It determines whether the cognitive or the emotional mechanism dominates responses to these events. Specifically, I posited that because of greater familiarity with and understanding of the
policy consequences of war that the cognitive mechanism is more likely to dominate an individual’s foreign policy preference formation in that context. Alternatively, in the context of terrorism, because of a lack of historical experience with terrorism and a quagmire of potential consequences for different policy responses, individuals will rely more heavily on the emotional mechanism. In addition, I examined how the emotional mechanism and specific negative emotions are affected by different casualty characteristics and how they in turn affect foreign policy preference formation. Table 2 briefly outlines the implications of the model I have just presented.

As discussed above, this chapter offered a model of how casualty events affect emotional responses, cognitive responses, and foreign policy preference formation. In particular, it addressed the role of the context, identity, and number of casualties both on direct calculations of what policies would be the most effective and how these casualties are affected by emotional responses. This chapter also introduced several hypotheses that will be explored in the following chapters. Specifically, chapters IV-VI will experimentally test the internal validity of the model. Chapter VII will examine how well this model applies to actual casualty events in Israel. Finally, chapter XIII will draw conclusions about the success of the model and further avenues of research.
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CHAPTER IV

EXPERIMENT I

Recent events such as the Second Gulf War and the terrorist attacks in London increased the importance of understanding how casualties (death) affect the public’s response to these events. Numerous studies have examined the effects of casualties on the public in wars and conflict (Gartner 1998; Gartner and Segura 1998, 2000; Gartner, Segura, and Wilkening 1997; Mueller 1973) as well as in terrorist attacks (Mosher 2004; Mueller 2004; Pape 2003). Few studies, however, attempt to compare the impact of casualties from both international conflict (e.g., war, militarized disputes, etc.) and terrorism.

The primary question raised in this work is whether all casualties are equivalent. Does the public respond to all casualties in the same way? This work as a whole and this chapter specifically attempts to address these questions by examining the effects of casualties and the emotions they trigger in different international conflicts. In this chapter, I utilize an experimental design to examine the impact of casualties on policy preference formation (i.e., the use of force, negotiations, and doing nothing). Specifically, I examine the effects of casualties within a single incident rather than the accumulation of casualties along the span of the conflict. First, it explores the potential impact of the context of the casualty event (war versus terrorism) – as well as the identity of the casualties, (i.e., military versus civilian casualties) as factors that mediate

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16 As discussed in previous chapters, studies of the impacts of casualties have only examined their impact within an accumulation of casualties over the course of a conflict.
such effects. Second, it explores the different impacts that emotions have on the decision outcome, given the findings that the effects of specific negative emotions indicate that not all emotions (specifically negative emotions) are equal, and that not all emotions have the same impact on the decision process (see Huddy, Feldman, and Cassese 2007; Keltner, Elsworth, and Edwards 1993; Lerner and Keltner 2000, 2001; Smith and Ellsworth 1985). These findings suggest the need to “unpack” negative emotions in order to determine their effects on international crises. Indeed, a difference in the type of negative emotion experienced by an individual might explain the difference in reactions to terrorism and war discussed earlier. For example, I expect that when sadness is the dominant emotional reaction we may observe less support for the use of force policy as a reaction to a casualty event than when anger and hate are the dominant emotions. Given this expectation, this study will explore more closely the distinctions between different negative emotions (sadness and anger) and their effects on endorsement of foreign policies.

**The Model: Impact of Casualties on Foreign Policy Responses**

Given the literature on casualties and emotions, I posit that casualty events will have two types of effects based on the characteristics of the casualty events. In this model, as Figure 2 below depicts, the casualty event will have both direct and indirect effects on an individual’s foreign policy preferences.
Specifically, the context and the characteristics of the casualty event are expected to influence cognitive calculations of individuals’ foreign policy preferences directly. In addition, the characteristics of the casualty event also have an indirect effect on foreign policy preferences via the emotions the casualty event evokes. The particular emotion that dominates the individual’s reaction to the event will affect how aggressively the individual wants to respond to the perpetrators. Below I present hypotheses that are derived both from the literature presented in previous chapters and from the above conceptual model.

Hypotheses

Context

Consistent with Mueller’s (2004) discussion of terrorism, I assume that the context of the casualty event directly affects the public’s policy preferences. The context
has a direct effect on the policy responses. The context may suggest how well the policy responses may work because individuals have no information about how well previous efforts have worked. In essence, the previous context sets expectations about what individuals may expect in a given casualty event. For instance, military intervention is not always effective at inhibiting terrorist attacks as can be seen in Israel and the second Gulf War. Alternatively, in a military conflict the use of force is the primary means of resolving the crisis. Thus, based on pure costs/benefits calculations and with the exception of September 11, we might expect more uses of force in war than in terrorism. I also expect the context of the event has an indirect effect on policy preferences as indicated my Mueller’s discussion of an emotional “overreaction” to the casualty event (2004). Therefore:

H4-1: Altering the context of the casualty event changes the effect of the casualty events on policy preferences.

However, it seems plausible that measures of effectiveness and emotional responses may produce opposite reactions and preferences in individuals. For instance Mueller’s (2004) discussion of the an “overreaction” or emotional reaction to September 11 that resulted in two wars, makes it plausible that a casualty event within the context of terrorism will lead to a greater preference for an aggressive foreign policy (i.e., the use of force) as compared to the context of war. However, if the context of the event acts more as a

17 There may be some difference in these calculations if we consider the “common sense approach” discussed in Chapter III.
cognitive response (i.e., a measure of the effectiveness of the policy responses), then we might expect the reverse to be true. If we examine recent history uses of force in response to terrorism have had limited effectiveness. Given this history if responses are based on more cognitive assessments then we might expect less support for the use of force. Regardless of whether or not the context causes an emotional response or act as a measure of policy effectiveness, militarized disputes and terrorism are expected to have fundamentally different impacts on both emotions and foreign policy preferences.\textsuperscript{18}

*Casualty Characteristics*

The characteristics of the casualty events analyzed here include the number of casualties and the identity of the casualties. Previous studies that examined casualties as part of an accumulation found that as the number of casualties or their rate of accumulation increased, negative public responses to the conflict also increased (e.g., support for leadership/ conflict). This study focuses solely on single casualty events and differs from accumulation studies. In a single incident without casualties’ accumulation information, I anticipate finding that as the number of casualties increase, the support for aggressive policy responses should also increase. This could be a function of individuals’ desire for retaliation or a reflection of the rally around the flag affect found in casualty accumulations. Therefore:

\textbf{H4-2:} The higher the number of casualties, the greater the support for the use of force.

\textsuperscript{18} For a more complete discussion of this effect, see Chapter III.
However, the number of casualties could be a reflection of the cost of the conflict as expected in accumulation studies. We might therefore expect the opposite of the hypothesis to be true and support for the use of force to go down while support for negotiation and withdrawal go up. Effectively, an increase in the number of casualties could increase the perceived cost of the conflict and thus decrease support for the use of force. In addition, the number of casualties may alter emotional responses and therefore policy preferences; however, there has been no work in the literature to support this. Thus, the results should give us a better idea what role casualties play in policy preference formation.

The second casualty characteristic considered here is the identity of the casualties. The identity of the casualties may also indicate the cost of the conflict. Specifically, civilian casualties may have a greater impact on individual’s policy preference than military casualties because of the inherent danger of the military. We expect that some soldiers will die in a conflict, but we do not necessarily expect civilians to die and if civilians die, the ‘cost’ may be higher than expected. Therefore:

H4-3: The identities of the casualties affect the impact of the casualty event on foreign policy preferences. This effect may be qualified by an interaction of identity and context.
This interaction is based on the following premises. Generally, civilians are the targets in terrorism and soldiers are the most likely casualties in war. Thus, the context of the event tells us who is the most likely target and thus, what the costs of the current event are likely to be. Deviations from this pattern may cause a stronger effect on policy preferences because the cost is different from what is expected. While civilians are killed in military interventions, they are not generally considered an acceptable cost of the conflict. Thus, in the case of war I expect:

H4-3a: Civilian casualties will have a greater impact on emotional responses and policy preferences than will military casualties in the context of war.

In the context of terrorism, civilians are the targets/costs of the context. Viewed in this way, soldiers become the less acceptable cost and therefore I expect:

H4-3b: Military casualties will have a greater impact on emotional responses and policy preferences than will civilian casualties in the context of terrorism.

Casualties and Emotions

In addition to these direct effects, context and casualty characteristics have indirect effects on foreign policy preferences through the emotional reaction of the individual to the casualty event. The particular negative emotion that dominates
reactions to the event will determine the most likely foreign policy response of the individual to the incident.

**Assumption:** The dominant emotion that the casualty event evokes affects individual’s preference for foreign policy responses. Therefore,

H4-4: When anger is the dominant emotion, it will lead to more support for the use of force than sadness.

Previously I discussed deviations from expectations resulting in ‘greater impacts’ on responses to casualty events. This implies in part that different emotions will be evoked depending on when casualty characteristics deviate from expectations. These deviations alert us that something is wrong. This in turn evokes different emotions and thus different policy preferences. In cases where the ‘wrong’ people are killed, I expect anger to be the dominant response. Alternatively, when we get what we expect, sadness is likely to dominate. Finally, when those killed are similar to the individual responding to the event, then fear will affect and sometimes dominate responses to the event. Therefore, I propose that:

H4-5: Deviations from expectations result in a greater likelihood of anger being the dominating emotion. Hence, deviations from the expected identity that are similar to the individual are more likely to cause anger to dominate emotional responses.
The Experiment

Participants

One hundred thirty (130) undergraduate students took part in this experiment. The participants were randomly assigned to one of twelve experimental conditions.

Experimental Design and the Treatments

This experiment used a 2x3x2 between groups factorial design to evaluate the effects of casualties (Table 3). The factors are: (a) the context of the casualty event (terrorism / war), (b) the number of casualties (3, 23, or 53)19, and (c) the identity of the casualties (i.e. civilian / military). The main measures are the expressed emotions to the incident and the level of endorsement of the use of force, negotiation, and doing nothing against the perpetrators.

Table 3: Experimental Design for Experiment I

<table>
<thead>
<tr>
<th>Identity of Casualties</th>
<th>Number of Casualties</th>
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<tbody>
<tr>
<td></td>
<td>Low (3)</td>
</tr>
<tr>
<td>Context</td>
<td>War</td>
</tr>
<tr>
<td>Civilian</td>
<td></td>
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<tr>
<td>Military</td>
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</table>

All participants receive an introduction to a hypothetical international scenario concerning unrest in the nation of Errata. The introductory scenario begins with the same

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19 The “number of casualties” represents incidents of low, medium, and high casualties.
basic descriptive information on Errata. This fictitious nation is depicted as a tropical island rich in strategic natural resources (uranium and diamonds), yet plagued with inter-tribal disputes. In recent years, a fundamental group, Tima, has been responsible for major political and social unrest. This group promotes fanatical anti-western/ anti-American themes amongst its adherents. The full scenario is shown below.

Errata is a small independent nation in the Zeta Ocean with a population of seven million people. Errata is a mountainous island nation with a dense tropical forest. Errata’s culture is based on a hierarchical and paternal tribal system. Through conquest and alliances, each of the major tribes has gained power at one time or another. Until the last couple of decades, intertribal disputes have quickly toppled most of the ruling alliances in Errata. The discovery of rich natural resources, diamonds, and uranium in the country has alleviated tension enough that a somewhat stable government was established. In fact, until recently, Errata has been experiencing widespread prosperity and was well on its way to becoming one of the wealthiest nations in the region.

Four years ago, an attempted coup by the leader of a fundamentalist group called Tima almost toppled the Errata government and the group has caused continuing unrest. Since then, the Tima gained increasing support against the central government. The Tima religion is a mix of traditional tribal pagan symbols of birth, death, earth, and sun with
heavy mysticism. Tima requires the total dedication of oneself to and a willingness to make personal sacrifices for the Timatu or “the way.” Tima blames all misfortunes in the third world including Errata on deprivations that resulted from Western colonization and American imperialism. Thus, Tima promotes a fanatical anti-western theme amongst its adherents.

Each scenario concludes with information specific to the conflict context assigned to the participants (i.e. terrorism or war). It should be noted that though I have used the phrase war as conceptual shorthand, the scenario does not meet the commonly accepted definition for war of one thousand battle deaths. Therefore, in the following sections I will refer to ‘war’ as either a military intervention or a military dispute. These texts provide cues that highlight elements associated with terrorism or a militarized dispute (e.g., military intervention on the island).

**Terrorism Context**

The groups associated with the Tima include multiple international terrorist organizations from different parts of the world. Because the Tima have a large base of support within the rural population, they have access to the natural resources of Errata. Therefore, the funding available for this group and others like them is in the hundreds of millions. In addition to the funding of terrorist groups, the Tima activities within Errata threaten to destabilize the intertribal balance. Additionally, anti-Tima paramilitary groups and affiliated extremist clans operate beyond the control of the unstable central
government in order to counteract the Tima threat. The combined unrest caused by Tima and their opponents threatens to spill over into U.S. installations in that region. The unrest caused the U.S. State Department to issue an advisory several days ago urging all U.S. citizens to leave the island nation as soon as possible.

**War Context**

Within the last two months, the Tima were finally able to take control of the island. Over 80% of the island is in their hands, although some anti-Tima and government forces have been able to hold on to small sections of the island. The central government was forced to flee to the neighboring island of Asu. As result of the danger to the uranium mines and the danger to U.S. installations on neighboring islands, the United States was forced to send forces to intervene. Three days after Tima took over the capital city of Tamatu U.S. forces landed in Errata and were able to bolster the remaining anti-Tima forces in the nation. In the last several weeks, the country has degenerated into a state of constant conflict. American and allied forces in the country have been involved in several skirmishes in an attempt to help protect civilians caught in the fighting while attempting to evacuate U.S. citizens in the area. In addition, the United States recently deployed additional troops to the area to ensure the safety of the troops already on the ground.

When participants completed reading the scenario and one of the two contexts they were exposed to a “news update.” This “news update” contained the manipulations of the other two independent variables (number and identity of casualties).
**News Update**\(^{20}\)

The Tima organization has claimed responsibility for the rocket that brought down military/civilian flight 7756 from Tamatu, the capital city of Errata. At 3:17 pm, witnesses reported an explosion in the air over Tamatu as the plane took off from Errata International Airport. The plane crashed, killing the crew and \((3, 23, \text{ or } 53)\) American soldiers/civilians. The names of the dead will not be released until their families have been notified. These are the first American casualties in the region.

