Military Conflict and Terrorism: General Psychology Informs International Relations

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Several experiments, focusing on decisions made by young, voting-age citizens of the United States about how to respond to incidents of international conflict, are summarized. Participants recommended measured reactions to an initial attack. Repeated attacks led to escalated reaction, however, eventually matching or exceeding the conflict level of the attack itself. If a peace treaty between contending nations was in place, women were more forgiving of an attack, and men were more aggressive. There was little overall difference in reactions to terrorist versus military attacks. Participants responded with a higher level of conflict to terrorist attacks on military than on cultural—educational targets.

The end of the East-West cold war and the fall of the Berlin Wall were triggers for major peace efforts and serious attempts to settle longstanding political disputes among nations. One of the most visible transitional events, of course. was the reunification of Germany, but there have been numerous other more recent examples of progress (and sometimes regress) in the Middle East, in Northern Ireland, on the Korean peninsula, in India/Pakistan, and elsewhere. These developments provided a context for recent trends toward peaceful international relations, and there was an enormous amount of literature produced by political scientists in an effort to understand these trends (e.g., Tanter, 1999; Volkan, 1999). But progress toward peace has recently been derailed by the shocking events of September 11, 2001, and the United States and many of its allies are currently engaged in an all-out new kind of war, a war against terrorism.

Over the 15 years before September 11, while peace-oriented international developments were

unfolding, we conducted a series of laboratory experiments, paralleling real international events, to examine how young citizens of the United States understand and react to episodes of international conflict and conflict resolution. The earliest of these studies explored military conflicts among nations, whereas the more recent studies contrasted military conflict with terrorist attacks and then focused on terrorism, fortuitously anticipating the events of September 11. One purpose of this work has been to determine whether there are any tried and true general psychological principles that might help to understand why international events unfold as they do, why political decision makers act the way they do, and how decisions made by diplomats might differ from those made by the general public. But it should be noted that participants in these studies, thus far, have been limited to college students. Generalizations from these results to real or expert political decision making are unclear, and their justification remains to be determined.

Priming and Personality in International Disputes

In all of our experiments, we ask young adult college student participants to evaluate mostly fictitious news reports describing aggressive acts against the United States or against an ally of the United States by a nonaligned, oppositional country.

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Priming

Our first study was modeled on the dispute between Great Britain and Argentina over the Falkland (Malvinas) Islands (Beer, Healy, Sinclair, & Bourne, 1987). The experiment began with a fictional scenario, read by participants, based on the then recently concluded (1982) confrontation. We asked participants to choose an appropriate reaction from a list of alternatives, graded in conflict level, for one fictitious country, called Afslandia, to take in response to an action taken by another fictitious country, Bagumba, over some disputed territory. The same request was repeated over several rounds of action and reaction between the two contending countries.

The main focus of this study was on the effects of priming: priming by texts read by some participants before any action decisions. One group of participants read a brief but compelling description of events leading up to World War II, focusing on the policy of Western statesmen in dealing with Germany's invasion of Czechoslovakia. The clear point of the story was that, when a country engages in warlike aggression against another country, escalation of conflict is inevitable and diplomatic efforts after peace are futile. Appeasement can only lead to wider, longer disputes. This description was written in a way so as to prime a conflictual, stand-up-for-your-rights attitude in readers. Another group read a description of the material and human costs of international conflict. The horrors of trench warfare during World War I, the suffering of military personnel on both sides, and the latent effects of this experience on the postwar morale and economies of contending countries were vividly described. This narrative was intended to prime cooperative, pacifist, nonconflictual responses. The remaining participants were given no priming text before they read the conflict scenario. Our theory was that any text about international interaction might call to the readers' mind one or more general schemas representing relevant or analogous previous experiences or knowledge. On the basis of what we know about priming, then, we expected that the first vignette would prime participants to adopt an aggressive attitude toward the contemporary conflict and that the second vignette would have the opposite effect.

