WHEN WILL STATES TALK? PREDICTING THE INITIATION OF
CONFLICT MANAGEMENT IN INTERSTATE CRIOSES

A Dissertation
by
BELINDA LESLEY BRAGG

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

August 2006

Major Subject: Political Science
WHEN WILL STATES TALK? PREDICTING THE INITIATION OF
CONFLICT MANAGEMENT IN INTERSTATE CRISES

A Dissertation

by

BELINDA LESLEY BRAGG

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

Approved by:

Co-Chairs of Committee, Charles Hermann
Nehemia Geva

Committee Members, Vesna Danilovic
James Rogers
Guy Whitten
Hank Jenkins-Smith

Head of Department Patricia Hurley

August 2006

Major Subject: Political Science
ABSTRACT

When Will States Talk? Predicting the Initiation of Conflict Management in Interstate Crises. (August 2006)

Belinda Lesley Bragg, B.A., University of Melbourne

Co-Chairs of Advisory Committee: Dr. Charles Hermann
Dr. Nehemia Geva

This research addresses the question of why some crises between states are resolved through negotiated agreements while others result in continued conflict or escalate to war. The model deviates from previous approaches to the study of conflict management in four key ways: 1) management is treated as a conflict strategy rather than an outcome; 2) costs, rather than calculation of the relative benefits of conflict over management, motivate the initiation of conflict management; 3) the conceptualization of costs is broadened to incorporate subjective factors; and 4) issue salience is proposed to determine the threshold at which an actor’s preference for conflict over management changes.

The central question this conceptualization raises, therefore, is what factors influence actors’ strategy choices during a crisis. The theory proposes that, when it comes to the initiation of conflict management, it is costs that dominate the decision process. Or as Jackman (1993) so succinctly puts it; “for those confronted with a very restricted range of available alternatives extending from horrendous to merely awful, minimizing pain is the same as maximizing utility”.

Both experimental and statistical methodologies are used to test the hypotheses derived from the theory. Original experimental data were collected from experiments run
on undergraduate students at Texas A&M University. For the statistical analysis a data set of interstate crises and negotiation behavior was compiled using data from the SHERFACS and International Crisis Behavior data sets and data collected specifically for this research. This multi-method approach was chosen because of the nature of the questions being examined and in order to minimize the limitations of the individual methodologies. The experimental tests demonstrate that the expectations of the model are supported in the controlled environment of the experiment. The results from the empirical analysis were, within the restrictions of the data, consistent with both theoretical expectations and the experimental results.
ACKNOWLEDGEMENTS

I would like to thank the co-chairs of my dissertation committee: Dr. Nehemia Geva for his tireless patience, constant availability, willingness to listen to new ideas and invaluable help in reminding me what really mattered, and Dr. Charles Hermann for his challenging and perceptive critiques, and who kept me from forgetting where the politics is. I am also indebted to all the other members of my committee whose expertise and advice was invaluable throughout the long and rather roundabout process of writing this dissertation.

Equally important to the completion of this work have been my friends and colleagues in the Political Science Department at Texas A&M University who provided unwavering support and encouragement, and the reminder that I was not in this alone. Without their help I would not have reached this point.

Finally, I would like to acknowledge the debt I owe to all my teachers, both within school and without, over the years. From primary school on, I have had the luck to meet teachers who have challenged and encouraged me, giving me the discipline and drive needed to develop as a scholar. Their work has been complimented by family and friends who have encouraged my curiosity and taught me, through example, to press my own limits.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>I  INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Why Move to an Issue-Based Approach?</td>
<td>3</td>
</tr>
<tr>
<td>Changing the Explanatory Role of Relative Power</td>
<td>3</td>
</tr>
<tr>
<td>Why Introduce the Concept of Pain?</td>
<td>4</td>
</tr>
<tr>
<td>Testing the Model</td>
<td>6</td>
</tr>
<tr>
<td>II LITERATURE REVIEW</td>
<td>10</td>
</tr>
<tr>
<td>Crises and Conflict</td>
<td>11</td>
</tr>
<tr>
<td>Managing and Resolving Crises</td>
<td>13</td>
</tr>
<tr>
<td>Casualties and Public Support</td>
<td>19</td>
</tr>
<tr>
<td>Sensitivity to Costs</td>
<td>23</td>
</tr>
<tr>
<td>The Issue at Stake</td>
<td>28</td>
</tr>
<tr>
<td>III THEORY AND MODEL SPECIFICATION</td>
<td>35</td>
</tr>
<tr>
<td>Building the Theory</td>
<td>36</td>
</tr>
<tr>
<td>Model Specification: Predicting the Timing of Conflict Management</td>
<td>46</td>
</tr>
<tr>
<td>Propositions and Hypotheses</td>
<td>50</td>
</tr>
<tr>
<td>Testing the Model: Experimental Design</td>
<td>53</td>
</tr>
<tr>
<td>Testing the Model: Empirical Analysis</td>
<td>59</td>
</tr>
<tr>
<td>IV EXPERIMENT ONE: ISSUE SALIENCE AND PUBLIC SUPPORT</td>
<td>65</td>
</tr>
<tr>
<td>Experimental Design</td>
<td>65</td>
</tr>
<tr>
<td>Experimental Procedure</td>
<td>68</td>
</tr>
<tr>
<td>Results</td>
<td>73</td>
</tr>
<tr>
<td>Discussion</td>
<td>84</td>
</tr>
<tr>
<td>CHAPTER</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>V</td>
<td>EXPERIMENT TWO: ISSUE SALIENCE &amp; RECEIVING AN OFFER OF NEGOTIATION</td>
</tr>
<tr>
<td></td>
<td>Experimental Design</td>
</tr>
<tr>
<td></td>
<td>Experimental Procedure</td>
</tr>
<tr>
<td></td>
<td>Results</td>
</tr>
<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td>VI</td>
<td>EXPERIMENT THREE: RECEIVING AN OFFER OF NEGOTIATION AND PUBLIC SUPPORT</td>
</tr>
<tr>
<td></td>
<td>Experimental Design</td>
</tr>
<tr>
<td></td>
<td>Experimental Procedure</td>
</tr>
<tr>
<td></td>
<td>Results</td>
</tr>
<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td>VII</td>
<td>EMPIRICAL ANALYSIS: PREDICTING THE TIMING OF CONFLICT MANAGEMENT</td>
</tr>
<tr>
<td></td>
<td>Data</td>
</tr>
<tr>
<td></td>
<td>Model Specification</td>
</tr>
<tr>
<td></td>
<td>Empirical Measurement</td>
</tr>
<tr>
<td></td>
<td>Model 1 Results: Pain Accumulation: Who Will Initiate Conflict Management?</td>
</tr>
<tr>
<td></td>
<td>Model 2 Results: Pain Threshold: When Will Conflict Management Occur?</td>
</tr>
<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td>VIII</td>
<td>CONCLUSION</td>
</tr>
<tr>
<td></td>
<td>Summary of Findings</td>
</tr>
<tr>
<td></td>
<td>Discussion</td>
</tr>
<tr>
<td>REFERENCES</td>
<td></td>
</tr>
<tr>
<td>APPENDIX A</td>
<td></td>
</tr>
<tr>
<td>APPENDIX B</td>
<td></td>
</tr>
<tr>
<td>APPENDIX C</td>
<td></td>
</tr>
<tr>
<td>VITA</td>
<td></td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Manipulated Variables for Individual Experiments</td>
</tr>
<tr>
<td>3.2</td>
<td>Hypotheses Tested in Each Experiment</td>
</tr>
<tr>
<td>3.3</td>
<td>Empirical Models: Variables and Sources</td>
</tr>
<tr>
<td>5.1</td>
<td>Issue Salience Measures: Means for Repeated Measures</td>
</tr>
<tr>
<td>7.1</td>
<td>Cases for Empirical Analysis</td>
</tr>
<tr>
<td>7.2</td>
<td>Multinomial Logit Models of Crisis Management Initiation: Models 1B₂ and 1B₃</td>
</tr>
<tr>
<td>7.3</td>
<td>Multinomial Logit Models of Crisis Management Initiation: Models 1B and 1B₂</td>
</tr>
<tr>
<td>7.4</td>
<td>Predicted and Actual Outcomes</td>
</tr>
<tr>
<td>7.5</td>
<td>Factor Change in the Odds of A, B or Both Initiating Conflict Management</td>
</tr>
<tr>
<td>7.6</td>
<td>Model 2: Duration of Conflict Prior to Management Attempt</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Effect of Relative Power on the Predicted Timing of Preference Change From Conflict to Management</td>
<td>47</td>
</tr>
<tr>
<td>3.2 Effect of Regime Characteristics on the Predicted Timing of Preference Change from Conflict to Management</td>
<td>48</td>
</tr>
<tr>
<td>3.3 Effect of an Opponent’s Offer of Conflict Management on Pain Threshold</td>
<td>50</td>
</tr>
<tr>
<td>3.4 Overall Experimental Design</td>
<td>54</td>
</tr>
<tr>
<td>3.5 Schematic Representation of Experimental Procedure</td>
<td>57</td>
</tr>
<tr>
<td>4.1 Salience Manipulation</td>
<td>66</td>
</tr>
<tr>
<td>4.2 Experiment I: Examples of Events</td>
<td>70</td>
</tr>
<tr>
<td>4.3 Casualty and Public Opinion Patterns for the Event Set</td>
<td>71</td>
</tr>
<tr>
<td>4.4 Experiment I: Mean Number of Events Prior to Negotiating</td>
<td>74</td>
</tr>
<tr>
<td>4.5 Experiment I: Mean Reported Pain of Conflict</td>
<td>76</td>
</tr>
<tr>
<td>4.6 Mean Negotiation Event by Condition</td>
<td>77</td>
</tr>
<tr>
<td>4.7 Experiment I: Relative Casualty Values</td>
<td>79</td>
</tr>
<tr>
<td>4.8 Relative Influences on Advice</td>
<td>81</td>
</tr>
<tr>
<td>4.9 Reasons for Offering to Negotiate</td>
<td>83</td>
</tr>
<tr>
<td>5.1 Experiment II: Examples of Events</td>
<td>93</td>
</tr>
<tr>
<td>5.2 Experiment II: Mean Number of Events Prior to Negotiating</td>
<td>100</td>
</tr>
<tr>
<td>5.3 Experiment II: Mean Reported Pain of Conflict</td>
<td>102</td>
</tr>
<tr>
<td>5.4 Experiment II: Relative Casualty Values</td>
<td>103</td>
</tr>
<tr>
<td>5.5 Interaction Between Relative Influences on Advice and Issue Salience</td>
<td>106</td>
</tr>
<tr>
<td>FIGURE</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>5.6</td>
<td>Interaction Between Motivation for Negotiation and Issue Salience</td>
</tr>
<tr>
<td>6.1</td>
<td>Experiment III: Example of Events</td>
</tr>
<tr>
<td>6.2</td>
<td>Experiment III: Mean Number of Events Prior to Negotiation</td>
</tr>
<tr>
<td>6.3</td>
<td>Mean Negotiation Points by Condition</td>
</tr>
<tr>
<td>6.4</td>
<td>Mean Reported Pain Prior to Negotiation</td>
</tr>
<tr>
<td>6.5</td>
<td>Experiment III: Relative Casualty Values</td>
</tr>
<tr>
<td>6.6</td>
<td>Relative Influence of Factors on Advice</td>
</tr>
<tr>
<td>7.1</td>
<td>Predicted Probability of Each Outcome as Relative Power Varies</td>
</tr>
<tr>
<td>7.2</td>
<td>Predicted Probability of Each Outcome as Relative Political Rights Vary</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

This research addresses the question of why some crises\(^1\) between states are resolved through negotiated agreements while others result in continued conflict or escalate to war. It draws on war termination literature to develop a decision making model that explains when and why actors involved in international crises attempt crisis management\(^2\). The war termination literature has a strong empirical and formal grounding, but tends to treat conflict as a function of systemic or structural characteristics of the international system and negotiation as an outcome, separate from the process of the conflict itself.

The model developed here introduces two key factors. First, it conceptualizes negotiation as a strategy, rather than an outcome. It proposes that, in a crisis situation, an actor has two strategy choices available; conflictual action or management (negotiation). By structuring the crisis environment in this manner, it becomes possible to examine the process of crisis management as part of the crisis itself.

Second, it conceptualizes crises as issue-based, rather than solely the result of structural characteristic of the international system. Actors are considered to have a general notion of the value they place on the issue in dispute. This value is considered to be a function of the salience, or importance, of the issue to the actor. Actors experience concrete

---

\(^1\) For the purpose of this research, I conceptualize crises according to Snyder and Diesing’s definition: “a sequence of interactions between the governments of two or more sovereign states in severe conflict, short of war, but involving the perception of a dangerously high probability of war” (1977: 6).

\(^2\) Crisis management is defined as the attempt to peacefully manage and resolve disputes either bilaterally or with the aid of an outside or third party. The primary purpose of conflict management, therefore, is “...to arrest the expansion and escalation of conflicts and create a structure or conditions under which it would be conducive to realizing beneficial consequences” (Bercovitch, 2000: 3).
costs associated with fighting; loss of life, materiel, and economic factors as well as less tangible negative effects, such as loss of public support or international reputation. The issue at stake – salience - affects actors’ conflict behavior through their evaluation and perception of the costs resulting from conflict. The loss of one hundred lives for an issue of great salience will be judged as more acceptable than the loss of the same lives for an issue of minor importance (Bragg and Geva 2005). The model proposes that the costs of conflict are translated by the decision maker through the conflict context (issue salience), representing the pain an actor experiences from pursuing a conflictual strategy.

This research incorporates these two factors to explain the point in a crisis at which an actor will decide to move from a conflictual to a management strategy. As the move to negotiation, or crisis management of any type, requires the willingness of both parties, the question must be further broken down:

1. In a crisis situation, when will an actor offer conflict management, and which actor will be the first to instigate negotiation?
2. In a crisis situation, when will an actor accept an offer of conflict management?

The model developed to explain why, and therefore when, actors will offer or accept conflict management incorporates four central explanatory variables; relative power, issue salience, costs and sensitivity to those costs. The concept of pain in introduced to capture the impact of costs on an actor, represented by the combination of costs and sensitivity. Issue salience is theorized to determine the actor’s pain threshold for a specific crisis. Once that threshold is reached, the actor’s preference for a conflictual strategy over management changes. How soon the threshold is reached, the rate of pain accumulation, is determined by the relative power of the actor, the intensity of the conflict and their

---

3 Sensitivity is conceptualized as a function of domestic regime characteristics and international support.
sensitivity to those costs (regime characteristics). The final factor which is theorized to affect the actor’s strategy choice is the receipt of an offer from their opponent.

**Why Move to an Issue –Based Approach?**

A model which stresses the importance of issue in determining and understanding the actions of crisis actors alters the role that power plays in our understanding of conflict behavior. It is the importance of the issue, or issues, under dispute which are theorized to determine willingness of actors to pursue a conflictual strategy and the pain the cost of that choice create. Rather than relative power explaining the choices of actors involved in international crises, power indicates the ability of an actor to achieve his/her goals.

**Changing the Explanatory Role of Relative Power**

Most existing empirical research on war termination searches for empirical patterns between objective measures such as casualty rates, duration and balance of force to explain war and conflict termination. In this model, relative power remains as an explanatory variable, acknowledging the reality that a state’s ability to achieve a goal through fighting will inevitably be conditioned by the relative balance of forces between them and their opponent. Furthermore, relative power can also provide an important indication of the probably timing of offers to enter or accept negotiation.

I also argue, however, that a decision maker’s “pain threshold” is a function of the salience placed on the issue / issues in dispute. The speed with which they reach that

---

4 Kecskemeti (1958); Iklé (1971); Bueno de Mesquita & Lalman (1990); Ostrom & Job (1986); Lalman (1988); Werner (1998); Bennett & Stam (1996).
threshold and experience that pain however, is largely determined by the balance of forces. The greater a state’s military advantage, the more likely they are to experience lower levels of casualties and losses. The greater an opponent’s advantage, the more likely a state is to experience high costs over a shorter period of time.

Conceptualizing relative power in this way significantly changes its role in explaining conflict behavior. Power is no longer the key variable to explain states’ behavior and choices. Instead, its function is to predict the speed at which a state incurs or anticipates incurring costs and, therefore, the speed at which they reach their pain threshold. Power does not determine the choices of states in and of itself. Rather, it conditions the degree to which actors can achieve their goals conflictually. As such, it provides a crucial indicator of the timing of an actor’s change in preference for fighting over talking.

**Why Introduce the Concept of Pain?**

Costs are a basic construct in the formulations of rational choice and expected utility. They capture the disutility of the outcome of a given alternative and, in conjunction with the utility of that alternative, affect the preferences that underlie choice. In the context of international conflicts, costs are usually related to tangible consequences: casualties, direct material losses as well as economic downfalls. It is increasingly accepted, however, that there are also domestic political ramifications to the use of force (see for example: Ostrom and Job 1986; Bueno de Mesquita and Lalman 1990). The legitimacy and political capacity of regimes of all types is negatively impacted by the human costs of war (Bennett and Stam 1996; Jackman 1993). Furthermore, the ability of leaders to retain power decreases when
they suffer military defeats or their use of force is seen to be unsuccessful (Bueno de Mesquita and Siverson 1995).

Since cost is such a multi-faceted construct, the attempt to link it to the choice process implies the need to identify the dynamics by which individual cost elements are “integrated” into the total cost. The epistemic implication of that integration is the formation of a hypothetical construct to capture this composite variable. Moreover, the shift from the seemingly “objective” variables to a hypothetical construct supports a corresponding transition to a more phenomenological orientation (Singer 1969). In such an approach, what are presumed to influence a decision maker’s choice calculation are the perceived or experienced costs – the pain - rather than “objective” costs.

The shift towards the phenomenological orientation implies that the same cost may create a different disutility, depending on the decision context. The concept of “pain” is used to capture this transition from the relatively tangible and objective elements of costs, familiar from existing conflict research, to the more perceptual and experiential construct theorized to affect decision makers’ choices in a conflict. It also makes it possible to incorporate the subjective, context dependent elements of cost acknowledged but not quantified in existing rational choice models of conflict.

For example, Egyptian President Sadat’s statement, (in a meeting with Israeli Prime Minister Begin prior to the Yom Kippur war), that he was “prepared to sacrifice a million Egyptian soldiers in return for the last grain of the holy earth of Sinai” (http://www.zionet.co.il/manhigut/en/view_article.php3?article_id=85) is not a statement that would be easily stomached in western democracies.
**Testing the Model**

Both experimental and statistical methodologies will be used to test the hypotheses derived from the theoretical model. This multi-method approach was chosen because of the nature of the questions being examined and in order to minimize the limitations of the individual methodologies. The hypotheses being tested are process-oriented and, as such, are very well-suited to an experimental design. In particular, experiments allow the researcher a great deal of control over the way in which variables are defined and operationalized, and the context in which they are presented. A statistical, large-n analysis, on the other hand, provides a more direct test of the applicability of the theory to the “real world”. Particularly when it comes to the measurement of issue salience, however, data on actual crises has limitations and the same closeness between theory and operationalization is not possible. By using both methods, therefore, the theory is tested both more directly and more realistically.

Before moving to a discussion of how the theoretical model will be tested, the question of the ability of experimental methodology to examine questions such as those raised in this model must be addressed. The internal validity of experimentation as a means of testing hypotheses can be directly tested, and is accepted by international relations scholars and political scientists more generally (Kinder and Palfrey 1993).

It should also be noted that, much like formal models, experiments are designed primarily to test hypotheses deduced from a given theory and model. Additionally,

---

6 It should be noted that in both the experimental and empirical models issue salience is assumed to be symmetric between actors. The reasons for this restriction are discussed in greater detail in the relevant chapters.

7 See discussion of the results of the manipulation checks of salience and information reported in this results section.
experiments can also be employed to explore the consequences of controlled counterfactual scenarios that are derived from more loosely defined theories. Again, as with formal modeling, this gives us potential insight into what may happen, but did not as yet actually happen, in the real world (Mook 1983). In cases where the experiment is an appropriate representation and thus test of the theory, the findings merely support the logic of the theory. “What we seek to generalize is not the findings but the theory” (Geva and Skorick 2001).

Chapter I will provide a conceptual introduction to the questions addressed in this research and their importance to the study of interstate crises, in particular their resolution through crisis management techniques. The rationale for moving to an issue-based approach to the study of conflict management initiation will be discussed, and its implications for the role and treatment of relative power. Finally, the concept of “pain”, as conceptualized in this research will be introduced, focusing on the advantages provided by moving from purely static and tangible measures of costs, particularly in light of the centrality of contextual factors to the model presented.

Chapter II will review the state of the literature in several pertinent areas. As the conflict literature is vast, it is not the intention of this chapter to provide a comprehensive review of all aspects of the literature. Rather, the review is structured around the dependent and independent variables used in the theoretical model and the move toward operationalization of these concepts in both the experimental and empirical chapters. Traditional and quantitative conflict literature provides a clear starting point for an examination of the effects of relative power and objective costs, (in particular economic and casualties), on actor behavior and strategy choices during conflicts. The theory’s
concentration on the effect of context, in this case the issue at stake, and individual actors’ sensitivity, both domestically and internationally to the costs of conflictual action, brings the research more in line with phenomenological and decision-based approaches to the study of conflict. These, in turn provide a linkage in to the conflict management literature, which places emphasis on issues and interests as key to generating resolution, and, consistent with the wide use of case studies, incorporates individual decision maker characteristics into its explanation of negotiated outcomes.

In Chapter III the theoretical model will be introduced and the relationship between the various independent variables and the model mechanisms discussed. Hypotheses concerning the choices actors make in particular circumstances and the effect of variables such as relative power and issue salience will also be introduced and discussed in this chapter. There will then be a discussion of how the theoretical model will be tested. An overview of the experimental and empirical models will be provided, with an emphasis on explaining how each individual model interrelates and reinforces the other. The aim of this multi-method testing approach is to provide the most comprehensive and appropriate test for the theoretical propositions presented.

Chapters IV, V, and VI develop the three related experiments designed to provide a controlled test of the hypotheses generated in the theoretical model. All three experiments are interconnected and the results of the first will be cross validated by replication in the second and third. The results of the three experiments and their implications for the theory will be discussed in each chapter.

Chapter VII will test the same hypotheses statistically, including the hypothesis regarding the effects of relative power. Data limitations, discussed in the chapter, prevent
comprehensive empirical testing of all hypotheses. The empirical models presented and
tested are, therefore designed to fulfill two main purposes. First, wherever possible to
replicate with “real world” data the hypotheses tested in the earlier experimental chapters.
Second, to explore the extent to which questions such as those raised by this research can
be addressed with the extant data, and what additional data collection and conceptualization
needs to be done to improve our ability to study the move from conflict to conflict
management empirically.

Finally Chapter VIII will summarize how the model and findings contribute to the
literature on conflict termination and our understanding of the conflict management
process more generally. Particular attention will be paid to the advantages of combining
these different literatures and moving away from a purely systemic focus to one which
accounts for context-specific factors.
CHAPTER II
LITERATURE REVIEW

In 1973 Blainey noted “For every thousand pages published on the causes of war, there is less than one page directly on the causes of peace. And yet the causes of war and peace, logically, should dovetail into one another” (1973: 3) As Vasquez’s recent edited volume (2000) indicates, almost thirty years later we still know much more about the causes of war and its escalation, than we do about the mechanisms by which its conflictual processes can be managed to achieve negotiated resolution. Yet if, as Blainey argues, the causes of war and peace are so closely connected, why is the conflict literature so disproportionately devoted to explaining the initiation and escalation of conflicts?

It is my contention that conflict management is relatively neglected in the conflict literature because it is most often seen as and end in itself, rather than an continuation of the conflict by different means. We know that wars and militarized disputes are nearly always preceded by crises. We also know that militarized disputes, once started, progress through different phases or stages, most often defined by the level and extent of violence and costs they involve. In this sense, use of force can be thought of as a strategy, the intensity of which varies over time. Conflict management, if considered as part of the conflict process, becomes an alternative strategy for achieving resolution of the conflict. This view is similar to Blainey’s conclusion that “…the outbreak of war and the outbreak of peace are essentially decisions to implement aims by new means” (1973).
Crises and Conflict

Traditional conflict literature has focused on system level factors to explain the behavior of states in the international system. More recently, however, increasing attention has been played to the role of state characteristics. Decision making perspectives have long emphasized the importance of considering policy makers perceptions in understanding responses to international events and pressures. These contending perspectives are evident in how the notion of a crisis is defined in these various branches of the conflict literature.

The clearest distinction is between the systemic perspective, which considers crises as situations that have significant implications for the stability of interaction within the international system as a whole or a subsystem (Young 1968), and the decision making perspective that define crises in terms of national policy makers’ responses to such systemic situations (see for example; (Allison 1971; Kennedy 1971). Hermann synthesizes elements of both these conceptualizations to arrive at a three-part definition of a crisis as a situation that “(1) threatens high-priority goals of the decision-making unit (2) restricts the amount of time available for response before the decision is transformed, and (3) surprises the members of the decision-making unit by its occurrence” (Hermann 1972:13). The idea that a full understanding of the dynamics of a crisis situation can only be gained by incorporating both levels of analysis has become a common features of the conflict literature (see for example: (Holsti 1972; McClelland 1972; Robinson 1972).

This definition of a crisis is, however, relatively content-free. It does not specify the level at which the event takes place; the national, regional or international, nor does it specify the area of activity effected. The research presented here is focused on a subset of crises, defined by Brecher (1993) as military-security crises, they key indicators of which are
“threat to basic values, action demonstrating resolve, and overt hostility” (1993: 2).
Although characterized as a military-security crisis, due to the implications for the actors involved, the triggering event for such as crisis does not necessarily have to be violent in nature, rather it must be perceived as a threat. Neither does the threat have to originate from an outside source, “[a]n international crisis can also be initiated by an internal challenge to a regime…” (Brecher 1993: 3).

Following from Hermann’s definition of crisis is his observation that “[t]he characterization of crisis from the systemic approach suggests the relationship of the concept to such terms as change and conflict” (1972). Rubin et. al. define conflict as a “…perceived divergence of interest, or a belief that the parties’ current aspirations cannot be achieved simultaneously” (1994: 5). According to this definition conflict is inherently strategic in nature, as each actor sees his/her ability to achieve a particular goal as both connected to and incompatible with the goals of his/her opponent. Wallensteen further refines this conceptualization of conflict by noting that conflict “…contains a severe disagreement between at least two sides, where their demands cannot be met by the same resources at the same time” (2002: 15).

So two elements appear to be necessary to the presence of conflict; there must be incompatibility between two or more actors and there must be some form of scarcity. But conflicts do not always provoke crises, so what is the relation between the two? Wallensteen’s (2002: 15) distinction between latent and manifest conflict may offer some insight into the connection. If incompatibilities are recognized, but there is no action that can be taken to alter the situation, then conflict will, according to Wallensteen, remain latent. However, if action is possible, the conflict will become manifest. Returning to
Hermann’s (1972) definition of crisis, which implies both the need and opportunity for action on the part of the decision maker, then it would seem that crises may be regarded as a subset of conflict situations in which action is both possible and indeed inevitable.

Managing and Resolving Crises

The Role of Issue

This discussion of crises and conflict raises an interesting observation. Inherent in the definition of both phenomena is the centrality of issue. That is, the existence between two or more parties of incompatible positions on an issue or issues of importance between two or more parties. Yet the conflict literature for the most part ignores the role of issues in explaining conflict behavior and crisis choices. Rather, it remains at the system level, only one of the levels identified by Hermann, Brecher and others as necessary for understanding and identifying crises. So, it would seem that even at the definitional level there is support and rationale for developing a model of crisis behavior which incorporates the effects of issue salience.

Conflict management is the black hole of the conflict literature. Conflicts are examined from their origins as disputes, through their escalation and to their termination. Termination however, is, considered more often than not simply an outcome, describing the extent to which each actor achieved their aims. That is, capitulation, victory, negotiation, or stalemate. The implication of these outcomes as processes in themselves is seldom given much attention.

Wallensteen (2002) sees the explanatory power of bargaining approaches in conflict resolution as limited. Specifically, he argues that, due to the lack of structure and
enforceable rules in the international arena, actors in a dispute are less constrained than they are in domestic conflicts such as labor disputes. As he puts it “…conflict resolution takes on an entirely different dimension when parties have been trying to kill each other” (2002: 3). War, according to Wallensteen, is a quantitatively different type of conflict, the stakes are higher, and the incompatibilities more fundamental to the groups involved and, unlike economic conflicts and bargaining situations, the issues are rarely fungible.

Expected utility theory, one branch of the conflict literature, does move away from strict adherence to the centrality of power as a determinant of conflict behavior. As work by Bueno de Mesquita and others (Bueno de Mesquita 1982; Bueno de Mesquita and Lalman 1990; Bueno de Mesquita et al. 1999) demonstrates, “rational actors can choose to wage war even when their subjective (or real) prospects of victory are very small if they care enough about the issues in question” (1988: 638-9). So there is precedent for an issue-based approach to the question of conflict management.

As discussed earlier, one of the less usual, aspects of this research is that it falls in the fault line between two major bodies of literature which do not talk well with each other. In particular, the conflict literature has much more to say about what causes war and conflict than it does about the conditions for its end. However, as Wittman points out; [b]ecause there is a great deal of symmetry between how a war ends, and how a war begins…the theoretical structure can be applied equally well to investigating the initiation of war” (1979: 44)

**Relative Power**

Realism and its more recent version, neorealism, remain the dominant perspective in international relations and conflict studies in particular. This dominance is reflected not only
in the development of theories of war and conflict, but has also influenced the manner in which large-scale data projects (such as COW and MID) have been constructed. This, in turn, has arguably conditioned the ability of scholars to test theories of conflict which deviate from the expectations and assumptions of this theoretical paradigm (Diehl 1992). Any discussion of the role that relative power plays in existing theories and studies of conflict behavior must, therefore take into account these antecedents.

There can be no getting around the fact that a state’s ability to achieve its goals through military action will inevitably be conditioned by its power, relative to its opponents. Or, as Blainey puts it:

One conclusion seems clear. It is dangerous to accept any explanation of war which concentrates on ambitions and ignores the means of carrying out those ambitions. A government’s aims are strongly influenced by its assessment of whether it has sufficient strength to achieve those aims. Indeed the two factors interact quietly and swiftly. (1973: 151)

However, as the United States and other powers have experienced throughout history, it is not always the most advanced, strongest and well-trained forces that ultimately triumph in militarized disputes and wars. Relative power may determine the speed with which an actor accumulates costs in a conflict, but, short of total annihilation, it cannot predict that actor’s willingness to tolerate those costs to achieve their goal.

**Expected Utility**

"Reason and war," or expected-utility theory (Bueno de Mesquita and Lalman 1992; Bueno de Mesquita 1982) incorporates the domestic realm into international interactions. States are assumed to be rational, unitary actors (with leaders acting as "gatekeepers"). Expected-utility theory bears some relation to realism/neorealism, but it does make some important contributions which put it at odds with important realist notions, especially the
systemic focus, and Bueno de Mesquita and Lalman (1992) themselves heavily criticize realism. The two basic questions they authors’ ask are, do states base their policies on reason, and do these policies advance the general welfare? They conclude that states are indeed rational, although they fail to conclude that foreign policies necessarily advance welfare.

Expected utility approaches retain the centrality of relative power as a determinant of conflict behavior through the calculation of the probability of success in conflict. They refine our understanding of the choices states make, however, through the introduction of the notion of utility. That is, determining that you can win a fight is no longer reason enough to start one. Rather, choice is balanced by consideration of the value of the issue at stake compared to the cost of achieving it. It is the manner in which costs have been conceptualized and incorporated into our understanding of conflict behavior, in particular conflict termination and post-conflict bargaining, that will be considered next.

Many expected utility approaches to war termination (see, for example Bueno de Mesquita 1982; Wittman 1979), assume that agreement to end a war can only be achieved if agreement makes both sides better off than continued fighting. The assumption behind these approaches is that actors initiate or accept conflict management only after determining that there exists a settlement that makes both actors better off than would continue fighting (Wittman 1979). The argument presented in this research deviates from this assumption. Actors are assumed to choose between conflict and management not on the basis of maximizing their ultimate outcome (the terms of any settlement or complete victory), but by assessing the costs they have sustained through fighting, relative to the importance they place on the issue in dispute. At the first stage of the conflict management process –
initiation – which this research is solely concerned with, it is the immediate pain of conflict, balanced against the value placed on the issue which is considered to dominate the decision process.

Expected utility models also address the question of the timing of management initiation. In particular, the dilemma that can emerge from the need for both actors to prefer management to conflict in order for management to be possible. According to this logic, as the probability that one side is going to lose a fight increases, so does its preference for attempting a negotiated agreement. However, if one side’s probability of winning is decreasing, then the other side’s must be increasing, thus their incentive to negotiate could be expected to decrease. This expectation has much in common with power preponderance theory and can initially appear to be a considerable obstacle to initiating conflict management. However, Wittman argues that this interpretation is in fact misleading as it discounts the effect that changing probabilities of victory have on the demands made by the losing side and, therefore, the attractiveness of settlement to the winning side. He contends that:

> War and peace are substitute means of achieving an end. If one side is more likely to win at war, its peaceful demands increase, but at the same time the other side’s peaceful demands decrease. Thus we do not know whether an overlap is more or less likely. (1979: 751)

**Costs**

In line with expected utility theory, much of the war termination literature (see (Werner 1998: 323) assumes that there is a relationship between the costs of a conflict it duration. That is, actors continue to fight until the costs of doing so outweigh their evaluation of the stakes. The more expansive the aims of the aggressor, the higher the costs
they will be willing to sustain. Following this logic, it is expected that war termination becomes more likely as the costs of conflict rise. Similarly, this would seem to suggest that an actor could shorten the duration of a war by increasing its initial intensity.

Werner (1998) discusses the implications of this approach to the relationship between war aims, conflict costs and terms of settlement. She focuses on the different implications of models which assume the benefits of conflict to be fixed and exogenous to those bargaining models (for example: Morrow 1989; Morgan 1994) which treat the terms of any negotiated settlement as endogenous to the conflict and bargaining processes. Werner finds that support for the latter approach is more consistent (1998: 336). Werner’s focus, however, is on the relationship between the process of war and the ultimate terms of settlement. So, while her findings can provide some insight into the relationship between costs and strategy choices in conflicts, they do not directly address the question central to this research: when will conflict management be initiated?

In the model developed here, actors involved in a crisis are considered to be utility maximizers. However, their frame of reference is not expected gain, but experienced loss, or cost. Actors are considered to have a general notion of the value they place on the issue in dispute. This value is considered to be a function of the salience of the issue to the actor. Actors also experience concrete costs associated with fighting – loss of life, materiel, and economic factors. This conceptualization of the role of costs draws heavily on expected utility. However, as will be argued in the later discussion of sensitivity to costs, this research proposed that is not objective costs that are incorporated into a decision maker’s calculus; rather, such costs are assessed in light of the salience of the issue at stake and the sensitivity of individual leaders to both the domestic and international ramifications of conflict costs.
Casualties and Public Support

Before beginning a discussion of the possible variables that contribute to public support for the use of force it is important to note one major caveat. Nearly all of the empirical, case study and theoretical work on the subject examines US public opinion.8 Extending the findings of this research to a general model of conflict decision making as presented here presents a problem for two, possibly more reasons. First, the US is a western democracy and, as discussed above regime type matters. Second, all of these studies of US public opinion have been done during a period in which the US has either been a superpower or, more recently the only superpower. As perceptions of risk and threat have been shown to influence public opinion, and relative power and international clout can be expected to effect these perceptions, it is possible that certain determinants of public opinion may be suppressed (for example vital interests), and others possibly sensitized (casualties), by the expectations created by the US’s international prominence and power.

The research available does, however, point to several key variables which can influence the level of public support for the use of force, and thus the decision maker’s response to costs. These are: the perceived success of an action; the length of an action; the rationale for engagement and the rally effect. As the presence of any of these factors is linked to an increase in support, it seems logical to infer that their absence would decrease support, thus increasing the impact of such costs – the pain - experienced by the decision maker.

---

8 Two exceptions to this are Eichenberg’s (1989) *Public Opinion and National Security in Western Europe* and Risse-Kappen’s (1991) comparative study of liberal democracies. Public opinion data from Eastern Europe is also becoming more available with time. However, this still leaves the majority of public opinion data coming from European, democratic states.
Success

Jentleson (1992) refers to the impact of success on public opinion as the “halo effect” – the “quintessential version of risk aversion theory” (1992: 52). While Jentleson remains unconvinced that success is the most appropriate indicator of public opinion, he does find some support for the theory. The support is mirrored in Kull and Ramsay’s study of American public attitudes to military fatalities in the post-Cold War era, which presents evidence that “The critical question that will determine public response [to casualties] is not whether US vital interests are involved, but whether the operation is perceived as likely to succeed” (2001: 212). Peffley et al. (1995: 310) also find that success creates a strong rally effect and generates increased presidential approval ratings. They suggest that one of the reasons success has such a strong positive effect on public opinion is that it removes uncertainty – effectively ending the debate about the issue itself and the appropriate response (314).