**Measurement of the Dependent Variables**

Participants rated their approval/disapproval of the “use of force,” “negotiation,” and “doing nothing” policy options in the current situation, on an eleven point scale (0 to 10). In addition, the participants answered a series of questions concerning their emotional reactions to the incident. Specifically, the participants rated on an eleven-point scale (0 to 10) the level of anger, hate, sadness, and fear they had experienced while reading the “news update.”

**Results**

The general findings of this study are supportive of the model and hypothesis suggesting that the context in which the casualties occur (terrorism or war) matters, and that within the terrorism context the identity of the casualties matters. However, counter

\(^{20}\) The bold text indicates the variations in the independent variables.
to hypothesis H4-2, the number of casualties had no effect in this study. Furthermore, in line with a previous study (Mosher 2004), anger is the negative emotion associated with support of the use of force, while other emotions such as fear and sadness have no relationship to the endorsement of that policy.

Effects of the Experimental Treatments on the Endorsement of the Use of Force

On average (and across experimental conditions), the participants in this study lean towards the endorsement of the use of force option with a mean 6.33 on a 0-10 scale. The 2x3x2 ANOVA yields no significant main effects of the independent variables (context, number of casualties, and casualty identity) on the endorsement of the use force.

However, the ANOVA analysis yields a significant interaction between the context of the incident and the identity of the casualties on the endorsement of the use of force \([F(1,115) = 5.41, p<.02]\). In the context of terrorism, the participants are more likely to support the use of force when soldiers die \((M = 6.97)\) than when civilians die \((M = 5.58)\).21 This pattern reverses in the context of war. In this case, there is more support for the use of force when civilians are the casualties \((M = 6.66)\) than when those killed are soldiers \((M = 5.86)\).22 Figure 3 depicts this interaction. While the lack of main affects offers no support for the model and hypotheses, this interaction does. Specifically the above interaction supports hypotheses H4-1, H4-3, H4-3a, and H4-3b.

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21 The simple effect for this finding is \(F(1,60) = 3.83, p<.05\)
22 It should be noted that this specific contrast is not statistically significant.
Figure 3: The Impact of Identity and the Context of Casualty Events on Support for the Use of Force.

![Support for the Use of Force]

Effects of the Experimental Treatments on the Endorsement of Negotiations

A 2x2x3 ANOVA of the effects of the independent variables on support for negotiations revealed one significant main effect and one significant interaction. The significant main effect is related to the context of the casualty event \([F(1,90) = 4.57, p<.03]\). Support for negotiation is higher in terrorism (M = 6.88) as compared to war (M = 5.84). In addition, there is also a significant interaction with the identity and the number of casualties \([F(2,90) = 5.41, p<.006]\). Figure 4 below shows that with military casualties, there is a linear increase in support for negotiations when casualties increase.
Alternatively, support for negotiation is highest at the lowest levels of civilian casualties. An increase in the number of casualties drops support for negotiations and remains low regardless of the increase in the casualties.

Figure 4: The Interaction of the Identity and the Number of Casualties on the Support for Negotiation.

Effects of the Experimental Treatments on Doing Nothing

The 2x2x3 ANOVA of the effects of the independent variables on support for doing nothing revealed one significant main effect \( [F(1,89) = 3.70, p<.05] \) and no significant interactions. Support for doing nothing is higher in terrorism \( (M = 4.84) \) than
in war (M = 3.70). This may reflect a feeling of less ‘hope’ that military interventions and negotiations will be effective in the context of terrorism.

**Effects of Experimental Factors on the Three Policies as Repeated Measures**

In order to explore the difference in relative preferences of the three policies, I performed a repeated measures 2x2x3x(3) ANOVA. First, this measure reveals that there are significant differences in the preferences for the three policies \[ F(2,222) = 26.32, \] \[ p<.0001 \]. More specifically, this ANOVA reveals that across experimental conditions, the participants in this study lean towards the endorsement of a diplomatic option with a mean of 6.68 and the use of force with a mean of 6.35 (on a 0-10 scale), in contrast with do nothing in response to the conflict with a mean of 4.22. Hence, the decision makers want something to be done about the situation. However, there is not a strong differentiation between the two policies of using diplomacy or using force.

Secondly, the identity of the casualties had a significant interaction with policy preferences \[ F(2,222) = 3.14, p<.04 \]. From the graph of the interactions (see Figure 5 below) we can see that most of the difference in the identity of the casualties occurs in support for doing nothing, while support for negotiation and the use of force are similar across identity. We can see from this difference that individuals want to take action when the casualties are military, but wish to avoid causing further problems or potential casualties in the case of civilian casualties.
Lastly, there was an interaction of the context and the identity of the casualties with policy preferences \(F(2,222) = 2.85, p<.05\) (See Figure 6 below). In general, we can see that participants wanted to do something rather than take no action or withdrawal, with exception of civilians in terrorism. It is not clear, however, which of the two remaining policies the participants prefer. Therefore, in the case of military casualties the context of the event seems to have little effect on support for different policies. Unlike military casualties, in the case of civilian casualties support for the policies are affected by the context of the casualty event. When the casualties occur in war, the effects on support for foreign policies are similar to military casualties.
However, when the context of the civilian casualties is terrorism, the participants were less optimistic about the success of “doing something.” This can be seen in the decreasing support for the use of force and a nearly two-point increase in support for doing something.

Figure 6: The Impact of the Identity and Context of Casualties on Support for the Three Policies.

These findings suggest that the respondents in this experiment are not that confident that military actions are very effective in curtailing terrorist attacks against civilians. It is plausible that this sentiment reflects public opinion about the continuous terrorist/insurgent attacks in Iraq, despite the military’s efforts. These findings support
hypotheses H4-1, H4-3, H4-3a, and H3b, as well as the idea that the identity and context of the casualty event matters in policy preferences of the public.

**Effects of the Experimental Factors on Emotions**

In much of the previous literature, the study of emotions focused on positive and negative emotions as general categories\(^{23}\). Thus, this section will examine emotions as a general category. In the first analysis, I generated a ‘negative emotional index’ that averaged the four scores on the self-reported emotive scales in this study. The ANOVA yielded one significant main effect \[F(1,112) = 4.54, p<.04\]. There is a higher level of expressed negative emotions in the context of terrorism than in war, which is in line with Mueller’s (2004) hypothesis of an emotional “overreaction” to terrorism. Neither identity nor the number of casualties had a similar effect. This indicates that the context of casualties has an important influence on public emotional reaction to these incidents.

However, as claimed in the conceptual model, it is anticipated that individuals who face a casualty event may experience different levels of negative emotions. The findings shown in Table 4 illustrate that across all experimental conditions, the casualty event evoked a higher level of sadness (\(M = 7.18\)) than anger (\(M = 6.33\)), hate (\(M = 4.89\)), and fear (\(M = 3.82\)), \[F(3,336) = 62.29, p<.0001\].

The following analyses examine the effect of the independent variables (context, number of casualties, and casualty identity) on these emotions.

**Context (Terrorism/War)**

Casting the casualty event within the context of terrorism has an impact on the level of hate and sadness expressed by the participants. Specifically, terrorism made participants feel more hate ($M = 5.46$) than when the event is part of a military intervention ($M = 4.27$) [$F (1,112) = 4.81$, $p < .03$]. The terrorism frame also led the participants to report more sadness ($M = 7.68$) as compared to the context of war ($M = 6.65$) [$F (1,112) = 5.12$, $p < .05$]. A similar effect occurs in the case of anger. The context had no significant effect on fear.

**Identity (Civilian/Soldier)**

The only significant effect of identity on the emotive scales is on fear. Exposure to civilian casualties triggers more fear ($M = 4.41$) than when casualties are soldiers ($M = 4.9$).
Fear is the ‘weakest’ emotive response to the event. Because the participants are not exposed to an event that represents specific danger to themselves or their loved ones, the fact that they as the target are civilians increases participants’ affinity and, hence, vicarious fear.

**Number of Casualties (3, 23, 53)**

None of the emotive scales is significantly affected by the change in the number of casualties as manipulated in this experiment. However, there is a significant effect of the number of casualties on sadness. Participants are sadder at the highest level of casualties (53, M = 7.85) than at the lower levels (23, M = 6.7 and 3, M = 7.0), [F(2,112) = 2.49, p< .08].

**The Link of Emotions and the Use of Force**

It is posited that among different negative emotions participants may experience because of the exposure to the scenario, anger is the emotion that is most closely related to the endorsement of the use of force. Bivariate correlation (across experimental conditions) of the four emotive scales and the participant’s support of the use of force confirmed this notion. The correlation of anger and the use of force is .22 (p< .02). There is a similar significant correlation between hate and the use of force, .21 (p< .02).24 Neither fear nor sadness correlates with the use of force.

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24 It should be noted that there is a relatively high and significant correlation between hate and anger (.62, p< .0001).
As discussed, sadness and anger are the dominant emotions in this study. Of the four emotions expressed, participants rate these emotions the highest. Based on the previous literature, I expect these negative emotions to have different impacts on foreign policy preference. To examine these differential effects a new variable is coded. The new ‘dominant emotion’ variable is coded as a “1” if the participants expressed greater levels of anger over sadness and “0” if the participants expressed greater levels of sadness over anger. The analysis reveals that those who are predominantly angry are more supportive of the use of force (M = 6.97) than those who are predominantly sad (M = 6.03), [F(1,124) = 2.97, p<. 05]. This finding and the above correlation between the use of force and anger offer firm support for hypothesis H4-4.

Indirect Effect of Casualties: Casualties Characteristics Effects on Emotions

From the above results, we can see that the biggest effect of the casualty characteristics on emotions was of the context of the casualty event. Indeed, the context of the event seems to explain the major movement in the indirect effects described in the model. The identity of the casualty also seems to have an effect on the emotions of the participants, although this effect is weaker. This was especially true when identity interacts with context. The primary emotion evoked by identity is fear. Alternatively, the number of casualties had a minimal effect on the emotions. This is in line with studies that demonstrate that the number of casualties have a weaker effect on individuals (Boettcher and Cobb 2006) than had been implied by the studies of Mueller (1973, 2004) and Gartner and Segura (1998). This study implies that the effect of casualty numbers is
uninterruptable because of its interactions with other characteristics of the conflict. Thus, the indirect effects of the model are driven primarily by the context of the casualty event followed by the identity of the casualties. The number of casualties by itself, however, has little or no effect on the emotions.

**Conclusion**

This study sought to understand the effects of casualties within a single event on the public’s endorsement of different policies. Specifically, I explored the context (war/terrorism) and identity of the casualties and their impact on the support for the use of force and other foreign policies. Finally, this study examined the potential effects of different negative emotions on the propensity to support the use of force.

The findings of this study suggest, as expected in hypothesis H4-1, that the context in which the casualties occur matters in terms of policy choice. In addition, the results also demonstrate that the context by itself had an impact on the emotions of the participants. Not only does the context alter the level of specific emotions (hate, sadness, and anger), it also altered the level of all negative emotions. This supports Mueller’s (2004) proposition that there is an “overreaction” to terrorism casualties. Indeed, the results show that individuals are sadder, more hateful, and angrier in the case of terrorism than they are in war. However, this result was caused by the context of the event, not the number of casualties.

One explanation for this difference is expectations. Specifically, it is clear in the context of militarized disputes that there are ongoing hostilities. The public expects that
when there is war there are going to be casualties. Over time, the public becomes used to these casualties. Alternatively, despite preparation for and attempts to prevent terrorist attacks, terrorism is an unexpected event. Very few individuals go through a day with the idea that “today there will be a terrorist attack.” Therefore, when these attacks occur there is a greater level of “shock” and, therefore, a greater reaction.

In addition, and in line with hypotheses H4-3, H4-3a, and H4-3b, the results suggest that the context of the casualty event interacts with the identity of the casualties. Specifically, the context seems to set expectations about the identity of the casualties (terrorism/civilians versus war/soldiers). The findings indicate that though all participants prefer to take some actions instead of not responding, deviations from the expected identity prompt a greater propensity to support the use of force. Civilian casualties within the context of terrorism, however, result in similar levels of support for the endorsement of the use of force and doing nothing. The participants seem to view the use of force as unlikely to be effective at stopping the terrorist attacks. This is a plausible explanation given the ongoing Iraq war, in which the use of force is not preventing insurgent attacks. Moreover, the participants may expect the use of force to escalate attacks on civilians.

Counter to the expectations of hypothesis H4-2, this study found that the number of casualties has no effect on emotional responses. There are several possible explanations. First, this finding is the result of the limited range of casualties (3, 23, and 53). Given that the intent of this work is to establish a baseline effect of casualties, these results could indicate that the number of casualties needs to be larger and vary more
widely to have an effect. This would indicate that individuals are insensitive to small variations in the numbers of casualties. Second, this result could reflect a habituation of the public to casualties in the ongoing conflict in Iraq. Although this study used the hypothetical state “Errata,” the participants’ exposure to the war in Iraq may have decreased their sensitivity to the casualties in this study. Third, the examination of “casualty events” outside the framework of an accumulation of casualties removes information on the importance of an event. Examining this casualty event in comparison with other casualty events may give the individual cues about how “bad” the event is. Imagine, for instance, if yesterday 53 people died and today three people died. Would this alter the response to the event? It seems plausible that previous attack serve as a baseline for each incident and without this baseline, an event loses some of it meaning. However, given the effect of identity and context, this effect would only be related to the number of casualties. Thus, this result and the possible explanations for it require further examination in the next studies.

The final set of results explores the relationship between different negative emotions and their effects on the endorsement of the use of force in response to the casualty event. Of the four negative emotions, sadness and anger were the dominant emotions. In addition, although sadness and anger are both negative emotions, as expected in hypothesis H4-4, only anger correlates with the endorsement of use of force. These findings support the idea that different negative emotions have different impacts. This replicates similar findings in a previous study (Mosher 2004) conducted on emotions in the context of terrorism and adds emotions in the context of war to this
study. Furthermore, the results show that sadness is greater in the context of terrorism and fear is greater when civilians are the casualties. It is probable that these interacting emotions lead to uncertainty about the best course of action. These findings indicate the need for more study into the emotional impact of casualties and the interactive effects of different negative emotions.