Individual Differences in Personality

After we completed this study, reports began to appear supporting a role for individual personality variables in real-life political decision making. Satterfield and Seligman (1994), for example, suggested that it might be possible to predict high-level international decisions from the personal explanatory styles of political decision makers. They derived a measure of explanatory style for George Bush and Saddam Hussein, based on content analysis of public statements made by these two national leaders at various points in time during the Gulf War. Statements were scored on the dimensions of internality-externality of event control, stability-instability of event causes over time, and globality-specificity of event effects. From these scores, Satterfield and Seligman computed a composite measure of explanatory or attributional style for each leader. This composite measure was highly and reliably predictive of the level of aggression and degree of risk taking represented in the subsequent decisions and actions of Bush and Hussein. Interestingly, the correlations were higher for Bush, suggesting a greater reliance in his case on personal conviction as opposed to rational decision. A similar interest in individual differences also led us to measure, among our participants, certain personality traits (using the 16 PF; Institute for Personality and Ability Testing, 1979) that we thought might be related to political decision making regarding international disputes.

Experimental Results

We found that, relative to the no-priming control, both of the war-priming vignettes produced significant effects on the conflict level expressed in our participants' action responses. But these effects were not simple. Both primes potentiated high levels of aggressive reaction by those participants who were high on the dominant end of the 16 PF dominant-submissive personality trait. The opposite was true of submissive participants, those at the low end of the dominant-submissive scale. Submissive participants responded significantly more weakly than controls to conflictual acts by the other side when primed by either war-related vignette, as shown in Figure 1. These findings imply that the specific content of the priming vignette is less important

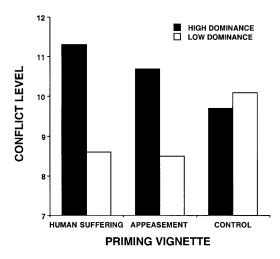


Figure 1. Mean conflict level recommended by participants in reaction to an enemy attack as a function of personality dominance level and nature of priming vignette (data from Beer et al., 1987).

than simply reminding participants about past wars. It seems that any war-related vignette will activate underlying personality predispositions that enhance or inhibit aggressive military decisions.

Results of the first experiment indicated that, at least for young American citizens, peace—war decisions are not necessarily undertaken on the basis of rational calculation of benefits and costs, although rational choice is surely a major part of real or elite political decision making. We suggest that decisions, especially those that are made serially and at a tactical level by ordinary citizens, are likely to be affected significantly by the schemas or images called to mind by the stream of events and by overall predispositions to respond submissively or dominantly. However, even in the real world of policy making, primes and personality might operate, possibly in subtle and informal ways, as signals or cues that flow through the stream of political events. Their effects might very well help to explain why different major players on the political scene—like Bush and Hussein during the Gulf War or Sharon and Arafat today react quite differently to the same events, events that might lead to cooperation and peace if reacted to in the same way by both sides.

The Role of Peace Treaties and of Gender

There was some suggestion in this first experiment that men and women react differently to acts of international aggression, as one might expect intuitively. But the numbers of men and women were not balanced across conditions. Thus, we corrected that flaw in subsequent studies, and the results highlight not only the influence of personality variations but also an extraordinary and unanticipated gender difference in naive political decision making. In the next study, we were primarily interested in the effect that the existence of a peace treaty might have on an individual's expression of conflict in reaction to an international attack. One might reasonably expect a peace treaty to minimize conflictual interactions between nations. The main question was, What happens if or when there is a transgression by one of the two parties to the treaty?

Effects of a Peace Treaty

Participants in our next study (Beer, Sinclair, Healy, & Bourne, 1995; see also Bourne, Sinclair, Healy, & Beer, 1996) were instructed to read through a test booklet, the first part of which contained items from the 16 PF, focusing on two bipolar dimensions, radicalism-conservativism and submissiveness-dominance. Next. participants read a background scenario describing an ongoing situation of intransigent regional conflict. In this case, the scenario was a fictionalized account of post-Gulf War activities in the Middle East, as Israel and the Arab countries attempted to work out a peace agreement. In our scenario, two neighboring countries are described as being locked in a historical struggle of tension and hostility. Afslandia is supported by the United States, and Bagumba is supported by its fictitious superpower ally, Calderon. After reading the background scenario, half of the participants read a simulated news story reporting the signing of a "historic peace agreement between Afslandia and Bagumba at Camp David." On the next page of the booklet, the following news flash appeared: "Bagumba's Artillery Opens Fire on Afslandia's Military Outpost Near the Border."