Duration

Success brings us to the second proposed determinant of public support – the length of the action. Not surprisingly, short, decisive actions are more likely to generate public support than long, drawn out engagements. How separate this factor is from success is less clear, however. As the oft-cited example of Vietnam demonstrates, lack of mission clarity creates uncertainty in terms of both execution and results. Both factors, it is argued

---

9 Specifically the cases of Lebanon, 1984; Panama, Libya and the Gulf War all demonstrated high support after clearly successful execution (Jentleson 1992)

10 Kull and Ramsay utilize extensive, multi-source polling data from PIPA; ABC; CNN-USA Today; Time-CNN; and Gallup. The polls provide contemporary public opinion data on US military involvement in Somalia (after the October 1993 fatalities), the Gulf War (before and after the ground war against Iraq), Saudi Arabia (after the June 1996 bombing in Dhahran), Lebanon (After the 1983 bombing of the Marine barracks) and Bosnia (Feb-Mar 1998).
depress public support. Holsti, quoting Clifford, provides anecdotal support for the
influence of this belief on the Johnson administration’s decision making on Vietnam during
the summer of 1965:

George Ball warned: ‘We can’t win. The war will be long and protracted
with heavy casualties. The most we can hope for is a messy conclusion. We
must measure this long term price against the short-term loss that will result
from withdrawal.’ Producing a chart that correlated public opinion with
American casualties in Korea, Ball predicted that the American public
would not support a long and inconclusive war. (Holsti 1991: 446)

Ball’s assumption of the US public’s unwillingness to stomach casualties is reflected in the
perceptions of contemporary policymakers. Similarly, Kull and Ramsay’s (2001) study
showed that there was a strong, widespread belief among foreign policymakers that there is
not enough national interest at stake in the post-Cold War era to justify US deaths.

**Rationale for Engagement**

The linkage of tolerance of casualties and national interest is in itself an assumption.
The contention is that the public will be more supportive of the use of force when the vital
national interests of the country are at stake. Interest-based explanations are premised
largely on realist-based notions of the determinants of foreign policy, translated down to the
level of the individual. Strategic ties, geopolitical primacy and geographic proximity, all
factors commonly found in general theories of conflict are, in this case used as determinants
of public opinion. The key problem with this conceptualization is that the US public has
been found again and again to have a very sparse, superficial understanding of international
events (Holsti 1992; Jentleson 1992; Peffley et. al. 1995).

Jentleson proposes an alternative structure for explaining variations of public
support for the use of force, one based on the “*principle policy objective*” either foreign policy
restraint or internal political change, with the former generating greater levels of support (1992: 53). Part of the logic behind these expectations is linked to the efficacy of military force in achieving either goal.

Foreign policy restraint objectives tend to lend themselves more readily to strategies that are primarily military and secondarily political … Internal political change objectives, however, tend to require strategies in which the relative balance is reversed, and in which the objectives are much more difficult to translate into an operational military plan. (1992: 53)

While the distinction between these two types of military action is both innovative and links well to broader conflict theory, it remains reliant on success and duration arguments. If foreign policy restraint is more suited to a military response, then isn’t it also more likely that a military action in such a case will be successful and decisive? As the current war in Iraq so painfully demonstrates, it is far quicker and easier to defeat a country’s military and overthrow its government than it is to create regime change in the midst of an occupation and insurgency.

**Rally Effect**

It is a well-documented and accepted fact that public support for intervention is generally high in the days immediately following the instigation of force. Peffley et.al. (1995) suggest that part of the reason for this surge in public support may be a media effect. They note that, particularly in the early stages of a conflict, the administration tends to have a virtual monopoly over information regarding a conflict. Furthermore, the president can use his prestige and position to directly address the nation and further shape public perceptions. These conditions, the authors argue, mean “…members of the opposition party are often reluctant to criticize the president” and “under these circumstances, media coverage of the
president’s use of military force tends to be not only intense but extremely favorable as well” (1995: 308).

Again, while an individual phenomenon in itself, the rally effect seems to be driven by the same factors as rationale – success and duration. Especially in the case of the United States, it is unlikely that an initial attack will go badly. Secondly, the rally effect is temporally confounded by duration. At the time in the conflict in which it occurs there is rarely any indication or discussion of the possible duration of the action and no direct experience by which to judge duration. Again, think back to the Bush administration’s estimates of a timeframe for US troops in Iraq and Bush’s infamous and premature declaration of “mission accomplished” in May of 2003.

**Sensitivity to Costs**

Despite the early dominance of the realist approach to study of international relations, over the past 15 years attention to the domestic sources of influence on foreign policy has increased. Led by the strength of empirical evidence supporting the democratic peace (Maoz and Abdolali. 1989) phenomenon, scholars have examined the extent to which factors such as structural constraints (Bueno de Mesquita and Lalman 1990), public opinion (Mueller 1973; 1994), and leader’s responses to public opinion (Ostrom and Job 1986; Russett and Graham 1989) influence foreign policy actors. While the majority of this research has focused on democratic regimes, Morgan and Campbell (1991) suggest that leaders in non-democratic states are also constrained by institutional factors and that the effects of these constraints may be equally as important as they are in democratic regimes.

---

11 Due to the overwhelming military superiority it enjoys.
Democratic Regimes

In democratic regimes, a government’s ability to use force to resolve international disputes is contingent upon public support. That is, those who will bear the brunt of the economic and human cost of fighting must either actively approve of, or passively acquiesce, to their government’s decision. Furthermore, structural features of democratic institutions – legislatures, bureaucracies, interest groups – are all considered to constrain the actions of democratic leaders. Broad societal support, at both the popular and institutional levels, is considered to determine the viability and legitimacy of any and all democratic policies, including the deployment and use of the military.

It is widely accepted that public support for military action is strongly influenced by the costs of that action, and that the clearest indicator the public has of those costs is the number of casualties their military forces are sustaining.12

Attention to Public Opinion in the US

According to Holsti’s (1992) overview of public opinion research, the impact of public opinion on US foreign policy has increased over time. Holsti notes a change in the opinion-policy link between the post-WWII and post-Vietnam eras, and offers both a substantive and methodological explanation for the differences. Substantively, during the post-WWII era the president was generally thought to have a “free hand” when it came to foreign policy. The public was considered to be both ill-informed and relatively disinterested in foreign affairs, influenced by the executive, but not influencing (1992: 444). After Vietnam, however, this idea of executive freedom was questioned and evidence of

public influence on presidential actions, although not definitive, begins to emerge. Quantitative studies, although short on causal clarity, suggest that, if used, foreign policy issues can influence election outcomes and voters do have a tendency to punish foreign policy failures (1992: 452). More generally, he finds there is “impressive correlation evidence that policy changes are in fact predominantly in the direction favored by the public” (1992: 459). Detailed case studies further suggest that the influence of the public also depends on the policymaker; “Whereas public opinion influenced many mid-level officials and a few higher ones – for example Casper Wienberger – it has little impact on others, including Ronald Reagan” (1992: 455).

Holsti does point out, however, that there are other possible explanations for these apparent substantive changes. First, influenced by realist theory, much of the study of foreign policy has focused on crises, leaving little time for public opinion to kick in (1992: 444). Furthermore, polling questions, survey and statistical techniques have all improved greatly in more recent times. This has allowed for more focused and nuanced studies of public opinion to be carried out. Still, as Holsti reminds us, “we have a good deal more systematic evidence describing the state of, or trends in, public opinion, than on how it has affected the actual conduct of foreign affairs” (1992: 451).

**Non-Democratic Regimes**

It is not just in democracies that leaders can be adversely affected by casualties. According to Stam (1996) and others (Jackman 1993) the legitimacy and political capacity of regimes of all types is negatively impacted by the human costs of war. Furthermore, the ability of leaders to retain power decreases when they suffer military defeats or their use of force is seen to be unsuccessful (Bueno de Mesquita and Siverson 1995). As discussed
earlier, “body counts”, or the number of casualties sustained in a conflict is one possible measure of success (Gartner and Myers 1995).

**Differences in the Impact of Public Opinion by Regime Type**

There is no theoretical or intuitive reason to expect the connection between public opinion and casualties to differ across regime types. To do so would imply that the responses of individuals to loss is related to the political system they live under. What is expected to differ however, is the sensitivity leaders have to public opinion. That is, leaders in democratic states are expected to place greater importance on public support of a particular foreign policy action, especially one than involves the use of forces, than are leaders in non-democratic regimes. This is based on the observation that, in democratic governments, the link between popular support and political longevity is both more direct (through the institutional mechanism of elections) and disaggregated (universal suffrage).

**What Regime Type Can’t Tell Us**

Consideration of the effects of regime type provides some insight into how various factors contribute to the pain a decision maker experiences in response to choosing a conflictual dispute resolution strategy. In terms of the model presented it indicates the extent to which domestic public opinion sensitizes decision makers to the tangible costs of conflict, particularly casualties\(^{13}\). What it cannot tell us, however, is how much pain a decision maker will be willing to endure to achieve a goal. Determination of the pain threshold for a particular conflict is theorized to be based on the particular issue at stake.

---

\(^{13}\) As discussed in the section “Defining success in conflicts” public support may also be predicated on perception of the success or failure of a particular action.
The more salient an issue is, the higher the level of pain an actor will be willing to sustain before looking for an alternative means of resolution.

There is also evidence from the American public opinion research that the influence of public opinion varies according to the type of foreign policy issue. In particular, Holsti notes that public opinion is less influential in crisis situations. He presents two possible explanations for this decrease. First, there is less time for the public to react and the administration to gain information on public opinion. Second this lack of time for reflection and debate makes it easier for a leader to manipulate and direct public opinion regarding the best response (1992: 461). This latter point is also consistent with Peffley et al.’s. (1995) explanation of the rally effect.

**Domestic Homogeneity**

Regime type also cannot provide a direct indication of the degree of consistency of public support within a particular society. As discussed, regime type can affect the type and degree of constraints faced by leaders involved in foreign crises and conflicts. However, levels of domestic support for a particular conflict may be conditioned by other social and demographic characteristics, in particular, the level of homogeneity within the society. More homogenous societies are more likely to share a common evaluation of the importance of a particular issue of dispute and, therefore, a common evaluation of the relative merits of management and conflict.

Coser discussed the possible implications of domestic differences on the conflict management process, noting that:

Such contentions [over when to move to management] are likely to be more deepgoing the less integrated the social structure. In integrated structures internal contentions may vitalize and strengthen the groups’ energies, but if
divergencies as to appropriate action affect the basic layers of common belief, symbolizations of victory and defeat are also likely to be basically divergent. (1961: 351)

**The Issue at Stake**

Blainey discounts the necessity of considering the specific issue context of a conflict in a manner consistent with realist and systemic theorists’ fixation on the centrality of power as an explanatory variable.

One generalization about war can be offered with confidence. The aims are simply varieties of power. The vanity of nationalism, the will to spread an ideology, the protection of kinsmen in an adjacent land, the desire for more territory or commerce, the avenging of defeat or insult, the craving for greater national strength or independence, the wish to impress or cement alliances – all these represent power in different wrappings. The conflicting aims of rival nations are always conflicts of power. Not only is power the issue at stake, but the decision to resolve the issue by peaceful or warlike methods is largely determined by assessments of relative power. (1973: 150)

This distillation of motivation provides a neat and parsimonious way of conceptualizing the decision to use force or not. I would argue, however, that it sacrifices considerable explanatory power when it comes to understanding the motivations for moving toward a strategy of management rather than conflict.

**Issue Type**

Much of the justification given for the disregard of issue type or salience in studies of conflict behavior is put down to the dominance of the realist paradigm. Consistent with Blainey (1973), Mansbach and Vasquez state that

…the realist paradigm omits the differences among stakes at issue as a significant variable, because it assumes that there is, fundamentally, only one issue in global politics – the struggle for power and peace. (1981: 868)
They challenge this view, however, arguing that “ignoring stakes leads to important distortions when mapping global behavior” (1981: 870). Although their study is based on specific, rather than generalizable foreign policy issues, it does provide initial support for their contention that “behavior in world politics may vary significantly according to the issues under contention” (1981: 874).

Gochman and Leng (1983) provide a more generalizable approach to the incorporation of issue type in the study of conflict behavior. They divide issues into two basic categories – vital and not vital. Their categorization is consistent with a realpolitik logic; vital interests are “(a) the political independence of the state and the survival of the governmental regime, and (b) the retention of, and control over, territory within and contiguous to the national borders” (1983: 100). All other issues, whether economic, military or territorial are considered as “less than vital” (1983: 100). Their empirical tests provide support for the hypothesis that vital issues play an important role in the escalation of hostilities in interstate bargaining. They conclude, consistent with Vasquez (1983; 1985), Rosen (1972) Hensel and Diehl (1994) and Bennet (1996; 1998), that:

…where the dispute bargaining entails opposing tendencies simultaneously pushing toward war and non-war settlements, non-behavioral attributes can tip the balance. Particularly important are the issues in contention.

(Gochman and Leng 1983: 108)

An alternate typology of issues, developed initially by Rosenau (1966), was tested by Vasquez (1983). The basic division according to this typology is between tangible and intangible issues. The fundamental difference between these two classifications is that tangible issues have divisible ends, while intangible issues do not. Subsequently, disputes

---

14 See discussion below
over intangible issues do not create a bargaining space in which compromise is possible, and thus cooperative interactions usually fail (Vasquez 1983: 181). Vasquez operationalizes tangibility according to “whether a stakes end can be photographed and its means purchased” (1983b: 181) and intangible ends as those which cannot be seen directly (e.g. prestige), and intangible means as verbal actions (e.g. signing a treaty). In this study he conducts a content analysis of event data concerning US –West German interactions (1949-75), identifying “78 distinct substantive stakes over which the actors were contending in this historical period (e.g., access to Berlin)” (1983: 181).

### Issue Salience

Rosen (1972) touches on the impact of issue salience on the comparative willingness of actors to sustain the costs of conflict. In particular, he notes the balancing effect that asymmetric issue salience can have on overcoming the relative power disadvantage common is guerilla wars and wars for independence. He quotes Ho Chi Minh’s prediction that “In the end the Americans will have to kill ten of us for every American soldier, but it is they who will tire first” (1972: 168) to illustrate his point. He suggests that major powers often miscalculate the probable trajectory of independence conflicts because their frame of reference is fundamentally different from that of the forces they face.

So while the strategic theory of the United States [in Vietnam] was derived from a model of war power based on the ability to harm, the strategic theory of the guerilla is based on the willingness to suffer. (1972: 168)

He suggests, however, that each side’s “war power model” was modified through exposure to the other resulting in a synthesis in which each actor’s “cost tolerance” is balanced against their ability to inflict harm on an opponent (1972: 169). The concept of
cost tolerance is similar to that of “pain” developed in this model. However, Rosen’s theory and analysis do not explicitly examine the impact of issue type or salience on an actor’s willingness to endure the costs of conflict.

The question of the effect of issue salience is addressed more explicitly by Vasquez, although his study is restricted to critical foreign policy issues; “those which have the highest salience in a political system” (1985: 644), and does not therefore provide a general theoretical framework for the incorporation of salience into a crisis behavior model. Furthermore, Vasquez’s discussion is primarily concerned with the sources and effects of domestic contention over such foreign policy issues and offers no propositions regarding how relative salience of an issue might affect the process of an issue once it becomes as crisis.

Vasquez also touches on the concept of issue salience in his (1983) study of cooperative-conflictual interactions between the US and West Germany. Here, he introduces a measure of intensity by counting the interactions associated with each of the 78 identified issues and using it as an indicator of the attention a specific “stake” is generating (1983: 182). Once again, however, the generalizability of this operationalization of salience is limited. First, the “stakes” themselves are specific policy issues and second, the intensity measure is based on the number of events engendered by each stake, with no accounting for the individual intensity or severity of the specific event. Overall, Vasquez’s approach to salience in this study is not well suited to the central questions of interest to this research.

Hensel and Diehl’s (1994) study provides a more generalized discussion of issue salience but is restricted to examining why states chose not to resort to military options in interstate disputes. The do note, however, that nonmilitarized disputes are “somewhat
unlikely when highly salient (or vital) issues are under contention” (1994: 484), although go on to note that this relationship is contingent on the behavior of the opponent, relative power and the absence of internal conflict in the target state. These last two factors are consistent with the theoretical expectations of the model developed in this research.

Hensel and Diehl base their operationalization of issue salience on Holsti’s (1991) issue typology. They collapse the original 24 categories into four: territory, regime, policy and third-party issues then again into two: territory or regime; and policy or third-party (Hensel and Diehl 1994: 492). Their finding, that issue salience so defined has the greatest influence on nonmilitary response; high salience issues being much less likely to provoke a nonmilitary response, is consistent with the expectations of the model developed here. So is their conclusion that “[t]he intent of the opponent must be measured not only by its level of hostility…but also be the importance of the issues involved in the confrontation from the vantage point of the target state” (1994: 503).

This recognition that not all issues are equally as important to states and that the salience of the issue in dispute in a specific crisis will condition the conflict behavior of actors has been demonstrated in later studies. Bennett (1996) found limited empirical support for the hypothesis that there was a positive relationship between issue salience and rivalry duration. His 1998 study of rivalry duration found that rivalries concerning important issues lasted longer than those that did not (1998: 1224). However, once again the operationalization of issue salience one based on what Bennett refers to a “realist conception” (1998: 1219). Rivalries over borders or homeland territory are considered more salient, as are colonial issues or issues of regional influence. So, much as with Hensel and
Diehl (1994), although salience is incorporated into theory, the operationalization significantly limits its explanatory purchase.

Diehl (1992) provides perhaps the clearest overview of the progress conflict literature has made in attempting to incorporate issue type and salience into the quantitative study of conflict. He identifies three reasons why issue-based analyses have not been more common in the literature. First, as does Vasquez, he point to the dominance of the realpolitik approach and it’s assumption that power alone determines behavior and outcomes in the international arena. Moving on from this, he notes the tendency of scholars to support the belief that “the black box of decision-making should remain closed at least at this stage in the international conflict field” (1992: 334). Finally, he raises the more pragmatic rationale, discussed earlier, that “[s]cholars also become socialized by the data sets they work with and their thinking tends to be stifled by that familiarity” (1992: 334).

Linked to this last rationale is the problem, apparent from this review and discussed in later chapters, regarding the difficulties inherent in identification and measurement of issues themselves. And, as Diehl observes:

It is even more problematic to develop and empirical measure of the salience of those issues involved in the conflict. In some conflicts, the stakes involved in the conflict are not as tangible as might be the case with conflicts over territory or markets…. Furthermore, one runs into the problem of perception; it is difficult to determine if hat appears objectively to be very salient is perceived as such by decision-makers (or vice versa). (1992: 336)

When it comes to determining the relative importance of different issues across different crises things become even more problematic, as an example may serve to illustrate. It is generally accepted that conflicts which involve territorial are of great importance to states,
as, in a state-based international system, control of territory is a prerequisite for most other issues (i.e. political power, resources). However, does this mean that a territorial dispute such as the Falkland Islands war should be considered to be as salient to the British as a hostile threat to the current boundaries of Great Britain would be? Or, alternately, that a trade dispute that threatens export earnings vital to a country’s economic survival is less important than a border dispute over an insignificant and unutilized area of territory? My point is this, the “what” of the issue at stake may provide a very rough indication of how important the issue may be, but to assume that relative salience can be ranked by the type of issue, alone appears unsupportable and potentially problematic.

If this is the case, however, how can we further refine our measurement of issue to accommodate variations in intensity and importance across these substantive issue types? The illustrations presented suggest that, in addition to the type of dispute, issue salience is determined by the extent to which the conflict has the potential to negatively affect the actors involved. That is, the more likely an issue is to directly and significantly decrease your security, self-determination and well-being, the more likely you are to consider it to be salient, regardless of “what” that issue is.
CHAPTER III
THEORY AND MODEL SPECIFICATION

Georg Simmel noted that conflict termination is “a specific enterprise. It belongs neither to war nor to peace, just as a bridge is different from either bank it connects” (1955: 34). It is perhaps for this reason that the transition from conflict to conflict management does not receive much attention in either the war termination or conflict management literature. The model presented and tested in this research addresses this specific issue by asking what motivates actors involved in interstate crises\(^{15}\) to cross that bridge and initiate crisis management\(^{16}\).

The model developed in this research deviates from previous approaches to the study of conflict management in four key ways: 1) management is treated as a conflict strategy rather than an outcome; 2) changing costs modify the cost/benefit analysis of conflict and the initiation of conflict management; 3) the conceptualization of costs is broadened to incorporate subjective factors and; 4) issue salience is proposed to determine the threshold at which an actor’s preference for conflict over management changes.

\(^{15}\) As discussed earlier, I conceptualize crises according to Snyder and Diesing’s definition: “a sequence of interactions between the governments of two or more sovereign states in severe conflict, short of war, but involving the perception of a dangerously high probability of war” (1977: 6). This definition is consistent with Hermann’s more general definition of crises as situations which threaten high priority goals, surprise the decision maker and leave little time for response (1972).

\(^{16}\) Crisis management is defined as the attempt to peacefully manage and resolve disputes either bilaterally or with the aid of an outside or third party. The primary purpose of conflict management, therefore, is “…to arrest the expansion and escalation of conflicts and create a structure or conditions under which it would be conducive to realizing beneficial consequences” (Bercovitch 2000: 10)
Building the Theory

Management as a Strategy

This model builds on Simmel’s observation regarding conflict management by separating the initiation of management from consideration of the final terms of settlement. This research focuses exclusively on the decision to initiate or accept conflict management. The move to conflict management is treated as a strategy change, rather than an outcome. As such the model makes no predictions regarding the success or failure of any subsequent negotiations, or the terms of settlement, if any are reached. The initiation of conflict management is conceptualized as part of the process of a conflict, rather than its end result. Again, what this model seeks to explain is what motivates actors to move from a conflictual strategy to a management strategy, not the terms of settlement that ultimately result.

Conceptualizing management as a strategy, or process within a conflict, rather than its outcome provides several advantages. It makes it possible to compare the impact of various factors, such as costs and issue salience on the crisis behavior choices of actors. In addition, it provides a means of transitioning from the examination of conflict processes, such as use of force and escalation, to the examination of management strategies; a transition that is not well established in the literature.

As discussed earlier, most of the expected utility approaches to war termination (see for example: Allison 1971; Bueno de Mesquita and Lalman 1992 ; Bueno de Mesquita 1982; Snyder and Diesing 1977; Wittman 1979, Werner, 1998) treat negotiation as an outcome; one that is achieved only if agreement makes all actors better off than continued fighting. The decision rule behind these models is one of utility maximization, which is difficult to
challenge, given the high stakes of such crises. This model, however, does not address crisis outcomes, but rather the strategic choices actors make during the process of a crisis.

The model does not assume that actors necessarily initiate or accept an offer of management with the intention of negotiating a settlement. Management initiation can play several roles in the conflict process; it can provide useful information regarding an opponent's demands, it can provide breathing room from conflictual action and the opportunity to regroup and strengthen forces and it can indicate whether there is, in fact terms of settlement that may be mutually acceptable. For this reason, it is proposed that the decision rule used by actors to determine their preferred strategy is driven more by the conflict conditions present at the time, than their expectations regarding the outcome of any settlement which is, according to Pillar, highly uncertain at this stage (1983: 57-58).

**Costs Drive Strategy Change**

The desired benefit sought through conflictual action is assumed to remain static over the course of the crisis. Conflict costs, however, are dynamic and inevitably increase over the course of a crisis. It is the changes in these costs, therefore, that impact the net benefits that an actor can hope to achieve. Actors are assumed to act to maximize their net benefit. Indeed, given this assumption, cost minimization is identical to maximizing net benefit. If the benefits associated with the crisis are static, then minimizing costs provide the only means to affect change in the net benefit. For this reason the model proposes that the strategy change, indicated by the initiation or acceptance of an offer of conflict management, is driven primarily by the costs actors experience over the course of the conflict.
It is possible that the goals of actors may change in response to events that occur over the course of the conflict; however these changes are most likely to be of lesser magnitude and certainty than the costs experienced in conflictual action. Therefore, even if the assumption of static benefits was to be relaxed, costs would still be expected to dominate the decision maker’s calculus at this stage of the conflict. Furthermore, benefits are uncertain and realized only in the future, whereas costs are experienced by the decision maker in the here and now.

This model is concerned exclusively with the strategy decision process during a crisis; it does not seek to predict what the final outcome of the crisis may be. The focus on costs is also consistent with Snyder and Deising’s observation that a crisis is a situation in which “…finding the best possible solution is a luxury” (1977: 347). The model therefore assumes that the decision rule determining the choice of strategy at this stage in a conflict is based on minimizing losses, in order to maximizing net benefits.

Because the assumption is made that benefits remain static while costs change, the choice between a conflictual or management strategy is theorized to be driven by experienced and expected costs, rather than potential gain. The decision to move from an exclusively conflictual to a management strategy is predicated on the disutility an actor experiences while involved in a conflict. Conflicts are situations in which actors are faced with very limited opportunity sets. And, as Jackman points out, “[f]or those confronted with a very restricted range of available alternatives extending from horrendous to merely awful, minimizing pain is the same as maximizing utility” (Jackman 1993: 279).
Moving from Objective Costs to Pain

This leads to the third key aspect of this model; how costs are defined in crisis situations. As discussed in the literature review, conflict costs are usually defined and measured as the economic, human and materiel losses an actor experiences during a conflict. Most generally, they can be thought of as the negative occurrences experienced cumulatively over the course of a specific crisis. Implicit in this conceptualization of costs, however, are two assumptions. First, that crises occur in a political vacuum, with that actors determining strategy choices without reference to their wider political situation. Second, that the costs have a consistent impact on a decision maker, irrespective of the context in which they are incurred.

This model challenges the assumption that the impact of costs on a decision maker is invariant. Rather, it proposes a means by which the subjective elements of cost, acknowledged but rarely incorporated into conflict termination models, can be addressed in a systematic manner. The theory contends that the impact of objective costs on a decision maker’s utility calculus is conditioned by factors specific to the decision maker (his/her political environment) and the conflict itself (issue salience). The adoption of this contingent conception of costs is predicated on the assumption that the decision environment conditions the way in which an actor perceives objective costs.

Implications of the Incorporation of Political and Crisis Context Factors

Since even the classical rational choice notion of cost is a multi-faceted construct, the attempt to link it to the choice process implies the need to identify the dynamics by which individual cost elements are integrated into the total calculation of cost. The epistemic implication of that integration is the formation of a hypothetical construct to
capture this composite variable. Moreover, the shift from objective variables to a
hypothetical construct supports a corresponding transition to a more phenomenological
orientation (Singer 1969). In such an approach, what are presumed to influence a decision
maker’s choice calculation experience of objective costs, rather than the objective costs
themselves.

The shift towards the phenomenological orientation implies that the same cost may
create a different disutility, depending on the decision context. The concept of “pain” is
used to capture this transition from tangible and objective elements of costs, familiar from
existing conflict research, to the more perceptual and experiential construct theorized to
affect decision makers’ choices in a conflict.

The recognition that human perception of physical stimuli is non-linear in nature is
well accepted in psychology. Stevens’s (1975) experiments on magnitude estimation
provided the groundwork for the now well-established psychophysical principle that
individuals’ sensitivity to changes in a physical stimulus varies as a function of the
percentage change in stimulus magnitude, rather than the absolute change. Depending on
the type of stimulus, perception of consistent incremental change can decrease as intensity
increases – response compression – or increase – response expansion (Goldstein 1999:12).
This observed physical phenomenon is similar to the principle of diminishing marginal
utility common in economics.

---

17 For example, Egyptian President Sadat’s statement that he was “prepared to sacrifice a million Egyptian
soldiers in return for the last grain of the holy earth of Sinai” (http://www.zionet.co.il/manligut/en/view_article.php3?article_id=85)
is not a statement that would be easily stomached in western democracies.
Stevens’ principle has also been demonstrated to affect individuals’ perceptions of cost in various settings. Fetherstonhaught et al. (1997) conducted an experiment to measure support for sending medical assistance to refugee camps experiencing a cholera outbreak in which the size of the camps was manipulated but the number of deaths that intervention would prevent was held constant. In general they found that, when the saved lives represented a smaller proportion of the total threatened respondents found intervention less worthwhile. That is, that people become desensitized to the value of an individual life when its loss is framed in terms of a larger overall victim population. Freidrich et al.’s (1999) experiment on willingness to support mandatory antilock brake requirements for new cars reports similar findings. 62% of respondents required more lives to be saved for the same expenditure, when the number of lives at risk was larger (Friedrich et al. 1999).

Stevens’ law provides the initial support for the contention that responses to stimuli can vary as a function of context and, in particular the accumulation pattern of the stimulus. In addition there is empirical evidence that the same psychometric principle influences individuals’ perceptions of non-physical stimuli. Physiological research into reactions to and recollections of physical pain provides an indication of how our understanding of physical pain may be add to these findings and be adapted to this research. Dar and Leventhal’s (1993) parallel-processing model conceives of pain as having both a sensory and affective, or perceptual component, provides a starting point for translating pain to the political realm. The sensory aspect can be encompassed by the familiar notion of costs. The affective as the perceptual, reflective factors which modify the impact those costs have on a decision maker - their sensitivity to the cost of conflictual action.
These two aspects of a stimulus contribute independently to the overall pain experience to create what Dar and Leventhal refer to as a distress schema (1993), which determines individuals responses to a stimulus. However, they propose that this schema is overridden if individuals are instructed to attend only to the sensory aspect of a stimulus and the experience is thus perceived primarily according to its sensory features. In comparing the relative painfulness of distress schema or sensory-based experiences of stimuli they propose that “If one accepts the premise that negative emotions associated with pain increase suffering and make the experience more “painful”, it follow that processing the noxious stimulus as a primarily sensory experience should reduce pain and distress” (Dar and Leventhal 1993: 341).

So how can this expectation be adapted the context of crisis decision making? First, it supports the proposition that considering the impact of costs as contingent on the context in which they are experienced improves our understanding of their influence on an actor’s strategy choices in a crisis. In effect, both sensory (objective cost) and affective (cost sensitivity, or consequences) components of an experienced stimulus (conflictual action) are being accounted for. Furthermore, the contention that the pain of an experienced cost is heightened by attention to the negative emotions it generates lends support to the proposition discussed below, that low public support for a conflict increases a decision maker’s sensitivity to costs.

**Political Context Effects**

Work by Bueno de Mesquita and others has begun to address this issue by incorporating the idea that all leaders seek to retain political office above all other

---

18 This prediction is supported by their findings.
considerations (Bueno de Mesquita 1982; Bueno de Mesquita and Lalman 1990). The model presented here expands on this idea by proposing conflict costs impact actors to differing degrees, conditional on their broader political environment.

It is argued that costs do not influence the decision process in isolation. Rather, they are translated by the decision maker, through his or her specific political context. The political context is a function of the domestic and international constraints faced by the decision maker in light of the current crisis. Domestic constraints are the factors which may adversely affect an actor’s ability to retain power. Although regime type\(^{19}\) provides a rough means of approximating the structural constraints facing an actor, it cannot account for possible variation as a function of the specific crisis. For this, more specific measures such as public opinion are needed. In addition, the potential for opposition may vary across similar regimes as a function of other characteristics such as the level of heterogeneity and more specific measures of political rights and civil liberties, which can effect the overall level of regime openness.

Furthermore, the model also enables consideration of how international opinion regarding the specific crisis may increase or decrease an actor’s sensitivity to the objective costs of conflict. The threat or use of sanctions and the presence of international peacekeeping forces may increase the potential objective costs of costs of continued conflictual action. International attention to a crisis, and the behavior of the actors involved may also increase their sensitivity to the these and other more direct objective costs of conflict. Concern for maintaining a “good reputation” in the international community

---

\(^{19}\) This is a common approach in conflict studies that acknowledge the impact of domestic variables on international actions (Bueno de Mesquita and Lalman 1990; Maoz, Ze’ev, and Abdolali 1989; Mueller 1973; 1994; Ostrom and Job 1986 Russett 1990-91).
would, in the context of the model, also increase an actor’s sensitivity to these objective international costs. Offers of mediation, while not increasing objective costs, would also be expected to increase sensitivity to conflict costs, while simultaneously encouraging attempts at conflict management.

Conversely, if an actor were to receive support from a third party for continued conflict, the opposite effect would be expected. The involvement of a third party would change the balance of power between the actors, thus potentially changing the rate at which objective conflict costs were incurred. Indirect support through economic or military aid would have a similar, if less extensive impact. International support for conflictual behavior may also alleviate reputational concerns and increase domestic support, thus desensitizing the actor to the costs of continuing a conflictual strategy.

The Role of Issue Salience

Pain is theorized to affect an actors’ decision to change from a conflictual to a management strategy by indicating the impact of the conflict costs experienced, on the decision calculus of the actor. As Shelling writes:

In addition to taking and protecting things of value it [military power] can destroy value. In addition to weakening an enemy militarily it can cause an enemy plain suffering… To inflict suffering gains nothing and saves nothing directly; it can only make people behave to avoid it. The only purpose, unless sport or revenge, must be to influence somebody’s behavior, to coerce his decision or choice. To be coercive violence has to be anticipated. And it has to be avoidable through accommodation. (Schelling 1966: 2)

In this sense pain acts no differently from the traditional cost measures used in rational choice models. As pain accumulates over the course of a crisis, the benefits of continuing a conflictual strategy diminish. In order to determine when an actor will change
his/her strategy however, and offer negotiation, it is necessary to know how much pain
s/he is willing to sustain. This brings us back to the basic idea behind this model; that
people will fight harder and longer for things they care more about.

Issue salience is expected to be the conflict characteristic that has the greatest
influence on an actor’s willingness to incur costs and their subsequent perception of the
painfulness of those costs. This relationship is based on the simple expectation that people
will fight harder for things that are important to them. Salience is thus theorized to have a
direct effect on the extent to which actors will tolerate pain, or losses, in pursuit of a goal.
Huth (1998) contends that the importance of the issue in dispute, in particular territory, is
crucial to understanding the conflict behavior of states. The significance of issue salience for
understanding state actions in international conflicts is also addressed by Danilovic (2002).
There is, therefore, indirect theoretical support for expecting a different response to
casualties in high salience conflicts compared to those considered to have low salience.

By focusing on issue salience this model is able to directly address the issue of
resolve by separating it from power and linking it instead to the context of the crisis.
Resolve becomes incorporated in the central notion of issue salience, which determines
level of pain an actor is willing to endure. This pain threshold marks the point at which an
actor’s strategic preference for conflict over management changes. Once reached, an actor
will move from a fighting to a talking strategy by either offering to negotiate or accepting an
opponent’s offer of negotiation. The level of this threshold is theorized to be a direct
function of the importance the actor places on the issue at stake.

As discussed earlier, a focus on relative power and other systemic factors makes it
difficult to account for situations in which small nations prevail in conflicts with major or
region powers, leaving us to resort to indirect and imprecise notions such as unequal “willingness”, or “resolve”, to use that power. This model enables us to directly address the issue of resolve by separating it from power and linking it instead to the context of the crisis. Resolve, therefore, becomes incorporated into the central notion of issue salience, which is proposed to determine the level of costs an actor will be willing to endure.

This change from a power-based to an issue-based explanation creates an interesting modification of our expectations regarding the effect of relative power on conflict behavior. A relative power disadvantage is generally expected to increase the costs an actor incurs. However, this model proposes that in high salience conflicts higher costs are regarded as acceptable. Put together, this suggests that the ability of relative power to predict conflict behavior may be confounded in situations where the less powerful actor regards the conflict issue as more highly salient than does the greater power.

**Model Specification: Predicting the Timing of Conflict Management**

The model proposes that there is a relationship between an actor’s willingness to sustain pain and the context in which that pain is experienced. That is, an actor’s pain threshold for a conflict is a function of the importance s/he places on the issue at stake. A decision maker enters a conflict with certain expectations of regarding the costs involved. These expectations correspond to a certain level of pain, which he/she has judged in advance to be acceptable, given the issue at stake. Thus, pain is incorporated into expectations regarding when an actor’s strategy choice between conflict and management will change in a specific conflict context.
As the conflict progresses, the accumulated costs move the decision maker toward his/her pain threshold. It is at this threshold level of pain that we expect to see decision makers searching for an alternate means of resolving the crisis, and thereby ending the pain. Figure 3.1 illustrates the relations between salience and the pain threshold, as affected by the relative power of the actor.\(^{20}\) As indicated in the figure, pain not only affects the threshold at which an actor’s strategy preference changes, but also the rate at which that threshold is reached.

---

20 Linearity in the graph is just a simplification heuristic.
Sensitivity to the objective costs incurred through conflictual action also affects the speed with which an actor reaches his/her pain threshold. As discussed above, sensitivity is theorized to be a function of the domestic political environment – the openness of the actor’s regime - and the crisis context. It is the former component that is theorized to affect the rate of pain accumulation, while the latter determines the actor’s threshold for that pain. This relationship is illustrated in Figure 3.2.

**FIGURE 3.2** Effect of Regime Characteristics on the Predicted Timing of Preference Change from Conflict to Management

Open Regime = High levels of civil liberties and political rights (high sensitive to costs)
Closed Regime = Low levels of Political rights and civil liberties (low sensitivity to costs)

I = expected point of change in preference (negotiate) of an open regime actor in low salience conflict.
II = expected point of change in preference (negotiate) of an open regime actor in high salience conflict.
III = expected point of change in preference (negotiate) of a closed regime actor in low salience conflict.
IV = expected point of change in preference (negotiate) of a closed regime actor in high salience conflict.
How Will Receiving an Offer Change an Actor’s Strategy Choice?

At the simplest level, an offer can be regarded as an additional piece of information to be considered by the decision maker when choosing between the two available strategies – conflict or management. In order to affect the decision process, however, an offer must be observed to change either the actor’s rate of pain accumulation or his/her threshold for pain. Following the logic of the model, the introduction of an offer can be considered as a signal of an opponent’s perception of the conflict; a signal that the opponent has reached his/her own pain threshold. This signal in turn provides new information to the decision maker regarding how to assess his/her own position. There are different ways in which such a signal may be interpreted, however, and the manner of interpretation has implications for how receipt of an offer is expected to change the decision maker’s own pain threshold.

The first assumes the decision maker to be willing to increase his/her pain threshold in order to achieve a greater payoff. The second assumes that the prospect of avoiding further pain will outweigh the potential costs accommodation signaled by an agreement to negotiate, (at least in the abstract). This raises the interesting possibility that both expectations may be right, but that the decision maker’s choice between them is influenced by the importance s/he places on the issue. That is, in high salience conflicts, where decision makers are expected to be more resilient to pain, an offer is more likely to trigger a strategic response, increasing the decision maker’s own pain threshold. In low salience

---

21 Snyder and Deising’s (1977) discussion of bounded rationality suggests that if an opponent proves to be more obstinate than expected a decision maker will lower his/her initial aspiration level, while if the opponent is more accommodating than expected the aspiration level will be revised upward. This process or revision, however, is not expected to occur more than once or twice in a conflict.
conflicts, however, when decision makers are more sensitive to pain, the domestic constraint explanation will hold and decision makers will be more likely to decrease their pain threshold in response to an offer of negotiation. This interactive relationship between the effect of an offer and issue salience is illustrated in Figure 3.3.