This study set out to examine the basic effects of casualties in international relations. Until this study, the literature on casualties was limited to examination of their effects in the context of an accumulation of casualties. This study adds to this literature by examining casualties in a single event. This focus on a single event makes it possible to examine and compare casualties in terrorism and war. In addition, this study examines the role of emotion in terrorism and war on the formation of foreign policy preferences. Ultimately, the results reveal that the context of the casualty event, the identity of the casualties, and the dominant emotion determine the impact an event has on foreign policy preferences. With events like the train bombings in Madrid and London, as well as the ongoing conflict in Iraq, there is a need to understand not only the underlying causes of these events but also the impact these casualty events have on the public. While much work remains, this study serves as a solid first step in establishing the impact of casualty events in different international conflict settings. The following study will expand on the effects revealed here and seek to replicate the findings on context and identity and determine if the number of casualties plays as large a role in casualty event effects as the previous literature indicates.
CHAPTER V
EXPERIMENT II

Introduction

In the first experiment, I examined the role of contexts (war and terrorism) and particulars of a single casualty event on emotions and policy preferences. The results lend support to my model of direct and indirect effects of casualties. Specifically, the results confirmed that the context (war and terrorism) and identities of the casualties effect policy preferences. In particular, Experiment I found support for differing effects of discrete emotions on policy preference formation, although the results suggest little or no effect from the number of casualties on policy preferences.

Explanations of this last finding could be the result of too narrow a range in numbers of casualties (3, 23, and 53). Alternatively, the finding could be caused by the exposure of participants to casualties in the second Iraq war. Another possibility is that a previous accumulation of casualties “adds” important information about the status of the ongoing conflict. In essence, without knowledge of previous casualties individuals have no way to determine whether the current casualty event indicates a worsening or improving situation. Given the vast array of casualty literature that focuses on the accumulation of casualties, I will examine the idea that the previous accumulation of casualties “adds” important information, which may alter interpretations and reactions to the event. Hence, I test what effect, if any, casualty accumulations have on the direct and indirect effects posited in my model in Chapter III. Thus, this experiment contributes to
the existing literature not only by examining the characteristics of a specific casualty event, but also by attempting to establish what effect previous casualties have on responses to these events. In particular, this study expands my investigation of the context of war and terrorism to include an examination of how much has already been suffered (i.e. previous casualties).

The Role of Previous Casualties

This experiment serves as a conceptual replication of the previous experiment. Thus, many of the hypotheses concerning the context and identity of casualties are carried over from Experiment I. The findings of Experiment I offered some new insights. First, I offer some additions to the hypotheses of that experiment. Second, I offer some new hypotheses on the effects of previous casualties on responses to casualty events.

Identity

The identities of the casualties had specific impacts on the policy preferences for the use of force, negotiation, and do nothing/withdrawal. These effects are modified by the context in which they occur. In terrorism, when civilians are the targets, the participants were less willing to support belligerent actions and more likely to want to reduce risk. The reverse seems to be the case when the casualties are military personnel. Specifically, in the context of war the pattern is the opposite. These findings indicate that anticipated casualties in a context matter, and this alters responses to casualty events. Thus, I add the following hypotheses:
H4-1a: Civilian casualties will decrease preferences for the use of force and increase preferences of withdrawal from the conflict event in war.

H4-1b: Military casualties will increase support for the use of force in terrorism and decrease preferences of withdrawal from the conflict event in war.

*Previous Casualties*

From Experiment I, we see that the number of casualties has little or no effect on policy preferences. Yet, this may be an artifact of a lack of information on previous casualties. The literature on casualties has focused on the accumulation of casualties, which equals the previous casualties rather than just current casualties (Gartner and Segura 1998, 2000; Gartner, Segura, and Wilkening 1997; Mueller 1973). Some of these studies (Kull and Ramsey 2001) have found that democratic elites and the public use the number of previous casualties as a benchmark of how the public and the government react to these events. It is possible that in order for the current number of casualties to be meaningful, individuals need something to compare with the current number of casualties. Thus, without the previous number of casualties, the current number of casualties may be too ambiguous for non-experts to use. This also implies that while the number of casualties may have an emotional component, it primarily serves as a cognitive signal used to evaluate the current event. The number of previous casualties provides information about the situation in which the casualty event occurred. This
element then determines whether the situation is improving, getting worse, or remaining the same. I expect that individuals respond to current casualties through the lens of previous casualties. The previous number of casualties is a benchmark of the seriousness of the situation; depending on these assessments, policy responses are altered. If there are no previous casualties, then the situation is worsening. If the number of current casualties is the same as the previous casualties, then the situation is bad but not worse. Lastly, if the previous number of casualties is larger than the current number of casualties, then the situation is improving. Therefore, I hypothesize that:

H4-2a: The number of previous casualties will affect policy responses to casualty events independent of what these casualties ‘tell’ us about the current situation. Specifically, worsening situations increase costs and, therefore, may decrease support for the use of force.

Thus, if the situation is improving, the individual may be unwilling to use more force. This effect will likely be altered by the context of the casualty events. It is even possible that this interpretation of casualty events will only apply to wars. This is because casualties in war occur frequently and in a pattern. Individuals can develop expectations about what is likely to happen in the near future and can calculate what the cost and benefits are going to be. This is a straightforward cognitive calculation.

For a number of reasons, terrorism does not allow for the same straightforward cognitive calculations. First, the point of terrorism is to strike without warning and cause
terrorism and fear. The intent of evoking this emotional response is to alter which costs are acceptable and which are not. Second, in order to evoke these responses, terrorist attacks occur semi-randomly and are not conducive to the formation of expectations or knowing what will happen. While cognitive analysis may work for war, for terrorism it may give less information about the situation or trend in casualties. This is supported by Mueller’s (2004) study discussed earlier. If this is the case, the effect of previous casualties in terrorism may have a lesser effect on policy preferences and a greater effect on emotional responses. Thus, I expect:

H4-2b: In war, previous casualties will act as additional information and thus have a greater effect on policy responses than emotional responses.

H4-2c: In terrorism, previous casualties will have a greater effect on emotional responses than on policy responses. Specifically, the previous casualties as a benchmark will exacerbate or diminish the effects of the other characteristics of terrorism.

Method of Experiment II

In Experiment II, I further explore the role of casualty events on people’s foreign policy preferences. Because Experiment II is a conceptual replication of the first experiment, there are a number of similarities between the two experiments. Specifically, Experiment II replicates the introduction, crisis scenarios, and measures
used in Experiment I. Experiment I, however, examined the effects of casualty events by themselves and outside of the context of the accumulation of previous casualties. The present experiment seeks to understand the role of previous casualties on responses to casualty events. For this reason, Experiment II differs from Experiment I in several features. First, unlike the previous experiment, the current number of casualties is held constant to enable the examination of the role of previous casualties. Second, a description of the number of casualties experienced in the previous two weeks is added. Thus, the following lines are inserted into the “News Update” which describes the number of previous casualties in the previous two weeks.

No previous casualties:

This incident marks the first American casualties in the last two weeks.

Previous casualties:

This incident brings the total number of American civilians killed in the region in the last two weeks to (10 and 25).

The previous casualty number thus lets participants know if the situation is worsening, the same, or getting better. In addition, this experiment adds a picture of the downed airplane to the “News Update.” This adds vividness of the casualty event and may increase the impact of the event in line with what people might see in a report of a real casualty event on the news. Figure 7 below is an example of these changes.
Figure 7: Example of News Update.

Five American Civilians Killed in Rocket Attack.

The Tima organization has claimed responsibility for the rocket that brought down commercial flight 7756 from Uttala, the capital city of the Errata’s neighboring island, Asu. At 3:17 pm, witnesses reported an explosion in the air over Uttala as the plane took off from Asu International Airport. The plane crashed, killing the crew and five American civilians. The names of the dead will not be released until their families have been notified. This incident marks the first American casualties in the region in two weeks.

Participants

One hundred thirty three (133) undergraduate students took part in this experiment. The participants were randomly assigned to one of twelve experimental conditions.

Experimental Design and the Treatments

This experiment used a 2x3x2 between groups factorial design to evaluate the effects of casualties. The factors are: (a) the context of the casualty event (terrorism/war), (b) the background of the casualties is changed (i.e., previous casualties 0/5/20), and (c) the identity of the casualties (i.e. civilian/military). The main measures
are the expressed emotions to the incident and the level of endorsement of the use of force, diplomacy, and withdrawal as a reaction to the event. See Table 5 for a representation of the experimental design.

Table 5: Experimental Design of Experiment II

<table>
<thead>
<tr>
<th>Terrorism</th>
<th>Civilian</th>
<th>Military</th>
</tr>
</thead>
<tbody>
<tr>
<td>War</td>
<td>Civilian</td>
<td>Military</td>
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Results

The results of this experiment again demonstrate support for the effects of casualty characteristics and emotions on foreign policy preference formation. In particular, there is support for the hypothesis that previous casualty accumulations add information to basic casualty events. Specifically, previous casualties seem to act as a benchmark that alerts the individual to the status of the conflict (i.e., improving, getting worse, or about the same). Furthermore, the participants wanted to negotiate and use force based on the context of the casualty event. In terrorism, participants preferred the use of diplomacy. In war-related casualties, the participants overwhelmingly preferred the use of force.

In terms of the effect of emotions, the results were generally supportive of the hypotheses. First, while sadness is associated with passive policies such as withdrawal from the conflict, anger is not. Second, although each emotion measured is related to the
others they have distinct effects. For example, in the case of civilian casualties in terrorism anger dominated, while in all other identity and context conditions sadness is the dominant response.

*Endorsement of the Use of Force*

A 2x3x2 ANOVA yields two significant effects of context and previous casualties on preferences for the use of force. Specifically, there was a greater preference for the use of force in the context of war (M = 6.84) as opposed to the context of terrorism (M = 5.49) \[F(1, 133) = 2.72, p<.10\]. The effect of previous casualties, however, is more complicated. The highest support for the use of force was in the case of five previous casualties (M = 7.39) as compared to no previous casualties (M = 5.56) and twenty previous casualties (M = 5.37), \[F(2,133) = 2.84, p<.06\] (see Figure 8 below). Thus, it appears that when the current casualty event doubles the previous casualties, respondents were more willing to take forceful action. They are less willing to take forceful action when casualties are decreasing or there are no previous casualties. Five previous casualties, which imply a doubling of the number of casualties, imply a worsening situation. Alternatively, twenty previous casualties may imply that the five casualties is an “improvement” and the participants responded accordingly. Lastly, with no previous casualties there is uncertainty as to the state of the crisis. Without knowing the status of the crisis, the participants reacted somewhere between an escalations and an improvement. Figure 8 below depicts these relationships.
Endorsement of the Negotiation

A 2x3x2 ANOVA yields one significant main effect and one significant interaction. First, the context of the casualty event had a significant effect on the preferences of the participants support for the use of diplomatic means of solving the crisis [F(1,132) = 3.61, p<.05]. Specifically, participants are more supportive of the diplomatic efforts when the context of the crisis is terrorism (M = 6.55) as opposed to war (M = 5.74). This pattern of support is the opposite of the pattern I found in support for the use of force. Hence, if the context is war then participants prefer to use force and less negotiation while they prefer to negotiate and use less force when facing terrorism.
Second, there is a significant interaction of the identity of the casualties and previous casualties on support for diplomatic solutions to the crisis [F(2,132) = 2.51, p<.08]. These results show that there is a similar pattern as the effect of the use of force. In particular, when casualties are doubled the effects are an inverted U but only in the case of civilian casualties.

For military casualties, support for diplomacy reflects a U-shape. Figure 9 below shows that patterns of support for diplomatic solution reversed depending on the identity of the casualties. Specifically, the support for diplomatic efforts is highest for civilians (M = 6.84) when there are five previous casualties. The participants are least supportive of diplomatic efforts for civilian casualties when the previous casualties indicate a declining rate of casualties (i.e., twenty previous casualties) (M = 5.57). Alternatively, the highest level of support for diplomatic efforts when the casualties are military occurred when there are twenty previous casualties (M = 6.73). Indeed, the participants are the least supportive of diplomatic efforts when military casualties are doubled (i.e., five previous casualties) (M = 5.90).

These results indicate that if the situation is deteriorating in the context of terrorism, the participants believe that increased diplomacy will work. Given the participants exposure to the second Iraq war, these results may reflect a belief that further use of force may be ineffective. Alternatively, in military casualties in war the participants want to negotiate when the situation is improving. This could indicate that soldiers are expected to die in war and thus negotiations will be delayed, or that individuals in war want to negotiate only from a position of strength.
Figure 9: The Effect of Previous Casualties and the Identity of Casualties on Support for Diplomacy.
Endorsement of the Withdrawal

A 2x3x2 ANOVA yields no significant main effects and one significant interaction for support for the immediate withdrawal from the crisis. There is a significant interaction of the identity of the casualties and the number of previous casualties on preferences for withdrawal \[F(2,132) = 3.59, p<.03\]. This interaction is the same pattern of support for withdrawal as found in support for diplomatic solutions. It seems that when the situation is getting worse, a doubling of the number of previous civilian casualties, then the participants want out of the conflict more than when the worsening is reflected in military casualties. Lastly, when there are no previous casualties then the identity of the casualties does not matter for this particular policy. See Figure 10 below for a depiction of these relationships.

Figure 10: The Effect of Previous Casualties and the Identity of Casualties on Support for Withdrawal.
In order to explore the difference in relative preferences of the three policies I performed a repeated measures 2x3x2x(3) ANOVA. First, this measure reveals that there are significant differences in the preferences for the three policies \([F(2,254) = 3.79, p<.02]\). Specifically, this ANOVA reveals that across experimental conditions, the participants in this study lean toward the endorsement of the use of force option with a mean of 6.47 on a 0-10 scale and diplomatic negotiation with a mean of 6.45, in contrast with withdrawal from the conflict with a mean of 5.51. Hence, the decision makers want something to be done about the situation, although they do not necessarily differentiate in their preferences between the use of force or diplomacy. Second, the context of the casualty event had a significant interaction with policy preferences \([F(2,254) = 3.14, p<.04]\). As the figure below reveals that within the context of terrorism the preferred policy is diplomacy (M = 6.77) followed almost in a tie by the use of force (M = 5.87) and withdrawal from the crisis (M = 5.81). Alternatively, the use of force (M = 7.15) is the clear front choice in the context of war as opposed to diplomacy (M = 6.09) and withdrawal from the crisis (M = 5.18). The type of context in which the casualty event occurs does matter. Figure 11 below depicts these relationships.
Doing Something versus Doing Nothing

Given that preferences for the use of force and diplomacy means are so close to one another (M = 6.47 and M = 6.45) and so much higher than the preference for withdrawal from the crisis, it is possible that participants simply prefer to take some action rather than take no action. To analyze this possibility I coded a dichotomous variable “1” if the participant preferred to either use force or diplomacy over withdrawal and “0” for everything else. The only significant result is an interaction between the context of the event and the identity of the casualty [F(1,133) = 3.306,p<.07]. As Figure 12 below indicates, there is in general a preference for doing something with the mean at .92 on a 0 to 1 scale. However, from the chart we can see that support for doing
something is at one hundred percent in the case of civilians in terrorism and soldiers in war. Support for doing something drops slightly when soldiers are killed in terrorism and civilians in war. Thus, when those killed are not of the expected identity the participants are less sure of what they want to do even at the basic level of doing something versus doing nothing. This is in line with the findings in Experiment I that casualties differing from expected identities altering policy preferences.