Participants were asked to respond to the news flash by choosing a reaction "that would be best for the United States [Afslandia's major ally] to support at this time in response to this news event." Twelve illustrative reactions, rank ordered in terms of level of conflict, were presented below a scale of numbers, 1–12. For

example, Number 4 was "The United States supports Afslandia's Foreign Minister in postponing a state visit to Bagumba, denouncing its recent hostile actions"; Number 7 was "The United States supports Afslandia in mining three of Bagumba's bridges and important industrial plants"; and Number 10 was "The United States supports Afslandia in using battlefield nuclear weapons against key command sites in Bagumba." The rank ordering and conflict levels of the sample of reactions presented to participants were determined in a separate norming study, reported in detail in Beer et al. (1995). It is important to keep in mind that these action items were described as examples representing quantitatively the different levels of possible retaliation. Participants were instructed to select an action number that was appropriate in terms of its level of aggression in response to the news flash. After their first action response, participants proceeded to the next page of the test booklet and were informed that "This news flash has just appeared. Despite Afslandia's response, Bagumba's artillery continues to fire on Afslandia's military outpost near the border." Participants were asked once again to respond to the news flash by choosing one of the 12 possible action alternatives that would be best for the United States to support at this time in response to this news event. In all, participants were asked to respond a total of five times to these repeated reports of aggression by Bagumba.

On a 1-12 scale, Bagumba's action—Bagumba's artillery firing on Afslandia's military outpost near the border—had a normative value of 8, as determined in the norming study. Figure 2 shows the average levels of conflict chosen by participants in each of five rounds of reaction to Bagumba, both as raw scores and as the best fitting equation. Two points are worth noting. First, the initial reaction of participants was at a level of conflict substantially lower than that of the initial act committed by Bagumba. There is something here that might be called forgiveness or the discounting of aggression. Participants' initial reaction to an unprovoked attack is relatively mild. Second, conflict level increased gradually over rounds, but it never exceeded the level of Bagumba's action. Participants appear to support the gradual escalation of hostility but only to a point of approximate reciprocity.

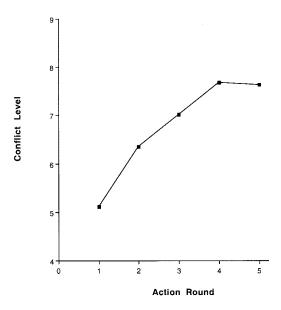


Figure 2. Mean conflict level as a function of action round (data from Beer et al., 1995).

Next, we looked at this trend over action rounds in light of four between-groups variables, namely, the existence or nonexistence of a peace treaty, the two personality variables created by partitioning participants at the median level of dominance-submissiveness and radical—conservative traits, and finally gender. The main effect of action round was highly significant but interacted with none of the four between-groups variables. There was no significant overall effect of peace treaty. Of the two personality variables, only dominance-submissiveness returned clear-cut results. High dominance participants were uniformly more conflictual (M = 7.26) than low dominance participants (M = 6.25), regardless of peace treaty, gender, or round. Conservative participants tended to be more conflictual across all action rounds than did liberal participants, but the difference was small and statistically unreliable.

Effects of Gender

What should we expect about gender? Traditionally, aggression is considered to be a masculine trait, and thus we might expect men to be more conflictual overall than women. But the literature on gender differences in decision making, such as it is, indicates little difference

between men and women over a variety of experimental situations. Still, there are important gender differences in many behaviors involving moral reasoning and interpersonal relationships (see, e.g., Eagly, 1987). According to Gilligan (e.g., Gilligan, 1982) and Buss (e.g., 1994), two authors with quite different perspectives on the matter, under circumstances in which a close relationship exists, women are more likely than men to search for ways to preserve that relationship. Women are generally more cooperative and compassionate in interpersonal interactions than men. Men, in contrast, seem more preoccupied with justice and with reaction in kind. Thus, even (or perhaps especially) when a relationship exists between two people, men seem more likely than women to act defiantly in the face of any active transgression by the other party. Does this translate to cases in which countries rather than individuals are the players?