![Figure 3.3: Effect of an Opponent’s Offer of Conflict Management on Pain Threshold.](image)

**Propositions and Hypotheses**

The model presented proposes that an actors’ move from a conflictual to a management strategy is determined by the pain accumulated over the course of the crisis and the actor's threshold for pain in that particular crisis conflict. Pain accumulation is predicted to be a function of the actor’s relative power, costs experienced (which is partially a function of their relative power) and their sensitivity to those costs. The threshold is a function of the salience of the issue at stake to the actor.
The hypotheses to be tested are based on the theoretical expectations regarding the effect of these three factors on two dependent variables. The first dependent variable concerns the timing of conflict management initiation across different crisis cases. The second dependent variable indicates which actor within an individual crisis initiates conflict management (offers to talk).

**Proposition 1**

_An actor's pain threshold determines the point in the conflict at which s/he will initiate conflict management._

1a: A low pain threshold will decrease the time to conflict management initiation.

1b: A high pain threshold will increase the time to conflict management initiation.

**Proposition 2**

_An actor's pain threshold is a function of the salience of the issue in dispute._

2a: The higher the issue salience the higher the pain threshold.

2b: An offer of conflict management affects the actor's pain threshold, contingent on the salience of the crisis.

From these two propositions the following hypotheses are derived:

**H1:** Actors in low salience disputes will have a lower threshold for pain than those in high salience disputes, resulting in an earlier offer of negotiation.

**H2:** Actors in highly salient disputes will sustain greater costs before offering to negotiate than those in low salience disputes.

**H3:** Actors in highly salient disputes will respond to an offer of negotiation from their opponent by fighting longer than they would have if no offer had been made.

**H4:** In low salient disputes, actors will respond to an offer of negotiation from an opponent by fighting for less time than they would have if no offer had been made.

---

22 The hypotheses listed deal with the expected main effects of the independent variables only. Additional hypotheses regarding the interactions between the independent variables are specified in the empirical chapters.

23 Another possible factor that may affect the timing of negotiation is the speed at which costs, and thus pain, are accumulated. In order to simplify the model and analysis speed is not considered as a variable in this research, but will be addressed in later work.
Proposition 3

An actor’s sensitivity to the costs of conflict determines the rate at which the pain threshold is reached.

3a: Sensitivity affected by the political consequences, both domestic and international, of costs incurred through conflictual action.

Proposition 4

An actor’s sensitivity to the costs of conflict determines the rate at which the pain threshold is reached.

4a: The power of an actor, relative to his/her opponent, will affect the rate of accumulation of costs.

The following hypotheses are derived from propositions three and four:

H5: Higher levels of civil liberties and political rights\(^{24}\) will increase an actor’s sensitivity to conflict costs, thus decreasing the time to management initiation.

H6: International involvement in conflict management attempts will increase actors’ sensitivity to the costs of conflict, decreasing the time to management initiation.

H7: Within a crisis, all other things being equal, the actor with the highest relative civil rights and civil liberties will be more likely to initiate management.

H8. Actors will reach their pain threshold more quickly when they are the weaker party in the dispute and more slowly when they are the stronger party\(^{25}\). Thus, weaker actors are more likely to initiate management.

Hypotheses one through six relate to the first dependent variable; the duration of the crisis prior to one or both of the actors changing to a management strategy. Hypotheses seven and eight deal with the second dependent variable; which actor within a crisis will initiate conflict management first.

\(^{24}\) The hypotheses derived from Propositions 3 and 4 are fundamentally arguments based on expectations regarding the effects of the scope of political franchise on the potential for opposition to a particular policy. The more restrictive a regime’s franchise, the fewer interests it encompasses. Opposition would be, therefore, less likely than in an open franchise regime.

\(^{25}\) Salience and relative power are expected to have a compounding effect on a decision maker. Thus, hypotheses 1 and 5 are not contradictory.
Testing the Model: Experimental Design

The first purpose of the experimental analysis in this research is to isolate and examine two of the variables central to the theory – issue salience and regime characteristics. Salience is theorized to have a direct effect on the extent to which actors will tolerate pain in pursuit of a goal – their pain threshold. Regime characteristics, operationalized as public support, or lack thereof, for the use of military action to resolve a crisis, is predicted to affect the sensitivity of the decision maker to the costs of conflict. Both these variables are highly suited to an experimental analysis as empirical data for both is sparse and problematic.

The second purpose of the experimental analysis is to create a simple means by which to address and test the second part of the research question: does the offer of negotiation by an opponent change the timing of an actor’s move from a conflictual to a management strategy. A series of three interrelated experiments has been designed to examine the effects of issue salience, public support and an opponent’s offer on a decision maker’s crisis behavior. A three-part design was chosen as it allows for comparison of all three key independent variables while retaining a 2x2 design, thus simplifying the experimental procedure and interpretation of the results. The overall experimental design and the relationship between the three individual experiments are shown in Figure 3.4.

---

26 Relative power is held constant in the experimental design. Reasons for this decision will be discussed in the experimental chapters.
FIGURE 3.4 Overall Experimental design

MANIPULATED VARIABLES

EXP I

EXP II

EXP III

SALIENCE
Conflict Context
Issue at Stake

OPPONENT
Receipt of an
offer to
negotiate

DOMESTIC
Public support for
FP action

PAIN THRESHOLD

PAIN ACCUMULATION

CHOICE
Fight
vs
Negotiate

DEPENDENT VARIABLES

RELATIVE VALUE OF CASUALTIES

DURATION
Length of conflict

INTENSITY
# Casualties
Experimental Analysis

All three experiments were carried out using the Dec-tracer, a web-based computer platform\textsuperscript{27}. Dec-tracer allows subjects to view information and make choices at their own pace. The order in which information can be accessed however, is linear and unidirectional, giving the experimenter much greater control over how subjects acquire information and enabling a greater uniformity across subjects\textsuperscript{28}. This feature is particularly important in this second experiment, as it enables control over if and when a subject receives an offer to negotiate, from his or her opponent.

Experimental Procedure\textsuperscript{29}

Subjects were informed that they were to play the role of chief foreign policy advisor to the President of the United States, and instructed that it was their job to advise the President on the best action to take, given the current circumstances. They were then exposed to an unfolding foreign policy crisis over a fictional island archipelago – the Kell Islands - with a fictional South American country – Hendara\textsuperscript{30}. Subjects were randomly assigned to one of the four experimental conditions. The individual conditions for each experiment are listed in Table 3.1.

\textsuperscript{27} Dec-tracer program developed by Uri Geva and Infinity Design
\textsuperscript{28} Compared to a paper and pencil based experiment where subjects can flip back and forward through the information and amend previous answers.
\textsuperscript{29} The procedure of each experiment will be the same, all that changes is the variables manipulated and whether or not the subjects receive an offer of negotiation from their opponent.
\textsuperscript{30} The 1982 Falkland / Malvinas war between Great Britain and Argentina was used as the basis of this scenario and a source of information regarding the escalation of the conflict and international response.
Before beginning their decision process, subjects were provided with background information regarding the history of the dispute, their opponent, the event which triggered the current crisis, and their task in the experiment. The subjects were then exposed to the first of a series of events detailing an escalation in the crisis as well as the current cumulative number of casualties suffered by the US forces. In order to progress through the experiment, each event prompted them to indicate their recommended strategy, given the updated information they had just received. These choices reflected the two strategy options proposed in the model – continue with the conflict or offer to negotiate. The structure of the experiment is represented graphically in Figure 3.5.

| TABLE 3.1 Manipulated Variables for Individual Experiments |
|-------------------------------|------------------|------------------|------------------|
| **Variable**                  | **Experiment I** | **Experiment II** | **Experiment III** |
| **SALIENCE**                  | High             | High             | ---Constant--- (High) |
|                               | Low              | Low              |                  |
|                               | Casualties       | (casualty only)  | Casualties       |
|                               | Casualty only    |                  | Casualty only    |
| **OFFER**                     | ---Constant---   | Offer            | Offer            |
|                               | (no offer)       | No Offer         | No Offer         |
FIGURE 3.5 Schematic Representation of Experimental Procedure

INTRODUCTION
Experimenter explains topic of experiment and role subjects are to play. Subjects read and sign informed consent forms.

EXPERIMENT
Subjects seat themselves at a computer, thus randomly assigning themselves to one of the four experimental conditions. They then begin the computer-based experimental scenario using the Dec-Tracer program.

Subjects are given 5 screens of information on the crisis, their opponent, the issue and their decision task. SALIENCE MANIPULATION INTRODUCED

Subjects begin to work through the event set, continuing until they chose to negotiate. PAIN INFORMATION MANIPULATION INTRODUCED

Day 7
Do you advise the President to:
Continue military action

Day 11
Day 13
Day 15

Day 16
Offer of negotiation received
(offer conditions only)
Do you advise the President to:
Continue military action
Accept Leopold’s offer of negotiation

Day 17
Event Information
Do you advise the President to:
Continue military action
Offer to negotiate with Hendara

FINAL SCREEN
Once Subjects chose to negotiate at screen appears telling them they have successfully completed the experiment.

POST-EXPERIMENTAL QUESTIONNAIRE
Subjects complete a short questionnaire (23 questions) which provides measures for some of the dependent variables as well as manipulation checks. Subjects are then thanked for their participation.
The experiment terminated when either the subject chose to advise negotiation, or all 27 events (28 in the case of offer conditions) were accessed. In the first case, the subject was told their opponent had agreed to negotiate. In the second, they were told that their opponent has surrendered. In both cases the outcome was presented as a success. The subjects were then given a post-experimental questionnaire. They were then asked to indicate their responses to a number of inferential statements about the opposing country, the crisis, and their perception of the costs incurred prior to the end of the crisis.

**Experimental Hypotheses**

Together, the three experiments test all of the hypotheses derived from the model except for Hypothesis 8. In all experimental scenarios the relative power of the parties is kept constant for two reasons. First, power is one of the variables that lends itself to relatively objective empirical measurement and thus is suited to empirical testing. Clear experimental design requires limiting the number of manipulated variables, so excluding relative power was judged to be the least detrimental to the overall research design, as it could be examined in more detail in the empirical design anyway.

Second, holding relative power constant in the experimental designs greatly simplified the instructions for the subjects, thus decreasing the probability of error and loss of data or reliability. To put it simply, when designing a foreign policy experiment, having the subjects “play” the US eliminates the need for them to absorb and remember their fictional country’s capabilities, regime characteristics, national interests and such, relative to their fictional opponent. This greatly decreases the possibility that there will be confusion over such issues, as well as avoiding the possibility that, despite who they are told they are,
they will “play” as the US regardless. Table 3.2 lists the hypotheses tested in the individual experiments.

<table>
<thead>
<tr>
<th>TABLE 3.2  Hypotheses Tested in Each Experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXPERIMENT I</strong></td>
</tr>
<tr>
<td>Hypothesis 1</td>
</tr>
<tr>
<td>Hypothesis 2</td>
</tr>
<tr>
<td>Hypothesis 5</td>
</tr>
<tr>
<td>Hypothesis 7</td>
</tr>
</tbody>
</table>

(r) = Replicated from previous experiment

**Testing the Model: Empirical Analysis**

The empirical analysis used in this research is drawn from data in Bercovitch’s *International Conflict Management* (ICM) data set and Frank Sherman’s *SHERFACS: A Cross-Paradigm, Hierarchical, and Contextually Sensitive International Conflict Dataset, 1937-1985*. As Bercovitch provides a direct case match between both data sets, combining them is not overly problematic. Furthermore, both use similar theoretical bases for the coding of central variables. Due to nature of the questions to be tested, some restructuring of the ICM data was required. A detailed discussion of the construction of the data set and case selection is provided in the empirical chapter.

**Empirical Measurement and Model Specification**

The first question addressed by the model is; in a crisis situation, when will an actor offer conflict management? There are two mechanisms in the model which predict the
change from a conflictual to a negotiating strategy – the rate of accumulation of pain (slope) and the actor’s pain threshold; these are presented graphically in Figures 3.1 and 3.2, discussed earlier.

The rate of pain accumulation predicts which actor within an individual conflict will initiate conflict management. The pain threshold predicts at what point in a crisis conflict management will be initiated. Model 1, dealing with pain accumulation, compares actors within crises and the unit of analysis is the crisis. Model 2, which deals with expectations regarding pain thresholds, compares the timing of conflict management initiations between crisis cases, and the unit of analysis is the initiating actor.31

The data available for empirically testing the model and derived hypotheses presented here are less than ideal. This is one of the reasons behind breaking down the first question posed by the model (When will a crisis actor initiate conflict management?) into the two individual questions specified in Models 1 and 2. This approach also helps maintain the distinction between the expected effects of the accumulation of pain (slope) and the pain threshold. A full list of variables and their source used in the empirical models is provided in Table 3.3.

---

31 In cases where both actors are coded as conflict management initiators, both actors are included in the analysis. In cases where one initiates, only the initiating actor is included.
### TABLE 3.3  Empirical Models: Variables and Sources

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>MODEL 1</th>
<th>MODEL 2</th>
</tr>
</thead>
</table>
| **DEPENDENT**             | • Conflict management initiative: ICM  
  ○ A (conflict initiator)  
  ○ B (conflict target)  
  ○ Both A and B           | • Duration of conflict prior to first acceptance of negotiation offer ICM |
| **INDEPENDENT**           | **RECODE** from P 10A; P10b  
  PwrA / PwrA + PwrB  
  Range: 0 – 1              |
| Relative Power            | **RECODE** from P 10A; P10b  
  PwrA / PwrA + PwrB  
  Range: 0 – 1              |
| Issue Salience            | • Core issue of dispute  
  ICM: D14  
  • Gravity of threat  
  S: THT_VALUE              |
| Cost                      | • Relative economic costs for A  
  S: COSTSA - COSTSB  
  • Relative domestic political costs  
  S: DISSENTA - DISSENTB  
  • International political costs  
  ICM: CM 12                |
| **Sensitivity to costs**  | • Regime type: demo / non-demo  
  ICM: P14a; P14b            |
|                           | • Relative Homogeneity of party  
  ICM: P20a - P20b           |
|                           | • Relative 3rd party support for conflict  
  ICM: P19a - P19b           |
|                           | • Relative political rights of A  
  ICM: P21a – P21b           |
|                           | • Relative civil liberties of A  
  ICM: P22a – P22b           |
|                           | • Economic costs related to conduct of dispute  
  S: COSTSA; COSTSB  
  • Casualties  
  S: FATALITIES  
  • Domestic political costs  
  S: DISSENTA; DISSENTB  
  • International political costs  
  ICM: CM 12                |
|                           | • Regime type: demo / non-demo  
  ICM: P14a; P14b            |
|                           | • Homogeneity of party  
  ICM: P20a; P20b            |
|                           | • Support for conflict  
  ICM: P19a; P19b            |
|                           | • Political Rights  
  ICM: P21a; P21b            |
|                           | • Civil Liberties  
  ICM: P22a; P22b            |
Model 1

Model 1 identifies which actor within an individual crisis initiates conflict management. Given that the universe of cases examined are crises in which one or both primary parties initiate conflict management, there are three possible outcomes, or values for the dependent variable; actor A (conflict initiator) initiates conflict management; actor B (conflict target) initiates conflict management; both A and B initiate conflict management. Due to the nominal nature of the dependent variable, the most appropriate estimation model is one designed for categorical and limited dependent variables. As there is no theoretical or logical reason to expect that there is any underlying order to the three outcomes, the use of multinomial logit (MNL) is indicated (Long 1997).

Three elements are theorized to contribute to an actor’s accumulation of pain during a crisis; their power, the costs they incur and their sensitivity to those costs. As Model 1 compares the behavior of actors within a crisis, what is of relevance to the analysis is the relative level of these elements, not their absolute value. That is, as salience (thus the pain threshold) is assumed to be constant across actors, the model predicts that the actor who experiences higher costs, relative to his/her opponent, will be more likely to initiate conflict management. There is also expected to be a relationship between relative power and the accumulation of pain, such that weaker actors experience a more rapid accumulation of pain. As both the ICM and SHERFACS variables used in Model 1 are actor level variables, all required recoding in order to reflect this relativity\(^3\).

\(^3\) In order to facilitate interpretation of these relative variables, all of the recoded variables were constructed so that a higher number indicated a greater constraint on continued conflictual action (higher costs or higher sensitivity) for Actor A.
Model 2

The focus of Model 2 is on explaining differences in the duration of crises prior to the initiation of conflict management. While Model 1 focuses on testing the theoretical model’s predictions regarding the rate of pain accumulation between crisis actors and the probability of initiating crisis management, Model 2 tests the predictions regarding the pain threshold of actors. Specifically, does issue salience affect pain tolerance, and is there a systematic difference in conflict duration (prior to the initiation of conflict management) as a function of issue salience.

In contrast to Model 1, the unit of analysis is the crisis actor(s) initiating conflict management in a specific crisis, and the comparison is between crises, rather than crisis actors. This creates several advantages in light of the existing data limitations: variables, such as casualties and issue, which are only available for the crisis as a whole, not the individual crisis actors can be incorporated. While many of the independent variables used in Model 2 are the same as those used in Model 1, their structure is different. As the comparison in this model is between crises, rather than between actors within a crises the actor level variables are not measured relative to the other crisis actor.

The dependent variable for Model 2 is the duration in days of the crisis prior to the first conflict management event initiated by a primary actor in the crisis. This variable was coded by calculating the difference between the conflict management start date (ICM CM 2a[day]; 2b[month]; 2c[year]) from the crisis start date (ICM D2a[day]; 2b[month]; 2c[year]). As the dependent variable in this second model is continuous, a simple OLS regression is a suitable estimation technique to use. This makes interpretation of the results simpler and,
along with the larger number of observations, increases the power of the statistical test of the model expectations regarding threshold effects.
CHAPTER IV

EXPERIMENT ONE: ISSUE SALIENCE AND PUBLIC SUPPORT

This research sets out to answer two central questions: 1) when will states involved in conflicts offer to negotiate, and 2) when will states involved in conflicts accept an opponent's offer of negotiation. It is proposed that an actor’s decision to either offer or accept negotiation is motivated by the degree of pain the conflict is causing him. His/hers tolerance for pain is, in turn predicated by the importance s/he places on the issue at stake. An experimental design offers the potential to clearly manipulate the two central concepts that underlie this model – salience and pain. It therefore provides a clear test of to what extent these two factors influence an actor’s decision to change from a fighting to a negotiation strategy.

Experimental Design

The first experiment in this series is designed to examine the effects of issue salience and pain on the timing of decisions to offer negotiation in a militarized conflict addressing, therefore the first question raised by the theory. Although there is no theoretical reason proposed to suggest that there is a substantive difference between militarized and non-militarized conflicts the scenario developed for this experiment presents subjects with a crisis that has already evolved to the use of force. This decision was driven by the need to ensure that each subject was at least minimally exposed to the pain manipulation. As discussed below, the pain manipulation chosen for the experiment was casualties.
Salience

Salience is theorized to have a direct effect on the extent to which actors will tolerate pain, or losses, in pursuit of a goal. Secondly, as has been previously discussed, there is no direct measure of salience in the empirical data. While there is both precedence and theoretical support for the ranking of issues used in the empirical analysis, the clearer and more directly manipulable treatment of the variable designed in the experiment provides a means of comparing results across methods.

To test the relevance of issue salience on an actor’s decision to move from a fighting to negotiating strategy two versions of the crisis scenario were developed for the experiment. The text of the manipulations is given in Figure 4.1 below.

<table>
<thead>
<tr>
<th>FIGURE 4.1 Salience Manipulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW SALIENCE</strong></td>
</tr>
<tr>
<td>At the end of WWII, the US revoked its territorial claim to Kell. During the Cold War the 4,700 square-mile territory of windswept, almost treeless bog and boulder was considered to be of no significant strategic value. The 54,000 Kellites, many of American and European descent, have continued their rural lifestyle, farming and raising sheep and alpaca for wool. They trade with Hendara and other near-by countries and also rely on their neighbors for advanced education and health care services. The United States has no official representative in Kell, but there is a small, unmanned communications post on the island used for satellite tracking.</td>
</tr>
<tr>
<td><strong>HIGH SALIENCE</strong></td>
</tr>
<tr>
<td>With the increasingly diffuse nature of security threats facing the US in the post-Cold War era Kell remains a strategically important military intelligence base. The significance of Kell has been demonstrated on numerous occasions since September 11th 2001. Its location enables the US military to maintain continuous, real-time satellite surveillance of politically critical areas, including the Middle East and South East Asia. Since 1947 the United States has maintained a garrison of approximately 80 marines at the capital, Port Lincoln. There is also a communications post on the island, used for satellite surveillance, which is manned by air force intelligence personnel. A recent geological survey indicates concentrated off-shore petroleum deposits near the main island. Joint development of these reserves with the Kellites could decrease US dependence on Middle East oil. The 540,000 Kellites, many of American and European descent, live a primarily rural lifestyle, farming and raising sheep and alpaca for wool. They trade with Hendara and other near-by countries.</td>
</tr>
</tbody>
</table>
In one condition the issue at stake was designed to reflect high salience, in the other low salience. The relationship between the United States and fictional island of Kell was set out with the following information.

Each condition contains information expected to elicit a certain assessment of salience by the subject. In the high salience condition the importance of the island is indicated on the strategic (intelligence collection), economic (petroleum), and cultural dimensions. These are structured around more general contemporary foreign policy concerns - terrorism and dependence on Middle East oil. In the low salience conditions these general concerns are not mentioned. Discussion of the importance of the island is restricted to the cultural dimensions, with mention of a former strategic purpose.

In all other respects the background information given to the subjects was identical. The information provided in the “events” which followed the instructions and briefing materials was the same for both high and low salience conditions. This ensured that the manipulation was consistent across all subjects and not a function of how far into the conflict, or “event set” they progressed before choosing to negotiate.

Pain

What is important in the context of this experiment is not the direct relationship between public opinion and casualties. Rather it is the effect that public opinion has on a decision maker’s reaction to costs, represented by casualties. So, the general prediction is that when the majority of the public supports a policy, then public opinion will act as an anesthetic and decrease the impact of casualties on a decision maker’s perception of the
painfulness of a conflict. When a majority do not support of a policy, however, the decision maker, feeling the pressure of public disapproval, will become more sensitized to casualties.

The effects of public opinion are also not directly measurable in an empirical context\textsuperscript{33}, but can be clearly manipulated in an experimental context. This was done by creating two versions of the event sets. In the casualty condition, information about the progress of the crisis included the number of cumulative casualties, updated after each event. In the public opinion condition subjects were also given information regarding the current level of public support for the conflict. No instructions were given regarding how much, if any attention the subjects should pay to these figures when that made their decisions. So, unlike the salience manipulation, the pain manipulation was undertaken during the course of the experiment itself. This is particularly important to keep in mind when it comes to the public opinion variable, as public support does not drop below 50% until event 16.

**Experimental Procedure**

The experiment, introduced as a study of foreign policy decision making, was conducted in regular political science classes at Texas A&M University. Subjects were informed that they were to play the role of chief foreign policy advisor to the President of the United States, and instructed that it was their job to advise the President on the best action to take, given the current circumstances\textsuperscript{34}. They were then exposed to an unfolding

\textsuperscript{33} Although public opinion data is available for some more recent crises it is extremely limited.

\textsuperscript{34} The process of the experiment is represented graphically in Figure 3.5.
foreign policy crisis over a fictional island archipelago – the Kell Islands with a fictional South American country – Hendara\textsuperscript{35}.

The experiment was carried out on a web-based computer platform which enabled the subjects to view information and make choices at their own pace. The order in which information can be accessed however, is linear and unidirectional, giving the experimenter much greater control over how subjects acquire information and enabling a greater uniformity across subjects.

Before beginning their decision process subjects were provided with information regarding: 1) the history of the dispute; 2) their opponent – a fictional South American country called Hendara; 3) the event which triggered the current crisis; 4) their task in the experiment. The subjects then moved to the first of a series of events, which detail an escalation in the crisis. After reading each event they chose between one of two recommendations to make to the President: 1) continue military action; 2) offer to negotiate with the Hendarans. These alternatives represent the two strategies identified by the theory as available to countries involved in a dispute: a conflictual strategy, or a cooperative strategy, and examples are given in Figure 4.2.

\textsuperscript{35} The 1982 Falkland / Malvinas war between Great Britain and Argentina was used as the basis of this scenario and a source of information regarding the escalation of the conflict, public opinion levels and international response.
The experiment terminates when either the subject chooses to advise negotiation, or all 27 “events” are accessed\(^{36}\). In the first case, the subject was told their opponent had agreed to negotiate, in the second they were told that their opponent had surrendered. In both cases the outcome was presented as a success. The subjects were then given an anonymous post-experimental questionnaire and asked to indicate their responses to a number of inferential statements about the country and their perception of the costs incurred prior to the end of the crisis (see Appendix C).

As well as providing information on the progress of the conflict each event in the event set was matched with changes in the cumulative casualty count and public support for

\(^{36}\) For full text of all instructions see Appendix A, for a full text of all “events” see Appendix B.
the conflict. These two measures enabled manipulation of the pain variable. In the casualty condition subjects were only provided with the casualty data. In the public opinion condition they received both the casualty and public support data. Figure 4.3 provides a graphical representation of these measures over the course of the 27 events.

Logically, casualties increased over the course of the conflict. Public, opinion, as discussed above decreased over the course of the conflict. It is important to keep in mind when interpreting the results, however, that public support for the conflict remained above 50% until the sixteenth event.
Internal Validity – Manipulation Check

Fifty-seven undergraduate students participated in this experiment. Subjects were randomly assigned to one of the four experimental conditions. Before evaluating the effect of the pain and salience variables it was first necessary to determine whether the manipulated variables were perceived accurately by the subjects. Responses to the post-experimental questionnaire provide manipulation tests across a variety of questions.

Sensitivity to Issue Salience: Sensitivity to issue salience was tested by three questions and perceived accurately in all cases. The one-way analysis of variance (ANOVA) of the subjects’ responses to the question regarding the overall importance of the Islands to the US yielded a significant effect of the manipulation. The findings suggest that subjects in the high salience condition evaluated the Islands to be of greater importance to the US (M=9.83) than did subjects in the low salience condition (M=4.63), [F (1, 52) = 3.36, p =.036 (one tailed)]. When the results for all three salience questions are examined, they too yield a significant effect for the manipulation. Once again the findings suggest that subjects in the high salience condition regard the conflict to be more important to the US in terms of national security, international position and reputation (M = 7.95), than did subjects in the low salience condition (M = 5.00), [F (1, 52) = 8.47, p = .002 (one tailed)].

The difference between the salience measures was not significant, but the order was as expected. Overall importance was greatest (M = 7.32), then international reputation (M = 7.10), with national security scoring lowest (M = 5.18). It may initially seem counter-

---

37. Overall, how important do you consider the conflict over Kell to be to the United States?  
9. How important do you consider control of Kell to be to the national security of the United States?  
10. How important do you consider maintaining control of Kell to be to the international position and reputation of the United States?  
38. Unless otherwise noted all questions are rated on a ten-point scale: 1: not at all important – 10: extremely important.
intuitive that international reputation was considered to be more important than national security it must be remembered that the subjects were representing the United States and creating a realistic scenario in which the contemporary United States’ national security is seriously threatened is extremely difficult.

Sensitivity to Public Opinion. The public opinion manipulation was tested by a question\(^{39}\) regarding the extent to which loss of domestic support for the President influenced the subject. The one-way analysis of variance (ANOVA) of the subjects’ responses to the question regarding the influence of domestic support on their advice to the President yielded a significant effect of the manipulation. The findings suggest that subjects in the public opinion condition, who were given updated figures regarding public support for the conflict, reported their advice as being more influenced by loss of support for the President ($M = 6.03$). Subjects in the casualty condition, who were given no information regarding public support levels reported loss of domestic support as having a lesser affect on their advice to the President ($M = 4.04$), $[F = (1, 52) = 9.33, p = .001$ (one tailed)]

Results

This experiment provides a means by which to test the most general proposition presented in this research: that people will fight harder and endure more pain for something they hold to be important. In doing so, however, it also provides considerable insight into the relationship between pain, casualties and issue salience. Furthermore, the post-experimental questionnaire raises some interesting inconsistencies between individual’s

\(^{39}\) To what extent did the following factors influence the advice you gave to the President?

12: Loss of domestic support for the President.
choices and pain thresholds and their self-reported thresholds. The first step, however, is to
determine the extent to which the findings support the theoretical expectations.

**Extent of Military Action**

One of the most basic tests of the theory is whether or not subjects in high salience
conditions progressed further with military action than did those in low salience conditions.
This can be determined by looking at the number of events subjects viewed before
choosing the option to negotiate. As shown in Figure 4.4, participants in the high salience
condition did in fact continue longer with military action (M = 12.10) than did those in the
low salience condition M = 7.0). The between-subject ANOVA yielded a significant main
effect for issue salience [F = (1, 52) = 4.97, p = .015 (one tailed)].

![FIGURE 4.4 Experiment I: Mean Number of Events Prior to Negotiating](image-url)
This finding supports the theoretical expectation that people will fight harder for something they consider important. It is also supported by the findings regarding casualties. Subjects in high salience conditions incurred more casualties before moving to negotiation (M = 241.45) than did subjects in low salience conditions (M = 132). Once again the between-subject ANOVA showed a significant main effect for issue salience \[ F = (1, 52) = 5.26, p = .012 \text{ (one tailed)} \].

**Perceptions of Pain**

The second central factor that the experiment is designed to examine is how public opinion and issue salience affect decision makers’ perceptions of pain. Within the experimental instructions, scenario and events no direct mention was made of pain. In the post-experimental questionnaire, however, subjects were asked a number of questions regarding their perception of the painfulness of the specific conflict presented in the experiment and such conflicts in general.

**Pain Responses to the Experimental Conflict**

The most direct indication of pain was responses to a question regarding how painful the subjects considered the conflict with Kell\(^4\). In line with the theoretical expectations subjects in the low salience conditions regarded the conflict to be more painful (M=46.7) than did those in high salience conditions (M = 39.3), however, these results were not significant. Those subjects who received information regarding public support found the conflict to be slightly less painful (M = 40.51) than did those who only received casualty data (M= 45.41). Again, as shown in Figure 4.5, this difference was not significant.

---

\(^4\) On a scale of 0 -100 mark and indicate with a number how painful you consider this conflict to be to the United States.
Keeping in mind that public support in the experiment did not drop below 50% until event 16, and the mean number of events viewed in the public opinion conditions was 9.44. It does suggest, however, that majority support for a conflict can have an anesthetizing effect on a decision maker’s perception of pain. Figure 4.6 indicates the mean stopping points for each condition, relative to both casualties and public opinion.
Interpreting Pain in the Experimental Context

It must be remembered that one of the central ideas in the theory is that pain is conceptually different from costs. In particular, that it is context dependent in nature. For this reason, simply assessing the experimental findings on the basis of these self-reported levels of pain does not tell the whole story. In order to obtain a closer test of the theory it is necessary to determine what underlies those pain measures. In this case such a measure can be gained by examining the number of casualties which resulted in the particular level of pain for each subject. That is, for each subject, dividing the number of casualties experienced (as a function of the event at which they chose negotiation and the experiment ended), by their self-reported evaluation of the painfulness of the conflict they experienced.
The variable constructed from the casualty and pain variables will be referred to as the relative casualty value. This variable indicates that, in high salience conditions, it took a greater number of casualties to move a subject one unit of pain (M = 7.37) than it did in low salience conditions (M = 3.48). The between-subjects ANOVA showed a significant main effect for issue salience \( [F = (1, 52) = 5.52, p = .012 \text{ (one tailed)}] \).

Those subjects in conditions where public opinion information was provided required more casualties (M = 6.0) to achieve a unit increase in pain than did those who only received casualty information (M = 4.9), although the results were not significant. These results may at first appear inconsistent with the literature, but they do reflect two separate components of public opinion studies. First, most of the subjects in the public opinion condition only saw public support figures above 50%\(^{41}\). Consequently, theory would lead us to expect that knowledge of public opinion would have an anesthetizing effect on pain, as indicated in the pain results above. This would, in turn, be translated in a higher relative casualty value. The accuracy of this assumption is supported by the finding that in all but one case subjects in all conditions indicated that the US public supported the President\(^ {42}\).

Furthermore, both the literature and common wisdom tell us that Americans will not support the loss of US soldiers in foreign conflicts. This is an attitude that is assumed to be known to, if not shared by, most subjects. Consequently, in the absence of evidence to the contrary (high public support information), we can expect subjects to be more sensitive to casualties. This assumption is supported by responses to the question regarding the

---

\(^{41}\) 77% of subjects chose to negotiate prior to event 16, after which public support dropped below 50%.

\(^{42}\) Post-experimental questionnaire, Q3: Overall, how did the American public and media respond to the conflict? Supported the President/Did not support the President/were indifferent to the conflict.
influence of military losses on advice given to the President\textsuperscript{43}. The findings, although not significant, indicate that military losses had more influence on the subjects’ advice in the public opinion conditions (M = 9.6) than they did in the casualty condition (M = 6.0). Similarly, those subjects in the public opinion conditions considered the cost of military action to be more important to their decision to negotiate (M=5.70) than did those in the casualty condition (M = 4.92).

Figure 4.7 suggests that, when assessing the impact of casualties on an actor’s decision to offer negotiation, context matters. That is, the pain associated with incurring

\textsuperscript{43} To what extent did the following factors influence the advice you gave to the President?

11: Military losses suffered by the US.
casualties is related to the salience of that conflict. In conflicts that are considered to be important, subjects indicated that their perception of pain, as measured in casualties was lower, than it was in less important conflicts. Furthermore, subject’s assessment of pain is influenced by the level of public support a conflict elicits.

What Influenced the Advice Subjects Gave?

The model predicts that pain and issue salience will influence the timing of a subject’s assessment of a crisis decision and whether fighting or talking is the best strategy to adopt. Several of the questions in the post-experimental questionnaire were specifically designed to provide an indication of how subjects processed and evaluated such information. They were asked to rate the extent to which military losses, domestic support, the issue itself and the international reputation of the US influenced the advise they gave the President. According to the theory, military losses and the issue itself should be the most influential factors. Furthermore, the issue should carry greater weight in high salience conditions, and military losses in cases where there were more casualties.

The findings from a within-subjects ANOVA indicate that there is a significant difference between these factors, \([F = (3, 156) = 6.97, p = .000]\). The issue itself was the most influential (\(M = 6.7\)), followed by military losses (\(M = 6.45\)), international reputation (\(M = 5.3\)) and domestic support (\(M = 5.1\)). This supports the expectations of the model. Furthermore, there is a significant (\(p = .02\)) negative correlation between cumulative casualties and the influence of military losses. In cases where subjects “fought” less and sustained fewer casualties, military losses were reported as having a greater influence on their advice, indicating a greater sensitivity to costs. Again, as Figure 4.8 demonstrates,
although not significant this relationship is supported by the greater emphasis placed on military losses shown in low salience conditions.

**Comparing Subjects’ Motivations for Negotiating**

The final question which must be addressed regarding the theory is the extent to which subjects’ decision to negotiate was influence by the costs they experienced during the course of the conflict. The model this experiment is designed to test proposes that the pain an actor experiences during a conflict drives his/her decision to negotiate. How much pain the actor is willing to endure is largely determined by the importance of the issue at stake. This pain is a function of the costs accumulated during the conflict, translated by the decision maker’s sensitivity to those costs.
Several of the questions in the post-experimental questionnaire were specifically designed to provide an indication of how subjects processed and evaluated the information they received during the course of the experiment. They were asked to rate to what extent military losses, domestic support, the issue itself and the international reputation of the US influenced the advice they gave the President. According to the theory, military losses and the issue itself should be the most influential factors. Furthermore, the issue should carry greater weight in high salience conditions and military losses in cases where there were more casualties.

Thus, several predictions can be made regarding the findings concerned with both the factors which influenced the advice subjects gave to the President and those which motivated their decision to negotiate. First, costs will become increasingly important as subjects progress further into the conflict. Second, costs will be more influential on subjects in low salience and casualty conditions.

There was a significant ($p = .009$) negative correlation between cumulative casualties and the extent to which subject’s were motivated to negotiate as a result of military losses. This supports the theoretical expectation that the costs of conflict make negotiation a more attractive alternative. Overall, subjects in low salience conditions proved to be more motivated to negotiate across all dimensions ($M = 6.0$), than did those in high salience

---

44 It must be remembered that the majority of subjects only experienced majority public support for the conflict and so we expect knowledge of public opinion to have an anesthetizing effect on the impact of cost and pain.

45 Analysis is based on answers to three questions in the post-experimental questionnaire: To what extent did the following considerations match your main reason for negotiating:

1. Maintaining control of Kell through military action was not worth the cost (in terms of lives, expenditure, public opinion and international opinion). [cost]
2. The belief that negotiation should be attempted before engaging in military action. [SOP]
conditions (M=5.6), although the finding was not significant it lends general support to the expectation that actors involved in low salience conflicts will be more motivated to negotiate. There was little or no difference between the level of motivation felt by subjects in the casualty condition (M=5.7) and those in the public opinion condition (M=5.84). As figure 4.9 demonstrates, comparing across dimensions, no significant difference was found in the impact between costs, SOP, or information as a rationale for offering negotiation.

3. A desire to gain more information about what the Hendaran’s wanted before committing to further military action. [information]
Discussion

Before moving to a discussion of how this research can be expanded, the question of the ability of experimental methodology to examine questions such as those raised in this model must be addressed. The internal validity of experimentation as a means of testing hypotheses can be directly tested\textsuperscript{46} and is accepted by international relations scholars and political scientists more generally (Kinder and Palfrey 1993). Debate remains, however, over the method’s external validity. Particularly relevant to this design is the criticism of the use of “novice” decision makers (undergraduates), as a proxy for “expert” decision makers\textsuperscript{47}.