**Figure 12: The Impact of the Context of the Casualty Events and the Identity of the Casualties on Support for Taking Some Action in Response.**

*Greater Force, Diplomacy, or Withdrawal*

Given that the participants overwhelmingly wanted to take some action, it is important to consider which actions they prefer to take and how the independent variables affect these preferences. For both diplomacy and the use of force, I created a
dichotomous variable with “1” indicating that the level of support for a particular policy was greater than the other two policies. Thus, for the greater diplomacy variable, a “1” is coded if the participant expressed greater support for the use of diplomacy than the use of force and withdrawal from the crisis. Alternatively, for greater force a “1” is coded if the participant expressed greater support for the use of force than the use of diplomacy and withdrawal from the crisis.

**Greater Force.** The results show that there was a significant main effect of the context \[F(1,131) = 2.65, p<.10\]. Support for the use of force was greatest in the context of war (M = .43) as compared to terrorism (M = .29), which replicates findings of context and the use of force presented above. There was also a significant interaction of the context, identity, and previous casualties \[F(2,131) = 4.79, p<.009\]. An examination of Figure 13 reveals distinct effects between war-related and terrorism casualties. In the context of war, support for greater force is higher for military casualties than for civilian casualties. The exception to this occurs when the previous casualties indicate that the situation is improving, in which case the support for greater force reverses. In the context of terrorism, support for greater force is highest when the casualties are civilians rather than military. Again, this pattern reverses when the previous casualties indicate that the situation is improving. Thus, expected identity plays an important role, but this effect is altered by the status of the current situation, as indicated by previous casualties.
**Greater Diplomacy.** The results show that there were three significant main effects. The first significant main effect is in the context \[F(1,132) = 4.25, p<.04\]. These results show that the greatest support for diplomacy over all other policies occurs in terrorism (M = .55) as compared to war (M = .36). This may imply that neither the use of force nor withdrawal is seen as likely to stop or hinder terrorism. The second significant main effect is the identity of the casualties \[F(1,32) = 3.72, p<.05\]. In this case, support for diplomacy was highest when the casualties are military (M = .55) as compared to civilians (M = .39). The final significant main effect is of previous casualties \[F(2, 132) = 2.72, p<.06\]. The results show that support for diplomacy was
highest when there were twenty casualties (M = .55) followed by zero (M = .48) and five (M = .35). This indicates that when the situation is getting better or when the casualties are the first set of casualties that participants see diplomacy as having the greatest probability of success. Alternatively, when casualties stay the same the participants may have a “wait and see” mentality.

In addition to the above significant main effects, there is a significant interaction. The interaction is between the identity and previous casualties \( [F(2,132) = 2.52, p<.08] \). Figure 14 demonstrates that when the casualties are military and the situation is bad, support for greater diplomacy is low. When the situation is worsening or improving, support for greater diplomacy is high. Alternatively, support for greater diplomacy is low for civilians when the situation is worsening or bad and rises when the situation is improving. The changing response here is primarily in the worsening situation; military casualties result in a wish for more diplomacy over any other option and civilian casualties result in lower support for greater diplomacy.
Figure 14: The Impact of Identity of Casualties and Previous Casualties on a Greater Preference for Diplomacy.

Effects of the Experimental Factors on Emotions

To examine the effects of the casualty event characteristics on emotions I ran a repeated measures ANOVA. The results reveal a significant difference between the measure of the emotions for sadness, anger, and fear \( [F(2, 264) = 51.71, p<.0001] \). These results reveal that the participants expressed greater levels of sadness (M = 6.53) followed by anger (M = 5.7) and fear (M = 3.95). As in the previous experiment, this indicates that sadness is the dominant emotion in this experiment. However, these numbers are still very close even though they are statistically different from one another.
This finding is important because of the passive implications of sadness for information processing and choice. There is also a significant interaction of the context of the event and the identity of the casualties on the repeated measure of the emotions [F(2, 264) = 3.27, p<.03]. This finding is important because of the implications for the effects of specific emotions. Specifically, the significant interaction described earlier on different emotions holds across all conditions except in the case of terrorism and civilians. The results indicate that the level of anger is lowered to the level of sadness.

*The Role of Emotions*

Given the role of emotion in the model, it is important to determine if emotion played a role in the policy preferences. As a first analysis of emotions (i.e., sadness, anger, and fear), I determined the correlation of the policy options with each emotion. There are two significant emotion and policy correlations. First, sadness and withdrawal were positively correlated (r = .164). Second, anger and withdrawal are negatively correlated (r = -.142). These findings are in line with expectations of the role of these specific negative emotions. These effects are depicted in Table 6 below.
Table 6: Correlations of Policies and Emotions

<table>
<thead>
<tr>
<th></th>
<th>Use of Force</th>
<th>Diplomacy</th>
<th>Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>.037</td>
<td>.058</td>
<td>-.149**</td>
</tr>
<tr>
<td>Sad</td>
<td>.054</td>
<td>.077</td>
<td>.161*</td>
</tr>
<tr>
<td>Fear</td>
<td>-.126</td>
<td>.033</td>
<td>.111</td>
</tr>
</tbody>
</table>

* Significant at .05 level; ** Significant at the .10 level

To ensure that these emotions were indeed distinct emotions, I determined how closely these emotions correlate with one another. As expected sadness, anger, and fear are all significantly correlated, although the correlation is not so high that we can say they are measuring the same thing. Specifically, sadness and anger were correlated at $r = .42$, while sadness and fear were correlated at $r = .55$, and anger and fear was correlated at $r = .35$.

Conclusion

This experiment set out to explore further the relationship between casualty characteristics, negative emotions, and policy preference formation. Unlike the previous experiment, this study examined variations in previous casualties as a benchmark for current casualties, in addition to the context of the conflict event and the identity of the casualties. The effects of emotions were also consistent with the hypotheses and the results of the previous experiment. Again, anger and sadness were the dominant emotions. Each emotion was stronger in specific contexts and identities. For instance, sadness dominated war and military casualties while anger dominated terrorism and
civilian casualties. This demonstrated two ideas. First, different elements cause different emotions. Second, different emotions are related to different policy preferences and/or choices. This study replicates many of the findings of the previous experiment and once more supported the idea that war-related casualties have a fundamentally different impact than casualties resulting from acts of terrorism (H1). In essence, there are significantly different effects based on the context of the casualty event. Indeed the results demonstrate that individuals prefer the use of force more in war-related incidents than in terrorism. Individuals prefer negotiation more in terrorism than in war-related incidents. Although this is supportive of H1, it does not support Mueller’s (2004) idea that an “overreaction” leads to the use of force. Finally, it seems again that the participants prefer to takes some action rather than no action in both terrorism and war.

Similar to the previous experiment, the identity of the casualties plays an important role in reactions to casualty events. Again, identity interacted with the context of the event. For instance, terrorism and civilian casualties played an important role in determining whether sadness or anger dominated the decision-making process. There is also support for H3c and H3d because the general effects of the identities of the casualties alter support for certain policies. Specifically, military casualties decrease support for the negotiation while civilian casualties increase support for negotiation. In addition, the results demonstrate that support for diplomacy and the use of force over withdrawal is dependent on the identities of the casualties and the context of the event. However, given the extremely high level of support for these policies, regardless of the context and identity, the results are not conclusive. Finally, unlike the previous
experiment, the number of previous casualties had a significant impact. In particular, the results demonstrated that previous casualties by themselves and in interaction with the identity and context of the casualties altered responses to casualty events. I will discuss this further in Chapter VI.

This experiment also demonstrated that previous casualties do have a significant impact on the responses to the casualty event. In fact, the number of previous casualties altered many of the observed effects of the contexts and identity, as predicted by H2a-d. From the effects, it is clear that previous casualties act as a “benchmark” of the status of the current conflict. It serves to alert individuals that something is getting worse, staying the same, or better. In one case where casualties are bad (doubled) individuals’ support for the use of force is higher than when it is an improving or worsening situation. Thus, previous casualties altered support for different foreign policies. In addition, previous casualties also affected emotional responses to the casualty event. Therefore, although the current number of casualties had no effect in the previous experiment, it may be the result of a lack of information. The question is how do different levels of current casualties affect the context of different levels of previous casualties. Chapter VI will explore this idea.
CHAPTER VI
EXPERIMENT III

Introduction

In Experiments I and II, I examined the role of different characteristics of a casualty event and specific negative emotions it triggers regarding support for policy preferences. Experiment I examined the role of identity, the number of casualties in the current event, and the context of the casualties. Experiment II examined the role of identity, the number of casualties before the current event, and context of the casualties. In both experiments, the identities of the casualties and the context of the casualty event played a crucial role in determining both support for specific foreign policies and the emotions evoked by these events. In particular, the role of the expected identity in the different contexts proved pivotal in determining the effect of the casualties on policy preferences and specific emotions evoked.

Despite the importance of the identity of casualties and the context of the casualties, the number of casualties had no impact in Experiment I. This led to the question of why this was the case. Was this result an artifact of the experiment or was there some information missing that made these numbers more or less relevant? It seemed possible that the Experiment I gave no base rate with which to compare the numbers. In essence, there was no way for a non-expert to judge how severe the situation was. In order to determine whether this is the case, Experiment II held the number of current casualties constant while introducing the number of previous casualties. This
provided a framework to evaluate the sensitivity associated with the “current” number of casualties. The results of Experiment II demonstrate that the introduction of previous casualties has important consequences for policy preferences. Specifically, these results show that variations in the base rates alter expectations and individuals’ emotional and policy responses. Thus, it seems previous casualties set a benchmark by which individuals set expectations. However, altering the number of previous casualties or the current number of casualties alone capture only part of the role that numbers of casualties play in response to casualty events.

In this experiment, I seek to examine casualties as they vary across the number of current and previous casualties. I do this by setting casualties at both low and high levels as well as offering variations in the current event’s number of casualties. With alterations in both current and previous casualties, the participants will have information regarding the status of the current situation. “New” casualties let individuals know how bad the current situation is while “Old” casualties tell individuals whether the situation is deteriorating, escalating, or improving.

**Hypotheses**

In Experiment I, I found little or no effect of the number of casualties on policy or emotional responses. In that experiment there was no reference to previous casualties to act as a benchmark for the seriousness of the current crisis. The importance of these benchmarks was demonstrated in Experiment II. This experiment examines the role of both current and previous casualties. The question is what are the effects? In this work,
previous casualties will be zero or a large number (in this case, 50). The current number of casualties is either large (190) or small (in this case, 5). If I compare casualty combinations with no previous casualties and get no effect, as in Experiment I, it would suggest that the actual current number of casualties matters only in comparison to the previous casualties.

H6-1: Current casualties have no effect without previous casualties.

Alternatively, if there is an effect then the number of current casualty numbers matters. This suggests that the number spread of current casualties in Experiment I was too small. Thus:

H6-2: In order for the current number of casualties to have an effect, there must be a large separation of the numbers.

If there is an effect when there are previous casualties, it implies that improving or deterioration of the situation adds information to the current situation. The previous casualties or history helps explain the current crisis. Given the lack of results for the impact of casualty numbers in a given event, as in Experiment II, I propose here that the impact of casualty numbers is related to the number of previous casualties. As previous casualties set expectations about how many casualties we can expect in the current event, I propose the following alterations to the hypothesis on the number or casualties
as described in Experiments I and II. Specifically, if the current casualties are fewer than the previous casualties, there will be a sense that the situation is improving and therefore:

H6-3: If the current casualties are less than or equal to the previous casualties, there will be greater sadness and passive actions are more likely.

H6-4: If the current casualties are greater than the previous casualties are, then there will be greater anger and aggressive actions are more likely.

Because this work addresses the role of both current and previous casualties there will be some effects of these casualties based on the identities of the casualties. In essence, soldiers are more likely to be killed by the very nature of their job while civilians are not and indeed are not considered legitimate targets. Thus, I propose some additions to the hypothesis on the number of casualties presented in Experiment I.

H6-5: When the number of civilian casualties exceeds expectations set by previous casualties the greater the support for negotiation and/or withdrawal from a conflict.
Methods and Research Design

As discussed above, the results of Experiment II indicate that there is a relationship between reactions to casualty events and previous casualties. This experiment explores the relationship of previous casualties by manipulating both the number of previous casualties and the current number casualties. This experiment is similar to the previous studies. The primary difference is in the “News Update,” which describes the number of casualties in the current event and the previous two weeks. The number of casualties in a specific incident is altered to either 190 or 5. These numbers of current casualties are chosen because they are widely different from one another. This will help ensure a potential lack of results of current casualties because they do not have an effect and not that the range of numbers was too small. In addition, previous casualties are changed to either 0 or 50. These numbers will help us create clear categories of deteriorating or improving situations discussed above. This allows for the expansion of our understanding of the role of casualties at the same time as it replicates the some of the conditions of previous experiments. The Figure 15 is an example of these changes.
Figure 15: Example of Breaking News.\textsuperscript{25}

\begin{center}
\begin{tabular}{|c|}
\hline
190 American Soldiers Killed in Rocket Attack \\
\hline
\end{tabular}
\end{center}

The Tima organization has claimed responsibility for the rocket that brought down military flight 7756 from Uttala, the capital city of the Errata’s neighboring island, Asu. At 3:17 pm, witnesses reported an explosion in the air over Uttala as the plane took off from Asu International Airport. The plane crashed, killing 190 American soldiers. The names of the dead will not be released until their families have been notified. This incident raises the total number of Americans killed in the last two weeks from 50 to 240.

Participants

One hundred forty (140) undergraduate students took part in this experiment. The participants were randomly assigned to one of sixteen experimental conditions.

Experimental Design and the Treatments

This experiment uses a 2x2x2x2 between groups factorial design to evaluate the effects of casualties event. The factors are: (a) the context of the casualty event (terrorism / war), (b) the number of casualties in this event (5 /190), (c) the number of previous casualties (0 /50), and (d) the identities of the casualties (i.e. civilian / military).

\textsuperscript{25} The numbers of casualties listed in this news update change depending on the experimental condition.
The main measures are the expressed emotions to the incident and the level of endorsement of three policies: the use of force, diplomacy, and withdrawal from the crisis. See Table 7 below for a representation experimental design.