In the data of the present experiment, the two genders showed essentially the same overall level of conflict in their action selections. However, and this is especially noteworthy in the light of earlier remarks about the differential importance of relationships to men and women, the presence of a peace treaty affected the two genders in diametrically opposed ways. As shown in Figure 3, there was a large and significant crossover interaction in action choices between gender and peace treaty. Men made more conflictual action choices in the presence of a peace treaty than in the absence of a peace treaty. Women, in contrast, made weaker conflictual action choices in the presence of a peace treaty than in its absence. Personality differences in the action choice data were statistically controlled by a linear regression analysis, so this effect is not attributable to a difference in dominance-submissiveness between the genders. Thus, the absence of an overall peace treaty or an overall gender effect in action choices is highly misleading. Peace agreements do have consequences and gender matters, but the effects are revealed only when the two variables are considered together. Especially when a relationship, signified by a peace agreement, exists between the two sides, men seem more

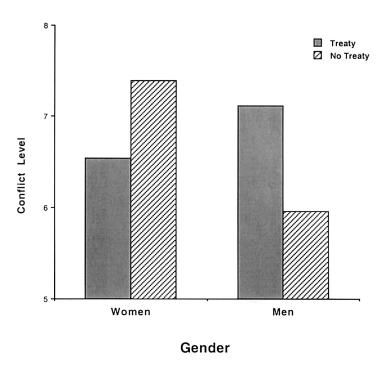


Figure 3. Mean conflict level as a function of gender and peace treaty condition (data from Beer et al., 1995).

likely than women to act defiantly in the face of any active transgression.

Generality of Interaction Between Peace Treaty and Gender

How stable are these results? Given the potential importance of a Peace Treaty × Gender interaction, we thought that it was necessary to replicate this finding. A replication also gave us the opportunity to extend the scope of the earlier studies, by including other acts of aggression as prompts or primes, in an effort to determine the generality of forgiveness, escalation, and reciprocity effects. In a follow-up study (Sinclair, Healy, Beer, & Bourne, 2002) based on the same Afslandia versus Bagumba scenario, we used three priming events (i.e., attacks of Bagumba on Afslandia) differing in conflict level, one higher, one lower, and one at the same level of conflict as in the preceding study. Personality measurements were taken as before, and participants were asked, after reading their prime, to respond in five action rounds. Our expectations were that participants would discount Bagumba's initial act of aggression but gradually escalate over five rounds to a level of conflict approximately equal to the prime, regardless of the level of the prime. Moreover, we expected to find a significant Gender × Treaty interaction at each prime level.

The data depicted in Figure 4 are consistent with these expectations in that participants did exhibit some initial forgiveness of the opposition's attack and escalated their retaliation in the face of continuing acts of hostility. Note that although participants' final level of conflict approximated the level of the prime for the primes of high and medium conflict levels, the final conflict level was higher than that of the prime when it was at a low level, suggesting a possible boundary condition on reciprocity.

Unlike the preceding study, there was an overall gender difference in these data, one that cannot be removed by controlling the significant difference between men and women in dominance—submissiveness. Overall, women were less conflictual than men, even when dominance differences were factored out. Our main interest, however, is in the Gender × Treaty interaction. As shown in Figure 5, that interaction was essentially the same as in the previous study. The interaction was not affected by any of the other variables in this experiment and

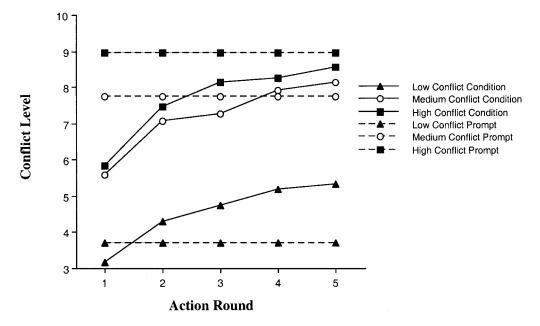


Figure 4. Mean conflict level as a function of action round and magnitude of prompt or prime (data from Sinclair et al., 2002).

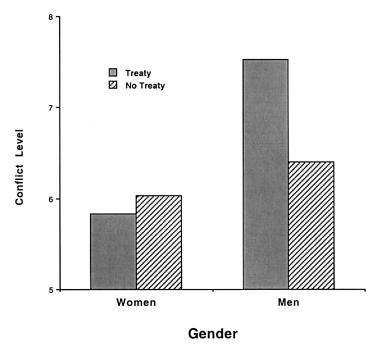


Figure 5. Mean conflict level as a function of gender and peace treaty condition (data from Sinclair et al., 2002).

appeared at all levels of prime, although it was numerically most pronounced at the midlevel prime.