The basis of this criticism lies in the belief that the greater experience and knowledge of policymakers and politicians influences their problem-solving processes and thus is reflected in their decisions (Wagner and Hollenbeck, 1998; Klein 1989; DeFong and Ferguson-Hessler 1987; Phelps and Shanteau, 1978). This debate really boils down whether or not there is a substantive difference between how experts and novices process information. The findings from several experiments suggest this is not the case. Experts have been found to be likely to use heuristics in a similar manner to novices (Gaeth and Shanteau, 1984; Christensen-Szalanski, et.al. 1983). The literature also suggests that, in general expert judgment is sub-optimal and naive and expert subjects demonstrate the same biases\textsuperscript{48}.

Such debate aside, it should also be noted that, much like formal models, experiments are designed primarily to tests hypotheses deduced from a given theory and

\textsuperscript{46} See discussion of the results of the manipulation checks of salience and information reported in this results section.
\textsuperscript{47} This discussion of external validity is taken from Geva and Skorick 2001.
\textsuperscript{48} Discussed by Wright, Bolger and Rowe (1993: 217).
model. Additionally, experiments can also be employed to explore the consequences of controlled counterfactual scenarios that are derived from more loosely defined theories. Again, as with formal modeling, this gives us potential insight into what may happen, but did not as yet actually happen, in the real world (Mook 1983). In cases where the experiment is an appropriate representation and thus test of the theory, the findings merely support the logic of the theory. “What we seek to generalize is not the findings but the theory” (Geva and Skorick 2001).
CHAPTER V

EXPERIMENT TWO: ISSUE SALIENCE & RECEIVING AN OFFER OF NEGOTIATION

The results of Experiment I clearly demonstrated that, when the stakes are high, people fight both longer and harder before they offer to negotiate a resolution. That is, their pain threshold is higher. This suggests that the timing of negotiation offers are effected by both the duration and intensity (measured in terms of casualties) of the conflictual action.

The actual, self-reported levels of pain that Experiment I subjects felt, however, did not vary significantly between high and low salience conflicts. Subjects reported a similar mean level of pain, (within 7 points on a 100-point scale), whether the crisis was over a high or low salience issue. The underlying metric, however, was very different. It took approximately twice as many casualties to generate the same level of pain in high salience conditions than it did in low salience conditions. In terms of the model, this supports the expectation that the accumulation of pain (measured in casualties) is slower in high salience conflicts than in low.

Experiment I, therefore, begins to shed some light on the first research question: when will states involved in a conflict offer to negotiate? The context of the conflict is demonstrated to have a significant impact on the timing of negotiation offers. Both the salience of the issue itself, and the subject’s awareness, or lack thereof, of public support for the conflict effected when they chose to instigate negotiation\(^49\). What Experiment I cannot

---

\(^49\) Knowledge that public support for the conflict remained above 50% appeared to have a tranquilizing effect of pain, decreasing subject’s perception of the painfulness of the conflict and the relative pain value of individual casualty. As 81% of subjects in the public opinion conditions chose to negotiate before support
tell us, however, the likely response an offer of negotiation from their opponent would have been. That is, it cannot shed any light on the second research question: what effect receiving an offer of negotiation from one’s opponent will have on the timing of the move to negotiation.

**Experimental Design**

Experiment II addresses this issue directly, by introducing an offer to negotiate into the event sequence. Half of the subjects are exposed to the same scenario and events as those in the casualty conditions in Experiment I. The other subjects receive the same introductory information and initial events. In addition, however, after the fourth event an offer of negotiation from the opposing actor is introduced. This provides an initial means of gauging if and how an actor’s willingness to negotiate is influenced by the demonstrated willingness of the opponent to negotiate. In terms of the model structure: whether receiving an offer of negotiation affects either the speed with which a decision maker reaches his/her pain threshold, and, whether such an event changes the decision maker’s threshold for pain itself.

**How Will Receiving an Offer of Negotiation Change an Actor’s Pain Threshold?**

There are two conflicting expectations regarding the timing of negotiation. The first argues that it is best to negotiate from a position of strength; implying that power on the battlefield translated into power at the negotiating table. The second contends that actors will seek to negotiate in order to avoid the costs of continued fighting. This interpretation for the conflict dropped below 50% Experiment I cannot tell us much about the effects of negative public opinion on a decision maker’s pain perception.
would imply that the actor offering to negotiate either a) no longer believes he can win the fight; or b) does not value the issue at stake enough to justify the costs of continued fighting. In either case, it is assumed that the actor’s perception has changed to one in which negotiation, rather than fighting, is the preferred strategy. In the first case, this change is driven by a comparison of gain, while in the second it is the desire to avoid further costs which motivates the actor’s strategy change.

Therefore, there are two possible, competing effects that the opponent’s presentation of an offer may have on the decision maker’s own pain threshold. The first assumes the decision maker to be willing to increase his/her pain threshold in order to achieve a greater payoff. The second assumes that the prospect of avoiding further pain will outweigh the costs of compromising inherent in the agreement to negotiate, (at least in the abstract). This raises the interesting possibility that both expectations may be right, but that the decision maker’s choice is influenced by the importance s/he places on the issue. That is, is high salience conflicts, where decision makers have been shown to be more resilient to pain 50, an offer is more likely to trigger a strategic response, increasing the decision maker’s own pain threshold. In low salience conflicts, however, when decision makers are more sensitive to pain, the domestic constraint explanation will hold and decision makers will be more likely to decrease their pain threshold in response to an offer of negotiation.

H1 \textsubscript{A}: Actors in highly salience disputes will respond to an offer of negotiation from their opponent by fighting longer than they would have if no offer had been made, whereas in low salience conflicts, actors will respond to an offer of negotiation from an opponent by fighting for less time than they would have if no offer had been made.

---

50 See salience results for Experiment I.
The interactive effect of issue salience and offer derives from the decision maker’s interpretation of this information signal, which is expected to be affected by his/her own preferences and perceptions of the conflict. In essence, an offer is interpreted as a signal that the opponent has little or no reserve strength or motivation left, suggesting that, if the actor can increase his/her own pain tolerance (threshold) even marginally, there is a greater opportunity to win decisively. How the decision maker responds to this opportunity, that is how an increase in incurred costs is perceived, is theorized to be a function of the importance of the issue at stake. If the issue is highly salient, the increase in expected pain is expected to be outweighed by the benefits of a potential military victory. Winning on the battlefield increases the actor’s bargaining power, enabling him/her to make higher demands at settlement, thus preserving or gaining more of a highly valued good.

In contrast, when the conflict is over a low salience issue an opponent’s offer of negotiation is expected to have the opposite effect; decreasing the decision maker’s pain threshold. The difference arises due to the increased sensitivity to costs (painfulness) and the decreased pain of compromising, implied in the willingness to negotiate. If a conflict is of little importance to an actor, an offer from the opponent presents an opportunity to avoid further pain either temporarily or permanently, if terms of settlement can be agreed upon. Furthermore, if the conflict is of low salience, public support for its resolution through use of force is likely to be lower, thus increasing the pain of costs incurred through fighting (sensitivity). The decision maker has, therefore, greater incentive to move to a negotiating strategy, and an opponent’s offer decreases the uncertainty over whether changing strategies will be successful, this decreasing the risk involved in moving to a negotiating strategy.
It is also possible, however, that regardless of the importance of the issue, decision makers behave strategically in response to an offer. An offer of negotiation would, therefore, be interpreted as a signal that the opponent had reached his/her own pain threshold. The value of continuing to fight would consequently be increased, as the certainty that complete victory through force was possible would be likewise greater. This creates an alternate hypothesis regarding the effect of an offer on the duration of conflict.

**H1**: Actors will respond to an offer of negotiation from their opponent by fighting longer than they would have if no offer had been made.

Regardless of which version of Hypothesis 1 gains support, the theory predicts that salience will influence the decision maker’s willingness to incur further pain if an alternative, in the form of an offer of negotiation, is presented. For this reason, it is expected that an offer will be accepted with greater alacrity in low salience conditions.

**H2**: In low salience conflicts, the delay between the receipt of an offer of negotiation from an opponent and its acceptance will be shorter than the delay in high salience conflicts.

**Salience and Pain**

The model developed in this research proposes that there is a relationship between an actor’s willingness to sustain and the context in which that pain is experienced. An actor’s pain threshold for a conflict is directly influenced by the importance s/he places on the issue at stake. This relationship is supported by the findings of Experiment I, and they are expected to be consistent in Experiment II. The hypotheses from Experiment I regarding the effects of issue salience on subjects’ perceptions of the painfulness of a conflict and the costs underlying that pain are carried over into Experiment II and provide a means of cross-validation by repetition.
H3: Actors in highly salient disputes will progress further into a conflict before offering to negotiate.

H4: High salience conflicts will be associated with higher casualty levels than low salience conflicts.

H5: The number of casualties required to reach a particular level of pain will be lower in low salience conflicts than in high.

The second experiment in this series was designed to examine how the receipt of an offer of negotiation effects an actor’s decision to move from a fighting strategy to a negotiation strategy. This decision is, in turn, expected to be influenced by the salience of the issue at stake and the subsequent willingness of the actor to endure pain. The experiment, introduced as a study on foreign policy decision making, was conducted with students from political science classes at Texas A&M University. Eighty-two undergraduate students participated in this second experiment.

The experiment uses a 2x2 between-groups design. The two factors are issue salience and whether an offer of negotiation was made by the opponent. As the model seeks to explain at what point in a conflict actors switch to a negotiation strategy the dependent variables were chosen to capture different elements of timing. Four specific measure of time were used: 1) the stage in the conflict at which the subject chose to negotiate; 2) the cumulative number of casualties prior to negotiation; 3) the level of pain (self-reported) the subject associated with the conflict; and, for the offer conditions 4) how far after an offer was received was that offer accepted.

---

51 The results for fifteen subjects had to be discarded from the analysis of results for the following reasons: 1) their questionnaires were incomplete; 2) their answer to question 4 indicated they did not understand the terms of the offer; or 3) their answer to question 11 indicated they did not register that an offer of negotiation had been made. Sixty-seven subjects were therefore used in the analysis of results.

52 Measured by the number of events subjects viewed before choosing the negotiate option and ending the experiment.
As with Experiment I, Experiment II was carried out using the Dec-tracer, a web-based computer platform. Dec-tracer allows subjects to view information and make choices at their own pace. The order in which information can be accessed, however, is linear and unidirectional, giving the experimenter much greater control over how subjects acquire information and enabling a greater uniformity across subjects. This feature is particularly important in this second experiment, as it enables control over if or when a subject receives an offer to negotiate, from his or her opponent.

**Experimental Procedure**

Subjects were informed that they were to play the role of chief foreign policy advisor to the President of the United States, and instructed that it was their job to advise the President on the best action to take, given the current circumstances. They were then exposed to an unfolding foreign policy crisis over a fictional island archipelago – the Kell Islands - with a fictional South American country – Hendara. Subjects were then randomly assigned to one of the four experimental conditions.

Before beginning their decision process, subjects were provided with background information regarding the history of the dispute, their opponent, the event which triggered the current crisis, and their task in the experiment. As with Experiment One, the salience manipulation was introduced at this stage. The subjects were then exposed to the first of a

---

53 Compared to a paper and pencil based experiment where subjects can flip back and forward through the information and amend previous answers.

54 The 1982 Falkland / Malvinas war between Great Britain and Argentina was used as the basis of this scenario and a source of information regarding the escalation of the conflict and international response.

55 High salience/Offer; High salience/No Offer; Low salience/Offer; Low salience/No Offer.

56 See Figure 4.1 for details of salience manipulation.
series of events, detailing an escalation in the crisis as well as the current cumulative number of casualties suffered by the US forces. In order to progress through the experiment each event prompted them to indicate their choice of strategy to recommend, given the information they had just received. These choices reflected the two strategy options proposed in the model – continue with the conflict or offer to negotiate. Examples of such events, including the text of the negotiation offer, are given in Figure 5.1.

Figure 5.1: Experiment II: Example of Events

**Event 5, No Offer Condition**

<table>
<thead>
<tr>
<th>DAY 17 of the CONFLICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>US forces continued to press the Hendaran occupying the main island as the Hendaran fleet came into range of the US fleet and the main Island. US ships and fighters sank a trawler, tanker and supply ship within hours of the fleet’s arrival. This leaves the Hendaran ground forces potentially short on food and ammunition. Extreme bad weather and low visibility has grounded US planes, leaving ground forces without air support or reconnaissance. 19 marines were killed and 22 soldiers wounded after being ambushed by Hendaran forces in a deserted village late yesterday afternoon. UN Secretary general Kofi Annan, meeting with high level US and Hendaran officials, again urged Hendara and the US to find a peaceful resolution to the crisis.</td>
</tr>
</tbody>
</table>

DoD CUMULATIVE CASUALTY COUNT: 78

**Event 5, Offer Condition**

<table>
<thead>
<tr>
<th>DAY 16 of the CONFLICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>You have received word from the Hendaran Foreign Minister that President Leopoldi is interested in finding a negotiated solution to the conflict over Kell. He has indicated that the Hendaran offer will remain open indefinitely.</td>
</tr>
</tbody>
</table>

Do you advise the President to:

- Continue military action
- Offer to negotiate with Hendara

---

\(^{57}\) The structure of the experiment is represented graphically in Figure 3.5.
The experiment terminated when either the subject chooses to advise negotiation, or all 27 events (28 in the case of offer conditions) were accessed\textsuperscript{58}. In the first case, the subject was told their opponent has agreed to negotiate. In the second, they were told that their opponent has surrendered\textsuperscript{59}. In both cases, the outcome was presented as a success. The subjects were then given a post-experimental questionnaire and asked to indicate their responses to a number of inferential statements about the country and their perception of the costs incurred prior to the end of the crisis (see Appendix C).

As in Experiments One and Three, pain was manipulated through increases in casualties, which logically increased over the course of the conflict, the pattern of accumulation matching that used in Experiment I\textsuperscript{60}.

**Offer Manipulation**

To test the effect of an offer to negotiate by an opponent (Hypotheses 1&2), two versions of the event set were created. The first was the same as that used in the casualty conditions in Experiment I. The second was based on this event set but had an additional event – the offer - inserted after the fourth event. The placement of the offer as the fifth event was chosen by analyzing the cases from Experiment I. A balance needed to be achieved between: 1) introducing the offer too early, thereby indicating a level of commitment on the part of the opponent incompatible with their action in invading the Islands; and 2) introducing the offer too late, leaving many of the offer condition subjects without exposure to the manipulation, thus rendering analysis and interpretation of results problematic. A frequency analysis of when subjects in Experiment I chose to negotiate

\textsuperscript{58} For full text of all instructions see Appendix A, for full text of “events” please see Appendix B.
\textsuperscript{59} Of the sixty-seven subjects, only two reached the final event.
\textsuperscript{60} See Figure 4.2 for casualty pattern over course of event set.
indicated that, overall (all conditions), 57.2% reached or passed the 5th event. Consistent with the general findings regarding conflict duration, this percentage was significantly different between high salience conditions (69% at or beyond 5 events) and low (44.5% at or beyond 5 events). These results suggested that, although placing the offer at event 5 would, in effect, move some subjects from the offer to the non-offer category, it would still ensure enough reached the offer to enable meaningful analysis. More importantly, it provided enough opportunities for developing the conflict and providing indications to the subject of their opponent’s conflictual performance.

There were also modifications made to the instructions subjects were given regarding their decision task, prior to beginning the experiment. In all conditions, subjects were informed that they might receive an offer of negotiation from their opponent, which did not have to be accepted immediately. It was further explained that they had the option to continue with military action and negotiate at a later point. There was also a question added to the post-experimental questionnaire designed to check the subjects’ understanding of the terms of the offer. If their answer indicated they had not accurately understood their response options, their results were excluded from the final analysis.

The subjects were given no instruction regarding how much attention they should pay to these casualty figures when making their decisions. Unlike the salience manipulation, the pain manipulation was undertaken during the course of the experiment itself. This is particularly important to keep in mind when interpreting the findings, as the point at which

---

61 Text in instructions read: “Please Note: If you receive an offer of negotiation from the Hendarans you do not have to accept it immediately. You have the option to continue with military action after an offer is made and choose to negotiate at a later time of your choosing.”

62 See footnote 3.
the subject chose negotiation, thus ending the experiment, varied creating variance in the exposure to pain-inducing factors.

**Internal Validity – Manipulation Check**

As with Experiment I, this experiment provides a means by which to test the most general proposition presented in this research: that people will fight harder and endure more pain before offering to negotiating when the issue at stake is highly salient. In addition, it provides a means by which to examine the second research question regarding acceptance of an offer of negotiation, and how acceptance of an opponent’s offer was influenced by the salience of the issue in dispute.

As expected, subjects in high salience conditions progressed further into the conflict and endured more casualties (Hypotheses 3 and 4) than did those in low salience conditions, regardless of whether they received an offer or not. The relationship between pain and casualties does suggest that there is a contextual component to pain (Hypothesis 5). It took significantly fewer casualties to induce the same level of pain in low salience conditions as it did in high salience conditions. Before discussing the results in any detail, however, it is important to check that the subjects responded to the manipulation of salience measures.

*Sensitivity to Issue Salience.* Sensitivity to issue salience was tested by three questions and was perceived accurately in all cases. The 2x2 analysis of variance (ANOVA) of the subjects’ responses to the question regarding the overall importance of Kell to the US yielded a

---

63 Overall, how important do you think this conflict is to the United States?
To what extent would losing access to Kell and the US military base there negatively affect the national security of the United States?
Will the international position of the US be negatively affected if the US is not able to maintain control of Kell and deter the Hendarans?
significant effect of the manipulation. The finding, shown in Table 5.1, suggests that subjects in the high salience condition evaluated the Islands to be of greater importance to the US\textsuperscript{64} (M=6.44) than did subjects in the low salience condition (M=5.03), [F (1, 63) = 8.908, p < .004]. When the results for all three salience questions are examined, they too yield a significant effect for the manipulation. Subjects in the high salience condition regard the conflict to be more important to the US in terms of national security, international position (M = 7.76), than did subjects in the low salience condition (M = 5.64), [F (1, 63) = 10.88, p < .002].

There was also a significant interaction between the three salience measures and the salience condition [F (1, 63) = 3.75, p = .026], when they were analyzed as a repeated measure. In high salience conditions, national security was rated as most important (M=9.32), followed by international reputation (M=7.53) and overall importance of the crisis (M=6.44). In low salience conditions international reputation was regarded as the most important factor (M=7.45), almost as important as in the high salience conditions. In contrast overall importance was lower (M = 5.03). The greatest difference, however, is seen in the ratings of importance for national security, which were almost 5 points lower in the low salience condition (M= 4.42). Thus, the salience manipulation worked, with subjects clearly distinguishing between low and high salience conditions.

\textsuperscript{64} Unless otherwise noted all questions are rated on a ten-point scale: 1: not at all important – 10: extremely important.
Understanding of the Terms of an Offer by the Opponent. Subject’s comprehension of the implications of receiving an offer from their opponent was tested in the post-experimental questionnaire. The first manipulation check was conducted by asking all subjects the following question:

4. According to the instructions, an offer of negotiation from the Hendarans:
   ____ would remain open for the duration of the conflict.
   ____ had to be accepted immediately or it would be withdrawn.

All but six subjects correctly indicated the first answer. Of these six, only two were in offer conditions. A later question was designed to test whether the subjects were sensitive to the receipt of an offer:

11. Did the offer of negotiation from the Hendaran government make you more willing to consider recommending negotiating to the President?
    ____ no
    ____ yes, more willing to recommend negotiation
    ____ I did not receive an offer of negotiation

<table>
<thead>
<tr>
<th>Questionnaire wording</th>
<th>High Salience</th>
<th>Low Salience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, how important do you think this conflict is to the United States?</td>
<td>6.44</td>
<td>5.0</td>
</tr>
<tr>
<td>To what extent would losing access to Kell and the US military base there negatively affect the national security of the US?</td>
<td>9.32</td>
<td>4.42</td>
</tr>
<tr>
<td>Will the international reputation of the US be negatively affected if the US is not able maintain control of Kell and deter the Hendarans?</td>
<td>7.53</td>
<td>7.45</td>
</tr>
</tbody>
</table>

### TABLE 5.1 Issue Salience Measures: Means for Repeated Measures
That is, did they register whether they had received an offer or not. If subjects in the no offer conditions answered yes or no, their results were excluded from the analysis. Nine subjects fell into this category, (one also incorrectly answered question 4), meaning that fourteen subjects were excluded from analysis as a result of the offer manipulation. The offer manipulation can, therefore, be considered completely effective. All subjects analyzed understood the terms of an offer from their opponent and accurately reported whether or not they received such an offer during the course of the experiment.

Results

At What Point in the Conflict Did Subjects Offer to Negotiate?

One of the most basic tests of the model is whether the results regarding conflict duration are consistent with the expectations of Hypothesis 3 and the findings of Experiment I. This simplest way to determine this is by looking at the number of events subjects viewed before choosing the option to negotiate. Participants in the high salience condition did in fact continued longer with military action (M = 8.91) than did those in the low salience condition, (M = 5.85). The between-groups ANOVA yielded a significant main effect for issue salience [F (1, 63) = 4.04, p < .05], as shown in Figure 5.2.

---

65 Subjects in the offer conditions, who reached the 5th event (the offer), but responded that they had not received an offer would also have been excluded, except that no subjects fell into this category.
In high salience conditions, people fight harder as well as longer. That is, the findings indicate that willingness to suffer casualties is influenced by the perceived importance of the conflict. Subjects in high salience conditions incurred more casualties before moving to negotiation (M = 149.21) than did subjects in low salience conditions (M = 98.61). The effect is significant for a one-tailed test, which is appropriate given the directional nature of Hypothesis 4, \[ F(1, 63) = 2.79, p < .05 \].

---

Analysis was done using the actual cumulative number of casualties incurred by the event at which the subject chose to negotiate, enabling comparison across subjects. In order to make sure that this manipulated casualty level was perceived by the subjects they were asked in the post-experimental questionnaire to indicate how many casualties the US sustained during the conflict. A correlation analysis indicates that their estimates were very close to the actual cumulative casualty level (r = .917, P < .0001).
Is There a Relationship Between Issue Salience and Pain Thresholds?

The second central factor that the experiment is designed to examine is how issue salience affects decision makers’ perceptions of pain. As with Experiment I, the experimental instructions, scenario, and events, made no direct mention of pain. In the post-experimental questionnaire, however, subjects were asked a number of questions regarding their perception of the painfulness of the specific conflict presented in the experiment.

The most direct indication of pain was indicated by responses to a question regarding how painful the subjects considered the conflict with Kell. In line with the theoretical expectations subjects in the low salience conditions regarded the conflict to be more painful (M=39.5) than did those in high salience conditions (M = 31.7), as with Experiment I, these results, shown in Figures 5.3 and 5.4, were not significant [F (1, 63) = 2.88, p = .097]. However, as we know from the discussion of Experiment I, this finding, does not really tell us much. All conflicts are expected to induce pain, what is expected to change is the cost metric underlying that measure of pain.

---

67 Consider the cost of military action, the risk of public disapproval of the President and death of US troops that were described in the events you just reviewed. Given all these factors, mark and number on the scale below, how painful this conflict was to the United States.
Does Pain Mean Different Things in Different Conflicts?

One of the central ideas proposed in the model is that pain is conceptually different from costs and is, in fact, context dependent in nature. By examining the number of casualties resulting in the particular level of pain for each subject, we can achieve an indication of the metric underlying perceived levels of pain\(^{68}\). The relative casualty variable indicates that, in high salience conditions, it took a greater number of casualties to move a subject one unit of pain\(^{69}\) (M = 5.96) than it did in low salience conditions (M = 2.79). The

---

\(^{68}\) As discussed in Experiment I, this measure was constructed by dividing the number of casualties experienced by each subject, (as a function of the event at which they chose negotiation and the experiment ended), by their self-reported evaluation of the painfulness of the conflict they experienced. The variable constructed from the casualty and pain variables will be referred to as the relative casualty value.

\(^{69}\) Pain was measured on a scale of 0-100.
between-subject ANOVA showed a significant main effect for issue salience \([F (1, 63) = 7.25, p = .009]\). These figures are consistent with Experiment I.

Consistent with Hypothesis 5, these results indicate that context matters when assessing the impact of casualties on an actor's decision to offer negotiation. As shown in Figure 5.5, the perceived pain of incurring casualties is related to the salience of a particular conflict.

![Figure 5.4](image)

**FIGURE 5.4 Experiment II: Relative Casualty Values**

Does Receiving an Offer of Negotiation Change Things?

The expectations regarding the effects of an offer on the strategy choice of an actor were not as clear as the expectations regarding issue salience. Two competing hypotheses
were developed. Hypothesis 1\textsubscript{a} predicted an interactive effect between issue salience and the receipt of an offer. Hypothesis 1\textsubscript{b} predicted a simpler, main effect of an offer. The results were consistent with Hypothesis 1\textsubscript{b}: subjects progressed further into the crisis in high salience condition when they received an offer (M = 9.65) than when they did no (M = 8.18), and this relationship carried over into the low salience condition as well, (offer M = 6.0; no offer M = 5.69), although its effect is negligible. Overall, the interaction between issue salience and the presence of an offer predicted in Hypothesis 1\textsubscript{a} is not significant [F (1, 63) = < 1.0, p = .70].

Another way of determining how an offer of negotiation affects decision makers’ strategy choice is to look at the delay between receiving an offer of negotiation and accepting it. According to Hypothesis 2, we would expect to see a longer delay in high salience conditions than in low. As an offer was only incorporated into the event sets for offer conditions, this analysis looks at the subset of cases in which an offer was made. The findings indicate that, as predicted, there is a longer delay between the receipt of an offer and its acceptance in high salience conditions (M = 4.65), than in low salience conditions (M = 1.00), although this relationship is not significant [F (1, 32) = 2.39, p = .132].

**What Influenced the Advice Subjects Gave?**

Several of the questions in the post-experimental questionnaire were specifically designed to provide an indication of how subjects processed and evaluated the information they received during the course of the experiment. They were asked to rate to what extent military losses, domestic support, the issue itself and the international reputation of the US influenced the advice they gave the President. According to the theory, military losses and the issue itself should be the most influential factors. Furthermore, the issue should carry
greater weight in high salience conditions and military losses in cases where there were more casualties.

The findings from a 2x2x4 mixed between-within subjects ANOVA indicate that there is a significant difference between these factors, \(F(3, 189) = 13.39, p < .0001\). The issue itself was the most influential (M = 6.7), followed by military losses (M = 5.9), international reputation (M = 5.0) and domestic support (M = 4.4). The repeated measures analysis also indicates that there is a significant interaction between the categories of influence (issue, military losses, international reputation and domestic support) and issue salience \(F (3, 189) = 13.39, p = .0002\). This relationship is driven by the increased importance placed on military losses in low salience conditions and the issue in high salience conditions, which provides further support for the theory. These findings, illustrated in Figure 5.5, support the general proposition of the model regarding the importance of the issue at stake and the pain experienced on a decision makers’ move to a negotiation strategy. They also replicate the findings of Experiment I, providing cross-validation.

Analysis of the independent influence of military losses indicates that this cost factor was rated as significantly more influential on advice by subjects in the low salience condition (M = 6.64), compared to those in high salience conditions (M = 5.14), \(F(1, 63) = 7.92, p = .007\). This finding provides further support for Hypothesis 5. Furthermore, there is a significant \((r = -.276, p =.023)\) negative correlation between cumulative casualties and the influence of military losses.
In cases where subjects “fought” less and sustained fewer casualties, military losses were reported as having a greater influence on their advice, indicating a greater sensitivity to costs. When the correlation is split by salience, it can be seen that, as expected, the strength of the relationship is driven by the low salience cases ($r = .372$, $p = .03$), rather than the high, ($r = .053$, $p = .771$). As figure 5.5 demonstrates, although not significant this relationship is supported by the greater emphasis placed on military losses in low salience conditions.

Consistent with the findings regarding issue salience, the issue itself also shows an independent effect on subjects’ advice [$F (1, 63) 6.87$, $p = .011$]. Matching the expectations of the theory, subjects rated the issue itself as having a greater influence over their advice in
high salience conditions (M = 7.38), than in low (M = 5.97). International opinion also proves to have a significantly different influence on subjects’ advice, according to their salience condition [F (1, 63) 4.9, p = .031]. In low salience conditions international opinion was more influential on subjects’ advice (M = 5.85) than it was in high salience conditions (M = 4.15). This is consistent with the expectation that in low salience conflicts, actors may consider the resort to use of force to be less justified, thus exacerbating the pain associated with fighting. The effects of domestic opinion were not significantly different between high and low salience conditions when analyzed independently. The difference was, however, in the direction expected, with domestic opinion having a greater influence on advice in low salience conditions.

Comparing Subjects’ Reasons for Negotiating

The results discussed so far support the theoretical expectation that what drives an actor involved in a conflict to move from a fighting strategy to one of negotiation is the pain experienced because of the costs involved in conflictual action. However, other factors are considered to influence an actor’s decision to negotiate. The post-experimental questionnaire asked subjects to rate the importance of three additional motivations for negotiation on their advice to the President; information, standard operating procedure (SOP) and strategic considerations.

70 Information: “Negotiation provides an opportunity to gain useful information about you opponent and their demands.”
SOP: “The belief that military action can only be justified if all other means of resolving a conflict have been attempted.”
Strategic: “US forces had inflicted considerable damage on the Hendarans and this placed the US in a strong position to negotiate a settlement favorable to the US.”
All questions are rated on a 10-point scale: 1 = not at all important – 10: extremely important.
When analyzed individually, neither information nor strategic considerations were
effected by either salience or an offer. Where SOP is concerned, however there is a
significant effect of salience \([F (1, 63) = 7.1, p = .01]\). In high salience conditions SOP is
considered as a less important motivation for negotiation \((M = 5.91)\) than it is in low
salience conditions \((M = 7.46)\). This finding is also consistent with the expectation that in
low salience conflicts actors are more sensitive to the expectations of others and take
greater care to appear to be doing the right thing.

Although, when considered together, there is no main effect of issue salience or
offer on the importance of these motivations, a repeated measure analysis indicates that
there is a significant difference in importance between them \([F (2, 126) = 3.116, p = .05]\).
Overall, strategic considerations have the greatest influence on subjects’ advice \((M=7.0)\),
followed by SOP \((M = 6.67)\) and information \((6.1)\). There is also a significant interaction
between the motivation for negotiation and the salience condition \([F (2, 126) = 3.245, p < .05]\). As Figure 5.6 illustrates, the interaction is driven largely by the variation in impact of
SOP. As the individual analysis indicated, in high salience conditions, SOP is considerably
less influential \((M = 5.91)\) than it is in low salience conditions \((M = 7.5)\). By contrast, high
salience increases the importance of information \((High: M = 6.21; Low: M = 5.91)\) and
strategy \((High: M = 7.12; Low: M = 7.0)\).
Discussion

This experiment was designed to accomplish two things. First, it provides a means of cross validation through replication of the findings regarding issue salience from Experiment I. Second, it extends the experimental testing of the theory and model by addressing the second question raised by the model; will an offer from an opponent change the timing of an actor’s move to negotiation? As discussed earlier, in the context of the model change in the timing of negotiation implies a change in preference for fighting over negotiation, which can only occur if there is a change in either the actor’s tolerance for pain (threshold), or the speed of pain accumulation (slope).
Regarding the first issue, this experiment generated results for the effects of issue salience that were uniformly consistent with those of Experiment I. This provides a further indication of the strength of the effect of issue salience, as well as the stability of the salience manipulation used in both experiments. Issue salience proves to be an important predictor of the extent to which decision makers will pursue a conflictual strategy prior to offering, or accepting an opponent’s offer of, negotiation. The results of this second experiment consistently indicate that people will fight longer before negotiating when the issue they are fighting over is important to them. This finding holds across all measures of issue salience and all analyses of the relationship between conflict duration and salience. Issue salience also affects decision makers’ willingness to incur costs. Those who consider a conflict to be highly salient will sustain higher costs before searching for an alternative means of resolving the crisis.

This finding lends support to the first expectation of the model; that the rate of pain accumulation will be faster (the slope of the line steeper) in low salience conflicts, as compared to high. This implies that the timing of offers of negotiation is affected not only by the duration of the conflict, but its intensity, measured in terms of casualties sustained. Both Experiments I and II demonstrate that subjects involved in high salience conflicts tolerated significantly more casualties prior to negotiating than did those in low salience conflicts. These findings regarding issue salience support the theoretical proposition that decision makers have pain thresholds associated with conflicts and that these thresholds are dependent on the importance they place on the issue at stake.

While the theoretical expectations regarding issue salience were quite straightforward, those concerning the effects of an opponent’s offer of negotiation were
more complex, and two alternate hypotheses were generated from the model. The first predicted an interactive effect of the opponent’s offer with the salience of the conflict. The second predicted a main effect of receipt of an offer increasing the duration of conflict prior to negotiation. The experimental findings supported the latter hypothesis: in both conditions the receipt of an offer from the opponent increased the duration of the conflict, although the relationship was not significant. There was, however, support for the prediction of Hypothesis 2 that the delay between receiving and accepting such an offer would be less in low salience conflicts than in high.

These results provide a cross-validation by replication of the effects of issue salience and pain on the timing of offers to negotiate in militarized conflicts. They build on the findings of Experiment I by enabling examination of the effects of receipt of an offer of negotiation from an opponent affects the decision maker’s pain threshold and consequently his/her behavior and choices. In order to complete the experimental testing of the model, however, it remains to examine how the information an actor has available (casualty levels alone, or casualty and public support levels), influences his/her response to an offer of negotiation by the opponent. This analysis was carried out in Experiment III.
CHAPTER VI

EXPERIMENT THREE: RECEIVING AN OFFER OF NEGOTIATION AND PUBLIC SUPPORT

Experiment I provides an initial test of the basic proposition that the effect of objective costs – the pain they produce - is context dependent. It demonstrates that people will indeed fight harder and longer when they are fighting for something they consider important. Further supporting the theoretical assumptions of the model are the findings regarding the effect of information regarding public support for the conflict. These findings suggest that awareness of public opinion further sensitizes decision makers to costs. This interpretation is supported by the literature (Bueno de Mesquita and Siverson 1995) which suggests that leaders are motivated by the desire to maintain power. More specific to the model, public opinion is demonstrated to have a tranquilizing effect on pain when there is majority support for a conflict. The fact that, when given no public support information, subjects rated the conflict as more painful may indirectly suggest that decision makers anticipate public aversion to casualties and, in the absence of evidence to the contrary, factor it in to their calculation of the impact of such costs.

Experiment I, therefore, begins to shed some light on the first research question: when will states involved in a conflict offer to negotiate? What it indicated, however, is the likely response to such an offer from the opponent. It does not address the second research question: what effect will receiving an offer of negotiation from one’s opponent will have on the timing of the move to negotiation?
Experiment II addresses this issue directly by introducing an offer to negotiate into the event sequence. This provides an initial means of gauging if and how an actor’s willingness to negotiate is influenced by the demonstrated willingness of the opponent to negotiate. In terms of the model structure: whether receiving an offer of negotiation affects either the speed with which a decision maker reaches his/her pain threshold, and, whether such an event changes the decision maker’s threshold for pain itself.

The findings from Experiment II generated results for the effect of issue salience that were uniformly consistent with Experiment I, lending further support to the model’s expectation that the rate of pain accumulation will be faster in low salience conflicts, leading actors to offer to negotiate sooner than they would in a high salience conflict. The model proposed two possible effects of receiving an offer of negotiation from one’s opponent. First, that in high salience conflicts receipt of an offer would increase the duration of the conflict, while in low salience conflicts it would decrease duration. Second, that the effect of an offer would be in increase the duration of conflict, regardless of issue salience. The findings of Experiment II support the expectations of the second hypothesis of a main effect of receipt of an offer. The expectation that offers will be accepted more quickly in low salience conflicts than in high is, however, supported by the findings of Experiment II.

This third experiment is designed to close the circle and provide a means of cross-validation by replication of the information findings from Experiment I and the offer effect in high salience conflicts of Experiment II. As with Experiment I, the information given

---

71 In both high and low salience conditions the receipt of an offer from the opponent increased the duration of the conflict.

72 High salience was chosen as the modal category because it is expected to be more reflective of the reality of the conflict environment. In terms of experimental cross-validation it also ensures that more of the subjects progress far enough into the event set to receive and react to the negotiation offer.
to subjects was manipulated. In the event set some received information on the current level of public support for the conflict as well as cumulative casualty reports, while others received only the cumulative casualty reports. Similar to Experiment II, half the subjects received an offer of negotiation from their opponent after the fifth event, and half did not.

**How Will Receiving an Offer of Negotiation Change an Actor’s Pain Threshold?**

Experiment III replicates Experiment II by introducing an offer to negotiate from the opponent into the event sequence. So, how is this additional factor expected to affect the actor’s pain threshold?

We know from the findings of Experiment II, that in both high and low salience conflicts the receipt of an offer from the opponent increased the duration of the conflict. The findings regarding the speed with which an offer was accepted also supported the hypothesis that offers in low salience conflicts will be more quickly accepted than those in high salience conflicts. As all the subjects in this experiment are presented with a high salience conflict, only the first hypothesis from Experiment II can be replicated\(^{73}\).

The domestic constraint explanation is indirectly supported, however, by the findings of Experiment I concerning public opinion. It was demonstrated that majority public support for a conflict appears to have a desensitizing effect on decision makers’ perception of costs. At the same time, the responses of subjects who did not receive the public support information conformed to the widely held belief that the US public is intolerant of casualties. These two findings suggest that there will be an interactive effect

---

\(^{73}\) It should be noted that, in the context of this experiment the effect will not be interactive, but will be a main effect.
between the information condition and an offer. This provides the second and third hypotheses for Experiment III.