### Table 7: Experiment Design for Experiment III

<table>
<thead>
<tr>
<th>Casualty Accumulation Range</th>
<th>Zero</th>
<th>Fifty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>190</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>190</td>
</tr>
<tr>
<td><strong>Terrorism</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>War</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Military</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Results

Like the previous experiments, this experiment supports my hypotheses about the relationship between casualty characteristics and policy preferences. The exception to this is that there is no effect on the characteristics of the casualty event on support for the use of force. This study also shows that both current and previous casualties affect support for different foreign policies. Both types of casualties had individual and interactive effects on policy responses. Although previous casualties are used as a benchmark of the seriousness of the current event, the current casualties also offer important information. Finally, the current and previous casualties also interacted with the context of the event and the identities of the casualties.
The results of this experiment also reveal the expected effects of emotions. In particular, the emotion expressed at the highest levels is sadness. Combined with the low correlation of sadness and the use of force, this helps explain why there were no effects of the variables on the propensity to support the use of force. As in the previous studies, without anger as the dominant motivator, support for the use of force is diminished. Each of the emotions (sadness, anger, and fear) examined here relate to specific variables. In particular, sadness and anger are related to all the independent variables. Fear; however, was only related to the context of the crisis.

*Effects of Experimental Factors on the Three Policies as a Repeated Measures*

As in Experiment II, I performed a repeated measures ANOVA in order to explore the difference in relative preferences for the three policies. This revealed one significant main effect and two nearly significant interactions. The significant main effect is of the repeated measures for the policy [F(2,280) = 16.87, p<.0001]. This result demonstrates that each of the policy measures is capturing something different with negotiation dominating. However, the primary difference between these policy preferences is between the active policies, the use of force (M = 6.27) and negotiation (M = 6.55), and withdrawal (M = 4.99). Participants overwhelmingly prefer to take action rather than withdraw from the crisis across experimental conditions. For a graphic depiction of this, see Figure 16 below.
Figure 16: Levels of Support for Different Foreign Policies in Response to the Casualty Event.

Endorsement of the Use of Force

A 2x2x2x2 ANOVA revealed no significant main effects or interactions of the independent variables on support for the use of force. This result is inconsistent with the findings of the previous experiments. Specifically, Experiment II demonstrated that all the variables either have a significant main or interactive effect of on preferences for the use of force. The difference between this experiment and Experiment II is that sadness is the dominant emotion in this experiment. This led to a less aggressive policy preference.
Endorsement of the Diplomacy

A 2x2x2x2 ANOVA reveals one significant main effect and one nearly significant interaction of the independent variables on support for diplomacy. First, there is a significant main effect of casualties from the current crisis event \([F(1, 140) = 3.06, p<.08]\). Participants who are exposed to 190 current casualties express greater levels of support for diplomacy (\(M = 6.93\)) than those who are exposed to only 5 current casualties (\(M = 6.27\)). In addition, there is a nearly significant three-way interaction of identity, current casualties, and previous casualties \([F(1, 140) = 3.03, p<.08]\) (See Figure 17 below). The results show that when the casualties are soldiers, the highest levels of support for diplomacy were when the current and previous casualties are at their highest levels. Thus, when the situation is at its worst, individuals want to use diplomacy to solve the crisis. Essentially, they are trying to find a way to resolve the conflict before any further casualties occur. Alternatively, when it appears that the trend of casualties is reversing or getting better (i.e., 5 current casualties and 50 previous casualties) support for the use of diplomatic means to solve the crisis goes down.
When the casualties are civilians, however, the effects of the casualties on diplomacy are more complex. In the case of civilians, the highest support for diplomacy occurs when the increase of casualties is at the highest level. Unlike military casualties, the lowest support for diplomacy does not occur when there is an improvement but rather when the event is the first event and has the fewest casualties (i.e., 5). In this case the participants may be taking a “wait and see” approach to the crisis.


**Endorsement of Withdrawal**

The ANOVA revealed a significant main effect and one nearly significant interaction. The results demonstrate that the context of the crisis affects support for withdrawal from the crisis \([F(1,140) = 3.67, p<.05]\). Specifically, the participants were more supportive of withdrawal from the conflict when the context of the crisis is terrorism \((M = 5.43)\) than when the context is war \((M = 4.54)\). Thus, it seems that individuals do not want revenge for terrorist attacks; they want to avoid further casualties. In addition, there is a nearly significant interaction of identity and current casualties \([F(1,140) = 2.59, p<.10]\). An examination of Figure 18 reveals that there is more support for the withdrawal of troops when there is an increase of casualties for civilians; however, this pattern is reversed if the casualties are military.

**Figure 18: The Impact of the Identity of Casualties and Current Casualties on Support for the Withdrawal from the Crisis.**
Greater Force, Diplomacy, or Withdrawal

As with Experiment II, the participants overwhelmingly wanted to take some action. It is therefore important to consider which actions they prefer to take and how the independent variables affect these preferences. For both diplomacy and the use of force, I created a dichotomous variable identical to the same used in Experiment II.26

Greater Force. There are no significant effects of greater force in this experiment. This result is consistent with results presented previously in this study. These results, however, are different from Experiment II in which there is a significant main effect of the context and interactive effect of the identity, context, and previous casualties.

Greater Diplomacy. There is one significant interaction of the identity and current number of casualties \[F(1,140) = 4.21, p<.04\]. As Figure 19 below reveals, when the casualties are civilians, support for diplomacy is highest when the number of current casualties is highest. The reverse is true for military casualties.

---

26 For both diplomacy and the use of force, I created a dichotomous variable with 1 indicating that the level of support for a particular policy was greater than both of the other two policies. Thus, for the “greater diplomacy” variable a one is coded if the participant expressed greater support for the use of diplomacy than the use of force and withdrawal from the crisis. Alternatively, for “greater force” a one is coded if the participant expressed greater support for the use of force than the use of diplomacy and withdrawal from the crisis.
Figure 19: The Impact of the Identity and the Current Number of Casualties on Greater Support for Diplomacy Compared to Other Policies.

The Role of Emotions

As in Experiment II, the role of emotion in the model is important, thus, it is necessary to determine if emotion played a role in the policy preferences. As a first analysis of emotions (i.e., sadness, anger, and fear), I determined the correlation of the policy options with each emotion. The results indicate that anger and the use of force are correlated ($r = .418$, $p < .0001$). This is an important replication of the findings of both previous experiments. In addition, sadness and to a lesser degree the use of force are also correlated ($r = .159$, $p < .04$). Fear, alternatively, is correlated to withdrawal from the
crisis \((r = .266, p<.001)\). For the most part, these findings fit with the idea that anger is conducive to aggressive foreign policy choices and fear is associated with withdrawal from a conflict.\(^{27}\) Table 8 shows all the correlations of the emotions as well as the policies.

**Table 8: Correlations of Policies and Emotions**

<table>
<thead>
<tr>
<th></th>
<th>Use of Force</th>
<th>Diplomacy</th>
<th>Withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>.418*</td>
<td>.061</td>
<td>.118</td>
</tr>
<tr>
<td>Sad</td>
<td>.159**</td>
<td>-.028</td>
<td>.037</td>
</tr>
<tr>
<td>Fear</td>
<td>.09</td>
<td>-.09</td>
<td>.266*</td>
</tr>
</tbody>
</table>

\(^{*}\) Significant at .05 level; \(^{**}\) Significant at the .001 level

*Effects of the Experimental Factors on Emotions as a Repeated Measure*

To examine the effects of the casualty event characteristics on emotions, I ran a repeated measures ANOVA. As with Experiment II, the results reveal a significant difference between the measure of the emotions for sadness, anger, and fear \([F(2,280) = 82.23, p<.0001]\). In line with Experiment II, participants expressed greater levels of sadness \((M = 7.03)\) followed by anger \((M = 6.38)\) and fear \((M = 4.26)\). These results show that while sadness is the dominate emotion that is expressed, the levels of anger are similar. However, the level of fear expressed by the participants is much lower than either anger or sadness.

\(^{27}\) In addition, all three negative emotions were correlated significantly and positively with one another. Anger was correlated with sadness at \(r = .48\). Anger and Fear were correlated at the \(r = .39\). Sadness and fear were correlated at \(r = .49\). Thus, although correlated none of these emotions were correlated so highly that we would say they measured or were the same emotions.
There are also two nearly significant interactions. The first nearly significant interaction is a three way interaction of the emotions, context of the casualty event, and previous casualties \(F(2,280) = 2.48, p < .08\). Figure 20 depicts this interaction.

Figure 20: The Impact of Casualties and Previous Casualties on Specific Emotions.

![Graph showing the interaction of emotion, context, and previous casualties](image)

Figure 20 indicates that sadness is highest in both terrorism (\(M = 7.51\)) and war (\(M = 7.26\)) when there are no previous casualties and lowest in terrorism (\(M = 6.62\)) and war (\(M = 6.74\)) when there were 50 previous casualties. Thus, when the event represents a new occurrence there is greater sadness. The results also reveal that, as with sadness, the highest levels of anger in both terrorism (\(M = 6.66\)) and war (\(M = 6.58\)) occur when
there are no previous casualties. They are lowest in terrorism \((M = 6.37)\) and war \((M = 5.84)\) when there were 50 previous casualties. This effect is more dramatic in the case of war. Lastly, Figure 20 shows that expressions of fear occurred in a different pattern than sadness and anger. Specifically, individuals experiencing terrorism events express higher levels of fear across past casualty conditions than when the event is within the context of war. When there is a terrorism event with no previous casualties, individuals had more fear \((M = 5.38)\) than individuals with no previous casualties in a war \((M = 3.71)\).

Similarly, although with a smaller effect, when there is a terrorism event with 50 previous casualties individuals expressed more fear \((M = 4.12)\) as opposed to war \((M = 3.82)\). Therefore, the context does matter. Interestingly, the highest level of fear occurs when the terrorism event has no previous casualties. Thus, while fear is expressed at the lowest levels, it is at its highest level when the casualties are the first or “new” casualties in terrorism. This perhaps reflects an uncertainty as to the future occurrence of terrorism and thus, possible danger to the individual. In essence, new casualties may lead to more emotional responses in terrorism than when the casualties are “old” or already occurring casualties.
Effects of the Experimental Factors on Specific Emotions

Given that each of these emotions has a significant and independent effect, I also examined the effect of the experimental factors on each of the emotions. Below I explore the significant and nearly significant effects by each emotion.

Sadness. A 2x2x2x2 between factors ANOVA reveals a nearly significant and two significant interactions on sadness. There is a nearly significant interaction of the context of the casualty event and the identity of the casualty [F(1,140) = 2.86, p<.09]. Figure 21 shows sadness is highest with military casualties in terrorism (M = 7.2) and with civilian casualties in war (M = 7.08) and lowest with military casualties in war (M = 6.92) and civilian casualties in terrorism (M = 6.92). This seems to reflect expectations about the identity of the victims in each casualty context (i.e., soldiers die in war and civilians die in terrorism).
There is also a significant interaction of the context of the casualty event, the identity of the casualty, and the number casualties in the current crisis event \(F(1,140) = 8.04, p<.005\). Figure 22 shows that for civilian casualties, sadness is at its highest in terrorism when the casualties are at low levels (5) rather than when they are at the highest levels (190). The opposite is true for civilians in war, with the highest sadness at the highest levels of casualties rather than the lowest. The difference between sadness levels is also wider in the context of war (M = 6.28 vs. M = 8.12) as compared to terrorism (M = 7.08 vs. M = 6.68). For military casualties, however, greater sadness is expressed at the highest levels of casualties in terrorism rather than the lowest. In the context of war, the pattern is again reversed with the lowest levels of casualties resulting
in the highest levels of sadness. Thus, it seems that military versus civilian casualties evoke opposing responses when it comes to sadness.

Figure 22: The Impact of Context, Current Number of Casualties, and the Identity of the Casualties on the Level of Expressed Sadness.

The final significant interaction concerns the identities of the casualties, the number of casualties in the current crisis event, and the number of previous casualties [F(1,140) = 9.51, p<.002]. Figure 23 demonstrates that sadness levels differ by identity but also according to the status of the current situation based on both past and current casualty levels.
Figure 23: The Current and Previous Number of Casualties, and the Identity of the Casualties on the Level of Expressed Sadness.

Specifically, the highest levels of sadness are when the current situation is making an already bad situation worse. Put differently, sadness is highest at the highest levels of current and previous casualties. When there is little information to base responses to the casualties on (i.e., no previous casualties), sadness remains high regardless of high or low current casualties. In this case, participants know the situation is deteriorating but without knowledge of previous casualties, they do not know how badly. The lowest levels of sadness, as you might expect, comes when the casualty
situation indicates an improving situation (i.e., lowest current casualties, highest previous casualties).

Alternatively, when the casualties are military personnel, responses seem dependent on current casualty levels. When the current situation is not so bad or at the lowest casualty levels, then sadness is similar across previous casualties (M = 6.95 vs. M = 7.2). However, when the current casualties are at their highest levels, then previous casualties become important as a benchmark of the status of the situation. Specifically, when there were previous casualties and a high number of current casualties, sadness is at a lower level than when this high number of current casualties marks the first casualties. Thus, when there are previous casualties, it is less saddening when there are more casualties than if this is the first casualty event. It may also be, however, that another emotion is dominating one of these categories.

These results indicate that “new” casualties have an impact on levels of sadness in conjunction with the highest levels of casualties. Specifically, when the casualties are soldiers we see greater sadness with new casualties than with “old” casualties. Alternatively, with civilian casualties the biggest difference occurs between the “old” casualties than if the casualties are the first casualties.

**Anger.** There is a significant interaction of the context of the casualty event, the identity of the casualty, and the number of casualties in the current crisis event [F(1,141) = 6.47, p<.01]. Figure 24 indicates that when the casualties are soldiers, the context of the event affects anger responses to high and low casualty levels. Specifically, when casualties are low in terrorism there are lower levels of anger than when there are a high
number of soldiers killed. The reverse response to military casualties occurs in war with the lowest level of casualties resulting in higher levels of anger than the highest levels of casualties. For civilian casualties, the context is also important but the pattern of anger responses is opposite to what is seen in military casualties. Unlike military casualties, with civilian casualties, the lowest levels of casualties have the highest levels of anger in terrorism and higher levels of casualties in war result in higher levels of anger. These results demonstrate the important role of the context and identity in affecting emotions in the model and thus the response to these events.

**Figure 24: The Impact of Context, Current Number of Casualties, and the Identity of the Casualties on the Level of Expressed Anger.**

[Bar chart showing the interaction between context, identity, and current casualties on the level of expressed anger]
Fear. There was only one significant main effect of the context of the crisis event on fear \(F(1,141) = 4.32, p<.03\). Specifically, individuals within the context of terrorism (M = 4.68) were more afraid than individuals in the context of war (M = 3.76). This again points to the importance of casualty characteristics, in this case the context of the event, in affecting responses to the conflict events.