Some Tentative Implications

In review, recommended responses by young citizens to military attacks by another nation tended to follow a pattern of reciprocity, with two important constraints. First, counterresponses tended to be initially forgiving or discounted. Second, however, counterreactions escalated over rounds, eventually approaching and sometimes exceeding the conflict level of the aggressor's attack. These action-reaction results might have some implications for the control of intransigent conflict. They suggest that the moves of each agent influence the countermoves of its opponent. Unilateral aggression, especially when it is repeated, risks expanding conflict: Saddam Hussein and the Arabs and Israelis stand as fairly recent historical examples of this principle. An interesting possibility is that unilateral deescalation, as exemplified in the politics of Mikhail Gorbachev, might have a similar downward ratcheting effect. We have

not yet examined this possibility but hope to do so eventually.

In the scenario read by some participants in the preceding experiment, Afslandia and Bagumba recently signed an agreement to maintain the peace in a region that had historically been rife with conflict. Naively, we expected the existence of this treaty to mitigate Afslandia's tendency to react in kind to Bagumba's hostility. But there was no consistent overall difference in the conflictual counterresponses of participants operating under the existence or the nonexistence of a peace treaty. The overall effect or lack thereof, however, does not tell the whole story. Our results suggest that peace treaties and identical international events can have substantially different meanings for men and women. For the female decision maker, the existence of a peace treaty between nations means that efforts after conciliation should be pursued, even in the face of a transgression. For the male decision maker, though, it provides the occasion for retaliation and revenge. If men are the decision makers in an unstable situation, it is probably best not to have a peace treaty, especially if it is tentative or preliminary to larger negotiations. Its violation will just exacerbate the problem. But if women are to make these decisions, preliminary peace treaties are to be sought after because they might minimize the level and probability of follow-up aggression.

Military Versus Terrorist Attacks

The experiments described thus far are limited in obvious ways. A particularly important limitation is their focus on only one type of conflict: conflict involving the military, occurring outside of the United States, and involving a fictitious ally and opposing nation. In recent times, many real-life conflictual acts have been executed by terrorist groups rather than by the military of another nation. There existed a substantial political science literature before September 11 focusing on terrorism and its specific implications for democracies, foreign policies, and international relations. Although the public view of terrorism might well have changed since September 11, this literature suggested that people generally think of terrorist acts as qualitatively different from and less serious than military engagements and of terrorists as not necessarily representative of their nation of origin (e.g., Crenshaw, 1986). But there are other obvious differences between terrorist and military attacks. For example, political scientists claim that terrorism, but not military action, exceeds the bounds of socially accepted violence, provoking a greater sense of moral violation (Crenshaw, 1986). Further, military attacks are designed to overwhelm an enemy, whereas terrorist attacks are symbolic in nature and are designed primarily to influence public opinion. There are other important differences between terrorism and "conventional" international disputes. The point is that citizens, as decision makers, might be expected to respond differently when their country or an ally is attacked by a terrorist group as opposed to the military, assuming of course attacks of equal severity. This literature inspired us to conduct a study comparing reactions to military and terrorist acts that were equated on other dimensions (Healy, Hoffman, Beer, & Bourne, 2002).

Differences in Reactions to Terrorist and Military Attacks

Most of what we know about public reaction to military versus terrorist aggression is based

on case studies or anecdotes. To collect more systematic empirical evidence, in a series of three experiments (Healy et al., 2002), we asked young adults to respond to conflictual events involving a terrorist group from an opposing country. It is critical to note that these experiments were completed before the events of September 11, 2001, and the results might be different today.

In one experiment, for half of the participants, a fictional attacking country, Bagumba, was said to have a peace treaty with a fictional ally of the United States, Afslandia. There was no peace treaty between Bagumba and Afslandia for the other half of the participants. For half of the participants in each of these groups, Bagumba's military attacks Afslandia, whereas, for the remaining participants, Afslandia is attacked by a state-sponsored terrorist group based in Bagumba. Military and terrorist attacks were described essentially in the same way, so any differences in the participants' responses to the attacks could not be attributed to differences normally confounded with this comparison.