H1: Actors in highly salient disputes will respond to an offer of negotiation from their opponent by fighting longer than they would have if no offer had been made.

H2: Actors who have public support information (when support $\geq 50\%$), will respond to an offer of negotiation from their opponent by fighting longer than they would have if no offer had been made.

H3: The delay between receipt of an opponent’s offer to negotiate and its acceptance will be shorter in conditions where the subject does not have public support information.

Public Opinion

As discussed in detail earlier, public opinion reacts to and is affected by the costs involved in a military conflict, in particular by casualties. In the context of this research, what is of interest is not the direct relationship between public opinion and casualties; rather it is the effect that public opinion has on a decision maker’s reaction to costs. The general prediction is that when the majority of the public supports a policy, then public opinion will act as a tranquilizer and decrease the impact of casualties on a decision maker’s perception of the painfulness of a conflict. When a majority do not support a policy, however, the decision maker, feeling the pressure of public disapproval, will become more sensitized to casualties.

H4: When public support is above 50%, it will decrease the pain a decision maker associates with a conflict, thus increasing the duration of the conflict.

If a decision maker is not given information regarding levels of support, we would expect his/her perceptions of pain to reflect the belief that the US public will respond badly to casualties. This leads to the final expectation of the model:
H5: When a decision maker does not have public support information he will be more sensitive to casualties than decision makers with public support information when that support is above 50%.

**Experimental Design**

The third experiment in this series was designed to examine how the receipt of an offer of negotiation effects an actor’s decision to move from a fighting strategy to a negotiation strategy in high salience conflicts. This decision is expected to be influenced by the information available to the decision maker and the subsequent sensitivity of the actor to costs. The experiment, introduced as a study on foreign policy decision making, was conducted with students from political science classes at Texas A&M University. Fifty-four undergraduate students participated in this third experiment.

The experiment uses a 2x2 between-groups design. The two factors are information and whether an offer of negotiation was made by the opponent. As the model seeks to explain at what point in a conflict actors switch to a negotiation strategy the dependent variables were chosen to capture different elements of timing. Four specific measure of time were used: 1) the stage in the conflict at which the subject chose to negotiate; 2) the cumulative number of casualties prior to negotiation; 3) the level of pain (self-reported) the subject associated with the conflict; and, for the offer conditions 4) how far after an offer was received was that offer accepted.

\[74\] The results for three subjects had to be discarded from the analysis of results for the following reasons: 1) their questionnaires were incomplete; 2) their answer to question 3 indicated they did not understand the terms of the offer; or 3) their answer to question 18 indicated they did not register that an offer of negotiation had been made. Fifty-one subjects were therefore used in the analysis of results.

\[75\] Measured by the number of events subjects viewed before choosing the negotiate option and ending the experiment.
As with Experiments I and II, Experiment III was carried out using the Dec-tracer. As with Experiment II, the ability to control the order of information is particularly important in this experiment, as it enables control over if and when a subject receives an offer to negotiate.

**Experimental Procedure**

Subjects were informed that they were to play the role of chief foreign policy advisor to the President of the United States, and instructed that it was their job to advise the President on the best action to take, given the current circumstances. They were then exposed to an unfolding foreign policy crisis over a fictional island archipelago – the Kell Islands - with a fictional South American country – Hendara. Subjects were then randomly assigned to one of the four experimental conditions.

Before beginning their decision process, subjects were provided with background information regarding the history of the dispute, their opponent, the event which triggered the current crisis, and their task in the experiment. The subjects were then exposed to the first of a series of events, detailing an escalation in the crisis as well as the current cumulative number of casualties suffered by the US forces. In order to progress through the experiment each event prompted them to indicate their choice of strategy to recommend, given the information they had just received.

---

76 The 1982 Falkland / Malvinas war between Great Britain and Argentina was used as the basis of this scenario and a source of information regarding the escalation of the conflict and international response.

77 Public Opinion/Offer; Public Opinion/No Offer; Casualty/Offer; Casualty/No Offer.

78 The structure of the experiment is represented graphically in Figure 3.5.
These choices reflected the two strategy options proposed in the model – continue with the conflict or offer to negotiate. Examples of such events, including the text of the negotiation offer, are given in Figure 6.1.

![FIGURE 6.1 Experiment III: Example of Events](image)

The experiment terminated when either the subject chooses to advise negotiation, or all 27 events (28 in the case of offer conditions) were accessed\(^9\). In the first case, the

\(^9\) For full text of all instructions see Appendix A, for full text of “events” please see Appendix B.
subject was told their opponent had agreed to negotiate. In the second they were told that their opponent had surrendered\textsuperscript{80}. In both cases the outcome was presented as a success. The subjects were then given a post-experimental questionnaire and asked to indicate their responses to a number of inferential statements about the country, and their perception of the costs incurred prior to the end of the crisis (see Appendix C).

Offer Manipulation

To test the effect of an offer to negotiate by an opponent (Hypotheses 1-3), two versions of the event set were created. The first two were the same as those used in the casualty and public information conditions in Experiment I. The third and forth were based on these event set but had an additional event – the offer - inserted after the fourth event. As with Experiment II, the placement of the offer as the fifth event was chosen by analyzing the cases from Experiments I and II.

The instructions subjects were given regarding their decision task, prior to beginning the experiment were the same as those used in Experiment II. In all conditions subjects were informed that they may receive an offer of negotiation from their opponent, which did not have to be accepted immediately. It was further explained that they had the option to continue with military action and negotiate at a later point\textsuperscript{81}. There was also a question added to the post-experimental questionnaire designed to check the subjects’ understanding of the terms of the offer. If their answer indicated they had not accurately understood their response options, their results were excluded from the final analysis\textsuperscript{82}.

\textsuperscript{80} Of the fifty-four total subjects, only seven reached the final event.
\textsuperscript{81} Text in instructions read: “Please Note: If you receive an offer of negotiation from the Hendarans you do not have to accept it immediately. You have the option to continue with military action after an offer is made and choose to negotiate at a later time of your choosing.”
\textsuperscript{82} See footnote 3.
Internal Validity – Manipulation Check

Information Manipulation: Casualties and Public Opinion. In the context of this experimental design the cost component of pain was expressed in terms of casualties. The perceptual component was operationalized as public opinion. As well as providing information on the progress of the conflict each event in the event set was matched with changes in the cumulative casualty count and public support for the conflict. These two measures enabled manipulation of the pain variable. In the casualty condition, subjects were only provided with the casualty data. In the public opinion condition, they received both the casualty and public support data.\(^3\)

No instructions were given regarding how much, if any attention the subjects should pay to these figures when making their decisions. It is important to keep in mind that the pain manipulation, like the offer manipulation, was undertaken during the course of the crisis events.

This experiment provides a means by which to examine the second research question regarding acceptance of an offer of negotiation, and how acceptance of an opponent’s offer is influenced by the salience of the issue in dispute.

Understanding of the Terms of an Opponent’s Offer: Subject’s comprehension of the implications of receiving an offer from their opponent was tested in the post-experimental questionnaire. The first manipulation check was conducted by asking all subjects the following question:

\(^3\) Figure 5.3 provides a graphical representation of these measures over the course of the 27 events. Casualties logically increase over the course of the conflict. Public, opinion, as discussed above decreased over the course of the conflict.
3. According to the instructions, an offer of negotiation from the Hendarans:
   ____ would remain open for the duration of the conflict.
   ____ had to be accepted immediately or it would be withdrawn.

All but two subjects correctly indicated the first answer; both of the two were in No Offer conditions. A later question was designed to test whether the subjects were sensitive to the receipt of an offer:

18. Did the offer of negotiation from the Hendaran government make you more willing to consider recommending negotiating to the President?
   ___ no
   ___ yes, more willing to recommend negotiation
   ___ I did not receive an offer of negotiation

That is, did they know whether they had received one or not. If subjects in the no offer conditions answered yes or no, their results were excluded from the analysis. If subjects in the offer conditions, who reached the 5th event, (the offer), responded that they had not received an offer there results were likewise excluded. Three subjects fell into this category, (two also incorrectly answered question 3), meaning that three subjects were excluded from analysis as a result of the offer manipulation. The offer manipulation can, therefore, be considered completely effective. All subjects analyzed understood the terms of an offer from their opponent and accurately reported whether or not they received such an offer during the course of the experiment.

Sensitivity to Public Opinion. The public opinion manipulation was tested by a question84 regarding the extent to which domestic support for the President influenced the subject. The expectation that high levels of public support will desensitize decision makers to the costs of conflict is based on the theoretical contention that leaders, particularly

---

84 To what extent did the following factors influence the advice you gave to the President?

   Loss of domestic support for the President.
democratic leaders want to stay in power. So, another way of testing the effects of public opinion on decision makers is by analyzing their responses to the question regarding their preference for fighting over talking\(^8\). If subjects in the public opinion conditions showed a greater proclivity for use of force, then the theoretical explanation for the effects of majority public support for a conflict are supported. The findings do in fact indicate that there was a greater preference for use of military action (\(M = 4.6\)) in the public opinion conditions than in the casualty conditions (\(M = 3.35\)). This finding was significant (one-tailed) \([F (1, 47) = 2.1, p = .05]\).

**Results**

**At What Point in the Conflict Did Subjects Offer to Negotiate?**

One of the most basic tests of the model is whether the results regarding conflict duration are consistent with the expectations of Hypotheses 1 and 4 and their counterparts in Experiments I and II. The most direct way to do this is by looking at the number of events subjects viewed prior to choosing to negotiate, as shown in Figure 6.2. Consistent with Hypothesis 1 and the findings of Experiment II, subjects did continue to fight longer in the Offer conditions (\(M = 14.7\)) than in the No Offer conditions (\(M = 4.4\)). This relationship is significant \([F (1, 47) = 22.6, p < .0001]\). The findings for Hypothesis 4 and Experiment 1 (high salience conditions only) regarding the effects of information were consistent with expectations and previous findings, but not significant. When given positive (\(\geq 50\%\)) information regarding public support for the conflict, subjects continued with

\(^8\) 8. To what extent would you prefer to resolve this crisis through military action? On a scale of 1 -10.
military action longer (M = 11.7) than they did when they received no information regarding public opinion (M = 8.1).

**FIGURE 6.2  Experiment III: Mean Number of Events Prior to Negotiating**

<table>
<thead>
<tr>
<th>Experimental Condition</th>
<th>Casualty</th>
<th>Public Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Offer</td>
<td>4.33</td>
<td>4.44</td>
</tr>
<tr>
<td>Offer</td>
<td>13.18</td>
<td>15.75</td>
</tr>
</tbody>
</table>

**Does Receiving an Offer of Negotiation Change Behavior?**

Overall, the general findings of Experiment III regarding the effect of an offer support Hypothesis 1 and provide cross-validation through replication of the findings for high salience conflicts in Experiment II. There is, however, another way in which the receipt of an offer is predicted to change conflict behavior. According to Hypothesis 3, the delay between offer and acceptance is expected to be longer in casualty conditions than it is when the decision maker is given public opinion information. As an offer was only incorporated into the event sets for offer conditions, this analysis looks at the subset of
cases in which an offer was made. The findings indicate that, as predicted, there is a longer delay between the receipt of an offer and its acceptance in public opinion conditions ($M = 10.75$), than in casualty conditions ($M = 8.18$). This relationship is not significant however, $[F (1, 25) = .439, p = .513]$.

An interactive effect between information and offer conditions was also predicted in Hypothesis 2; specifically, that the effect of an offer would be greater in the public opinion condition than in the casualty condition. As shown in Figure 6.2, the effect appears to be there, however it is not significant. While the results show that subjects given public opinion information who received an offer did fight longer ($M = 15.75$) than those receiving an offer who were only given casualty information ($M = 13.18$), this relationship was not significant $[F (1, 47) = .336, p = .565]$. These results can also be seen in Figure 6.3.

**FIGURE 6.3 Mean Negotiation Points by Condition**

<table>
<thead>
<tr>
<th>Event Number</th>
<th>Casualties</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td>8</td>
<td>80</td>
</tr>
<tr>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Public Support for Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casualties</td>
</tr>
<tr>
<td>Public Opinion/Offer (15.8)</td>
</tr>
<tr>
<td>Casualty/Offer (13.2)</td>
</tr>
<tr>
<td>Public Opinion/No Offer (4.4)</td>
</tr>
<tr>
<td>Casualty/No Offer (4.3)</td>
</tr>
</tbody>
</table>

---

---

---

---
Does Receiving an Offer of Negotiation Effect Perceptions of Pain?

None of the hypotheses dealing with the effects of an opponent’s offer on a decision maker’s conflict behavior explicitly predict effects on pain perception. The rationale underlying the strategic response explanation used to establish the Hypothesis regarding the effects of an offer in high salience conditions does assume some change in a decision maker’s translation of costs into pain. It predicts that an offer will increase the resolve of a decision maker to “win” the conflict through use of force, thereby increasing his/her bargaining power at the final settlement stage.

This explanation would gain support if a difference can be shown in the metric underlying subjects’ self-reported levels of pain in Offer and No Offer conditions. That is, does it take a different level of costs (in this case casualties) to induce the same level of pain in cases where the subject receives an offer of negotiation; or does the relative value of a casualty vary by condition. This relative casualty variable was calculated for each subject by dividing the cumulative casualty count prior to their decision to negotiate by their self-reported level of pain. It indicates the number of casualties it took to move each subject, (on a scale of 1 -100), one unit of pain.

The results indicate that, in conditions where the subjects received an offer of negotiation it took them more casualties to move one unit of pain (M = 7.34), than it did when they did not receive an offer (M = 3.71). This relationship was not significant, however [F (1, 47) 5.543E-5, p = .994]. There is directional support, however, for the logic underlying the strategic response explanation. Subject’s response to a direct question
regarding the effect of an offer on their conflict behavior\textsuperscript{86}, however, elicited a contradictory response. Overall, 66.5\% (64\% casualty condition, 69\% public opinion condition) of subjects who received an offer of negotiation indicated that their opponent’s offer had made them more willing to recommend negotiation.

**Does Public Opinion Effect Perceptions of Pain?**

The experiment used selective provision of information regarding levels of public support for the conflict as a means of analyzing decision makers’ sensitivity to the costs of conflict. In order to assess the effects of this information half of the subjects were given both updated levels of public support and cumulative casualty levels with each event, while the others received only the casualty information. The expectation was that positive (≥50\%) public support would desensitize subjects to the costs of conflict, thus increasing the time they took to reach their pain threshold (indicated by the choice to negotiate).

Those subjects who received public support information did indicate the conflict to be slightly less painful (M = 35.72) than did those who only received casualty data (M = 38.27), however this difference is not significant \( [F (1, 47) = .719, p = .400] \). It is important to note that in the event set, public support did not drop below 50\% until event 16, and the mean number of events viewed in the public opinion conditions was 11.68. This suggests, some support for Hypothesis 4; that majority support for a conflict can have a tranquilizing effect on a decision maker’s perception of pain. Figure 6.4 indicates the mean pain for each condition, relative to both casualties and public opinion.

\textsuperscript{86} Q18: Did the offer of negotiation from the Hendaran government make you more willing to consider recommending negotiating to the President? (no; yes, more willing to recommend negotiation; I did not receive an offer of negotiation)
Does Public Opinion Affect the Costs Behind Pain?

When interpreting subjects’ pain perception, their self-reported levels of pain are not the most sensitive measure, as they can be expected to be affected by the duration of the conflict itself. As casualties increase over the course of the conflict, the longer a subject pursues a conflictual strategy, the greater the costs s/he experiences. As subjects in public opinion conditions fought longer (M = 11.68 events) than those in casualty conditions (M = 8.1 events), this difference could be driving the differences in self-reported pain levels. For this reason, a better measure of pain is provided by the constructed variable relative casualty variable.

The findings regarding relative casualty values across conditions provide support for Hypothesis 5. Subjects in conditions where public opinion information was provided
required more casualties ($M = 9.74$) to achieve a unit increase in pain than did those who only received casualty information ($M = 3.71$). These results were significant in a one-tailed test $[F = (1, 47) = .502, p = .035]$. The prediction that, when subjects had information regarding the level of public support and that support was above 50%, they were less sensitive (reported lower levels of pain) to casualties than if they did not receive such information.

As discussed earlier, the literature and common wisdom tell us that Americans will not support the loss of US soldiers in foreign conflicts. This is an attitude that is assumed to be known to, if not shared by most subjects. Consequently, subjects are expected to be more sensitive to casualties in the absence of evidence indicating public support for the conflict remains high. This assumption is supported by responses to the question regarding the influence of military losses on advice given to the President$^{87}$. A 2x2 between subject ANOVA indicates that military losses had slightly more influence on the subjects’ advice in the casualty conditions ($M = 6.385$) than they did in the public opinion conditions ($M = 5.36$), although this relationship is not significant $[F = (1, 47) = 1.99, p = .165]$. The effects of both offer and information conditions on the relative value of casualties is shown in Figure 6.5.

---

$^{87}$To what extent did the following factors influence the advice you gave to the President?
Military losses suffered by the US.
What Influenced the Advice Subjects Gave?

The post-experimental questionnaire was designed to shed light on how subjects processed and evaluated information received during the course of the experiment. Among the questions was a series relating to the possible factors which influenced their decision process, in particular; the extent to which military losses, domestic support, the issue itself and the international reputation of the US influenced the advice they gave the President. According to the theory behind the model, military losses and the issue itself should be the most influential factors. Furthermore, military losses should have a greater impact in cases where there were more casualties and conditions where the subjects were not aware of public support levels\(^{88}\).

\(^{88}\) Again, it should be kept in mind that this relationship holds for conditions where public support is \(\geq 50\%\).
A repeated measures test of the relative influence of these four factors (military losses, the issue, domestic support and international reputation) demonstrates a significant main effect off the category. As the model predicts for high salience conflicts, the issue itself had the greatest influence on subjects’ advice (M = 7.37), followed by military losses (M = 5.9), international reputation (M = 5.75) and finally domestic opinion (M = 5.18), and the difference was significant [F (3, 141) 7.086, p = .0002]. So, as illustrated in Figure 6.6, the model’s expectations regarding what factors subjects give greatest weight to when deciding between continuing to fight and offering to negotiate or accepting an opponent’s offer, is supported by these findings. They also replicate the findings of Experiments I and II, providing cross-validation.

89 Subjects were asked to rate on a scale of 1 – 10 the extent to which each of these factors influenced the advice they gave the President. Full text of all post-experimental questionnaire questions is provided in Appendix C.
The influence of military losses is also expected to vary according to the information available to the subjects. The expectation is that subjects without positive public opinion information will be more sensitive to military losses. The interaction between influences on advice and the information condition (casualty / public opinion) indicates that in casualty conditions military losses do indeed have a greater influence on subjects’ advice ($M = 6.39$) than in public opinion conditions ($M = 5.36$), although the interaction as a whole is not significant. This relationship is also repeated in the ANOVA analysis of the independent effects of military losses on advice. Subjects in casualty conditions again demonstrate a greater sensitivity to military losses ($6.39$) than those in public opinion conditions ($M = 5.36$), although this relationship is not significant either.

Another difference in impact suggested by the theory and model is, of course, the impact of domestic support on subjects’ decision processes. This may work in several ways. First, consistent with the logic used to predict greater sensitivity to military losses in the casualty conditions, we may find that uncertainty regarding the degree of public support for military action would lead subjects in the casualty conditions to place greater emphasis on loss of domestic support. Those in the public opinion conditions knew that, for the great proportion of the conflict there was majority popular support, and this knowledge could logically be expected to assuage fears of domestic backlash against the President and decrease the influence of this factor on subjects’ advice. Second, is the possibility that the provision of public support information sensitizes subjects to the issue of domestic support, thus increasing the influence this factor plays in their decision process. In this scenario subjects in the casualty condition face greater uncertainty only if they think to consider public opinion at all. What we find from the ANOVA analysis of the domestic support
variable is virtually no difference between casualty \(M = 5.11\) and public opinion \(M = 5.24\) conditions. This may perhaps indicate support for both, conflicting expectations, or, alternately, be a reminder that there are limitations to the inferences to be wrung from such data.

**Comparing Subjects’ Reasons for Negotiating**

The results discussed so far support the theoretical expectation that what drives an actor involved in a conflict to move from a fighting strategy to one of negotiation is the pain experienced as a result of the costs involved in conflictual action. However, other factors are considered to influence an actor’s decision to negotiate. The post-experimental questionnaire asked subjects to rate the importance of three additional motivations for negotiation on their advice to the President; information, standard operating procedure (SOP) and cost considerations\(^{90}\).

The results of Experiments I and II indicate that the only factor which generates any difference in the importance placed on these factors is issue salience. There is no rationale to be derived from the model that would lead to an expectation of difference driven by either of the variables manipulated in this third experiment. Moreover, when analyzed individually, neither information, cost, nor SOP considerations generate any significant effect of either information or offer. When considered together in a repeated

\(^{90}\) Information: “Negotiation provides an opportunity to gain useful information about you opponent and their demands.”
SOP: “The belief that military action can only be justified if all other means of resolving a conflict have been attempted.”
Cost: “Maintaining US control of Kell through military action was not worth the cost (in terms of lives, expenditure, public opinion and international reputation).”
All questions are rated on a 10-point scale: 1 = not at all important – 10: extremely important.
measures ANOVA, there is also no main effect of information or offer on the importance of these motivations.

**Discussion**

The first purpose of this experiment was to extend the experimental testing of the model by examining how information (public opinion and casualty, or casualty alone) influences the effects of the receipt of an offer of negotiation from an opponent in high salience conflicts. By doing so, it brings the experimental design full-circle and enables cross validation of all three key variables; issue salience, information and the presence of an offer of negotiation.

Consistent with the findings of Experiment II (high salience conditions), subjects did continue to fight longer when they received an offer of negotiation. There is also directional support for the theoretical contention that the reason for this effect is increased the resolve of a decision maker to “win” the conflict through use of force, thereby increasing his/her bargaining power at the final settlement stage. The findings regarding the effects of an offer were simpler in Experiment III than Experiment II, as the salience was held constant and high, thus eliminating the interactive effects predicted in the earlier experiment.

There was, however, an interactive effect predicted between receipt of an offer and the information provided to the subject. Specifically, Hypothesis 2 predicted that, when public support for the conflict was $\geq 50\%$, knowledge of public opinion levels would increase the delay between receiving and accepting an offer of negotiation. The logic for this expectation is similar for that regarding issue salience and related to the underlying salience
condition. In high salience conditions, it is theorized that an offer from an opponent increases the resolve of a decision maker, decreasing his/her sensitivity to pain, thus increasing the pain threshold. Public support information, when positive, \((\geq 50\%)\), is expected to magnify this effect, being theorized to be one of the determining factors in the translation of costs into pain. So, if a decision maker is aware that his/her current strategy (fighting) is supported, his/her sensitivity to pain is decreased. At the same time, there is an implicit indication that accepting an offer of negotiation or offering to negotiate one’s self, may not meet with popular approval, thus decreasing the attractiveness of this alternate strategy. The results of this experiment lend some support to this idea, indicating a greater delay between offer and acceptance in the public opinion/offer condition, although this relationship was not significant.

As with Experiment I, the results for the effects of information on the duration of conflict were in line with the model’s prediction that, when the majority of the public supported the conflict actor’s would fight longer. Majority public support also demonstrated, as predicted a tranquilizing effect on sensitivity to pain. On average, it took more casualties to induce the same level of pain in public opinion conditions than it did in casualty conditions.

At first glance, these results may appear inconsistent with the literature, but they do reflect two separate components of public opinion studies. First, most of the subjects in the public opinion condition only saw public support figures above 50\%\textsuperscript{91}. Consequently, theory would lead us to expect that knowledge of public opinion would have a tranquilizing effect on pain, as indicated in the pain results above. In turn, this would be translated in a

\textsuperscript{91} 70.5\% of subjects chose to negotiate prior to event 16, after which public support dropped below 50\%.
higher relative casualty value. The accuracy of this assumption is supported by the finding that, in all but two cases, subjects in both public opinion conditions indicated that the US public supported the President\(^2\).

\(^2\) Post-experimental questionnaire, Q3: Overall, how did the American public and media respond to the conflict? Supported the President/Did not support the President/were indifferent to the conflict. In one of the cases where the subject indicated that the public did not support the President, s/he continued with a fighting strategy up to the last event, at which stage public support was below 50\%.
CHAPTER VII

EMPIRICAL ANALYSIS: PREDICTING THE TIMING OF CONFLICT MANAGEMENT

The goal of this research is to explain when and why parties involved in international crises will attempt crisis management. This move is conceptualized as a change in strategy - from fighting (conflictual) to talking (management) - rather than as an outcome in itself. That is, the model does not distinguish conflict and crisis management as two separate processes, rather, as a continuous, evolutionary process of dispute resolution. As discussed above, actors’ preferences over strategies are considered to be a function of the amount of pain they are experiencing as a result of pursuing a conflictual strategy, relative to the salience they place on the issue(s) in dispute. Two basic questions define the scope of the model:

1. In a crisis situation, when will an actor offer conflict management?
2. In a crisis situation, when will an actor accept an offer of conflict management?

The experimental tests in previous chapters demonstrate that the expectations of the model are supported in the controlled environment of the experiment. The next step, therefore, is to see whether these findings are reflected in testing of data from historical crises. This transition raises several difficult problems, however, due to the type and structure of data available on international crises and disputes, relative to the questions being asked. Although the model to be tested examines actor behavior in a crisis, the structure requires that the unit of analysis be the crisis management event within the crisis, not the crisis itself.
Both questions addressed by the model are linked intrinsically to the notion of time and the dynamic process of the conflictual interaction between the actors in a dispute. Duration analysis would be, therefore, the most appropriate form of statistical analysis to test the model empirically. Two central issues emerge when considering the optimal data for testing the model presented. First, the data would need to be time series in nature and second, the data for specific crises must incorporate both conflict characteristics and conflict management characteristics. Unfortunately, there is no available source of conflict data that fits all these requirements.

Most of the data collected on international crises is not times series in nature, instead measuring variables at either the start or end of the conflict. Furthermore, both the MID and COW data projects do not focus on the issues under contention in crises, adopting more of a realist framework for their data collection and concentrating on factors such as relative power, strategic and great power involvement. Moreover, both of these data sets do not incorporate conflict management variables; instead they consider negotiation, mediation, or arbitration as conflict outcomes. This approach is in direct opposition to the assumptions of the model developed in this research.

Data sets focusing on conflict management are rarer and present similar limitations in respect to this research. That is, just as conflict data sets ignore conflict management variables, conflict management data sets are similarly brief in their treatment of conflict variables. Bercovitch’s International Conflict Management (ICM) dataset does incorporate variables describing dispute characteristics, but as with the COW and MID data sets does so only at the cumulative level.

\[93\] See for example the MID and COW data projects.
As the questions tested by this model require variables measured at the time of the conflict management event, this can cause problems. An example may serve to better clarify this problem. One of the basic predictions of the model is that actors have a threshold for pain that is a function of the costs they are incurring during a dispute and their sensitivity to those costs, all conditioned by the salience of the issue at stake. In order to test this prediction empirically several things are necessary. First, we must be able to identify the conflict management attempt, and which of the parties was the initiator (of the conflict management attempt). Second, we must be able to calculate the costs (economic, casualty, political) at the time of the conflict management attempt. Third, we must be able to evaluate the sensitivity of each actor to the costs experienced up to that point. Fourth, there must be a variable, which indicates the central issue at stake in the dispute.

The Bercovitch ICM data enables partial identification of the first requirement. All conflict management attempts within the data set include a variable (ICM CM12) coding the identity of the conflict management initiator. However, the structure of the dataset is such that, although cost measure are included in the “dispute characteristics” subset of the dataset, they are cumulative in nature, indicating the overall costs at the end of the dispute, not the costs at the time of a specific conflict management attempt. Thus, as with the COW and MID datasets this is not an appropriate source for the cost variables. ICM includes, however, some variables, which are appropriate to measure the sensitivity of actors to such costs. As these are regime characteristics, they are not expected to change significantly over

---

94 CM12: “Initiated by” Request for conflict management initiated by: (0) no management; (1) one party; (2) both parties; (3) mediator/ third party; (4) regional organization; (5) international organization; (6) unspecified.
the duration of the conflict (prior to initiation of conflict management) and therefore can be used to test the model\textsuperscript{95}.

This leaves the issue of the cost variables to be addressed. The data set which best enables the identification of costs at specific stages of a conflict is Frank Sherman’s \textit{SHERFACS: A Cross-Paradigm, Hierarchical, and Contextually Sensitive International Conflict Dataset, 1937-1985}. This data set is unique among conflict data sets as it takes a dynamic approach to conflict data, modeling the escalation and de-escalation of crises; dividing crises into phases and measuring variables at each phase in the conflict. This is the closest to a time series data structure available, although it still does not permit times series analysis as the phase structure is defined by the conflict behavior of the actors, rather than a set measure of time, such as months or weeks\textsuperscript{96}. However, it does provide the best source for intra-conflict measures of cost.

\textbf{Data}

The empirical analysis used in this research are, therefore, drawn from data in Bercovitch’s \textit{International Conflict Management} (ICM) data set and Frank Sherman’s \textit{SHERFACS: A Cross-Paradigm, Hierarchical, and Contextually Sensitive International Conflict Dataset, 1937-1985}. As Bercovitch provides a direct case match between both data sets, combining them is not overly problematic. Furthermore, both use similar theoretical bases for the coding of central variables. Unlike most conflict data sets, neither the SHERFACS

\textsuperscript{95} Specifics regarding the choice and measurement of these sensitivity measures are given in the measurement section below.

\textsuperscript{96} Conflict phases represent one of six levels of disagreement and conflict, (dispute, conflict, hostility, post-hostility conflict, post-hostility dispute, settlement) and a given crisis may pass (repeatedly) through one or all of these phases.
nor ICM impose a minimum number of fatalities to qualify as a conflict. The logic for this is set out in the ICM codebook:

This project has thus adopted the generic term of “conflict”, rather than “war, or “dispute” to denote our cases, as “conflict” recognizes the dynamic and diverse nature of international interactions and confrontations that characterize threats to international peace and security. (Bercovitch 2000: 10)

This broader definition of conflict is in keeping with the theoretical model, which does not assume that military action must take place in order for the expectations of the model to hold.

One of the key variables required for testing the hypotheses derived from the model developed here is the identity of the party who initiates negotiation. Unfortunately, this variable is not coded in either data set. As discussed above, however, the ICM dataset does include a variable indicating the identity of the initiator of the specific conflict management attempt. However, this variable only codes whether one or both parties to the dispute requested conflict management, not the identity of that party. For this reason it was necessary to code the identity of the initiator for all cases coded as “one party” initiation according to the ICM data. This was done using a variety of sources, primarily Facts on File, Keesings Record of World Events and Brecher and Wilkenfeld’s International Crisis Behavior (ICB) dataset.

Case Selection

Due to nature of the questions to be tested, some restructuring of the ICM data was required. Discussions with the author indicate that such a transformation is not out of

---

97 It should be noted, however, that in all three experimental designs subjects begin the decision process after military action has been initiated.

98 See footnote 2.
keeping with its content. Currently the data is set up with the unit of analysis being the crisis management attempt. For this research, the unit of analysis will be the crisis itself. Currently there are 309 cases of interstate and internationalized civil conflicts included in the data set. All cases that do not involve states as the primary actors were removed. An additional nine cases were excluded as they involved no conflict management attempts, and finally eight cases were excluded as the date matches between the two data sets were inconsistent.

The cases selection process for this analysis presented a number of additional challenges. As discussed above, the variables required limited the choice among available datasets. Once the ICM and SHERFACS datasets had been identifies as the most appropriate to the model and specific research questions, an additional issue arose. That is, all of the crises included in the ICM data set that involve states as primary parties and can be matched to SHERFACS cases, are associated with multiple conflict management attempts. So the question arises; which conflict management event should be chosen for the analysis. The model is designed explicitly to test predictions regarding the actions of the central actors in a crisis, not how they might react to the actions of third parties. Conflict management events initiated by outside parties, therefore, were deemed inappropriate, as they required the very strong assumption that either one or both of the primary actors

---

99 Seven case matches between the data sets were excluded for this reason: Yemeni Civil War, 1948-1972; Timorese Independence, 1974-?; Lebanese/Jordanian Civil Wars, 1943-1958; Cypriot Civil War, 1960-1974; Namibia, 1946-?; Iraqi-Kurdish War, 1958-1974; Zaire Independence, 1960-1964


102 Those instances of ICM CM 12 coded (0) no management; (3) mediator/ third party; (4) regional organization; (5) international organization; (6) unspecified.
involved had reached their pain threshold and would have initiated conflict management themselves if not so pre-empted. This, however, leaves the question of how cases in which one or both of the primary actors never initiated conflict management should be treated.

One possible solution to this problem would be to interpret such cases as never having induced enough pain in the actors to raise them to their pain threshold. In such an interpretation, the appropriate cost measures would be those at the end-point in the conflict. However, this approach implies an equally strong, but opposite assumption that any third party initiated conflict management event did not correspond to the pain threshold of either actor. Without considerably more detailed information regarding the specifics of the initiation, this assumption was felt to be unsupportable. Given that the cost measures are calculated at the point in time at which conflict management is initiated, measuring costs in cases where there were no direct conflict management attempts at the end-point of the conflict has no theoretical justification in light of the model and would considerably skew the data. For this reason, cases where there was no direct conflict management initiation by either or both primary actors were dropped from the analysis. This resulted in eight additional cases\textsuperscript{103} being dropped from the case list used for analysis. Once cross-referencing with the SHERFACS cases and research of the initiator identity was completed this left a total of 66 cases for analysis, covering the period 1942 - 1975. A full list of cases and the primary parties involved is provided in Table 7.1.

\textsuperscript{103} The specific cases, included in both the SHERFACS and ICM datasets, dropped due to lack of direct conflict management initiation were: Pakhtunistan, 1947; Turkish Syrian Frontier, 1955-1957; Lake Tiberias, 1955-1956; Afghanistan – Pakistan 1960-63; Mayaguez Seizure, 1975; Mosul Revolt, 1958-1963; Israel - Syria Yom Kippur War, 1973-1974; South Yemeni Borders, 1969-1978.
<table>
<thead>
<tr>
<th>CASE</th>
<th>Conflict Initiator (A)</th>
<th>Conflict Target (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>French in Levant, 1945-1946</td>
<td>France</td>
<td>Syria-Lebanon</td>
</tr>
<tr>
<td>Azerbaijan, 1941-1946</td>
<td>USSR</td>
<td>Iran</td>
</tr>
<tr>
<td>Indonesian Independence, 1945-1950</td>
<td>Netherlands</td>
<td>Indonesia</td>
</tr>
<tr>
<td>Indochinese Recolonization Attempt, 1945-1956</td>
<td>France</td>
<td>Indochina</td>
</tr>
<tr>
<td>Corfu Channel, 1946-1949</td>
<td>Albania</td>
<td>Britain</td>
</tr>
<tr>
<td>Kashmir Accession, 1947-1965</td>
<td>Pakistan</td>
<td>India</td>
</tr>
<tr>
<td>Soviet-Yugoslav Rift, 1948-?</td>
<td>USSR</td>
<td>Yugoslavia</td>
</tr>
<tr>
<td>Israeli Independence, 1941-1949</td>
<td>Egypt</td>
<td>Israel</td>
</tr>
<tr>
<td>Berlin Blockade, 1948-1949</td>
<td>USSR</td>
<td>USA</td>
</tr>
<tr>
<td>Costa Rican Exiles #1, 1948-1949</td>
<td>Nicaragua</td>
<td>Costa Rica</td>
</tr>
<tr>
<td>Syrian-Lebanese Tensions, 1949-1950</td>
<td>Syria</td>
<td>Lebanon</td>
</tr>
<tr>
<td>Chinese Aggression in Tibet, 1949-1956</td>
<td>PRC</td>
<td>Tibet</td>
</tr>
<tr>
<td>Lake Huleh Dispute, 1951</td>
<td>Syria</td>
<td>Israel</td>
</tr>
<tr>
<td>Tunisian Independence, 1945-1956</td>
<td>Tunisia</td>
<td>France</td>
</tr>
<tr>
<td>British in Suez, 1951-1956</td>
<td>Egypt</td>
<td>Britain</td>
</tr>
<tr>
<td>Trieste, 1952-1954</td>
<td>Yugoslavia</td>
<td>Italy</td>
</tr>
<tr>
<td>The Macao Conflict Jul 1952 - Aug 1952</td>
<td>PRC</td>
<td>Portugal</td>
</tr>
<tr>
<td>Temple of Preah Vihear, 1953-?</td>
<td>Cambodia</td>
<td>Thailand</td>
</tr>
<tr>
<td>Algerian Independence, 1947-1962</td>
<td>Algeria</td>
<td>France</td>
</tr>
<tr>
<td>Costa Rican Exiles #2, 1955-1959</td>
<td>Nicaragua</td>
<td>Costa Rica</td>
</tr>
<tr>
<td>The Enosis Movement Sept 1955- Feb 1959</td>
<td>Cyprus</td>
<td>Britain</td>
</tr>
<tr>
<td>The Aden Conflict 1956--60</td>
<td>Yemen / Aden</td>
<td>Britain</td>
</tr>
<tr>
<td>Polish October, 1956-1957</td>
<td>USSR</td>
<td>Poland</td>
</tr>
<tr>
<td>Suez War, 1953-1957</td>
<td>Israel</td>
<td>Egypt</td>
</tr>
<tr>
<td>Hungarian Intervention, 1955-1958</td>
<td>USSR</td>
<td>Hungary</td>
</tr>
<tr>
<td>Honduran Border, 1957-1961</td>
<td>Nicaragua</td>
<td>Honduras</td>
</tr>
<tr>
<td>India-Pakistan Borders, 1958-1960</td>
<td>India</td>
<td>Pakistan</td>
</tr>
<tr>
<td>Quemoy-Matsu, 1958-1960</td>
<td>PRC</td>
<td>USA</td>
</tr>
<tr>
<td>Mexican Shrimp Boats, 1958-1959</td>
<td>Guatemala</td>
<td>Mexico</td>
</tr>
<tr>
<td>Sino-Nepalese Border, 1959-1961</td>
<td>PRC</td>
<td>Nepal</td>
</tr>
<tr>
<td>Haitian Exiles, 1959-1960</td>
<td>Cuba</td>
<td>Haiti</td>
</tr>
<tr>
<td>Sino-Indian Border, 1958-1962</td>
<td>PRC</td>
<td>India</td>
</tr>
<tr>
<td>Mali-Mauritanian Border, 1960-1965</td>
<td>Mauritania</td>
<td>Mali</td>
</tr>
<tr>
<td>Bay of Pigs, 1959-1962</td>
<td>USA</td>
<td>Cuba</td>
</tr>
<tr>
<td>Kuwaiti Independence, 1961-1963</td>
<td>Iraq</td>
<td>Kuwait</td>
</tr>
<tr>
<td>Berlin Wall, 1960-1967</td>
<td>USSR</td>
<td>USA</td>
</tr>
</tbody>
</table>
### TABLE 7.1 cont.