Conclusion

This study set out to replicate the findings of the first two studies and determine the relationships between past and present casualties on foreign policy preferences and emotions. The results again support the impacts of context and the identities of the casualties. This experiment added to these results by clarifying the role of both current and previous casualties. Finally, this study again demonstrated that specific emotions have distinct effects.

In particular, this study and Experiment II show that the number of casualties matters. Specifically, the number of casualties has an effect but without knowledge of previous casualties, this effect diminishes or disappears. There are several interactive effects of casualties found in this experiment. Essentially, participants used previous casualties to interpret the current casualties. This effect, however, is often modified by the identities of the casualties. For example, when both current and previous casualties indicate that the situation is getting worse, individuals supported diplomacy. Although when the casualties indicate an improvement in the situation, the identities of the casualties are important in determining support for diplomacy.
The results of this study also demonstrated the effects of specific emotions on policy preferences. Again, anger was correlated with the use of force and fear was associated with withdrawal. Anger and sadness were basically equivalent in levels of expressed emotion, but there were distinct effects of each emotion. It appears that the effects of sadness were greater in this study than in Experiment II. Because it was established that sadness has no direct effect on the use of force, I am not surprised by this experiment’s findings. Indeed, most of the effects in this study were on diplomacy. Despite this, the specific effects of the identity, context, and casualty numbers on emotions are similar to the findings in the previous experiment. Thus, it seems that casualty numbers result in more cognitive responses and greater levels of sadness over anger and fear. This in turn resulted in the dominance of diplomacy rather than force, as we might expect if anger was dominant.

Lastly, and critically to this study, the context of the casualties continues to have distinct effects both on the emotions and on policy preference formation. Changing the context of the crisis alters what effect the other casualty characteristics will have. This explains why scholars have found consistent effects of casualties across different wars. While this study illustrates that casualties in individual events are as vital to reactions as their accumulated effects, it also illustrates that the context of the casualties is just as important.
CHAPTER VII
APPLICATIONS TO A REAL WORLD CASE

Introduction

Thus far, I have focused on examining the impacts of the characteristics of casualty events on emotional responses and foreign policy preferences in hypothetical experimental casualty events. These experiments have shown that the context of the casualty event and the identities of the casualties effect both emotional responses and policy preferences. The effect of the number of casualties was more complex. Specifically, the current number of casualties only had an effect when they were put in the context of previous casualties. Ultimately, these three studies lend support for the main propositions of my model. However, these events were hypothetical and tested responses of only of United States citizens. It is possible that these observed effects would only apply to this limited society with a particular history. The question therefore becomes do the findings from these experiments correspond to real world events?

In order to answer this question I sought to take the model and apply it to civilian responses to a set of real world casualty events. By examining my model in this type of setting, I will be testing my model with multiple measures. This multi-method approach will offer support not only for the theoretical foundations of the model (chapters IV-VI) but also demonstrate that the model is applicable to range casualty events in and outside the United States (current chapter). This chapter therefore will add a unique element to
the literature on the role of the context, identity, and number of casualties on public responses to casualty events.

To achieve this goal it is necessary to examine a set of casualty events that has examples of or variation in all the independent variables previously examined. Specifically, I looked for a case in which casualty events occur in the context of terrorism and war, has both military and civilian casualties, and has variations in the numbers of casualties killed. While finding variation in the number of casualties is straightforward, finding instances in which both the context of the event (terrorism/war) and the identities of the casualties (military/civilian) vary is more difficult. Indeed, many nations have experienced both terrorism and war, and the attendant variations in the identities of the casualties, but few have experienced them at the same time.

One of the few nations that have experienced both terrorism and war simultaneously is Israel. Throughout its history, Israel has experienced both terrorist attacks and international conflict events at the same time. It thus offers a unique opportunity to examine how well my model corresponds with actual events and responses in Israel. I specifically examined events leading up to and during the 1969 “War of Attrition.” This conflict revolved around territorial gains Israel made against Egypt during the Six Day War. During this period, many of Israel’s Arab neighbors as well as Palestinians within its borders conducted or supported a series of terrorist attacks against Israel. Studying this period in Israel therefore offers the necessary variation along my independent variables. However, because it occurred in a real world setting, measurements of individual public policy preferences were not available following each
event. Specifically, the experiments in the previous chapters allowed individuals to express preferences for different foreign policies and indicate emotional reactions. This required that I find an alternate dependent variable. I therefore created a new dependent variable of civilian/public responses to casualty events from newspapers of that era. Specifically, I examined civilians’ propensity to take action or respond to these events (discussed more fully in the section on Methodology). Briefly, I examined each casualty event to see if the public responded to these events. Public responses could range from writing letters to editors to violent retaliations against families of or groups associated with perpetrators. Thus, I was still able to examine civilian responses but in a different format. I expect that this change in dependent variable will lend support for my model by demonstrating that it applies across multiple measures.

As discussed above this chapter addresses the role of casualties and their characteristics on civilian reactions to these events in a real world setting. I began by briefly reviewing the main points of the model and hypotheses as they apply to this real world case. Next, I reviewed the methodology and case selection process used in this study. Finally, I reviewed the results and formed conclusions about how well the theoretical model works.

**Model and Hypotheses**

In the model presented in Chapter III, there are two basic effects of casualty events: direct and indirect. Direct effects are driven by cognitive mechanisms and represent individuals’ calculations of the cost and benefits of different policy responses
to these events. The most effective alternative is the response that is preferred when the
cognitive mechanism dominates. Alternatively, indirect effects are driven by the
emotional mechanism and the specific negative emotion evoked by that event. These
negative emotions can alter or bias calculations toward or away from different policies.
In this chapter, I am interested in determining if the context, identity, and number of
casualties in a real world case have effects similar to those demonstrated in the
experiments. Thus, I pulled several hypotheses from the experiments and applied them
to the case examined below.

Context

All three of the experiments demonstrated that the participants reacted differently
to changes in casualty contexts. I therefore seek to find out if variations in the context of
the casualty events in Israel affected responses to these events. In particular, I expected
that the context would alter responses to the event, especially in the case of terrorism in
comparison to war. I expect this because the experiments revealed that there are
important differences in emotional responses and policy preferences in response to
terrorism versus war. Given the experimental findings and changes in the dependent
variables, this finding implies that a change in context of the casualty event should result
in a change in the propensity of the public to respond to it. Given the more dramatic
responses described in the literature (Chapter II) and in the experiments to terrorism
versus war, I expect that:
H7-1: Terrorism is likely to increase the public’s propensity to respond to the event as compared to war.

Identity

As with the context of the casualty event, the identities of the casualties are also shown to alter the impact of the casualties on events in all three experiments. The experiments showed that the identities of the casualties had an effect on how aggressively individuals want to respond to these events. When the casualties are military personnel, then individuals wanted to use military force. Alternatively, when the casualties were civilians, individuals wanted to take more a diplomatic approach. If we apply these preferences to the propensity of individuals to respond to casualty events, then I expect that:

H7-2a: When the casualties are military, the public will have a greater propensity to respond to the event than when the casualties are civilian.

However, the experiments also showed that reactions to the identities of the casualties are altered by the context of the event. Specifically, when the identities of the casualties differ from what is expected in a given context, policy and emotional responses are dramatically different. I therefore expect that:
H7-2b: Changes away from the expected identities of the casualties in a given context (e.g., civilians in war and soldiers in terrorism) will result in a greater likelihood that the public will respond to the event.

**Number of Casualties**

The previous experiments showed that the number of casualties had mixed effects on responses to casualty events. Specifically, the Experiment I found no effect on responses to casualty events. Alternatively, the Experiments II and III showed that the effects of the number of casualties from the current events are altered by the number of previous casualties. In particular, when the number of previous experiments indicates that the current casualty event is worsening or improving, this alters preferences for different foreign policies. In this chapter, the events analyzed generally occur in a series of events. Indeed, many of the events captured in the study below occurred within hours or days of one another and consequently I expect that the civilians have a general understanding of previous casualties. Therefore, responses to casualty events in this study occur within the context of previous casualty accumulations. Given this setting, I expect the current number of casualties will affect the propensity of individuals to respond to these events. More specifically:

H7-3: The higher the number of casualties, the greater the likelihood the public will respond to the event.
Methodology

This section details how I compiled and analyzed the data used in this chapter. Generally, this study examined all casualty events in Israel in 1969, which marks the beginning of the period known as the “War of Attrition.” In order to accomplish this I collected data from daily news reports on casualty events in an Israeli newspaper, the *Jerusalem Post*. More specifically, I collected information about the context of the event (war/terrorism), the identities of the casualties (military/civilian), and the specific number of casualties that occurred during the event. Because this chapter is not based on experimental methodology, it was necessary to create a new dependent variable. I therefore examined public responses to each of these events rather than preferences for specific foreign policies. Given the nature of the data available (most often short news stories), I was only able to determine if there is a public or civilian response. Thus, my dependent variable is dichotomous and required that I analyze the casualty events using a logistic regression model. The following subsection will more closely detail the reasoning behind my decision to examine casualty events in Israel. The second subsection will more explicitly examine how I coded each of the dependent and independent variables.

Case Selection

In choosing the case to examine, I considered a number of factors. I needed a case that offered casualty events with variation along the independent variables. Specifically, I needed a case that offered a wide range of events that included terrorism
and militarized disputes as well as civilian and military casualties across both of these contexts. Israel is a nation that through its history has faced war and terrorism and the deaths of both civilians and soldiers. By examining Israel, I am able to hold factors such as culture constant and achieve the variations in casualty events needed. Specifically, I examined casualty events reported from January to December 1969. This period marks the beginning of the “War of Attrition” which lasted until the fall of 1970. The “War of Attrition” was a militarized dispute primarily between Israel and Egypt over territorial gains Israel made during the Six Day War. Though a cease-fire was declared in 1967 following the Six Day War, hostilities continued throughout the intervening years. Hostilities ranged from artillery exchanges to clandestine assaults and bombing raids by both sides. This period also included terrorist attacks originating from multiple Middle Eastern countries. This conflict became an open and official conflict in March of 1969 when Gamal Abdel Nasser (then President of Egypt) declared he would not abide by the cease-fire agreement. Given the different actors involved in these events, this case allows for variation across all the independent variables and is an ideal case with which to test my model.

**Coding**

In order to analyze the characteristics of the casualty events on public/civilian reactions I first had to gather the data. I collected information on each casualty event from the *Jerusalem Post* daily newspaper. This was the only long-running English newspaper in Israel during this period. It was also considered conservative in its
coverage and thus reactions covered in this paper are more restrained in their treatment of these events and their aftermath. To gather the data I needed, I examined each day’s paper for casualty events during the selected period. Specifically, the events studied focus only on the deaths of Israel’s citizens and residents. I also coded attacks leading to the deaths of visitors and tourists. The idea behind this decision is that citizens are more likely to care about their own citizens and welcome guests rather than ‘other’ groups or outsiders to the country (Mosher and Geva 2006a, 2006b).\footnote{There are at least two events when foreign tourists or missionaries are specifically mentioned. More frequent are discussions of students or victims being recent immigrants to Israel.}

Second, given that my interest in this study is to examine reactions to casualty events, the unit of analysis examined here was the casualty event. This means that if there was an attack but no one was killed by the attack itself, I did not include that particular event in the dataset. For example, consider two nearly identical rocket attacks. In one attack, a man is hit by shrapnel and killed while in the second the attack a man dies of a heart attack. In the first instance, I included the event in the data set but I did not include the second. This is because the first died as a direct result of the attack while in the second the man died of natural causes that were not necessarily related to the attack.\footnote{One incident closely matched this scenario and therefore was not included in this dataset.} If events reported in the news included attack-related deaths of Israelis or their welcome guests, I further coded each event along the independent and dependent variables described below.

**Dependent Variables.** As discussed previously the experiments examined the effects of the independent variables on foreign policy preferences. However, it was not
possible in this study to examine the policy preferences of the Israeli public following each event. I therefore sought an alternative measure of responses to these casualty events. In examining news coverage of casualty events, it is possible to get some sense of the public’s responses to events from war and terrorism. These reports often explicitly discuss that a group of mourners/protestors/concerned citizens gathered in a specific place to discuss/protest/show support in response to these types of events. Therefore, I examined the casualty event reports during this period for indications of these types of public reactions. Specifically, I coded my dependent variable “Civilian Reactions” as a “1” if members of the public reacted to events in any way. This included giving speeches, issuing statements, writing letters to the Jerusalem Post, staging peaceful rallies and protests, attending funerals of the victims by massive numbers (in the hundreds or sometimes thousands), reacting with violence either during rallies and protests, or through other retaliatory attacks. These events are coded only if members of the public reacted, not if members of the governments reacted to these events. If there was no overt public/civilian response to casualty events then I coded this variable as “0.”

Although it could have added depth to my analysis to examine each type of civilian reaction described above more explicitly, in this study I was not able to do so. For instance, it would be interesting to know if terrorism versus war casualties led to larger numbers of certain types of responses. This is due in part to the Israeli government’s standard security response to these types of events. Specifically, in most cases following an attack, especially terrorist attacks, the Israeli government locks down the area and/or areas where suspected terrorists/fighters or families of victims might
gather. Almost no opportunity for group civilian retaliation or protests where allowed during this period. Indeed, anyone remotely suspected of participations in these attacks was arrested within minutes of the attack. These government responses indicate that the government at least takes civilian responses seriously. However, this makes it difficult if not impossible to capture or analyze more nuanced civilian responses that might have occurred had the government not had these procedures in place.

**Independent Variables.** The independent variables coded here include “total killed,” the “context,” and “civilian” or identity of the victim. The first independent variable (Total Killed) gives the total number of all Israelis and welcome guests killed in an event. This includes those Israelis that subsequently died from their injuries. The second variable (Context) is coded according to whether or not the event occurred in the context of terrorism or militarized disputes as defined in Chapter I. Briefly, however, if non-military non-state actors initiated the attack, and then the context is coded as a “1” or as terrorism. If the casualty event was the result of military personnel of another state, it was coded as a “0.”

The final independent variable captures the identities of the casualties. The basic distinction made here is between civilians and military casualties. In the case of civilians, I included any Israeli killed in or out of the country in a terrorist or militarized dispute as well as students and tourists in Israel. If the target of attack fit this

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30 I included Israelis killed outside of Israel because they were often targeted outside of their nation and caused substantial reaction by the public and in the media and government.
description then I coded the identity of these casualties as civilians or as a “1.” If those killed were Israeli military or security personnel\(^{31}\) then I coded the casualties as a “0.”