<table>
<thead>
<tr>
<th>CASE</th>
<th>Conflict Initiator (A)</th>
<th>Conflict Target (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bizerte, 1958-1963</td>
<td>Tunisia</td>
<td>France</td>
</tr>
<tr>
<td>Goa, 1947-1974</td>
<td>India</td>
<td>Portugal</td>
</tr>
<tr>
<td>Malaysian Confrontation, 1961-1966</td>
<td>Indonesia</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Lauca River, 1962-1965</td>
<td>Chile</td>
<td>Bolivia</td>
</tr>
<tr>
<td>Missiles in Cuba, 1962-1963</td>
<td>USA</td>
<td>USSR</td>
</tr>
<tr>
<td>Sino-Indian War, 1962-1978</td>
<td>PRC</td>
<td>India</td>
</tr>
<tr>
<td>Intervention in Haiti, 1962-1963</td>
<td>Haiti</td>
<td>Dominican Republic</td>
</tr>
<tr>
<td>Nigerian-Dahomean Border, 1959-1965</td>
<td>Niger</td>
<td>Benin</td>
</tr>
<tr>
<td>Panama Canal #1, 1959-1970</td>
<td>Panama</td>
<td>USA</td>
</tr>
<tr>
<td>Ghanaian Border, 1963-1966</td>
<td>Ghana</td>
<td>Burkina-Faso</td>
</tr>
<tr>
<td>War of Secession 1965-May 1993</td>
<td>Eritrea</td>
<td>Ethiopia</td>
</tr>
<tr>
<td>Kashmir War, 1965-1970</td>
<td>India</td>
<td>Pakistan</td>
</tr>
<tr>
<td>Six Day War June 1967</td>
<td>Israel</td>
<td>Egypt</td>
</tr>
<tr>
<td>Biafran Civil War, 1966-1970</td>
<td>Biafra</td>
<td>Nigeria</td>
</tr>
<tr>
<td>Zaire-Rwanda Mercenaries Dispute, 1967-1968</td>
<td>Demo Repub Congo</td>
<td>Rwanda</td>
</tr>
<tr>
<td>Pueblo Seizure, 1968-1969</td>
<td>North Korea</td>
<td>USA</td>
</tr>
<tr>
<td>Czech Invasion, 1968-1969</td>
<td>USSR</td>
<td>Czechoslovakia</td>
</tr>
<tr>
<td>Football War, 1969-1980</td>
<td>El Salvador</td>
<td>Honduras</td>
</tr>
<tr>
<td>Bangladesh Independence, 1947-1974</td>
<td>Bangladesh</td>
<td>Pakistan</td>
</tr>
<tr>
<td>Cod War, 1971-1974</td>
<td>Iceland</td>
<td>Britain</td>
</tr>
<tr>
<td>Iranian Borders, 1961-1975</td>
<td>Iran</td>
<td>Iraq</td>
</tr>
<tr>
<td>Corisco Bay Islands, 1972-1975</td>
<td>Equatorial Guinea</td>
<td>Gabon</td>
</tr>
<tr>
<td>Ethiopia - Somalia Ogaden War, 1974-?</td>
<td>Ethiopia</td>
<td>Somalia</td>
</tr>
<tr>
<td>Iraqi-Kuwaiti Border, 1972-1977</td>
<td>Iraq</td>
<td>Kuwait</td>
</tr>
<tr>
<td>Yom Kippur War, 1973-1974</td>
<td>Israel</td>
<td>Egypt</td>
</tr>
<tr>
<td>Malian-Upper Voltaic Border, 1960-?</td>
<td>Mali</td>
<td>Burkina-Faso</td>
</tr>
<tr>
<td>Euphrates Waters, 1975-1978</td>
<td>Syria</td>
<td>Iraq</td>
</tr>
</tbody>
</table>

**Model Specification**

The first question addressed by the model is; in a crisis, when will an actor offer conflict management? There are two mechanisms in the model which predict the change
from a conflictual to a negotiating strategy – the rate of accumulation of pain (slope) and the actor’s pain threshold

The rate of pain accumulation predicts which actor within an individual conflict will initiate conflict management. The pain threshold predicts at what point in a crisis conflict management will be initiated. Model 1, dealing with pain accumulation, compares actors within crises and the unit of analysis is the crisis. Model 2, dealing with expectations regarding pain thresholds, compares the timing of conflict management initiations between crisis cases, and the unit of analysis is the initiating actor104.

**Model 1: Pain Accumulation: Who Will Initiate Conflict Management?**

The slope of the line indicates the rate of accumulation of pain for each actor within a conflict. Pain is conceptualized as a composite measure of how the objective costs of a conflictual strategy (loss of life, materiel and economic costs) are translated by an actor, thought consideration of less tangible negative factors such as loss of public support or international reputation. In the strategic environment of a dispute, actors’ expectations are also conditioned by their power, relative to their opponent. The slope of the line in figure 1 is therefore based on the following equation:

\[
\text{Slope}_A (\text{pain accumulation}) = (\text{relative power}_A + \text{costs}_A) \times \text{sensitivity}_A
\]

These components become the key measures needed to predict which actor within an individual conflict will initiate conflict management. Holding issue salience constant within the crisis, (both actors are assumed to have the same pain threshold), the predictions of the model are as follows:

---

104 In cases where both actors are coded as conflict management initiators, both actors are included in the analysis. In cases where one initiates, only the initiating actor is included.
If $\text{Slope}_A > \text{Slope}_B$: $A$ will offer first
If $\text{Slope}_A < \text{Slope}_B$: $B$ will offer first
If $\text{Slope}_A = \text{Slope}_B$: Both $A$ and $B$ will offer

The slope equation and predictions enable testing of hypotheses five through seven derived from the theoretical model and concerning the behavior of individual actors within a single conflict. For the purposes of empirical testing these hypotheses are expressed as follows:

H1: Within an individual crisis, there is a negative relationship between relative power and the probability that an actor will initiate conflict management.

H2: Within an individual crisis, if an actor experiences higher costs than his/her opponent the probability that s/he will initiate conflict management increases.

H3: Within an individual crisis, if an actor experiences domestic dissent as a result of the crisis, the probability that s/he will initiate conflict management increases.

H4: Within an individual crisis, there is a negative relationship between relative political sensitivity to costs and the probability that an actor will initiate conflict management.

**Model 2: Pain Threshold: When Will Conflict Management Occur?**

The model predicts that actors’ tolerance for pain will vary across crises. More specifically, that actors will be willing to endure more pain when the issue of dispute is highly salient than they will when the issue is of little salience. The pain threshold is the element of the model that is associated with issue salience; as issue salience increases, so does the actor’s pain threshold. Consequently, irrespective of the rate of accumulation of pain (slope), the model predicts that conflict management will be initiated later (after more pain has been experienced) in high salience conflicts than in low. Three hypotheses regarding the timing of conflict management are generated from the theoretical model.
H1: Actors in highly salient disputes will take longer to move from a conflictual strategy to a negotiating strategy than actors in a low salience conflict.

H2: Actors in highly salient disputes will incur greater costs before offering to negotiate than actors in low salience disputes.

H3: Actors in low salience disputes will have a lower threshold for pain than those in high salience disputes, resulting in an earlier offer of negotiation.

**Empirical Measurement**

As discussed earlier, the data available for empirically testing the model and derived hypotheses presented here are less than ideal. This is one of the reasons behind breaking down the first question posed by the model (When will a crisis actor initiate conflict management?) into the two individual questions specified in Models 1 and 2. This approach also helps maintain the distinction between the expected effects of the accumulation of pain (slope) and the pain threshold.

**Model 1: Pain Accumulation: Who Will Initiate Conflict Management?**

Dependent Variable and Estimation Technique. This model identifies which actor within an individual crisis initiates conflict management. Given that the universe of cases examined are crises in which one or both primary parties initiate conflict management, there are three possible outcomes, or values for the dependent variable; actor A (conflict initiator) initiates conflict management; actor B (conflict target) initiates conflict management; both A and B initiate conflict management. Due to the nominal nature of the dependent variable, the most appropriate estimation model is one designed for categorical and limited dependent variables. As there is no theoretical or logical reason to expect that there is any underlying order to the three outcomes, the use of multinomial logit (MNL) is indicated (Long 1997).
Independent Variables. Three elements are theorized to contribute to an actor’s accumulation of pain during a crisis; their power, the costs they incur and their sensitivity to those costs. As Model 1 compares the behavior of actors within a crisis, what is of relevance to the analysis is the relative level of these elements, not their absolute value. That is, as salience (thus the pain threshold) is held constant across actors, the model predicts that the actor who experiences higher costs, relative to his/her opponent, will be more likely to initiate conflict management. A relationship is expected also between relative power and the accumulation of pain, such that weaker actors experience a more rapid accumulation of pain. As both the ICM and SHERFACS variables used in Model 1 are actor level variables, all required recoding in order to reflect this relativity. In order to facilitate interpretation of these relative variables, all of the recoded variables were constructed so that a higher number indicated a greater constraint on continued conflictual action (higher costs or higher sensitivity) for Actor A.

It should be noted that the small number of cases (66) used in this analysis imposes certain additional limitations on the empirical testing of Model 1. In particular, the restricted degrees of freedom, makes the specification of the model particularly important. Both data sets provided many potential independent variables both as measures of the theoretical elements of the model and as controls. It was crucial, however, to choose the variables for analysis as carefully as possible in order to balance the operationalization requirements of the model with the limitations brought about due to the small n.

Relative Power. The theoretical model predicts that the weaker an actor is, relative to his/her opponent, the greater the costs he will incur (or expect to incur) through pursuing a conflictual strategy. Thus, s/he will reach accumulate pain more rapidly; reaching his/her
threshold faster than if more evenly matched. As discussed earlier, the expectations regarding power are internal to the relationship between the primary actors in the crisis. Thus, what is of interest is not the actual power of the individual actors, but its value, relative to their opponent.

The variables used to calculate relative power will be ICM variables P10a and P10b. This is a modified version of the Cox-Jacobson Scale, which has been extended to accommodate non-state international actors and limited to measures of tangible resources. The resulting “power index score” is calculated for each actor based on the following factors: GNP, GNP per capita, military spending, population and territory. The index ranges from 3 (lowest possible score) to 40 (highest possible score) (Bercovitch 2000).

In order to convert the individual power scores for each actor to a relative power measure the following formula was used:

\[ r_{pwr_a} = \frac{Pwr_a}{Pwr_a + Pwr_b} \]

This created a ratio measure ranging from 0.769 (actor A weakest) to 0.824 (Actor A strongest), with 0.5 indicating power parity between A and B. Thus, as \( r_{pwr_a} \) increases, the constraints on A can be thought to decrease and with them the probability that A will initiate conflict management.

*Costs of Conflictual Action.* Measures of the cost associated with conflictual action are commonly operationalized as casualties, materiel and more general economic costs. Unfortunately, neither the ICM of SHERFACS data sets include a casualty variable at the level of the individual actor; consequently, it is not possible to include this element of costs in Model 1. SHERFACS, however, does have an ordinal measure of the economic costs experienced by each actor at each phase of the conflict. Variables COSTSA and COSTSB
measure the severity of the respective actor’s economic costs related to the conduct of the dispute during that phase. Costs are coded according to a 6-point scale. These variables were used to construct the relative economic cost variable “r_cost” used in Model 1.

The first step required in recoding this variable was to identify the phase in which the relevant conflict management attempt (from the ICM dataset) took place. As the slope measure the accumulation of pain an actor experiences, the question of how to code r_cost in crises that have passed through multiple phases must be addressed. The decision was made to take the highest value COSTSA or COSTSB of as the value for r_cost. Due to the categorical nature of the original variable adding or aggregating the values did not make sense. Examination of the movement of the cost variable for a specific actor across the relevant conflict phases revealed that in most cases costs only varied by one category. In the majority of case this was either between 4 (insignificant, minor, or none) and 5 (moderate: 3-9% GNP), or 5 and 6 (Severe: 10% or more GNP). In all cases the higher value occurred in the phase at which the conflict management took place. This distribution further supported the coding of r_cost at the most recent phase value. Similarly, it is consistent with the cumulative notion of costs inherent in the model.

Once the cost variable had been determined for both actors, it was necessary to transform it into a relative measure. This was done by subtracting the chosen value of COSTSA from the chosen value of COSTSB for each crisis case. As there were no cases in which the costs between actors differed by more than one category, this created a three category ordinal variable. As with the variable for relative power, this variable was coded

---

105 1 = not relevant; 2 = no information; 3 = debatable; 4 = insignificant, minor or none; 5 = moderate (3-9% GNP, roughly); 6 = severe (10% or more of GNP)

106 This is the first conflict management attempt initiated by one or both of the primary actors in the crisis.
such that higher values indicate greater constraint on Actor A. Specifically; 0 = A’s costs lower; 1 = costs equal for A and B; 2 = A’s costs higher.

*Sensitivity to Costs: Domestic Factors.* Ideally the effect of a crisis on the domestic support for a leader would be accounted for by a variable directly measuring level of public support for a particular crisis. Although such data is not available, SHERFACS does include a less sensitive variable – DISSENTA and DISSENTB - indicating whether the crisis actor suffered “any internal division and/or dissentions during this phase”¹⁰⁷. In the context of the model, such dissent is expected to reduce the actor’s confidence regarding his/her domestic political position, thus increasing his/her sensitivity to the costs of continued conflictual action. On the other hand, awareness that an opponent faced such domestic discontent would have the inverse effect.

In order to test the effects of the dissent variables a relative measure was constructed – “r_diss”, from the two SHERFACS variables. This was done in two stages; first the two variables DISSENTA and DISSENTB were recoded dichotomously (0 = no dissent; 1 = dissent). This was then used to code r_diss, with the variable in such a way that higher values indicated a greater constraint on actor A. This created four possible values for r_diss; 0 = A no dissent | B dissent; 1 = A no dissent | B no dissent; 2 = A dissent | B dissent; 3 = A dissent | B no dissent.

*Regime Type.* Consideration of the effects of regime type provides some insight into how various factors contribute to the pain a decision maker experiences in response to

¹⁰⁷ 1 = no information; 2= debatable; 3 = no divisions; 4 = its leaders and/or top government; 5 = its type of government; 6 = its social order.
choosing a conflictual dispute resolution strategy\textsuperscript{108}. In democratic regimes, a government’s ability to use force to resolve international disputes is contingent upon public support. That is, those who will bear the brunt of the economic and human cost of fighting must either actively approve of, or passively acquiesce to, their government’s decision. It is widely accepted that public support for military action is influenced strongly by the costs of that action, and that the clearest indicator the public has of those costs is the number of casualties their military forces are sustaining\textsuperscript{109}.

Regime type is therefore a possible indicator of the sensitivity an actor has to the objective costs incurred during conflictual action. The ICM dataset includes variables indicating the regime type of each actor (P14a, P14b), as the theoretical distinction being operationalized here is between democratic and non-democratic regimes, these variables were recoded dichotomously (0 = non-democracy; 1 = democracy).

While it is common to see regime type measures at the dyadic level in conflict studies, the common distinction between democratic, mixed and non-democratic dyads was not best suited to the model being tested. The predictions are not those based on democratic peace phenomena (Maoz and Abdolali. 1989), but rather are concerned with the extent to which an actor’s actions are constrained by domestic institutional structures (Bueno de Mesquita and Lalman 1990) and public opinion (Mueller 1973; 1994). Again, the interest is in the degree of constraint relative to the opponent. The dyadic variable “dyad” was constructed to reflect this slightly different use of the regime variable. It is coded, as

\begin{footnotesize}
\textsuperscript{108} See for example: Maoz and Abdolali. (1989); Bueno de Mesquita and Lalman (1990); Mueller, (1973); Ostrom and Job (1986).
\end{footnotesize}
with the other variables constructed, such that higher values indicate higher relative constraints on actor A\textsuperscript{110}.

*Civil Liberties and Political Rights.* The use of regime type as an indicator of sensitivity to costs rests on the assumption that structural democracy is linked to substantive democracy. That is, that people within countries classified as democratic have the rights of political expression and civil liberties that we commonly associate with democratic regimes. While this assumption may be reasonable for established democracies, it is more problematic for newly democratic states. As many of the countries in the data set fall into this latter category, it seemed prudent to consider other measure of the actual levels of political freedoms enjoyed by citizens, as it is the ability to protest and indicate dissent which is theorized to be influencing an actor’s cost sensitivity.

A way of more directly measuring a population’s actual ability to protest a particular government policy (in this case involvement in conflict), is called for. The model, therefore, includes variables constructed from the Freedom House political rights and civil liberties ratings, included in the ICM dataset. For each actor political rights and civil liberties are coded on a seven point scale with one indicating the highest level and 7 the lowest (Bercovitch 2000). A variable “r\_polr” was constructed for each crisis by subtracting the political rights score of actor B from the political rights score for actor A. This created a measure running from -6 to 6. Negative scores indicate actor A has more political rights than actor B, therefore more constraints on conflictual action. A score of 0 indicates equal level of rights for each actor, and a positive score indicates actor A has fewer political rights

\textsuperscript{110}Dyad coding: 0 = A non-democratic | B non-democratic; 1 = A non-democratic | B democratic; 2 = A democratic | B non-democratic; 3 = A democratic | B democratic.
than actor B and therefore fewer constraints. The same method was used to construct the variable “r_civil”, using the civil liberties scores for both actors, and the scale variable created can be interpreted in the same manner.

*Internal Homogeneity.* It is also possible that the domestic ethnic, linguistic, and religious make-up of a state may affect the efficiency and cohesiveness of opposition to government policy – and their sensitivity to the costs of conflict. For this reason, the model incorporates a variable measuring the relative homogeneity of the crisis actors. This variable, based on a Freedom House measure, is constructed from the ICM variables P20a and P20b – homogeneity of party\footnote{The variables are coded on a five point scale: 1 = homogeneous; 2 = significant minority (a single significant minority (10-25% population) or a combination of smaller minorities (15-25% population)); 3 = Majority (majority population (51% or more) but also a large single minority or group of minorities (26-49% of population)); 4 = Plurality (only one very large minority group (>30% population and >10% more of population than any other single group)); 5 = Fragmented (More than one very large minority or several smaller minorities, but no majority or plurality population).} The same method was used to construct the variable “r_homog” as described above for “r_pol” and “r_civil”. The resulting scale runs from -2 to 3; negative scores indicate actor A is more fragmented, thus less constrained, 0 that A and B are equally constrained and positive numbers that A is less fragmented than B and therefore more constrained by domestic factors when choosing conflictual action.

*Sensitivity to Costs: International Reputation.* The final aspect of costs sensitivity that remains to be operationalized is that of international reputation. The expectation is that actors are cognizant that their actions in the international sphere can have implications for how they are viewed by other states and, that this reputation can have ramifications for future relations. Particularly, that undertaking aggressive or conflictual action as a means to
resolve a dispute may cause a state to be seen by others as a potential threat, or a less attractive partner for cooperation.

Data concerning overall international opinion regarding the behavior of individual actors in specific crises is, not surprisingly, unavailable. ICM does, however, code the level of third party support that actor’s received over the course of a specific crisis (P19a; P19b). This provides a rough indicator of the level of international support that the conflictual strategy of each primary actor received. These variables were combined to create the variable “r_supp”, which indicates the relative level of support from third parties received by both primary actors. Again this is coded such that 0 = actor A has more support than B, and thus less constraint; 1 = equal levels of support for A and B; 2 = A has less support than B, thus greater constrain on conflictual action.

**Controls: Type of Conflict.** Model 1 does not directly address the effects of issue salience on the behavior of actors in a crisis. This is primarily because the theoretical model assumes that salience is symmetric between actors, and, as Model 1 deals with behavior *within* individual crises, no variation in issue salience would therefore exist to be tested. The assumption of symmetric salience, however, may be unrealistic in specific crises contexts. It particular, crises that are internationalized civil disputes and those involving colonial territories.

Two variables are included to control for this; “civil” is a dummy variable constructed from the ICM variable D17. It is coded 1 for all crises coded by D17 as internationalized civil or internal crises, and 0 for all other cases. The second variable “colonial” is coded from the ICM variable D14, which categorizes the central issue of dispute in a crisis. Colonial is coded 1 for all crises coded as 4 (independence, colonial /
post-colonial) for D14, and 0 for all other issue categories. The expectation is that the cost variables, as well as the relative power variable, will be less effective indicators in case coded as internationalized civil and colonial conflicts, as there is likely to be a negative relationship between the relative power of the actors in such crises and the importance they place on the issue of dispute.

Model 2: Pain Threshold: When Will Conflict Management Occur?

The focus of Model 2 is on explaining differences in the duration of crises prior to the initiation of conflict management. While Model 1 focuses on testing the theoretical model’s predictions regarding the rate of pain accumulation between crisis actors and the probability of initiating crisis management, Model 2 tests the predictions regarding the pain threshold of actors. Specifically, does issue salience affect pain tolerance, and is there a systematic difference in conflict duration (prior to the initiation of conflict management) as a function of issue salience?

In contrast to Model 1, the unit of analysis is the crisis actor(s) initiating conflict management in a specific crisis, and the comparison is between crises, rather than crisis actors. This creates several advantages in light of the existing data limitations: First, as several of the cases are coded as having both parties initiating conflict management, this raises the n to 84 for Model 2\(^{112}\). Second, variables such as casualties and issue, which are only available for the crisis as a whole not the individual crisis actors, can be incorporated\(^{113}\). While many of the independent variables used in Model 2 are the same as those used in Model 1, their structure is different. As the comparison in this model is between crises, 

\(^{112}\) 18 of the 66 crises used in the analysis are coded as having both actors as conflict management initiators.

\(^{113}\) The treatment of the casualty variable will be discussed in more detail in the section on independent variables.
rather than between actors within a crisis, the actor level variables are not measured relative to the other crisis actor.

*Dependent Variable and Estimation Technique.* The dependent variable for Model 2 is the duration (in days) of the crisis prior to the first conflict management event initiated by a primary actor in the crisis. This variable was coded by calculating the difference between the conflict management start date (ICM CM 2a[day]; 2b[month]; 2c[year]) from the crisis start date (ICM D2a[day]; 2b[month]; 2c[year]). As some crises did not have a specific day code for either date, this created possible variance in the actual duration in days these crises. To overcome this problem when the either or both D2a and CM2a were coded as a range, this value was coded separately at the first and last day of the range. When computing the duration variable, four possible values were therefore possible. The smallest (early conflict management start - late crisis start) was used in the variable “cm_s” and the largest (late conflict management start - early crisis start) was used in the variable “cm_l”. Model 2 is tested using both of these duration measures.

Additionally, from these initial duration variables, a categorical variable “length” was constructed in order to enable an initial comparison of the duration of conflicts over different core issues. The variable is coded 1 = 1 month; 2 = 1-2 months; 3 = 2-6 months; 4 = 6-9 months; 5 = 9-12 months; 6 = 12-18 months; 7 = 18-24 months, 8 = >24 months. As the dependent variable in this second model is continuous, a simple OLS regression is a suitable estimation technique to use. This makes interpretation of the results simpler than those of Model 1 and, along with the larger number of observations, increases the power of the statistical test of the model expectations regarding threshold effects.
Independent Variables: Issue Salience. Central to the model to be tested is the idea that people will fight harder and suffer more pain for something that is important to them. Testing this basic proposition requires an empirical model that incorporates a variable, or variables, which capture the concept of issue salience. That is, a measure that identifies not only what the dispute is about, but how important that “what” is to the primary actors. Coding even the “what” part of issue salience is difficult enough (Diehl 1992:333-44). Bercovitch’s ICM dataset does, however, provide a variable that identifies the core or source of a dispute, categorizing it as either: 1) territory/sovereignty; 2) ideological/political; 3) security/military; 4) independence/colonial, post-colonial; 5) resources/economic; 6) ethnic/cultural.

The closest match that could be found to the concept of issue salience developed in this research, is the SHERFACS variable THT_VALUE: “what was the gravity of the threat as perceived by the parties involved in the dispute or quarrel?” This is coded on a nine-point scale from “threat to existence” to “threat (limited) to population or property”\textsuperscript{114}. Although there is some overlap between this variable and the ICM coding of issue (specifically the colonial and economic categories) it does represent a theoretically different aspect of issue salience.

Combined, the ICM issue variable and the SHERFACS variable THT_VALUE capture the basic components of the concept of issue salience presented in the theoretical model. The structure of the variable THT_VALUE seems somewhat amenable to

\textsuperscript{114} Full coding of THT_VALUE is as follows: 1) threat to existence; 2) threat of grave damage; 3) threat to influence in international system; 4) threat of loss of colonial territory; 5) threat to territorial integrity; 6) threat to political system; 7) threat to diplomatic personnel or process; 8) threat to economic interests; 9) threat (limited) to population or property.
interpretation according to rank order. As discussed earlier, however, the ICM issue variable requires theoretically unsubstantiated assumptions if ordering is to be imposed. So, although measures have been found to differentiate between crises on the basis of the issue at stake, how exactly to compare these differences remains problematic. For this reason, the analysis will assume no specific meaning to the order of the variable categories. Rather, comparisons are made regarding the behavior of actors across the different categories of disputes.

Relative Power. The relative power variable was calculated in the same manner as it was for Model 1. However, whereas Model 1 consistently used the relative power of actor A \([r_{pwr\_a}]\), in Model 2 the relative power scores for the specific actor were used. That is, in crises where actor B initiated conflict management, the variable “\(r_{pwr}\)” refers to the relative power of B, in cases where A initiated it refers to the relative power of A. Thus, in either case as \(r_{pwr}\) increases, the constraints on the conflict management initiating actor can be thought to decrease.

Economic Costs. The SHERFACS dataset includes an ordinal measure of the economic costs experienced by each actor at each phase of the conflict. Variables COSTSA and COSTSFB measure the severity of the respective actor’s economic costs related to the conduct of the dispute during that phase, coded according to a 6 point scale\(^{115}\). For Model 2 the value of the cost variable for the conflict management initiating actor, during the phase in which the conflict management event was initiated\(^{116}\), was used as the value of “cost” for the individual case.

\(^{115}\) 1 = not relevant; 2 = no information; 3 = debatable; 4 = insignificant, minor or none; 5 = moderate (3-9% GNP, roughly); 6 = severe (10% or more of GNP)

\(^{116}\) For a full explanation of the phase coding rule used for this variable see the discussion of the cost variable for Model 1.
Casualties. As discussed at some length in the theoretical and literature chapters, casualties are a commonly used measure for the costs of a conflict. In particular, when there is interest in the public support or disapproval off a particular policy action, casualties are regarded often as a key explanatory factor. However, data on casualty rates, particularly for less recent wars, lower-intensity conflicts, and those not involving major powers, are hard to come by. Even when such data is available for a crisis as a whole, it is rare to find it disaggregated over the course of the conflict.

The SHERFACS dataset does include a measure of fatalities at the phase level\textsuperscript{117}; however, this variable is measured at the level of the crisis, not the actor. So, it is possible to identify the total casualty count prior to the conflict management attempt, but not how those casualties were distributed between the two primary actors. It was this structure, which prevented the use of the casualty variable in Model 1. In Model 2, the problem is a little less severe, as the analysis is between crisis cases. If the FATALITIES variable is employed in the analysis of Model 2, however, the structure of the variable must be kept in mind when it comes to interpretation. Rather than interpreting “death” as the actual casualty cost incurred by an actor, it should be interpreted as an indicator of the severity of the conflict and the potential for loss of public support.

Sensitivity to Costs: Domestic Factors, Domestic Dissent, Civil Liberties, Political Rights & Internal Homogeneity. The rationale for the inclusion of these four variables as measures of domestic sensitivity to the costs of conflictual action remains consistent with that discussed for Model 1. As with the other independent variables in Model 2, it is the variable value for

\textsuperscript{117} FATALITIES is an ordinal variable coded as follows: 0) no known; 1) no information; 2) debatable; 3) none; 4) 1-25; 5) 26-100; 6) 101-1000; 7) 1001-2000; 8) 2001-10,000; 9) 10,001 – 100,000; 10) 100,001 – 1,000,000; 11) over 1,000,000. In the cases used for analysis the values ranged from 3 – 10.
the conflict management-initiating actor, which is used in this model, not the relative measure calculated for and used in Model 1.

*Sensitivity to Costs: International Factors, Third Party Support; UN Involvement.* The third party support variable was also discussed in relation to Model 1 and is used in the same manner in Model 2 except that, once again, it is the level of support for the crisis management initiating actor that is used in Model 2, not the relative level of support between the primary actors. The between crises nature of the analysis in Model 2 allows for the inclusion of additional measures of international opinion. In particular, it becomes possible to include variables that account for the behavior of international actors.

The ICM data provide two variables describing UN involvement in the dispute, the first “un_involv” indicates whether there was UN involvement in managing the dispute (1=yes; 2=no). Crises in which there is UN management are considered to place greater constraints on the conflictual behavior of crisis actors, thus increasing their sensitivity to the costs of continued conflictual behavior. The second variable, “un_op” indicates whether there was a UN peacekeeping operation, sanctions or embargoes in place either prior to the dispute or established as a result of the dispute. For Model 2, this variable was recoded as a dichotomous indicator (0 = no UN operation; 1 = UN operation).

*Controls: Previous Relations; Previous Conflict Management Attempts.* Finally, two control variables were included in Model 2, both from the ICM dataset. Both of these are concerned with the context of the crisis, and possible additional factors that may indirectly indicate the salience of the issue in dispute. The first of these – “prev_rel” [ICM P12] - is a

---

118 Original coding: 0) no UN operation; 1) Peacekeeping established in this dispute; 2) Peacekeeping already operating from a previous dispute; 3) Peacekeeping established and already operating; 4) peacekeeping/sanctions/embargoes established; 5) peacekeeping/sanctions/embargoes already operating
variable that codes the nature of the relationship between the primary actors, prior to the dispute. This variable is coded from “friendly” to “more than one prior dispute”. It is expected that, all other factors held constant, crises in which the value for prev_rel is higher, would be regarded as more serious, and therefore more salient. The second control variable is “#_prev_cm” [ICM CM 8], which measure the number of previous mediation or negotiation attempts in the particular dispute.

**Model 1 Results: Pain Accumulation: Who Will Initiate Conflict Management?**

The dependent variable for Model 1 is the conflict management initiator for the specific crisis – either Actor A, Actor B or Both. The analysis is between actors within a specific crisis and the independent variables are structured as relative measures (between the two actors). In terms of the theoretical model, Model 1 is testing predictions regarding the effects of pain accumulation on the behavior of crisis actors, specifically, their move from a conflictual to a negotiating strategy. The basic prediction being tested is that conflict management initiation will be influenced positively be the speed of accumulation of costs, relative to the opponent.

**Model Specification**

As discussed above, the independent variables fall into three basic categories; relative power, costs, and sensitivity to costs, both domestic and international. Because there are multiple potential indicators of domestic sensitivity, several different versions of Model 1 were run. In addition, the control variable for potential asymmetry of issue salience

---

119 Coded as follows: 1) friendly; 2) no previous relationship; 3) antagonism; 4) previous conflict, no military hostilities; 5) 1 previous dispute; 6) more than 1 previous dispute.

120 Coded as follows: 0 = 0; 1 = 1-2; 2 = 3-4; 3 = 5-6; 4 = 7-8; 5 = 9-10; 6 = 11+. 
–“colonial” – is introduced. There are serious restrictions on the number of independent variables that can be included in one model, due to the very small number of cases. The choice was made, therefore to specify and test different versions of Model 1.

**Initial Results**

An initial comparison of the results of the various multinomial models specified in indicates that the variable measuring the level of internal fragmentation (“homog”) is a better measure of domestic sensitivity that the variable “dyad”, which is based on the regime type of the primary actors. The variable for internal sensitivity (“r_supp”) was not significant in any of the model specifications. Furthermore, its inclusion did not improve the overall fit of the model or its predictive power. For this reason, it was decided not to include this variable in the final version of Model 1. Unfortunately, this makes it impossible to test Hypothesis 4. The effects of domestic dissent will, however be tested in Model 2, enabling an examination across crises. Table 7.2 presents the results from Model 1B (no third part support variable) and 1B3 (third party support variable included).

---

121 This is a dummy variable constructed from the ICM variable D14, which indicates the central issue of dispute. The constructed variable was coded 1 for all cases coded 4 (independence/colonial, post-colonial) for D14 and 0 for all other cases. In all, 9 cases fell into the colonial category.

122 All statistical testing was run in Stata 8.

123 The various models were estimated and then their relative measures of fit were compared across a variety of statistics of fit including; adjusted count R², Pseudo R², Akaike’s information criteria and the Baysian information criteria.

124 Part of the poor performance of the variable r_diss may be a result of the lack of variation in the variable. Of the 66 cases, 49 were coded as neither actor experiencing domestic dissent. There were 9 cases in which B alone experienced dissent, 6 in which A alone experienced dissent and 2 in which both actors experienced dissent.

125 Within an individual crisis, is an actor experiences domestic dissent as a result of the crisis, the probability that s/he will initiate conflict management increases.
<table>
<thead>
<tr>
<th>TABLE 7.2 Multinomial Logit Models of Crisis Management Initiation: Models 1B₂ and 1B₃</th>
<th>MODEL 1B₂</th>
<th>MODEL 1B₃</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ln [A</td>
<td>both]</td>
</tr>
<tr>
<td>Relative Power A</td>
<td>-4.10*</td>
<td>-4.99**</td>
</tr>
<tr>
<td></td>
<td>(2.80)</td>
<td>(2.65)</td>
</tr>
<tr>
<td>Relative Cost</td>
<td>0.05</td>
<td>-1.27</td>
</tr>
<tr>
<td></td>
<td>(1.37)</td>
<td>(1.15)</td>
</tr>
<tr>
<td>Relative Political Rights</td>
<td>-0.04</td>
<td>0.18**</td>
</tr>
<tr>
<td></td>
<td>(0.13)</td>
<td>(0.12)</td>
</tr>
<tr>
<td>Relative Homogeneity</td>
<td>0.46**</td>
<td>0.48**</td>
</tr>
<tr>
<td></td>
<td>(0.28)</td>
<td>(0.27)</td>
</tr>
<tr>
<td>Colonial Conflict</td>
<td>2.34**</td>
<td>2.10*</td>
</tr>
<tr>
<td></td>
<td>(1.45)</td>
<td>(1.52)</td>
</tr>
<tr>
<td>Relative 3rd Party Support</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Constant</td>
<td>1.67</td>
<td>3.62*</td>
</tr>
<tr>
<td></td>
<td>(2.34)</td>
<td>(2.12)</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-62.59</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>66</td>
<td>N</td>
</tr>
<tr>
<td>LR chi²(10)</td>
<td>15.69</td>
<td>LR chi²(10)</td>
</tr>
<tr>
<td>Prob &gt; chi²</td>
<td>0.10</td>
<td>Prob &gt; chi²</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.11</td>
<td>Pseudo R²</td>
</tr>
<tr>
<td>Adj Count R²</td>
<td>0.017</td>
<td>Adj Count R²</td>
</tr>
</tbody>
</table>

* p < 0.1, **p < 0.05 (one-tailed t-tests)
The higher adjusted count $R^2$ for Model 1B$_2$ indicates that the model can correctly predict more outcomes (17%), above the number that would be correctly guessed by choosing the largest marginal, than can model 1B$_3$ (11%). Furthermore, a comparison of the relative measures of fit for the two models indicates that the AIC (Akaike’s information criteria) for Model 1B$_2$ is smaller (2.26 compared to 2.32 for Model 1B$_3$) and the BIC (Baysian information criteria) more negative (-101.1 compared to -92.9 for model 1B$_3$), both comparisons providing positive support for Model 1B$_2$ compared to 1B$_3$.

So the specification of Model 1 which provides the strongest results is that which uses relative homogeneity and relative political rights as measures of domestic sensitivity to costs, and does not include a measure for international sensitivity. An assumption has been made, however, that there is something fundamentally different about the behavior of actors in colonial and post-colonial crises that requires controlling for this type of conflict in the specification of the model. In order to test this assumption, Model 1B$_2$ was run without the control variable “colonial” (Model 1B). The results of the two models are presented in Table 7.3.
# TABLE 7.3 Multinomial Logit Models of Crisis Management Initiation: Models 1B and 1B₂

<table>
<thead>
<tr>
<th></th>
<th>MODEL 1B</th>
<th></th>
<th>MODEL 1B₂</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ln [A</td>
<td>both]</td>
<td>Ln [B</td>
<td>both]</td>
</tr>
<tr>
<td>Relative Power A</td>
<td>-2.51</td>
<td>-3.80**</td>
<td>3.80**</td>
<td>-4.10*</td>
</tr>
<tr>
<td></td>
<td>(2.51)</td>
<td>(2.36)</td>
<td>(2.36)</td>
<td>(2.80)</td>
</tr>
<tr>
<td>Relative Cost</td>
<td>0.78</td>
<td>-0.79</td>
<td>0.79</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>(1.26)</td>
<td>(1.10)</td>
<td>(1.10)</td>
<td>(1.37)</td>
</tr>
<tr>
<td>Relative Political Rights</td>
<td>-0.11</td>
<td>0.13</td>
<td>-0.13**</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>(0.12)</td>
<td>(0.11)</td>
<td>(0.12)</td>
<td>(0.13)</td>
</tr>
<tr>
<td>Relative Homogeneity</td>
<td>0.36*</td>
<td>0.41**</td>
<td>-0.41**</td>
<td>0.46**</td>
</tr>
<tr>
<td>Colonial Conflict</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>2.34**</td>
</tr>
<tr>
<td></td>
<td>(0.27)</td>
<td>(0.26)</td>
<td>(0.26)</td>
<td>(0.28)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.52</td>
<td>2.80*</td>
<td>-2.80*</td>
<td>1.67</td>
</tr>
<tr>
<td></td>
<td>(2.15)</td>
<td>(1.94)</td>
<td>(1.94)</td>
<td>(2.34)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>Log Likelihood</th>
<th>-64.31</th>
<th>Log Likelihood</th>
<th>-62.59</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
<td></td>
<td>N</td>
<td>66</td>
<td>N</td>
<td>66</td>
</tr>
<tr>
<td>LR chi²(10)</td>
<td>12.24</td>
<td></td>
<td>LR chi²(10)</td>
<td>15.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob &gt; chi²</td>
<td>0.14</td>
<td></td>
<td>Prob &gt; chi²</td>
<td>0.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.09</td>
<td></td>
<td>Pseudo R²</td>
<td>0.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj Count R²</td>
<td>0.17</td>
<td></td>
<td>Adj Count R²</td>
<td>0.14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.1, **p < 0.05 (one-tailed t-tests)
Not only does the model incorporating the colonial dummy (1B₂) have stronger results for all variables, but the colonial dummy is significant for all three outcome categories. Furthermore, a comparison of the relative fit of the models also indicates that Model 1B₂ performs more strongly than Model 1B (no colonial control). The adjusted count R²’s indicate that Model 1B₂ is a better predictor of outcomes than Model 1B (17% above largest marginal, compared to 14%). Although the AIC and BIC scores for Model 1B are slightly better, providing support for the model over Model 1B₂, the differences are very small. Comparison of these two model specifications does not provide, therefore, conclusive support for one specification over the other. The increase in predictive power provided by Model 1B₂, combined with the significant coefficients for the colonial dummy, however, were considered to outweigh the results of the comparison of the information criteria and Model 1B₂ was chosen as the optimal specification of Model 1, given the limitations of the data. This specification will be used for all subsequent analysis and interpretation.

How Well Does the Overall Model Perform?

One way to obtain a general idea about the how well the model performed is to compare the predicted and observed outcomes, presented in Table 7.4. From the table we can see that the model predicted both parties would initiate conflict management fifteen times. Eight of these were classified correctly, that is the observed outcome was both initiating. A was predicted to initiate ten times, five of these predictions being correct. B was correctly predicted to initiate twenty-three out of the thirty observed cases of B

---

126 From this point on Model 1B₂ will be referred to simply as Model 1.
127 Two were incorrectly classified as A initiating and five as B initiating.
128 Three were incorrectly classified as Both initiating and two as B initiating.
initiating\textsuperscript{129}. The model demonstrated more accuracy in predicting B’s actions (77\%) than it did in predicting initiation by A (28\%) or both (44\%). However, as there were more cases in which B initiated than any other outcome, and considering the small number of cases used in the analysis, this could be a statistical artifice, rather than an indication of any substantive difference in the predictive power of the model across outcome categories. So, as the adjusted count R\textsuperscript{2} measure indicates, knowledge of the independent variables, compared to basing prediction only on marginal distributions, does reduce the error in prediction, in this case by 17\%.

\begin{center}
\begin{tabular}{|l|ccc|c|}
\hline
\textbf{Predicted} & \textbf{Both Initiate} & \textbf{A Initiates} & \textbf{B Initiates} & \textbf{Total (predicted)} \\
\hline
Both Initiate & 8 & 2 & 5 & 15 \\
\hspace{20pt} & (44\%) & & & \\
A Initiates & 3 & 5 & 2 & 10 \\
\hspace{20pt} & (28\%) & & & \\
B Initiates & 7 & 11 & 23 & 41 \\
\hspace{20pt} & (77\%) & & & \\
\hline
Total (actual) & 18 & 18 & 30 & 66 \\
\hline
\end{tabular}
\end{center}

\textbf{Effects of Individual Independent Variables}

Examination of the results of the multinomial logit estimated for Model 1\textsuperscript{130} indicates that all independent variables were significant for at least one of the comparisons between outcomes, with the exception of the measure for relative economic costs.

\begin{flushleft}
\textsuperscript{129} Seven were incorrectly classified as Both initiating and eleven as A initiating.
\textsuperscript{130} Model 1B\textsubscript{2} in Tables 7.2 and 7.3.
\end{flushleft}
Interpreting the substantive meaning of the coefficients produced by the MNL requires keeping several factors in mind. First, as the model is non-linear, the magnitude of effect cannot be calculated directly from the coefficients. Second, the MNL is, in effect a simultaneous estimation of the binary logits for all possible combinations of outcomes categories (Long 1997: 149). Any interpretation of a particular coefficient for a particular outcome must be made, therefore, in reference to the base category. For example, the coefficient in Table 7.2 (Model 1B) for the effect of the relative power of A indicates that the probability of A initiating conflict management decreases significantly \( p < .05 \), compared to the probability that both will initiate.

Interpretation of the effects of individual variables is simplified by considering the MNM in terms of odds. To do this the logit model is calculated in its log-linear form. Since the model is linear in this form, the coefficients can be interpreted as indicating the change in odds of a particular outcome, relative to another, which results from a unit change in X. Or “for a unit change in \( x_k \), we expect the logit to change by \( \beta_k \), holding all other variables constant” (Long 1997: 81). Stata 8 reports both the factor change \( e^{\beta} \) and the standardized factor change \( e^{\beta \text{StdX}} \) if the “listcoef” command is run after the MNL is specified. Table 7.5 presents the factor change in the odds of relative outcomes for all Model 1 variables that are significant at the 0.1 (one-tailed) level and above. Stata also calculates the percent change in the odds of a particular outcome, which provides an alternate means of interpretation.

\[ \text{Stata 8 command: listcoef, percent} \]
As Table 7.5 indicates, relative power has a significant effect on the odds that either
A or B will initiate conflict management compared to the odds that conflict management
will be initiated by both actors. For a standard deviation increase in the log of relative

**Relative Power of A**

As Table 7.5 indicates, relative power has a significant effect on the odds that either
A or B will initiate conflict management compared to the odds that conflict management
will be initiated by both actors. For a standard deviation increase in the log of relative

## TABLE 7.5  Factor Change in the Odds of A, B or Both Initiating Conflict Management

<table>
<thead>
<tr>
<th>Variable (odds comparing group 1 vs group 2)</th>
<th>$\beta$</th>
<th>$e^b$</th>
<th>$e^bStdX$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relative power of A</strong> (sd = 0.187)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A – Both</td>
<td>-4.07*</td>
<td>0.02</td>
<td>0.47</td>
</tr>
<tr>
<td>B – Both</td>
<td>-4.99**</td>
<td>0.01</td>
<td>0.39</td>
</tr>
<tr>
<td>Both – A</td>
<td>4.07*</td>
<td>58.46</td>
<td>2.13</td>
</tr>
<tr>
<td>Both - B</td>
<td>4.99**</td>
<td>146.81</td>
<td>2.54</td>
</tr>
<tr>
<td><strong>Relative Political Rights of A</strong> (sd = 3.10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A – B</td>
<td>-0.22**</td>
<td>0.80</td>
<td>0.50</td>
</tr>
<tr>
<td>B – A</td>
<td>0.22**</td>
<td>1.25</td>
<td>1.99</td>
</tr>
<tr>
<td>B – Both</td>
<td>0.18**</td>
<td>1.20</td>
<td>1.78</td>
</tr>
<tr>
<td>Both - B</td>
<td>-0.18**</td>
<td>0.83</td>
<td>0.56</td>
</tr>
<tr>
<td><strong>Relative Internal Homogeneity of A</strong> (sd = 1.330)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A – Both</td>
<td>0.46**</td>
<td>1.59</td>
<td>1.85</td>
</tr>
<tr>
<td>B – Both</td>
<td>0.48**</td>
<td>1.62</td>
<td>1.90</td>
</tr>
<tr>
<td>Both – A</td>
<td>-0.46**</td>
<td>0.63</td>
<td>0.54</td>
</tr>
<tr>
<td>Both - B</td>
<td>-0.48**</td>
<td>0.62</td>
<td>0.53</td>
</tr>
<tr>
<td><strong>Colonial / Post Colonial Crisis</strong> (sd = 0.346)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A – Both</td>
<td>2.34**</td>
<td>10.38</td>
<td>2.25</td>
</tr>
<tr>
<td>B – Both</td>
<td>2.10*</td>
<td>8.20</td>
<td>2.10</td>
</tr>
<tr>
<td>Both – A</td>
<td>-2.34**</td>
<td>0.10</td>
<td>0.45</td>
</tr>
<tr>
<td>Both - B</td>
<td>-2.10*</td>
<td>0.12</td>
<td>0.48</td>
</tr>
</tbody>
</table>

* $p < 0.1$, ** $p < 0.05$ (one-tailed t-tests)

$e^b$ = factor change in odds for a unit increase in x.
$e^bStdX$ = Change in odds for a standard deviation increase in x.
power, the odds that A will initiate conflict management are 0.47 times the odds of both
initiating, holding all other variables constant; a decrease of 98.3% in the odds. For standard
deviation increase in the log of relative power of A the odds of B initiating, are 0.39,
compared to both, holding all other variables constant; a decrease of 99.3% in the odds.

Assessing these findings in terms of Hypothesis 1 is a little problematic, as the
only significant relationships involve the outcome category in which both actors initiate.
The model makes no specific predictions regarding the effects of power on the probability
that both actors will initiate. An examination of the predicted probabilities of each outcome
therefore provides more information regarding the performance of Hypothesis 1. As Figure
7.1 shows, the probability that A will initiate conflict management decreases as its power
relative to B increase.

Interestingly, and inconsistent with Hypothesis 1, B’s probability of initiating
conflict management also decreases as A’s relative power increases although the effect is not
as pronounced. One possible explanation for this may be found by considering the
predicted probability results for both initiating. There is a clear increase in the probability of
both actors initiating as the relative power of A increases, particularly toward the more
extreme values of A’s power. This outcome category may be capturing cases where both
actors are willing to negotiate, but for different reasons. B’s motivation for initiating would
be consistent with the expectations of the Model. A, on the other hand, may see conflict
management as a low cost, low risk alternative to conflict as the probability of their being

---

132 Within an individual crisis, there is a negative relationship between relative power and the probability that
an actor will initiate conflict management.
able to return to a conflict strategy and successfully achieve their goals through force if negotiated terms were unfavorable would be seen to be high.

**FIGURE 7.1 Predicted Probability of Each Outcome as Relative Power Varies**

- **Probability A initiates**
- **Probability B initiates**
- **Probability Both initiate**
Relative Domestic Sensitivity

Two variables were used in Model 1 to measure the level of domestic sensitivity to the costs of conflictual action; relative political rights and relative homogeneity. The expectation was that actors whose citizens had more political rights, relative to their opponent’s citizens, would be more sensitive to the costs of conflict, as their citizen’s would have greater freedom to express opposition to government policy, or punish decision makers for their policy choices at the ballot box. Conditioning this expectation, however, is the effect of the social makeup of the country. The variable for relative homogeneity is designed to account for the effects of social cleavages (fragmentation) on the ability of citizens and opposition parties to effectively mobilize opposition to government policy.

As the results reported in Table 7.5 indicate, there is support for Hypothesis 4\textsuperscript{133}. Specifically, for each unit decrease\textsuperscript{134} in the relative political rights of A, the odds of A initiating compared to B, decrease by a factor of 0.8, holding all other variables constant; a change of 20% in the odds. Similarly, the odds of B initiating compared to A increase by a factor of 1.25, holding all other variables constant; an increase of 24.9% in the odds.

The effects of changes in the relative political rights of A can also be analyzed by comparing the predicted probability of each outcome as the value of r_polr changes\textsuperscript{135}. These are presented graphically in Figure 7.2. The other dependent variables are set according to the same logic as used in the graphs in Figure 7.1\textsuperscript{136}.

\textsuperscript{133} Within an individual crisis, there is a negative relationship between relative political sensitivity to costs and the probability that an actor will initiate conflict management.

\textsuperscript{134} The variables “r_polr” and “r_homog” are coded such that a higher value denotes a lower sensitivity for A, relative to B.

\textsuperscript{135} The decision was made to vary r_polr as the variable spanned a greater range (-6 - 6) than r_homog (-2 - 2).

\textsuperscript{136} r_pow-a was set at 0.5 for “costs equal”, one standard deviation (0.187) above 0.5 for “costs lower for A” a one standard deviation below 0.5 for “costs higher for A”
FIGURE 7.2 Predicted Probability of Each Outcome as Relative Political Rights Vary

Probability A initiates

Probability B initiates

Probability Both initiate
As the graph for the predicated probability of A initiating indicates, A is increasingly more likely to initiate as its political rights increase, relative to B. This is consistent with the expectations of Hypothesis 4. The results for B are similarly supportive of the hypothesis; as B's rights increase relative to A, the probability B will initiate conflict management increases. There is little variation in the probability that both actors will initiate, relative to changes in the relative political rights of A.

As far as the effects of relative internal homogeneity are concerned, the results for the behavior of A are supportive of Hypothesis 4, but the relationship is not significant. As Table 7.2 indicates, as A becomes more internally fragmented, the probability that it will initiate conflict management compared to B decreases. A’s relative internal homogeneity does, however have a significant effect on the probability of A or B initiating, compared to the probability that both will initiate. Specifically as A’s internal homogeneity decreases by one unit, the odds it will initiate (compared to both) increase by a factor of 1.59, holding all other variables constant; an increase of 58.7%. The odds of B initiating, compared to both, increase by a factor of 1.62 for every unit decrease in the relative homogeneity of A; an increase of 62% in the odds.

Relative Economic Costs

Although the variable for relative economic cost used in Model 1 was not significant, it was in the direction expected. As A’s costs increase, relative to B, so does the probability that it will initiate. For each unit increase in the relative costs, the odds of A initiating, compared to B, increase by a factor of 3.76; an increase in the odds of 276%. This is consistent with the expectations of Hypothesis 2.
The graphs in Figure 7.1 provide an overall picture of the effects of relative economic costs on the predicted probability of an actor initiating conflict management. In all three graphs, the probability of initiation for each actor is shown for three separate costs conditions. In the “costs equal” condition the variables for relative political rights, costs and internal homogeneity were set equal for both A and B and colonial was set at 0. In the “costs for A higher” condition the variables were set to the value which represented the highest relative cost, or greatest sensitivity for A. In the “cost for A lower” condition variables were set to values which reflected the lowest cost and sensitivity to costs for A.

As the graph of the predicted probability of A initiating indicates, when A is less powerful (relative power < .5), A is more likely to initiate when its costs are higher than B’s, and least likely to initiate when its costs are lower. This is consistent with Hypothesis 5b. This relationship changes when A is more powerful than B (relative power > .5). In such cases A is most likely to initiate when it has costs equal to those of B, but still least likely to initiate when its costs are lower. The difference in probability between these conditions almost converges as the relative power of A becomes greatest, making substantive distinction between them difficult.

The relationship between the probability of B initiating and the relative costs it incurs is both clearer and more consistent. B is considerable more likely to initiate when it experiences higher costs than A, and highly unlikely to initiate when its costs are lower than A’s. This pattern indicates consistent support for Hypothesis 2. Similarly in cases where

---

137 As only nine cases were coded as colonial or post-colonial crises, it was decided that the modal category was most appropriate for this part of the analysis. The effects of colonial crises are discussed later.

138 Within an individual crisis, if an actor is experiencing higher costs than his/her opponent, the probability that s/he will initiate conflict management increases.
both actors initiate, the probability of initiating is greatest when A’s costs are higher and lowest when A’s costs are lower. As the model makes no specific hypotheses regarding the conditions under which both actors will initiate this result is harder to interpret in terms of the stated hypotheses.

The effects of the relative costs incurred by an actor and their probability of initiating conflict management can be seen also by considering the graphs in Figure 7.2. In the graphs for both A and B, the probability of each actor negotiating is consistently highest when their relative costs are highest and lowest when their relative costs are lowest. This reinforces the findings supporting Hypothesis 6b discussed above for changes in the relative power of A.

Colonial and Post-colonial Crises

It was suggested in the discussion of issue salience that there may be a systematic difference in the behavior of actors in colonial and post-colonial crises, compared to other issues of dispute. As Table 7.5 indicates, the dummy variable does have a significant effect on the probability that a either A or B will initiate, compared to both initiating. For A, the odds of initiating increase by a factor of 10.38 in colonial conflicts, holding all other variables constant; a change in the odds of 938.1%. The odds for B are similar; a factor change of 8.20, indicating an increase in the odds of 720.3%.

As there were only nine cases of colonial crises, the predicted probabilities were calculated using the modal values of the variables r_cost; r_homog and r_pwr_a. The variable r_polr was chosen as the most suitable variable to move, as there was a relatively even distribution of values of the variable for colonial cases. As the graphs for the predicted probability of A and B indicate, in both cases the probability of the individual actor
initiating is higher in colonial crises than it is in no-colonial crises. Not surprisingly, the probabilities are reversed in cases where both actors initiate conflict management.

Model 2 Results: Pain Threshold: When Will Conflict Management Occur?

The dependent variable for Model 2 is the duration (in days) of the crisis prior to the first conflict management event initiated by one of the primary actors in the crisis. As with Model 1, the data sets provided multiple possible measures for the key theoretical concepts: power, costs, sensitivity to costs and, most centrally, issue salience. However, variable selection was limited by the small number of observations. Variable choices were made, therefore, according to the following criteria: 1) closeness to theory; 2) consistency with Model 1; 3) ability to capture theoretical concepts absent from Model 1.

Model Specification

Power

\textit{Rel\_pwr}: Relative power of actor(s) initiating crisis management

Costs

\textit{cost}: Economic cost to actor(s) initiating conflict management, measured at the phase which management attempt takes place.

\textit{deaths}: Number of fatalities, prior to conflict management initiation, for both actors

Sensitivity to costs

\textit{pol\_rights}: Level of political rights initiating actor(s)' country.

\textit{un\_op}: Presence of a UN peacekeeping operation, sanctions or embargo prior to or at the time of the conflict management initiation.

\textit{High\_Threat}: Severity of threat (crisis level) at the time of the conflict management attempt

\textit{E\_rival}: Was the crisis part of an enduring rivalry?

\textit{E\_RxThr}: Interaction: \textit{High\_Threat} \times \textit{E\_rival}

Control

\textit{#prev\_cm}: Number of previous conflict management attempts during the crisis

The results of the OLS regression are presented in Table 7.6 below:
### TABLE 7.6  Model 2: Duration of Conflict Prior to Management Attempt

| Independent Variable | Coefficient (std. error) | P>|t| (2-tailed t-test) | 95% Conf. Interval |
|----------------------|--------------------------|----------------------|-------------------|
| Relative power       | 1511.87 (598.87)         | 0.013                | 330.56 2693.18    |
| Economic cost        | 541.57 (201.78)          | 0.009                | 139.51 943.63     |
| Deaths               | 39.40 (80.6)             | 0.626                | -121.198 200.00   |
| Political rights     | 101.56 (46.04)           | 0.031                | 9.82 193.31       |
| UN operation         | -211.72 (186.38)         | 0.260                | -583.09 159.66    |
| Severity of threat   | 169.54 (100.52)          | 0.096                | -30.75 369.83     |
| Enduring rivalry     | 1490.28 (851.49)         | 0.084                | -206.35 3186.90   |
| # Prev CM attempts   | -133.69 (71.36)          | 0.065                | -275.89 8.500     |
| Threat*Enduring rivalry | -305.00 (187.73)     | 0.108                | -679.06 69.06     |
| Constant             | -3814.94 (879.83)        | 0.000                | -5568.04 -2061.84 |

Dependent variable: Duration of crisis (in days) prior to initiation of crisis management.

N 84
F (9, 74) 4.40
Prob > F .0001
R² 0.35
Issue Salience

Three variables are used to capture the effects of issue salience on the duration of a crisis prior to one or both of the primary actors instigating crisis management; severity of threat, whether or not the crisis is part of an enduring rivalry and the interaction between the two. The coefficient for severity of threat indicates that, when the crisis is not part of an enduring rivalry, a unit increase in the severity of threat increases the duration of a crisis prior to a management attempt by 169.54 days. This finding supports Hypothesis 1; that actors in highly salient disputes will take longer to move from a conflictual to a negotiating strategy than those in lower salience disputes; and is significant at the 0.05 level for a one-tailed test.

Interpreting the coefficient for enduring rivalry and its interaction with threat is a little more complex. The coefficient for enduring rivalries reveals the estimated effect of the presence of an enduring rivalry when the severity of threat is zero. However, severity of threat never takes the value of zero, so there is no logical or substantive meaning to this coefficient considered independently. For this reason the effects of this pair of interactive variables can be interpreted either through differentiation or differences in the predicted values.

Analysis of the first derivative of Y with respect to the independent variable enduring rivalry yields the effects of enduring rivalry, conditional on the severity of threat. The values indicate that at low levels of threat the fact that the crisis is part of an enduring rivalry has a positive effect on the duration of the crisis prior to a management attempt. This relationship is reversed at high levels of threat, however, with the presence of an

---

139 Interpretation of interaction effects is taken from Kam and Franzese, 2005.
enduring rivalry decreasing the duration of the crisis prior to a management attempt. Overall, the conditional effect of an enduring rivalry is larger at low levels of threat.

Calculation of the differences in the predicted duration of a crisis prior to conflict management for both enduring and non-enduring rivalries indicates that in crises that are not part of an enduring rivalry, the predicted crisis duration prior to management increases as the severity of threat increases. This is consistent with Hypothesis 1. Cases of crises that are a part of an enduring rivalry, however, behave differently.

Costs

The results for the two cost variables – economic costs and deaths - are not consistent with the Model’s expectations. Hypothesis 2 predicted that actors in high salience conflicts would incur greater costs before offering crisis management, than would actors in low salience crises. The findings indicate that costs do have a significant effect on the duration of a crisis prior to management initiation, this effect is positive. That is, for every unit increase in costs, the duration of the crisis increases by 541.57 days. However, the independent effect of economic costs does not fully capture the relationship proposed by Hypothesis, as it does not account for the effects of issue salience on costs. The results for the effect of deaths on crisis duration are similarly inconsistent with Hypothesis 2, although not significant. There is also the same problem of interpreting the effects of fatalities without accounting for the interactive effect of issue salience.

Sensitivity to Costs

The variable measuring political rights capture sensitivity to domestic political costs. The findings show that as the political rights in the country increase, the duration of the conflict prior to management also increases. This contradicts the theoretical expectation
that actors in states where the population has a higher level of political rights will be more constrained by public opinion and therefore less likely to be able to continue a conflictual strategy without the rationale of a high stakes issue.

Sensitivity to the international reputational costs of continuing a conflictual strategy is captured through the variable UN operation, which is a dichotomous variable indicating the presence, or not, of a UN peacekeeping mission, sanction or embargo associated with the crisis. It is theorized that the presence of such an operation would increase the actors’ sensitivity to the costs of conflict. While the coefficient for the UN operation variable is not significant, it is in the direction consistent with the theory. The findings indicate that the presence of such a UN operation decreases the duration of a crisis prior to the initiation of conflict management by 211.72 days.

Control

Finally, a variable indicating the number of previous conflict management attempts was included in the model. The inclusion of this variable is grounded in the idea that prior conflict management attempts increase an actor’s information regarding his/her opponent. In turn, this decreases the level of uncertainty associated with initiating an offer of conflict management. The finding that a greater number of previous conflict management attempts has a significant (p = 0.065) effect on the duration of a conflict prior to the initiation of conflict management by one or both of the primary actors, decreasing it by -133.69 days for each prior conflict management event is consistent with this idea. An alternate explanation of the effect of prior conflict management attempts, related to sensitivity to international reputation is also possible. As measurement of the dependent variable is based on the first case of conflict management initiated by either one or both
primary actors, any previous conflict management events must, by definition involve third party intervention. The negative and significant coefficient for this variable is therefore consistent with the theoretical expectation that increased international interest and/or intervention to encourage the primary actors to move to a negotiation strategy will result in a decrease in the time to conflict management initiation.

Discussion

Model One

The results from the MNL analysis are generally supportive of the theoretical model. As predicted in Hypothesis 1 the probability of A initiating conflict management, decreases as A’s power increases relative to B, although this finding is not significant overall. There is, however, a significant and negative relationship between relative power and the probability of either or B initiating compared to both. The graph for A’s predicted probability of initiating in Figure 2 indicates that this relationship is strongest when A’s costs are highest, suggesting that there may be a cumulative relationship [interaction?] between increased costs and increased relative power.

Hypothesis 2 predicted that increases in the costs incurred by actors, relative to their opponent would increase the probability of their initiating conflict management. Although the variable for economic costs is not significant for any pair of outcomes, the graphs in Figures 7.1 and 7.2 show that actors are more likely to initiate conflict management independently when the costs they incur are higher than the costs their opponent incurs. This is consistent with the expectations of Hypothesis 2.
As discussed above, it was not possible to test the effects of domestic dissent within the structure of Model 1. Consequently, Model 1 did not test Hypothesis 3. This hypothesis will be tested, therefore, in Model 2, where comparison is between crises, rather than between actors within a single crisis.

The graphs of the predicted probabilities for each outcome presented in Figure 7.2 demonstrate that there is support for Hypothesis 4. For both A and B the probability of initiating conflict management increases as the relative political rights of the actor decrease. In the comparison between the probability of A and B initiating, this relationship is also statistically significant. It is also significant in the comparison of either A or B initiating, compared to both initiating.

**Model Two**

The results of the OLS regression offer mixed support for the model. Most importantly, the central theoretical contention that actors will fight longer in high salience crises is supported by the findings regarding the level of threat and its interaction with the contextual variable indicating the crisis to be part of an enduring rivalry. As hypothesized, in crises involving high levels of threat actors take longer to move from a conflictual to a negotiating strategy.

The secondary hypotheses regarding actors' tolerance for costs are less clear. As tested, the cost variables do not perform in the manner expected. In fact, both higher economic costs and fatality levels are associated with increased conflict duration. This result may be partly the result of multicollinearity, although VIF levels do not indicate that this is a problem. It is more likely an issue of model specification. The relationship between costs and crisis duration is operationalized in Model 2 as a direct relationship. However,
theoretically the model proposes that these relationships are conditioned by the importance actors place on the issue at stake.

Expectations regarding actors’ sensitivity to experienced costs were tested. The findings support the theoretical proposition that international involvement in crisis management (measured by the variable number of previous conflict management attempts) and crisis intervention (UN operation) were consistent with the model and the latter measure was statistically significant. The findings regarding domestic sensitivity were not consistent with theoretical expectations. It was predicted that, as the political rights within a state increase, the leader’s sensitivity to the costs of conflict will also increase, resulting in a shorter duration of conflictual action prior to initiation of conflict management. This expectation is not supported by the empirical findings. In fact, the opposite relationship is present and significant.

Finally, relative power was included as an indicator of the costs an actor might expect to incur through a conflictual strategy. The expectation is that actors who are at a power advantage, relative to their opponent, will expect to incur lower costs from the conflict and a lower probability of failure. The findings support this expectation, with increasing relative power resulting in longer conflicts prior to the initiation of management.
CHAPTER VIII

CONCLUSION

This research focused on developing a preliminary model capable of explaining what compels actors involved in conflict situations to offer to negotiate. Although this initially appeared to be a relatively simple question, it required rethinking how we consider both conflict behavior and crisis management behavior and, perhaps more importantly, the link between the two. The theory developed in this research contends that, rather than discrete, independent events, these two behaviors can be considered as different strategies chosen to achieve a single goal.

If this is, in fact, the case, then what explains actors’ choice of strategy? If the factors driving strategy choice can be identified, it should, become possible to better explain and predict the point in a crisis at which an actor would be most likely to change from a conflictual to a management strategy. This is the first question that is drives the model and analysis in this research: In a crisis, when will an actor offer conflict management, and which actor will be the first to instigate negotiation? As the move to negotiation, or crisis management of any type, requires the willingness of both parties, however, a second question must also be addressed: In a crisis, when will an actor accept an offer of conflict management?

An online model was developed to test the theory that it is the costs of continued conflict that drive the decision process at this stage in a crisis. That is, when faced with the choice between continued conflict or extending an offer to negotiate (or accepting an opponent’s offer), a decision maker’s choice is determined by his/her tolerance for the pain conflict costs inflict, rather than his/her belief regarding the relative benefits of resolution
through conflict versus bargaining. It should be stressed at this point that this model does not make any predictions regarding the ultimate outcome of a crisis, nor whether conflict management, once begun will be successful is achieving resolution. Rather, it seeks to explain the mid-crisis behavior of actors; what conditions create an environment in which crisis management is more likely to be offered and received.

The model incorporates four central explanatory variables; relative power, issue salience, costs and sensitivity to those costs. Pain captures the impact of costs on the actor, and represents the combination of costs and sensitivity. Issue salience is theorized to determine the actor's pain threshold for a specific crisis. Once the threshold is reached, the actor's preference for a conflictual strategy over management changes. How soon the threshold is reached – the rate of pain accumulation is determined by the relative power of the actor, the intensity of the conflict and their sensitivity to those costs (regime characteristics). The final factor theorized to affect the actor's strategy choice is the receipt of an offer from their opponent.

**Summary of Findings**

**Experiment One**

In the first experiment, salience and information categories were manipulated, while the offer condition was held constant at no offer. Manipulation of the salience variable enabled testing of the first two hypotheses developed in the model.

**H1:** Actors in low salience disputes will have a lower threshold for pain than those in high salience disputes, resulting in an earlier offer of negotiation.

**H2:** Actors in highly salient disputes will sustain greater costs before offering to negotiate than those in low salience disputes.
The construction of the information condition was designed to test the theoretical hypotheses concerning the impact of sensitivity to domestic constraints on an actor’s sensitivity to the costs of conflictual action:

- **H5**: Higher levels of civil liberties and political rights will increase an actor’s sensitivity to conflict costs, thus decreasing the time to management initiation.

- **H7**: Within a crisis, all other things being equal, the actor with the highest relative civil rights and civil liberties will be more likely to initiate management.

As discussed in Chapter IV (Experiment I) one of the difficulties involved in creating effective experimental scenarios is presenting information to subjects that can be related to their own understanding of political processes, while still enabling exploration of the key variables of interest. For this reason, in the experimental designs domestic constraints were operationalized as the level of public support for the crisis. This measure is both familiar to undergraduate subjects and captures the essence of the theoretical hypotheses, at least in the domain of democratic regimes.

The findings relating to the extent of military action prior to negotiation support the expectations of Hypotheses 1 and 2. Not only did subjects in high salience conditions progress further into the conflict before offering negotiation, but they incurred a higher level of casualties. Both these findings are statistically significant at the .01 level. The findings regarding the effects of exposure to public opinion were not significant, nor did they provide a full test of the theoretical hypotheses as, in nearly all cases subjects choose to negotiate before public opinion fell below 50%.

The most central test of the theory, however, relates to the contextual effects of costs. That is, that what influences decision makers choices is not objective costs, but pain -
the impact of those costs, translated through the conflict context and the wider political environment. In the post experimental questionnaire, subjects were asked to rate how “painful” they felt the conflict to be. The number of casualties experienced in each case (as a function of the event at which they chose negotiation and the experiment ended) was then divided by the self-reported evaluation of the pain to create a measure referred to as the “relative casualty value”. This variable indicates that, in high salience conditions, it took a significantly greater number of casualties to move a subject one unit of pain than it did in low salience conditions. In other words, a casualty incurred in a low salience condition created more pain for the decision maker. This finding supports the model’s central contention that the costs of conflictual action are not consistent across contexts. To ignore context, then undermines our ability to explain and predict the strategic choices made by actors involved in crises.

**Experiment Two**

In the second experiment salience and offer categories were manipulated, while the information condition was held constant at casualty only. Manipulation of the salience variable enabled cross-validation of the findings of experiment one. The consistency of the results between the two experiments provides a further indication of the strength of the effect of issue salience, as well as the stability of the salience manipulation used in both experiments. Issue salience proves to be an important predictor of the extent to which decision makers will pursue a conflictual strategy prior to offering, or accepting an opponent’s offer of, negotiation. Both Experiments I and II demonstrate that subjects involved in high salience conflicts tolerated significantly more casualties prior to negotiating than did those in low salience conflicts. These findings regarding issue salience support the
theoretical proposition that decision makers have pain thresholds associated with conflicts and that these thresholds are dependent on the importance they place on the issue at stake.

The experimental findings regarding the effects of receipt of an offer were mixed. The model proposed that the effect of an offer would be conditional on the salience of the conflict.

H3: Actors in highly salient disputes will respond to an offer of negotiation from their opponent by fighting longer than they would have if no offer had been made.

H4: In low salient disputes, actors will respond to an offer of negotiation from an opponent by fighting for less time than they would have if no offer had been made.

The findings of Experiment II supported the theoretical expectations for high salience conflicts but not low. In both conditions, the receipt of an offer from the opponent increased the duration of the conflict, although the relationship was not significant.

**Experiment Three**

In the third experiment information and offer categories were manipulated, while the salience condition was held constant at high salience. Manipulation of the information variable enabled cross-validation of the findings of Experiment I. Manipulation of the offer condition enabled cross-validation with Experiment II.

As with Experiment I, the results for the effects of information on the duration of conflict were in line with the model’s prediction that, when the majority of the public supported the conflict actor’s would fight longer. Majority public support also demonstrated, as predicted a tranquilizing effect on sensitivity to pain. On average, it took more casualties to induce the same level of pain in public opinion conditions than it did in
casualty conditions. However, these findings were not significant, and, as discussed earlier provide only a partial test of the theories predictions.

Consistent with the findings of Experiment II (high salience conditions), subjects did continue to fight longer when they received an offer of negotiation. There is also directional support for the theoretical contention that the reason for this effect is increased the resolve of a decision maker to “win” the conflict through use of force, thereby increasing his/her bargaining power at the final settlement stage. The findings regarding the effects of an offer were simpler in Experiment III than Experiment II, as the salience was held constant and high, thus eliminating the interactive effects predicted in the earlier experiment.

**Methodological Validity**

The question of the ability of experimental methodology to examine questions such as those raised in this model needs to be reiterated at this stage. The internal validity of experimentation as a means of testing hypotheses can be directly tested and is accepted by international relations scholars and political scientists more generally (Kinder and Palfrey 1993). Debate remains, however, over the method’s external validity. Particularly relevant to this design is the criticism of the use of “novice” decision makers (undergraduates), as a proxy for “expert” decision makers.

The basis of this criticism lies in the belief that the greater experience and knowledge of policymakers and politicians influences their problem-solving processes and thus is reflected in their decisions (Wagner and Hollenbeck, 1998; Klein 1989; DeFong and

---

140 See discussion of the results of the manipulation checks of salience and information reported in this result sections of each experimental chapter.

141 This discussion of external validity is taken from Geva and Skorick 2001.
Ferguson-Hessler 1987; Phelps and Shanteau 1978). This debate really boils down whether or not there is a substantive difference between how experts and novices process information. The findings from several experiments suggest this is not the case. Experts have been found to be likely to use heuristics in a similar manner to novices (Gaeth and Shanteau, 1984; Christensen-Szalanski, et.al. 1983). The literature also suggests that, in general, expert judgment is sub-optimal and naive and expert subjects demonstrate the same biases142.

Such debate aside, it should also be noted that, much like formal models, experiments are designed primarily to test hypotheses deduced from a given theory and model. Additionally, experiments can be employed to explore the consequences of controlled counterfactual scenarios that are derived from more loosely defined theories. Again, as with formal modeling, this gives us potential insight into what may happen, but did not yet actually happen, in the real world (Mook 1983). In cases where the experiment is an appropriate representation and thus test of the theory, the findings merely support the logic of the theory. “What we seek to generalize is not the findings but the theory” (Geva and Skorick 2001).

**Empirical Analysis**

The experimental tests in Chapters IV, V, and VI demonstrate that the expectations of the model are supported in the controlled environment of the experiment. Whether these findings are consistent with an actor’s behavior in actual crises required the move to historically-based empirical data. This transition raised several difficult problems due to the type and structure of data available on international crises and disputes, relative to the

---

142 Discussed by Wright, Bolger and Rowe (1993: 217).
questions being asked. These problems and their solution are discussed in detail in Chapter VII. What needs to be kept in mind when evaluating the empirical results drawn from the constructed data set is that they are limited in their strength and generalizability by the limitations of the data itself.

As discussed in the experimental chapters, there was no test of the effects of relative power on the initiation of crisis management, as in all conditions subjects “played” the United States. Chapter VII therefore provides the first test of Hypothesis 8:

H8. Actors will reach their pain threshold more quickly when they are the weaker party in the dispute and more slowly when they are the stronger party. Thus, weaker actors are more likely to initiate management.

Similarly, in order to limit the complexity of the experimental design and instructions there was no test of the hypothesis regarding the impact of international involvement:

H6: International involvement in conflict management attempts will increase actors’ sensitivity to the costs of conflict, decreasing the time to management initiation.

The chief purpose of the two empirical models developed in this chapter was to test the applicability of the theoretical model to real world crises. At the same time, however, it provided an interesting opportunity to compare findings across methodologies as many of the hypotheses tested in the three experiments are replicated in the empirical chapter.