**Results**

I ran three basic logistic regression models in this study to test my theoretical models. Model 1 tests the effects of these three independent variables by themselves. In essence, this model tests the idea that these variables have an effect on individual responses to casualty events. Model 2 again tests the effect of the three main independent variables as well as the interaction of the identity and the context of the event. This model thus tests the idea that the context of the casualty events sets expectations about the identity of the casualties. Lastly, Model 3 tests the effects of the independent variables and an interaction of all three independent variables. I did not include the two-way interactions to avoid multicolinearity with the three-way interactions.

Table 9 demonstrates these models are supportive of my theoretical model. Both the number of casualties and the identities of the casualties alter the propensity of individuals to respond to casualty events. In addition, although there was no independent effect of the context, there was an interactive effect of the identity as well as the number of casualties with the context. This is consistent with my models’ hypotheses and the findings of the experiments in previous chapters. As my review of the results below will

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\(^{31}\) I included security and police officials with military groups because the jobs are similarly dangerous. In addition, security personnel in Israel often face groups of armed individuals, in some cases terrorist and in others Jordanian, Syrian, and Iraqi (stationed on Jordanian boarders) border guards in much the same way the military personnel do.
show, however, there were some interesting differences in the effects of the independent variables in this study as compared to the experimental studies.

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrorism</td>
<td>0.441</td>
<td>0.404</td>
<td>7%</td>
</tr>
<tr>
<td>Civilians</td>
<td>0.938**</td>
<td>0.463</td>
<td>17%</td>
</tr>
<tr>
<td>Total</td>
<td>0.583*</td>
<td>0.186</td>
<td>9%</td>
</tr>
<tr>
<td>Number Killed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terrorism*</td>
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<td></td>
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<td>Civilian*</td>
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<td>Terrorism*</td>
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</tr>
<tr>
<td>Number</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Casualties</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.58*</td>
<td>0.444</td>
<td>-2.54*</td>
</tr>
</tbody>
</table>

Number of Observations | 174 | 174 | 174 |
LR chi2(4) | 28.58 | 23.69 | 20.35 |
Prob > chi2 | 0.0000 | 0.0001 | 0.0004 |
Pseudo R² | 0.1544 | 0.1280 | 0.1099 |
Log likelihood | 78.292876 | 80.738227 | 82.408751 |
The first model demonstrates that the context of the casualty events had no effect on civilian reactions. This is contrary to the findings of all Experiments I, II, and III, which showed multiple significant effects of the context of the casualty event. Second, this model shows that the identities and number of casualties had a significant positive effect on civilian responses. The marginal effects reveal that the civilian casualties increase the probability of civilians responding by 17%. In essence, a change in identity from military to civilian casualties results in a 17% increase in the probability that the Israeli public will respond in some way to the casualty event. Interestingly, in the experiments the soldiers’ deaths resulted in a greater support for active foreign policies.

Third, increasing the number of casualties in a given event increases the probability that civilians will react to the event. Specifically, a one-unit increase in the number of casualties increases the propensity of civilians to respond to the event by 9%. This is consistent with hypothesis H7-3 and the idea that current casualties are related to previous casualties. What is unique to this study is that the number of casualties has an independent effect. This contrasts with the experiments in which the primary impact of the number of casualties is in interaction with the identity and or the context of the casualty event.

The second model introduces an interaction of the identity and context of the casualties. Again, the second model demonstrates that the context of the event has no effect on public responses. In addition, the identity of the casualties is no longer significant. There was, however, a significant interaction of the context of the casualty event and the identities of the casualties on civilian reactions to casualty events. The
marginal effects demonstrated that civilians killed in the context of terrorism increases the propensity of the public to react to the casualty event by 68%. The final independent effect in this model is the significant effect of the number of casualties. The marginal effects demonstrates that a one-unit increase (or one more death) in the number casualties increases the likelihood of a civilian reaction by 10%. In line with the results of the experiments, this demonstrates that the context and identities of the casualties have an important impact on responses to casualty events. These results, however, are the reverse of the findings found in the experiments. This demonstrates that real world cases may introduce unique elements to reactions to these events.

The third model presents the three independent variables plus the interaction of all three variables. This model shows that the context of the casualty events and the identities of the casualties did not have an independent effect. However, the number of casualties again showed a positive effect on public reactions. The number of casualties increases the propensity for civilians to react to casualty events by 9%. Thus, the effect of the number of casualties is consistent across the three models. In this model, the interaction of the context, the identity, and the number of casualties also has a significant and positive effect on public reactions. The marginal effects reveal that an increase in civilian casualties in terrorism increased the propensity of civilians to react to these events by 21%. This interactive effect is similar to the results found in the experiment that found support for the idea that the effect of number of casualties is related to the identity of those casualties. Additionally, while this effect is implied by my model this
study is the first to support the idea that all three independent variables have an interactive effect on public responses.

From the above results, we can see that there is support for the effect of the context of the conflict only in conjunction with the other independent variables. This is supportive of the idea found in the experiments that casualty context has some effect even if it does not support its direct effect. The effects of the identities of the casualties are supportive of the findings of the experiment. Finally and unique to this study, the number of casualties in a casualty event always had a significant effect on civilian responses. As expected, this indicates that while the model holds, “real world” cases will introduce unique effects into the model.

**Conclusion of the Empirical Sections**

This study set out to replicate the findings of the three experiments presented in earlier chapters in a real world case across casualty events. Similar to the experimental results, I can say that the impact of casualty events is caused by more than just the number of people killed. Indeed this study shows that the context and identities of the casualties also have an effect on response to casualty events. Although all three independent variables had an impact on responses to casualty events, these effects differed from those I found in the experiments.

First, in this chapter the primary effect of the context of the casualty event occurs in interaction with the other casualty characteristics. In contrast, the experiments showed that the context had independent as well as in interactions effects with other variables. In
this chapter, the largest effect of the context occurs together with the identity of the casualties. This is effect appears in all three experiments, in which alteration in the identity and contexts altered policy and emotional responses. In addition, there was also an effect of the context, identity, and the number of casualties. Again, this replicates the findings of the experiments. Thus, while many of the effects in the experiments were replicated, there was no independent effect of terrorism and war on civilian reactions similar to the preference for taking some action in the experiments.

There are a number of possible explanations for these differences between the experiments and the study in this chapter. It is possible that the terrorism and war casualty events in this study are so close together geographically and temporally that they were hard to differentiate from one another. Given the political climate of this era in Israeli history, the perpetrators of terrorist attacks were seen as allies of (if not soldiers in disguise) sent directly by Egypt and its allies. In an experimental setting researchers are able to draw clear lines between groups, but this is not as easy to do in a real world setting. In addition, the experimental studies took place in the United States where terrorism and war casualty events have been widely spaced from one another and or are very far from the average citizen. Thus, respondents to my experiments are relatively ‘safe’ from imminent attack and have the ‘time and space’ to react to each event individually. However, because some effects where similar to those found in the experiment I can say that context matters, but that how it matters may be altered by additional factors.
Unlike the experiments, the number of casualties had an independent effect on responses to the casualty event. In the experiments, the number of casualties in the scenarios is set up to distinguish between the current casualties and the previous casualties. Given this is a real world case it is likely that individuals are aware of previous casualties in part because they are often mentioned in the same article and multiple events happen in the same week or day. Therefore, the effect of the casualties was already in the context of previous casualties. The last two casualty experiments demonstrated that previous casualties set up reactions to the current casualty event. Thus, these findings remain consistent with my model.

This study replicated many of the findings of the experiments reported in the previous chapters. As described above, there were several results that where unique to this study though still supportive of the model. This chapter thus strengthens the support for my model in a real world case. Ultimately, the effects of casualty events are greater than the number of those who are killed. Indeed who is killed and how they are killed (in terrorism or war) is at the very least equally as important if not more important in determining the effect that casualties have on public responses to these events.
CHAPTER VIII
CONCLUSION

Introduction

On September 11, 2001, jet liners crashed into the World Trade Center, the Pentagon, and a field outside of Pittsburg, Pennsylvania. These events launched the United States into two wars and woke the nation to the reality that, like many other nations (e.g., Great Britain, Israel, India, etc.), the United States is vulnerable to terrorism. The public’s reactions to these terrorist attacks when contrasted with the wars in Afghanistan and Iraq indicate that the context of casualty events has a fundamental impact on responses to these events. Specifically, when the number of people killed in terrorist attacks is compared to the number of people killed in wars, the extreme response to terrorist attacks appears excessive.

In this work I sought to explore this puzzle as well as to examine what other characteristics of casualty events affect responses to terrorism. In particular, I examined the relationship between different casualty characteristics (context, identity, and number of casualties) and individuals’ emotional and cognitive responses to these events. I proposed a model that depicts an interaction between cognitive cost/benefit calculations and specific negative emotions. I expected that specific negative emotions in some cases would influence an individual’s calculations of the optimal responses to these events. Furthermore, an examination of the existing literature on casualties shows us that little is known about the role of casualties or their characteristics in conflict events outside the
impact of the number of casualties. Even the literature on casualty numbers only
discusses casualties in the context of militarized disputes across an accumulation of
casualties, not individual events with variations in the characteristics of the events.
Casualties, in essence, are a “black box” of unknown relationships and impacts.
Therefore, the primary objective and contribution of this work and its model is to shed
some light into this black box and more fully understand why some casualties result in
different responses. This is especially important given the vivid coverage of both of the
ongoing wars (i.e., Iraq and Afghanistan) and international terrorist attacks (e.g., London
and Madrid) in recent years.

In this work, I set out to understand the independent and interactive effects of
specific casualty event characteristics on public reactions including the context of the
event, the identities of the casualties, and the number of casualties. Given world events,
it seemed likely that variations in the above casualty characteristics could have
fundamentally different effects on responses to these events. If these different casualty
characteristics have distinct effects then the questions generally are “What are the
effects?” and “How do these effects occur?” More specifically, I asked how do
casualties affect public responses to foreign policies, what is the impact of context on the
effects of casualties, and what role do emotions play in the effects that casualties have?

To answer these questions I reviewed literature on casualties from terrorism and
war, the costs of casualties, the unique impacts of terrorism on individuals, and the
effects of specific negative emotions discussed in political psychology (Chapter II).
From the literature, I formulated a model of how casualty events interact with emotional
and cognitive mechanisms to produce distinct reactions to these events (Chapter III). As discussed above, this model suggests that distinct negative emotions alter cognitive responses and foreign policy preference formation. Additionally, while the identity and the number of casualties are depicted as having important impacts, the context of casualties is a primary determinant of which negative emotions are evoked by the event. From this model, I extracted several hypotheses to be tested in the empirical section of my dissertation. This section included three experiments (Chapters IV-VI) and a statistical analysis of data collected from a case study of actual casualty events in Israel (Chapter VII).

In the remainder of this chapter, I will examine the findings of the above studies as well as the implications of this work. In the section on findings, I will examine how well my model and hypotheses performed in describing the effect of casualties on the public. In particular, I will examine the role that casualty context and emotions play in public responses to these events. In addition, I will assess what findings are consistent or inconsistent with my model’s expectations. In the section on the implications of the findings, I will explore the theoretical and methodological implications of the results. In this section, I also discuss the policy implications of these findings. Finally, in the section on future work, I will suggest some areas for further study based on my findings.

**Findings**

Generally, my analyses are supportive of the idea that casualty characteristics play an important role in determining how individuals respond to casualty events. In
particular, the context and identities of the casualties play a pivotal role in emotional responses to these events. Alternatively, the primary impact of the number of casualties seems to be on cognitive cost calculations. The results also supports the idea that emotional responses to casualty events can alter cognitive calculations of the best response to these events based on the specific emotion evoked by the event. I will address each of these findings more specifically in the following paragraphs.

One of the primary propositions of this model was that the context of the casualty event is dominant. In essence, it determines what effects casualties have on an individual’s responses. The findings support this proposition. In addition, the results of the four studies conducted here support the idea that the context of the casualty event is of central importance in determining both foreign policy preferences and emotional responses. In all three experiments, the context of the event had a direct impact on the policy preferences of individuals. Specifically, in Experiment I (Chapter IV) the context of terrorism increased the propensity of individuals to support non-aggressive foreign policy options (i.e. withdrawal, do nothing, or negotiation). In Experiments II and III (Chapters V and VI), the context of the casualty event had significant effects on both belligerent and non-belligerent foreign policies. In particular, when the context was terrorism individuals preferred to negotiate or take no action. Alternatively, when the context was war, the participants wanted to use force. Thus, the context alone had a fundamental impact on policy preferences. In contrast to the experiments, the statistical analysis (Chapter VII) demonstrated that the impact of the context in the real world occurs when the context interacts with identity. Specifically, it demonstrated that civilian
casualties in terrorism increase the likelihood of a reaction to these events. There were similar effects when identity interacted in conjunction with number of casualties in a casualty event.

In all three experiments, there are no direct effects of the identity, but there was an interactive effect in line with my expectations. The experiments demonstrate that there are important interactive effects of the identities of the casualties with the other casualty characteristics. Civilian casualties result in a greater propensity for individuals to react to these events (Chapter VII) and in greater levels of support for active policies. In particular, support is highest when the casualties are soldiers as opposed to civilians (Chapters IV-VI). Alternatively, when the identities of casualties are considered in conjunction with the context the results change. When there are civilian casualties in terrorism, there is greater support for doing nothing or withdrawing from the situation. In addition, when the identities of the casualties differ from what is expected in a given context, such as soldiers during war, support for the different policy options is altered. For instance, in Experiment I when soldiers are killed in a terrorist attack rather than war, civilian support for the use of force is increased. Thus, the effects of the identities of the casualties are greatly affected by the context of the casualty event.