The first question addressed by the model is; in a crisis, when will an actor offer conflict management? There are two mechanisms in the model that predict the change from a conflictual to a negotiating strategy – the rate of accumulation of pain (slope) and the actor’s pain threshold. The rate of pain accumulation predicts which actor within an individual conflict will initiate conflict management. The pain threshold predicts at what point in a crisis conflict management will be initiated.
Model 1, dealing with pain accumulation, compares actors within crises and the unit of analysis is the crisis. Due to the nominal nature of the dependent variable, the most appropriate estimation model is one designed for categorical and limited dependent variables. As there is no theoretical or logical reason to expect that there is any underlying order to the three outcomes, the use of multinomial logit (MNL) is most appropriate (Long 1997).

Model 2 tests the predictions regarding the pain threshold of actors. Specifically, does issue salience affect pain tolerance, and is there a systematic difference in conflict duration (prior to the initiation of conflict management) as a function of issue salience. In contrast to Model 1, the unit of analysis is the crisis actor(s) initiating conflict management in a specific crisis, and the comparison is between crises, rather than crisis actors. The dependent variable for Model 2 is the duration (in days) of the crisis prior to the first conflict management event initiated by a primary actor in the crisis. As the dependent variable in this second model is continuous, a simple OLS regression is a suitable estimation technique.

Model 1: Within a crisis, which actor will initiate conflict management? The results from the MNL analysis are generally supportive of the theoretical model. As predicted, A (conflict initiator) initiating conflict management, decreases as A’s power increases relative to B (conflict target), although this finding is not significant overall. However, there is a significant and negative relationship between relative power and the probability of either A or B initiating, compared to both. Examination of A’s predicted probability of initiating indicates that this relationship is strongest when A’s costs are highest, suggesting that there may be a cumulative relationship between increased costs and increased relative power.
The model also predicts that increases in the costs incurred by actors, relative to their opponent would increase the probability of their initiating conflict management. Although the variable for economic costs is not significant for any pair of outcomes, the calculated predicted probabilities show that actors are more likely to initiate conflict management independently when the costs they incur are higher than the costs their opponent incurs. This is consistent with the expectations of the model.

For both A and B the probability of initiating conflict management increases as the relative political rights of the actor decrease. In the comparison between the probability of A and B initiating, this relationship is also statistically significant. It is also significant in the comparison of either A or B initiating, compared to both initiating. This is consistent with the theoretical expectation that domestic constraints effect decision makers’ strategy choices in a crisis situation.

Model 2: When will conflict management occur? The results of the OLS regression offer mixed support for the model. Most importantly, one of the central theoretical contentions that actors will fight longer in high salience crises is supported by the findings regarding the level of threat and its interaction with the contextual variable indicating the crisis to be part of an enduring rivalry. As hypothesized, in crises involving high levels of threat actors take longer to move from a conflictual to a negotiating strategy.

The secondary hypotheses regarding actors’ tolerance for costs are less clear. As tested, the cost variables do not perform in the manner expected. In fact, both higher economic costs and fatality levels are associated with increased conflict duration\textsuperscript{143}. The

\textsuperscript{143}This result may be partly the result of multicollinearity, although VIF levels do not indicate that this is a problem. It is more likely an issue of model specification.
relationship between costs and crisis duration is operationalized in Model 2 as a direct relationship. However, theoretically the model proposes that these relationships are conditioned by the importance actors place on the issue at stake.

Expectations regarding actors’ sensitivity to experienced costs were tested. The findings support the theoretical proposition that international involvement in crisis management (measured by the variable number of previous conflict management attempts) and crisis intervention (UN operation) were consistent with the model and the latter measure was statistically significant. The findings regarding domestic sensitivity were not consistent with theoretical expectations. It was predicted that, as the political rights within a state increase, the leader’s sensitivity to the costs of conflict will also increase, resulting in a shorter duration of conflictual action prior to initiation of conflict management. This expectation is not supported in the empirical findings. In fact, the opposite relationship is present and significant.

Finally, relative power was included as an indicator of the costs an actor might expect to incur through the use of a conflictual strategy. The expectation is that actors who are at a power advantage, relative to their opponent, will expect to incur lower costs from the conflict and a lower probability of failure. The findings support this expectation, with increasing relative power resulting in longer conflicts prior to the initiation of management.

Discussion

This research was motivated by the recognition that, even thirty years after Blainey noted that “for every thousand pages published on the causes of wars, there is less than one page directly on the causes of peace” (1973:3), there is still a large disconnect between the
study of conflictual crisis behavior and crisis management initiation. The theory and model developed were designed to provide an initial means of understanding crisis management initiation by conceptualizing crises as a dynamic process in which conflict and management are strategies for achieving a certain goal, rather than an end in themselves.

The central question this conceptualization raises, therefore, is what factors influence actors’ strategy choices during a crisis. The theory proposes that, when it comes to the initiation of conflict management, it is costs that dominate the decision process. Or as Jackman so succinctly puts it; “for those confronted with a very restricted range of available alternatives extending from horrendous to merely awful, minimizing pain is the same as maximizing utility” (1993). That conflict costs are multifaceted and changing in nature, ranging from economic, to reputational to human, is widely accepted in the conflict literature. That their impact on a decision maker may be similarly variable is not taken into consideration. This research theorizes that the context in which conflict costs are incurred, both in terms of the salience of the conflict itself and the wider political environment in which the decision maker must act, influences the impact they have on the decision maker, and thus the timing of strategy change from conflictual to management.

In order to capture this translation process the model employs the concept of “pain”, which is designed to incorporate not only the objective components of conflict costs, but the decision maker’s sensitivity to those costs. The experimental findings present strong support for this central contention that the perception of the “painfulness” of costs – in this case casualties- changes, relative to the salience of the conflict in which they are incurred. That the effect of costs is not consistent across conflict contexts is also supported by the empirical findings.
In conclusion, this research develops a theoretical model that enables exploration of the process of decision making in crises. Additionally, by broadening the treatment of costs by accounting for the effects of context, it demonstrates that if we really want to understand what motivates decision makers to come to the table and at least initiate conflict management, we need to consider more than the distribution of force and power. The importance placed on the issue of dispute and the wider political environment in which a decision maker works both effect their choices in crises and their response to the pain of conflict.
REFERENCES


APPENDIX A

EXPERIMENTAL INSTRUCTIONS

Below is the text of the instructional and background information inputted into the Dectracer and shown to the experimental subjects. The only variations in the information provided are those necessary to provide the manipulation of the relevant independent variables. The text of these sections is indicated by italics.

Introduction

You are the Chief Foreign Policy Advisor to the President of the United States of America. You are the last point of reference for the President on matters of foreign policy, and he relies on you to provide balanced and informed foreign policy advice.

Your job today is to give the President advise on how best to resolve an ongoing military conflict between the US and Hendara over the Kell Islands, a group of islands in the south Atlantic.

When advising the President you should consider the effect your choices will have on three key factors: domestic public support for the administration, the international reputation of the United States and national security.

Background to the Dispute

Since losing control of Kell Islands in 1833, Hendara has never recognized United States’ control over the territory. It challenged the legality of the 1947 US grant of independence in 1948, and again in 1953 and 1973. UN supported talks between Hendara and the US were attempted in 1966 and again in 1997, but were unsuccessful.
On May 12th of this year, the Hendaran Foreign Minister warned that if an agreement on the islands was not reach shortly Hendara would resort to “other means” to resolve the dispute. The UN Security Council called upon both parties to seek a diplomatic solution to the crisis. The US restated its position that Kell is an independent nation, and the Hendaran President declined to resume talks.

Seven days ago the Hendaran army took control of Kell. The Kellites have called on the US to come to their aid, as they have no desire to become part of Hendara. The majority of Kellites are of European and American descent and have few historical or cultural ties to Hendara. In a televised speech the President promised to defend Kell and announced that the US had severed diplomatic ties with Hendara and imposed economic sanctions. There has been widespread international condemnation of the invasion and support for the US position.

Following the invasion, the Hendaran government resisted all requests from allies, regional organizations and the UN to negotiate a resolution to the crisis. They repeated their resolve to bring Kell under Hendaran control and landed additional troops to fortify their positions. The US Department of Defense advised the President that delaying military action would only make it more costly for the US to retake Kell.

In light of these developments your President decided to commit the US to military action in order to regain Kell. 120 US marines and Special Forces landed on West Kell yesterday. They successfully established a beachhead and a full-scale US operation against the Hendaran forces is currently underway.

Public opinion polls indicate that the majority of Americans believe the US action is justified and that US forces will quickly defeat the Hendarans. UN Secretary General, Kofi
Annan, has called upon both the US and Hendara to declare a ceasefire and seek a diplomatic solution.

**The United States and Kell**

<table>
<thead>
<tr>
<th>Low Salience</th>
<th>High Salience</th>
</tr>
</thead>
</table>

*At the end of WWII, the US revoked its territorial claim to Kell. During the Cold War the 4,700 square-mile territory of windswept, almost treeless bog and boulder was considered to be of no significant strategic value.*

*The 54,000 Kellites, many of American and European descent, have continued their rural lifestyle, farming and raising sheep and alpaca for wool. They trade with Hendara and other near-by countries and also rely on their neighbors for advanced education and health care services.*

*The United States has no official representative in Kell, but there is a small, unmanned communications post on the island used for satellite tracking.*

*With the increasingly diffuse nature of security threats facing the US in the post-Cold War era Kell remains a strategically important military intelligence base. The significance of Kell has been demonstrated on numerous occasions since September 11th 2001. Its location enables the US military to maintain continuous, real-time satellite surveillance of politically critical areas, including the Middle East and South East Asia.*

*Since 1947 the United States has maintained a garrison of approximately 80 marines at the capital, Port Lincoln. There is also a communications post on the island, used for satellite surveillance, which is manned by air force intelligence personnel.*

*A recent geological survey indicates concentrated off-shore petroleum deposits near the main island. Joint development of these reserves with the Kellites could decrease US dependence on Middle East oil.*

*The 540,000 Kellites, many of American and European descent, live a primarily rural lifestyle, farming and raising sheep and alpaca for wool. They trade with Hendara and other near-by countries.*
Background Information on Hendara

Location

Hendara, located in central South America, is approximately the same size as Texas. It is the largest country in the region.

Economics

Strategic advantage and trading power have put Hendara at a position of regional strength. The discovery of reserves of petroleum and uranium in the 1960s cemented Hendara’s regional influence. The US currently imports approximately 11% of its total petroleum imports from Hendara. Hendara is an important player in regional economics and a member of the Organization for Free Trade and Regional Cooperation (OFTRC). In 1997 it became a member of the World Trade Organization.

Politics

Hendara became an independent democracy in 1983. However in 2000, after a bloodless coup, former military commander General Leopoldi became President for life. Hendara is a member of SAOS (South American Organization of States), a regional security organization.

Military Capabilities

Despite recent economic problems Hendara continues to spend a considerable portion of its annual revenue on the military. In 2007 its military expenditure was estimated at $US 8.9 billion, placing it 20th in the world.

Hendara has a military capacity about 2/3rd the size of Great Britain, but considerably less sophisticated. They have 32 major warships, 1 nuclear-powered submarine, a 326-plane air force and some medium-range missile capability.
Decision Task

As Chief Foreign Policy Advisor to the President of the United States, you must decide on the best strategy to resolve this crisis successfully. You will need to consider how both the American people and the international community will respond to your recommendations and the costs that result from them.

During the crisis you will choose between

1: Pursuing the same conflictual strategy your advisors have supported to this point.
2: Offering to negotiate with the Hendarans.

Your advisors from the Department of Defense, the State Department and the CIA will provide you with updates on the progress of the crisis after each decision. After each update you will again chose to either continue with your current strategy, or offer to negotiate with the Hendarans.
Included in this information will be the number of casualties (from the first day of fighting) that the US has suffered up to this point in the conflict. The Department of Defense (DoD) Cumulative Casualty Count will be updated after every event to reflect new casualties.

[Public Opinion Conditions Only]

You will also be given current public opinion data regarding the level of public support for the conflict. This data is being collected daily and the most recent report will be included with every update you receive from your advisors.

[Offer Conditions Only]

Please Note:

If you receive an offer of negotiation from the Hendarans you do not have to accept it immediately.

You have the option to continue with military action after an offer is made and choose to negotiate at a later time of your choosing.

Once you advise the President to negotiate with the Hendarans, however, military action will stop until this option (negotiation) is fully explored.

As you deal with this crisis and consider your options you should assume that:

1. The United States has no major military commitments in progress.
2. The United States is not involved in any military action or dispute with another country.
APPENDIX B

EVENT SET

Below is the text of the event set that experimental subjects worked through after reading through instructions and background information. After the first event subjects could choose to negotiate at any point. Text in bold and public opinion levels was included in the public opinion conditions only.

1. **DAY 7 of the CONFLICT**

The US attack on the main island was launched earlier this morning. Ground troops moved toward the capital and airbase, making good progress despite resistance. The Hendaran air force initiated a coordinated air-ground attack and shot down 4 F-14s. The remaining US planes were forced to cut short their mission without significantly impacting Port Lincoln or the Hendaran planes at Goose Green.

DoD CUMULATIVE CASUALTY COUNT:  27

CURRENT PUBLIC SUPPORT for CONFLICT:  63.9%

Do you advise the President to:

- Continue military action
- Offer to negotiate with Hendara

2. **DAY 11 of the CONFLICT**

Ground forces have been advancing toward the capital Port Lincoln, still encountering organized resistance from the Hendaran and incurring casualties. A squadron of F15s attacked the east Kell airstrip severely damaging 2 of the 4 runways. During the attack 3 US F-18 Hornets were shot down and 2 pilots lost at sea. Air reconnaissance is tracking a large Hendaran naval contingent moving toward Kell.

DoD CUMULATIVE CASUALTY COUNT:  30

CURRENT PUBLIC SUPPORT for CONFLICT:  66.3%

Do you advise the President to:

- Continue military action
- Offer to negotiate with Hendara
3 DAY 13 of the CONFLICT

Early this morning an Exocet air-to-surface missile sank the US destroyer Impellance. The 283-man crew lost 26 killed and 31 wounded. Ground forces moving toward Port Lincoln and Goose Green continue to engage Henaran forces and sustain casualties.

The administration’s public affairs chief believes the President should visit the Impellance’s home port and deliver a speech supporting the troops and families and restating the importance of Kell for the security and protection of the US.

DoD CUMULATIVE CASUALTY COUNT: 58

CURRENT PUBLIC SUPPORT for CONFLICT: 61%

Do you advise the President to:

Make a public statement
Offer to negotiate with Hendara

4 DAY 15 of the CONFLICT

The President received a warm reception from supporters on his arrival in San Diego. A group of anti-war protestors were involved in minor scuffles with police. In a televised speech, the President referred to the soldiers, sailors, and marines on Kell as heroes, deserving of the full support of the American people. He also met in private with the families of those lost on the Impellance.

A marine platoon involved in the advance on Goose Green yesterday, was caught in an ambush by Henaran soldiers disguised as civilians. After losing a critical number of soldiers they were forced to withdraw from the village they secured earlier.

DoD CUMULATIVE CASUALTY COUNT: 63

CURRENT PUBLIC SUPPORT for CONFLICT: 64.9%

Do you advise the President to:

Continue military action
Offer to negotiate with Hendara
5 DAY 17 of the CONFLICT

US forces continued to press the Hendaran occupying the main island as the Hendaran fleet came into range of the US fleet and the main Island. US ships and fighters sank a trawler, tanker and supply ship within hours of the fleet’s arrival. This leaves the Hendaran ground forces potentially short on food and ammunition.

Extreme bad weather and low visibility has grounded US planes, leaving ground forces without air support or reconnaissance. 19 marines were killed and 22 soldiers wounded after being ambushed by Hendaran forces in a deserted village late yesterday afternoon.

UN Secretary general Kofi Annan, meeting with high level US and Hendaran officials, again urged Hendara and the US to find a peaceful resolution to the crisis.

DoD CUMULATIVE CASUALTY COUNT: 78
CURRENT PUBLIC SUPPORT for CONFLICT: 66.3%

Do you advise the President to:

Continue military action Offer to negotiate with Hendara

6 DAY 18 of the CONFLICT

A 12-man team of US Special Forces struck a Hendaran installation on Pebble Island, blowing up an ammunition dump and destroying 8 planes.

After the severe damage sustained by its ships over the past two days, the newly arrived Hendaran fleet has withdrawn from Kell and all indications are it is retreating to Hendara. Military intelligence indicates that the Hendaran forces have been hard-hit by recent US attacks and face shortages of food and ammunition.

DoD CUMULATIVE CASUALTY COUNT: 94
CURRENT PUBLIC SUPPORT for CONFLICT: 67.5%

Do you advise the President to:

Continue military action Offer to negotiate with Hendara
7 DAY 19 of the CONFLICT

The Pentagon has released reports to the media regarding US losses in the battle for Kell. These figures do not include the loss this morning of a Chinook, shot down by a surface-to-air missile while ferrying troops to the main island where ground fighting continues. 16 soldiers drowned in the attack and another 12 were injured.

DoD CUMULATIVE CASUALTY COUNT: 112
CURRENT PUBLIC SUPPORT for CONFLICT: 72.7%

Do you advise the President to:

| Continue military action | Offer to negotiate with Hendara |

---

8 DAY 21 of the CONFLICT

US forces have begun mobilization and late-stage planning for the main landing and invasion of the main Island. The weather around Kell remains extreme and fighters were grounded after the crash of an F14 and the loss of its pilot due to poor visibility.

Media discussion of Hendaran President Leopoldi’s inability to generate regional support for his action is widespread. It is being interpreted as a sign that the international community recognizes the legitimacy of the US's position, even if they will not openly support the use of force to settle the dispute.

DoD CUMULATIVE CASUALTY COUNT: 135
CURRENT PUBLIC SUPPORT for CONFLICT: 74%

Do you advise the President to:

| Continue military action | Offer to negotiate with Hendara |
9

DAY 23 of the CONFLICT

US forces began their main invasion, landing 5000 troops on the north-west coast of the main island this afternoon. The invasion started badly when a Chinook helicopter ferrying troops ditched into the sea drowning 36 US marines. Resistance onshore was minimal, however and a firm beachhead has been established.

DoD CUMULATIVE CASUALTY COUNT: 163
CURRENT PUBLIC SUPPORT for CONFLICT: 71%

Do you advise the President to:

Continue military action
Offer to negotiate with Hendara

10

DAY 25 of the CONFLICT

A 72 plane Hendaran air assault has seriously damaged the US frigate Ohio whose crew lost 36 dead, 44 wounded. 2 other US ships have been damaged. 16 Hendaran planes were shot down for the loss of 2 US F-14s and 2 reconnaissance helicopters.

Despite administration efforts, European allies remain reluctant to declare support for, or approval of the US decision to use military action to retake Kell.

DoD CUMULATIVE CASUALTY COUNT: 183
CURRENT PUBLIC SUPPORT for CONFLICT: 67.9%

Do you advise the President to:

Continue military action
Offer to negotiate with Hendara
11 DAY 28 of the CONFLICT

The US frigate, the Indiana was destroyed by Hendaran bombs late yesterday afternoon. Its crew lost 4 dead and 10 wounded, but 6 attacking aircraft were shot down during the battle.

DoD CUMULATIVE CASUALTY COUNT: 192
CURRENT PUBLIC SUPPORT for CONFLICT: 62.7%

Do you advise the President to:

Continue military action  Offer to negotiate with Hendara

12 DAY 29 of the CONFLICT

8 more Hendaran planes were shot down as the battle for Port Lincoln intensified. US marines and Special Forces meet unexpectedly stiff resistance from Hendaran soldiers entrenched in the hills around the port. Captured soldiers are in poor conditions, with very low reserves of supplies and, in many cases, insufficient clothing for the harsh winter weather.

You receive word that the Organization of Southern States (OSS), meeting at the request of Hendaran President Leopoldi, voted not to condemn US actions. Hendara is a founding member of the OSS and such a public show of non-support indicates that Hendaran President Leopoldi is unlikely to be able to generate any regional military support for his actions against Kell and the US.

DoD CUMULATIVE CASUALTY COUNT: 211
CURRENT PUBLIC SUPPORT for CONFLICT: 64.5%

Do you advise the President to:

Continue military action  Offer to negotiate with Hendara
13  DAY 30 of the CONFLICT

In an early morning attack on US ships moving closer to Port Lincoln, the US destroyer Sheffield was hit, and sunk with 31 of the 170-man crew killed and 33 wounded. 5 more Hendaran fighters were shot down during the attack. Pentagon advisors calculate that the Hendaran air force is close to losing a critical percentage of its capability.

DoD CUMULATIVE CASUALTY COUNT: 228
CURRENT PUBLIC SUPPORT for CONFLICT: 61%

Do you advise the President to:

 Continue military action  Offer to negotiate with Hendara

14  DAY 32 of the CONFLICT

A US merchant ship was struck by an Exocet missile while delivering supplies to the aircraft carrier the Intrepid. The 170-man crew lost 12 men and 4 helicopters went down with the ship. Ground forces continue advance on Port Lincoln and a marine force is moving into position to attack Goose Green.

DoD CUMULATIVE CASUALTY COUNT: 238
CURRENT PUBLIC SUPPORT for CONFLICT: 54.5%

Do you advise the President to:

 Continue military action  Offer to negotiate with Hendara
15 DAY 33 of the CONFLICT

10 more US warships arrived in Kell and aircraft losses have been replaced by a reinforcing squadron of F15s. The reinforcing squadron of 15 F14s more than makes up for current US losses, especially considering the Hendaran’s limited reserves of fighters. Marines approaching Goose Green have reported minor skirmishes with Hendaran forces.

DoD CUMULATIVE CASUALTY COUNT: 251

CURRENT PUBLIC SUPPORT for CONFLICT: 50.8%

Do you advise the President to:

Continue military action  Offer to negotiate with Hendara

16 DAY 36 of the CONFLICT

250 marines stormed and captured Goose Green south of the beachhead established in 12 days ago. The larger 350 man force which attacked Darwin was unsuccessful in securing the town and forced to retreat back to the original landing point.

During a regular session the European Parliament officially condemns Hendara’s invasion of Kell, although the stopped short of publically approving US action. Instead, they reiterated the member states’ commitment to the peaceful resolution of international disputes.

DoD CUMULATIVE CASUALTY COUNT: 272

CURRENT PUBLIC SUPPORT for CONFLICT: 49.4%

Do you advise the President to:

Continue military action  Offer to negotiate with Hendara
17  **DAY 37 of the CONFLICT**

3000 more troops were transferred from the aircraft carrier Intrepid to Goose Green and Darwin was finally captured. 1000 Hendaran troops were taken prisoner after surrendering to US forces, but marine and army units experienced casualties.

**DoD CUMULATIVE CASUALTY COUNT:** 314

**CURRENT PUBLIC SUPPORT for CONFLICT:** 44.3%

*Do you advise the President to:*

- Continue military action
- Offer to negotiate with Hendara

---

18  **DAY 39 of the CONFLICT**

Approximately 5,000 US troops pressed east to take strategic high ground at Mount Kent and Two Sisters Ridge. This advance places US troops on the ground in a much stronger position to launch an attack on the capital Port Lincoln.

There has been no indication that the Hendaran forces intend to withdraw from the island despite this setback. Information gained from captured soldiers, however, indicates that moral is low among the Hendaran soldiers and their living conditions have deteriorated due to disruptions in their supply lines.

**DoD CUMULATIVE CASUALTY COUNT:** 366

**CURRENT PUBLIC SUPPORT for CONFLICT:** 44.5%

*Do you advise the President to:*

- Continue military action
- Offer to negotiate with Hendara
19 DAY 43 of the CONFLICT

With a strong force well positioned east of Port Lincoln US commanders are advising the placement of additional forces at Port Fitzroy, 17 miles southwest of Port Lincoln. This would involve landing an additional 3000 forces from the aircraft carrier Defiance, currently 100 miles off the coast.

US Commander General McDowns is confident that all the troops can be moved into position at Port Fitzroy with little risk. Troops on Twin Sisters Ridge and Mont Kent have successfully held and expanded their positions against several attacks by Hendaran soldiers over the past days. The fighting has been sporadic but intense.

The United Nations Secretary General Kofi Annan has again called upon both the US and Hendara to declare a ceasefire and seek a diplomatic solution.

DoD CUMULATIVE CASUALTY COUNT: 384

CURRENT PUBLIC SUPPORT for CONFLICT: 43.9%

Do you advise the President to:

Continue military action  Offer to negotiate with Hendara

---

20 DAY 46 of the CONFLICT

US forces established a second beachhead when 3000 marines and army regulars from the fifth brigade were put ashore at Port Fitzroy. Despite the optimistic assessment you received, US forces suffered their worst casualties of the war in the process. Both large landing ships were set afire and destroyed with 76 killed aboard and 61 wounded. In other air attacks a smaller US landing craft was sunk and the frigate Ohio was damaged. Ground troops also met with stiff resistance from the entrenched Hendaran forces.

DoD CUMULATIVE CASUALTY COUNT: 461

CURRENT PUBLIC SUPPORT for CONFLICT: 44%

Do you advise the President to:

Continue military action  Offer to negotiate with Hendara
Opposition politicians are questioning the administrations handling of the conflict. In particular they are calling on the President to make a clear statement of when the conflict will be over.

DoD CUMULATIVE CASUALTY COUNT: 466
CURRENT PUBLIC SUPPORT for CONFLICT: 39%

Do you advise the President to:

- Make a public statement
- Offer to negotiate with Hendara

In a televised speech last night the President set out the administration’s view on the progress of the conflict in Kell. He focused on how close US forces were to a decisive victory. Fighting continues around Port Lincoln and small skirmishes with isolated pockets of Hendaran resistance around Darwin and Goose Green have also been reported.

DoD CUMULATIVE CASUALTY COUNT: 476
CURRENT PUBLIC SUPPORT for CONFLICT: 43.8%

Do you advise the President to:

- Continue military action
- Offer to negotiate with Hendara
After intense fighting US forces are now in position to the east and southwest of Port Lincoln. In all, 9000 US marines, Special Forces and army troops are in place to move against the 5000 Hendaran troops estimated to be in the Lincoln perimeter. Even your most skeptical military analysts agree that the fall of Port Lincoln is now inevitable.

The European Parliament joined with the International Court in encouraging the US and Hendara to avoid unnecessary violence and settle their disputing claims diplomatically and according to international law.

DoD CUMULATIVE CASUALTY COUNT: 479

CURRENT PUBLIC SUPPORT for CONFLICT: 44.5%

Do you advise the President to:

Continue military action  Offer to negotiate with Hendara

Earlier today 3000 US soldiers and marines overran the Hendaran positions on the hills 12 miles west of the capital and pushed to within 7 miles of Port Lincoln. While shelling the capital, the US Cruiser McMahon was hit by a land-based Exocet.

DoD CUMULATIVE CASUALTY COUNT: 497

CURRENT PUBLIC SUPPORT for CONFLICT: 43.6%

Do you advise the President to:

Continue military action  Offer to negotiate with Hendara
25  **DAY 55 of the CONFLICT**

In the past three days 6000 US troops have seized Mount Tumbledown, Wireless Ridge and Mount William, reaching within 3 miles of the capital Port Lincoln.

DoD CUMULATIVE CASUALTY COUNT: 511

CURRENT PUBLIC SUPPORT for CONFLICT: 48%

*Do you advise the President to:*

- Continue military action
- Offer to negotiate with Hendara

---

26  **DAY 57 of the CONFLICT**

Fighting continues in and around Port Lincoln. US marines penetrated the Hendaran perimeter in several key locations, effectively dividing their main force.

You have received word from US commander in chief General McDowns that the Hendaran commander General Avianca has asked for a cease-fire. It is General McDown's assessment that the cease-fire should be granted.

DoD CUMULATIVE CASUALTY COUNT: 516

CURRENT PUBLIC SUPPORT for CONFLICT: 49.2%

*Do you advise the President to:*

- Grant a ceasefire
- Offer to negotiate with Hendara
The remaining 8,978 Hendaran troops on Kell, including the 4500 in the Port Lincoln perimeter have surrendered.

The war is over.

DoD CUMULATIVE CASUALTY COUNT: 516
CURRENT PUBLIC SUPPORT for CONFLICT: 49.6%

Do you advise the President to:

- Declare Kell a US protectorate, ignoring Hendara’s claim
- Offer to negotiate with Hendara toward a mutually satisfactory resolution

---

Offer Condition Only

Event # and day will vary

You have received word from the Hendaran Foreign Minister that President Leopoldi is interested in finding a negotiated solution to the conflict over Kell. He is prepared to agree to a cease-fire if the US will agree to negotiations. He requires an answer within the next 24 hours.

Do you advise the President to:

- Reject Leopoldi’s offer to negotiate a settlement and continue military action
- Accept Leopoldi’s offer to negotiate a settlement
APPENDIX C

POST-EXPERIMENTAL QUESTIONNAIRES FOR EACH EXPERIMENT

Below are the post-experimental questionnaires completed by subjects at the end of the decision task. The wording of all questions was consistent across experiments whenever possible.

Experiment 1: Post-Experimental questionnaire

POST-CRISIS ASSESSMENT DOCUMENT

1. How many days did the conflict last?
   ____________

2. How many casualties did the US sustain during the conflict?
   ____________

3. Overall, how did the American public and media respond to the conflict?
   ____ supported the President
   ____ did not support the President
   ____ were indifferent to the conflict

4. Overall, how did the international community respond to the conflict?
   ____ supported the United States
   ____ remained neutral regarding the conflict
   ____ did not support the United States

5. On a scale of 0 – 100, mark and number how painful you consider this conflict to be for the United States?
   0 __________________________ | __________________________ 100
   No Pain                         Extreme Pain

6. What is the probability that you will resume military action to retake Kell?
   None at all 1 2 3 4 5 6 7 8 9 10 Absolutely
7. To what extent would you prefer to resolve this conflict through military action?

   None at all  1  2  3  4  5  6  7  8  9  10  Absolutely

**NATURE of the DISPUTE**

8. **Overall**, how important do you consider the conflict over Kell to be to the United States?

   Not at all  1  2  3  4  5  6  7  8  9  10  Extremely

   Important

9. How important do you consider control of Kell to be to the **national security** of the United States?

   Not at all  1  2  3  4  5  6  7  8  9  10  Extremely

   Important

10. How important do you consider maintaining control of Kell to be to the **international position and reputation** of the United States?

    Not at all  1  2  3  4  5  6  7  8  9  10  Extremely

    Important

**YOUR ASSESSMENT**

To what extent did the following factors influence the advice you gave to the President?

11: Military losses suffered by the United States

   Not at all  1  2  3  4  5  6  7  8  9  10  Very

   Significantly

12: Loss of domestic support for the President.

   Not at all  1  2  3  4  5  6  7  8  9  10  Very

   Significantly

13: The importance of maintaining US control over Kell.

   Not at all  1  2  3  4  5  6  7  8  9  10  Very

   Significantly
14: Loss of international support for, and reputation of the United States.

Not at all  1  2  3  4  5  6  7  8  9  10  Very
Significantly

YOUR DECISION

To what extent do the following considerations match your MAIN reason for offering to negotiate?

15: Maintaining US control of Kell through military action was not worth the cost (in terms of lives, expenditure, public opinion and international opinion).

Not at all  1  2  3  4  5  6  7  8  9  10  Very
Significantly

16: The belief that negotiation should be attempted before engaging in military action.

Not at all  1  2  3  4  5  6  7  8  9  10  Very
Significantly

17: A desire to gain more information about what the Hendaran’s wanted, before committing to further military action.

Not at all  1  2  3  4  5  6  7  8  9  10  Very
Significantly

If you decided to negotiate for another reason please describe.

_________________________________________________________________

_________________________________________________________________

18. If you had received a direct offer of negotiation from the Hendaran government would you have been more willing to consider recommending negotiating to the President?

    ____ no

    ____ yes, more willing to recommend negotiation
UNITED STATES’ INVOLVEMENT IN INTERNATIONAL CONFLICTS

19. In general, how important is it for the United States to win conflicts such as this?

Not at all 1 2 3 4 5 6 7 8 9 10 Extremely Important

20. In this conflict such as these, how many casualties do you consider to be a reasonable number for the US to sustain?

21. What number of casualties would make you search for other means to resolve the conflict?

22. On the scale below, mark and number how severe, “painful”, you consider the level of US casualties you indicated in box A to be.

0 _________________________ | _________________________ 100
No Pain Extreme Pain

23. On the scale below, mark and number how severe, “painful”, you consider the level of US casualties you indicated in box B to be.

0 _________________________ | _________________________ 100
No Pain Extreme Pain

Experiment II: Post-Experimental questionnaire

POST-CRISIS ASSESSMENT DOCUMENT

1. Consider the cost of military action, the risk of public disapproval of the President and death of US troops that were described in the events you just reviewed. Given all these factors, mark and number on the scale below, how painful this conflict was to the United States.

0 _________________________ | _________________________ 100
No Pain Extreme Pain

2. How many days did the conflict last?

_______________
3. How many casualties did the US sustain during the conflict? 

4. According to the instructions, an offer of negotiation from the Hendarans:

   ___ would remain open for the duration of the conflict.
   ___ had to be accepted immediately or it would be withdrawn.

5. Overall, how did the majority of the American public and media respond to the conflict?
   ___ supported the President
   ___ did not support the President
   ___ were indifferent to the conflict

6. Overall, how did the international community respond to the conflict?
   ___ supported the United States
   ___ remained neutral regarding the conflict
   ___ did not support the United States

7. Before the President decided to use military action to retake Kell, had the US and Hendara tried to resolve the dispute through negotiation?
   ___ yes
   ___ no
   ___ don’t know

**NATURE of the DISPUTE**

8. Overall, how important do you think this conflict is to the United States?

   Not at all  1  2  3  4  5  6  7  8  9  10  Extremely Important
   Important

9. To what extent would losing access to Kell and the US military base there negatively affect the national security of the US?

   Not at all  1  2  3  4  5  6  7  8  9  10  Extremely Important
   Important

10. Will the international reputation of the US be negatively affected if the US is not able maintain control of Kell and deter the Hendarans?

    Not at all  1  2  3  4  5  6  7  8  9  10  Extremely Important
    Important
11. Did the offer of negotiation from the Hendaran government make you more willing to consider recommending negotiating to the President?
   ___ no
   ___ yes, more willing to recommend negotiation
   ___ I did not receive an offer of negotiation

   **YOUR ASSESSMENT**

   To what extent did the following factors influence the advice you gave to the President?

   12. Military losses suffered by the United States
      
      Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

   13. Loss of domestic support for the President.
      
      Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

   14. Loss of international support for, and reputation of the United States.
      
      Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

   15. The importance of maintaining US control over Kell.
      
      Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

   16. Negotiation provides an opportunity to gain useful information about you opponent and their demands.
      
      Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

   17. The belief that military action can only be justified if all other means of resolving a conflict have been attempted.
      
      Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

   18. US forces had inflicted considerable damage on the Hendarans and this placed the US in a strong position to negotiate a settlement favorable to the US.
      
      Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly
Experiment III: Post-Experimental questionnaire

POST-CRISIS ASSESSMENT DOCUMENT

1. How many days did the conflict last?
   ______________

2. How many casualties did the US sustain during the conflict?
   ______________

3. Which of the following best describes your understanding of your option for responding to the Hendaran offer of negotiation?
   _____ The offer would remain open for the duration of the conflict.
   _____ I had to respond to the offer immediately [that event] or it would be withdrawn.
   _____ I did not receive an offer from the Hendarans.

4. Overall, how did the American public and media respond to the conflict?
   _____ supported the President
   _____ did not support the President
   _____ were indifferent to the conflict

5. Overall, how did the international community respond to the conflict?
   _____ supported the United States
   _____ remained neutral regarding the conflict
   _____ did not support the United States

6. On a scale of 0 – 100, mark and number how painful you consider this conflict to be for the United States?
   0 __________________________ | __________________________ 100
   No Pain
   Extreme Pain

7. What is the probability that you will resume military action to retake Kell?
   None at all    1    2    3    4    5    6    7    8    9    10   Absolutely

8. To what extent would you prefer to resolve this conflict through military action?
   None at all    1    2    3    4    5    6    7    8    9    10   Absolutely
NATURE of the DISPUTE

8. **Overall**, how important do you consider the conflict over Kell to be to the United States?

   Not at all 1 2 3 4 5 6 7 8 9 10 Extremely Important

9. How important do you consider control of Kell to be to the **national security** of the United States?

   Not at all 1 2 3 4 5 6 7 8 9 10 Extremely Important

10. How important do you consider maintaining control of Kell to be to the **international position and reputation** of the United States?

    Not at all 1 2 3 4 5 6 7 8 9 10 Extremely Important

YOUR ASSESSMENT

To what extent did the following factors influence the advice you gave to the President?

11: Military losses suffered by the United States

    Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

12: Loss of domestic support for the President.

    Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

13: The importance of maintaining US control over Kell.

    Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly

14: Loss of international support for, and reputation of the United States.

    Not at all 1 2 3 4 5 6 7 8 9 10 Very Significantly
YOUR DECISION

To what extent do the following considerations match your **MAIN** reason for offering to negotiate?

15: Maintaining US control of Kell through military action was not worth the cost (in terms of lives, expenditure, public opinion and international opinion).

Not at all  1  2  3  4  5  6  7  8  9  10  Very
Significantly

16: The belief that negotiation should be attempted before engaging in military action.

Not at all  1  2  3  4  5  6  7  8  9  10  Very
Significantly

17: A desire to gain more information about what the Hendaran’s wanted, before committing to further military action.

Not at all  1  2  3  4  5  6  7  8  9  10  Very
Significantly

If you decided to negotiate for another reason please describe.

_______________________________________________________________________
_______________________________________________________________________

_______________________________________________________________________

18. Did the offer of negotiation from the Hendaran government make you more willing to consider recommending negotiating to the President?

___ no
___ yes, more willing to recommend negotiation
___ I did not receive an offer of negotiation
VITA

Name: Belinda Lesley Bragg

Address: Department of Political Science
Rowan University
201 Mullica Hill Road
Glassboro, NJ 08028-1701

Email Address: belinda@polisci.tamu.edu

Education: B.A.(Hons.), University of Melbourne, Australia, 1995
Ph.D., Political Science, Texas A&M University, 2006