As this discussion demonstrates, the above results are consistent with the expectations of my model. Indeed both context and identity played important roles in determining reactions to casualty events and foreign policy preference formation. The effects of the number of casualties, however, were inconsistent with my expectations and the findings of the literature on casualty events. I expected that the number of casualties
by themselves would have an effect on responses to casualty events and foreign policy preference formation. Specifically, I proposed that as the number of casualties increased, it was most likely to cause decreasing support for active foreign policies. Put differently, the higher the cost, the less willing individuals are to pay it. This is essentially the outcome expected by Mueller (1973; 1994) and Nincic and Nincic (1995), though for different reasons. In Experiment I, however, I found no effect of the number of casualties. Given these results, I then considered the possibility that the rate of casualty accumulation as proposed by Gartner and Segura (1998, 2000) and Gartner, Segura, and Wilkening (1997) plays a role in responses to numbers of casualties. I postulated that the previous number of casualties add information without which individuals do not have the necessary knowledge to interpret the current situation. The previous number of casualties tells the individual how bad or dangerous the circumstances surrounding the event are. Imagine, for instance, we hear that a man jumped out of a window. We are likely to expect different outcomes if we know the window was on the second floor or the fifteenth. Without knowing the floor the window was on, we could still guess that the outcome will not be good. However, this information tells us how bad the outcome could be in comparison to the actual outcome. Both Experiments II and III are supportive of the informational effect of the accumulation of previous casualties. More specifically, if the previous casualties when compared with current casualties indicate that the situation is worsening or improving, individuals respond accordingly. For instance, when the situations are worsening, individuals are supportive of taking forceful actions.
These findings, though initially inconsistent with my expectations, increase our knowledge of the effects of the number casualties in several ways. First, the number of casualties does not produce an easily calculated cost. Rather, calculations of the costs depend on what happened before the current event. Second, though some of the initial literature on casualties considered the effects of a worsening situation as indicated by the number of casualties, they did not explicitly examine the idea that an improving casualty situation might also alter responses to these events. Thus, casualties in some instances might represent a decreasing cost rather than increasing costs. In further support of this informational effect, the statistical study of a real world case supported the effect of previous casualties. Because the events occurred in the real world, the effect of the number of casualties was in the context of these previous casualties. Increasing the number of casualties increased the propensity of individuals to respond to these events. Although these findings were inconsistent with what I initially expected, ultimately they indicated that the number of previous casualties in fact actually represented an additional casualty characteristic. Without considering both current and previous casualties, discerning the actual responses of individuals to these events is problematic.

However, what drives these effects? My model proposed and the findings indicate that the key to understanding these different effects is the type of negative emotion evoked by the incident. The results of the experiments show that there are distinct effects on specific emotions and these emotions are correlated with specific policy preferences. In all three experiments, anger and sadness were expressed at higher levels than fear. Fear, alternatively, is the emotion expressed at the lowest levels.
Furthermore, when we examine these emotional responses in conjunction with the context of the casualty events, the relationship between the two and the responses becomes clearer. These emotional effects seem to be driven primarily by the context of the event. In the experiments, the context of the casualty events resulted in different levels of overall negative emotions. Specifically, terrorism resulted in higher levels of all the negative emotions than did war. This supports the idea that there may be an emotional “overreaction” to terrorist attacks when compared to military clashes in war. In addition, while fear is expressed at the lowest levels it has a significant effect in the context of terrorism. This response corresponded with an increased propensity to support withdrawal/do nothing in a crisis.

In all three studies, anger is correlated with the use of force and sadness is correlated with withdrawal. This supports the passive and aggressive policy implications of each emotion proposed in the literature. This finding is explicitly demonstrated in Experiment III (Chapter VI). In this experiment, sadness clearly dominates and as a result, there is no direct effect of the variables on support for the use of force. Finally, the independent variables in the experiments had similar effects on responses to observed effects in the statistical study. Therefore, it seems plausible that the emotional effects observed in the experiments may also occur in the real world case. However, because this study occurred in the real world nearly forty years ago, it is impossible to find a measure of emotions and I was not able to test it in this study.
Implications of the Findings

As discussed above, the findings are generally supportive of my model of the effect of casualties on public reactions. The question is what they imply theoretically, methodologically, and for foreign policy decision making in response to these events. In this section, I will address each of these areas. First, I will examine what these finding imply for the overall study of casualties in international relations. Second, I will examine the implications of my findings for foreign policy decision making in response to these events. Finally, I will address how my methodology may affect interpretations of my findings.

Theoretical Implications

Given the above findings, I now ask what the findings imply about the model I presented in this work. Primarily these findings support my contention that casualties in international relations represent more than just a calculation of the cost of a conflict. Indeed, while the processes by which responses are generated include cognitive cost/benefit calculations they also evoke emotional responses. The dominant negative emotions (e.g. sadness, anger, and fear) alter the outcome of these cognitive calculations. This implies that if we do not take emotional responses to these events into consideration, we cannot accurately identify how the public will react to these events.

Therefore, although the quote at the beginning of Chapter III implies that casualties affect individuals either as a tragedy or as a statistic, the relationship is much more complex. Specifically, low or high casualties can act as both a statistic (cost) or as
a tragedy (an emotional reaction). Which it is seems to be based largely on what all the characteristics of the casualty event together tell us about the event. Specifically, although the effects of the characteristics of the casualty event work independently, some of the most interesting effects occur when these effects interact. For instance, the characteristic with the greatest effect is the context of the event. It alters both cognitive and emotional reactions leading to different negative emotional and policy responses. Yet, when you add the identities of the casualties to the context, you see that it again alters policy preferences. In this instance, there is an increase in support for aggressive policies for soldiers killed in terrorist attacks, but a decrease of support for those policies when the casualties are civilian. This implies that the interaction of identity causes anger to dominate in one instance while an alternate identity leads to greater sadness. In the case of this interaction, the higher levels of sadness caused by a change of identity seem to counter the effects of anger caused by terrorism. This is associated more with the cognitive mechanism and cost calculations. In essence, the identities of the casualties seem to cancel out the emotive effects of terrorism.32

Thus, to understand the effects of casualties in international relations it is necessary to consider not only casualty characteristics, but also how these characteristics interact with one another and negative emotions. Indeed, some of the well-established relationships discussed in the literature on war casualties, such as the “rally around the flag” effect, may be due in part to these emotional reactions and/or the interactions of these casualty characteristic. At the very least, from these results it is clear that war and

32 There are similar effects when the identity of the casualties and the previous casualties are interacted.
terrorism casualties have dramatically different impacts on responses. While the characteristics within these contexts are identical, they do not result in the same outcomes. If war, terrorism, and each characteristic within a casualty event cause dramatically different emotional responses and foreign policy preferences in the public, the question is “What are the implications of these findings for foreign policy decision making?” The following subsection will address these implications.

Policy Implications

When the results of the studies in this work are examined, we see that each of the casualty characteristics and the emotions they evoked had important effects on policy preferences. In particular, the context of the casualty event alters responses to these events. Furthermore, the context alters policy preferences in ways that have not been anticipated by decision makers. For instance, Kull and Ramsey’s (2001) work showed that regardless of the actual response of the public, leaders believe the public will not tolerate any war casualties. In addition, in the context of terrorism there is a perception that if leaders do not respond aggressively to terrorist attacks, then the public will become outraged and punish them for their failure to respond (see Chapter III). This work, however, contradicts both of these perceptions. In reality, it seems that the public has a greater willingness to support the use of force in war as compared to terrorism. Thus, rather than be averse to casualties in war, individuals seem to be somewhat more acceptant of them. Alternatively, in the context of terrorism the public wants to avoid further losses. It is plausible, however, given current world events (e.g., continuing
insurgencies in Iraq and Afghanistan, and worldwide terrorist attacks) that the public does not believe that the use of force will work. Instead, individuals seem to prefer to negotiate or do nothing/withdrawal in the context of terrorism.

In addition to the above, the effects of the context are further altered by the identity of the casualties. When the casualties are soldiers, there is a greater level of support for the use of force and lower support for negotiation or doing nothing. Alternatively, when those killed are civilians, policy preferences are reversed. When the identity of the casualty is considered in conjunction with the context of terrorism these patterns are further complicated. These results imply that public responses to casualty events are more complex than a simple aversion to all casualties. Indeed, it seems that public is more willing to tolerate civilian casualties as compared to military casualties. Again, this is the reverse of what is generally expected. Therefore, despite the impression that all casualties will lead to adverse public responses the public reacts negatively, in terms of remaining involved in or escalating the conflict, to only certain types of casualties.

In addition, the effects of the context and the identity of the casualties offer further evidence that the public supports policies in a conflict based on more criteria than the number of casualties. Indeed the public is seemingly more prudent in their policy evaluations than even some researchers (Jentleson 1992; Jentleson and Britton 1998) would credit them. Specifically, individuals consider casualty characteristics as well as policy objectives. Essentially, the public evaluates how bad the current situation is, what the context is, who was actually killed in the event, and thus how successful policies
such as the use of force are likely to be. They then seemingly alter their foreign policy preferences according to these factors. This suggests that leaders need to consider more than just numbers of casualties when they are attempting to anticipate the public’s response to these types of events. Specifically, leaders need to consider that the public may react with anger or fear leading to opposing responses. Specifically anger may lead to calls for action, which if leaders do not respond to in a way the public wants, may lead to a politically tenuous situation. However, if sadness is the dominant response they (the public) may also react with a careful calculation of the best responses to these events. Which reaction dominates the public’s responses will be determined by the casualty characteristics. Therefore, when decision makers try to predict public responses to these events they must consider these additional characteristics if they wish to choose a policy that the public will support, or at least tolerate.

Methodological Implications

The studies in this work have important implications for both the study of public responses to international conflict events and of foreign policy decision making. However, it is plausible that how I analyzed the impact of casualty events in this work altered or in some way adversely affected my findings and therefore my conclusions. Thus, I will briefly review how I analyzed my data in the following paragraphs. By exploring my methodology in this way, I hope to illustrate that each of the multiple methods I used had strengths that countered any weakness that the other analyses I conducted may have had. Specifically, in this work I used a multi-method approach with
an emphasis on experimental methodology to assess my model of the impact that casualty events have on the public responses. Below, I will briefly review each method and its implications for my model.

The purpose of experimental analysis is to examine the underlying assumptions and hypotheses of the model. In addition, experiments allow researchers to examine counterfactual cases that are possible in theory but are very unlikely to happen in the real world (Mook 1983). For instance, in this study I was interested in understanding how the public responds to both terrorism and war casualty events. Yet, in the United States, where my studies were conducted, citizens are very unlikely to be targeted in a terrorism casualty event. In fact, an American is more likely to die of drowning in a toilet than to die in a terrorist attack (Mueller 2004). Therefore, while there are casualty events from the ongoing wars in Afghanistan and Iraq there are few instances of both contexts to which Americans can react. Without variation across both contexts, it is difficult if not impossible to conduct an analysis of public responses to such events in the United States. Thus, experiments allow us to examine what may happen if the logic or internal structure of the model is accurate. In addition, assuming the experiments are good representations of the model, they can offer support for the internal validity or logic of the theory or model rather than attempting to generalize or predict what will or has already happened in reality. From this perspective, the model is generalized to the real world rather than the findings. Alternatively, statistical methods assess how well a given model reflects the real world. In this type of analysis if we examine a model that says X causes Y, we want to know how often that actually happens in the real world. Thus, this type of study
allows researchers to test the external validity and predictive capabilities of the model. I believe that by using both methods, the studies I conducted balance the needs of internal and external validity. Put differently, using both methods I found support for both the internal logic of the model and the potential predictive capabilities of my model.

In addition to the above considerations, the experiments I conducted are potentially vulnerable to two additional criticisms. First, they were conducted using college students who may not accurately represent the population I am interested in investigating. Sears (1986), for example, pointed to several problems that might occur when using college students. The primary concerns are that college students may be naïve, may be more likely to conform to authority, and/or are more easily influenced. In essence, students may not make the same decisions or express the same preferences as elected decision makers. For instance, Mintz, Redd, and Vedlitz (2006) demonstrate that as compared to military officers, college students are less likely to support military action. However, in this study I was interested in determining how the public responds to casualty events. Thus, I am not in danger of attempting to equate college students with elected decision makers. In addition, given the extensive media coverage of world events it seems plausible that the college students of the current generation are aware of what the judgments they are being asked to make entail (see also Gartner 2008). Therefore, I expect that they are more likely to react similarly to the way the general public reacted.

The second potential criticism that could be leveled at my experiments is that they do not occur in the real world. As discussed above, the intent of the experiments was to test the internal logic of my model. My results demonstrate there is support for
the internal validity of my model and therefore I believe my model receives firm support from these experiments. Despite this evidence, if my model were a completely inaccurate representation of the real world, I would not expect it to withstand an application to a real world case. As the findings in Chapter VII demonstrate, my model does correspond with the way the public reacts to casualty events in a real world case. This is especially true considering that my experiments were conducted with United States citizens, in a different culture, and in the last decade while my statistical study examined Israeli citizens nearly forty years ago. Given the differences between the experiments and the statistical study, it is reasonable to expect no results in the statistical analysis rather than support I found for my model. Thus, the statistical study I conducted replicates the experimental findings, adding robustness and vigor to the work and specifically supports the external and internal validity of my model.

**Future Work**

This work shed light into the black box of the effects of casualties on public reactions to casualty events. In fact, these studies have shown that the characteristics of casualty events have important and complex effects on emotional and cognitive responses. However, there are several potential areas for further exploration of these effects, including other contexts and identities, a wider range in casualty numbers and base rates, distances of individuals from the casualty event, and studies in nations with more experience with terrorism.
First, this work has demonstrated the effects of two different types of international contexts. Other contexts may also dramatically affect responses to casualties such as insurgency, ethnic conflicts, or natural disasters (e.g., hurricanes, tsunamis, and earthquakes). Given the differences between the effects of terrorism and war, it is plausible that other contexts will also have unique impacts. Second, this study only examined two general types of identities. It seems plausible that identities that are more specific may have important impacts on responses to casualties. For instance, in the second gulf war there have been a number of private contractors killed. The deaths of these individuals seemingly received a great deal less sympathy than soldier’s deaths and in some cases resulted in scorn for the dead in media coverage. What might be the difference between reaction to the deaths of for example civilian contractors and other groups? Other identities to consider might be in-group and out-group identities, local civilians versus foreign civilians, U.S. soldiers versus allied forces, local versus foreign public officials, soldiers versus police or security personnel, etc.

A third area of future study might be an examination of a larger range in the number and base rate of individuals killed. Given the effects found here it would be of interest to establish exactly what types of numbers and rates of casualties achieve different effects. The fourth area of potential future work would be establishing the effect of distance of the casualty event from those responding to it. It seems plausible that the closer a casualty event is to an individual the greater the likelihood that it might result in different negative emotional responses especially fear. As demonstrated by this study, different negative emotions can result in significantly different behavior response.
and therefore distance could significantly alter responses to these events. Fifth and related to this it seems plausible that nations and cultures that have more experience with terrorism might react differently to these types of events. For instance, it might be of interest to conduct similar experiments in Ireland, Israel, or India.

Examining any or all of these additional areas would further shed light into the black box of the effect of casualties on international relations. This would in turn give us a better understanding of why the public supports or opposes different foreign policies in different conflict settings. It would also give decision makers a better understanding of when and why the public will support or oppose leader in a conflict. Given that the results show the public does not reflexively oppose conflicts based on casualties, the numbers alone this understanding may be vital to the political survival of these leaders.


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VITA

Name: Katrina N. Mosher

Address: Department of Political Science, Texas A&M University, 2010 Allen Building, 4348 TAMU, College Station, TX 77843

Email Address: kmosher@polisci.tamu.edu

Education: Ph.D. Department of Political Science, Texas A&M University, 2008