The question put to participants was, in effect: How should Afslandia respond to these attacks? We were interested in any evidence that citizens might be more willing to forgive terrorist attacks than military attacks. As usual, participants increased their level of conflict in the face of repeated rounds of attacks of either type, military or terrorist. But there was an important interaction between round and type of attack. Despite the similarity in the descriptions of the military and terrorist attacks, participants responded initially with a greater level of conflict to military than to terrorist attacks. Eventually, however, with repeated attacks, the level of conflictual response to terrorist actions surpassed the level of response to military attacks so that, in the final rounds of this experiment, the level of reaction was greater to terrorist attacks than to military ones (see Figure 6). Presumably, participants view the initial terrorist act as an isolated event not worthy of strong retaliation but revise this view after repeated instances of terrorism. The repeated, temporally and geographically separated incidents of terrorism that occurred on September 11 might well have provoked a similar incremental reaction, although presently there are no data available to confirm or deny this possibility.

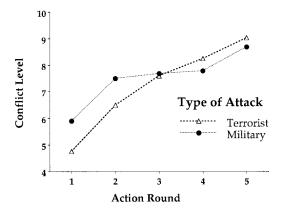


Figure 6. Mean conflict level as a function of action round and type of attack, terrorist or military (data from Healy et al., 2002).

The Democratic Peace Hypothesis

The results of the preceding experiment led us to focus in subsequent studies on terrorist attacks taking place in different political and geographical contexts. One political context that has been the target of a substantial body of recent literature in international relations is the form of government (or regime) of contending nations (see, e.g., Cederman, 2001, and Henderson, 2002, for recent discussions of this issue). A democratic peace hypothesis formulated by Russett (1993) implies that nations with a democratic form of government do not go to war against other democratic countries. A weaker version of this hypothesis is that democratic nations tend not to support attacks of any kind on each other (Maoz, 1997). Both versions are based on the arguments that (a) alternative diplomatic mechanisms for settling disputes are available to democracies and (b) shared cultural values mitigate conflict. On the basis of this hypothesis, one might expect that participants, who in our experiment are young citizens of a democracy, will respond less conflictually to an attack on the United States (or an ally) by another democratic nation than by a nondemocratic nation. But we have proposed an extension of this hypothesis based on the idea that participants are likely to treat two contending democratic countries as though they had an implicit peace treaty. If this is a reasonable assumption, then, on the basis of earlier findings, we would predict that female participants

will forgive and respond less forcefully to an attack by a democratic nation relative to one by a nondemocratic nation. Male participants, in contrast, will retaliate more vigorously to an attack by a democratic nation than to an attack by a nondemocratic nation.

The background scenario presented to participants at the outset of the next experiment described the country of Calderon, a superpower nation that often opposed the United States. For different participants, Calderon was said to have either a democratic or a nondemocratic government. According to the democratic peace hypothesis of Russett (1993), we would predict that reactions by our participants to any kind of attack by Calderon on the United States might be weaker if Calderon is a democracy than if it is a nondemocracy. But, on the assumption that there is an implicit peace treaty among democratic nations, Calderon's form of government (democratic or nondemocratic) might have an effect similar to the peace treaty variable, resulting in an interaction between gender and form of government.

Even though the United States has not been involved in any military conflict within its borders in modern times, it has suffered a number of serious terrorist attacks. In some cases, the attack has occurred within the United States (e.g., the attacks of September 11 on the World Trade Center in New York City and the Pentagon in Washington, D.C.). Other terrorist activities involving United States citizens or property have occurred within allied nations (e.g., the bombing of the United States embassies in East Africa or the more recent bombing of the USS Cole in Yemen). We were concerned in the present study with determining whether there is a difference in reaction to a terrorist attack on domestic versus foreign soil. Participants were asked to respond over successive rounds to a terrorist act perpetrated on U.S. citizens in five different venues—an office building housing the Coca Cola Company, a military barracks, a university campus, a cafe, and a tour bus located either inside or outside of the United States.

There was no overall difference in level of conflictual response attributable either to location of attack, inside or outside the United States, or to form of government of the attacking country. The latter result is, of course, inconsistent with predictions based on the demo-

cratic peace hypothesis (Russett, 1993). Participants' responses did increase in conflict over rounds, as in previous experiments, although the venue and nature of the attack varied over rounds in the present experiment. As shown in Figure 7, this escalation effect depended on the combination of the gender of the participant and whether or not the attack was made by a democratic country. During the last two rounds, men responded with more conflict to an attack by a democratic adversary than to an attack by a nondemocratic adversary, whereas women responded with more conflict to an attack by a nondemocratic adversary than to an attack by a democratic adversary. This outcome is in accord with predictions based on our extension of the democratic peace hypothesis and on an analogy between the relationship among democracies and the existence of an implicit peace treaty.

Although the sample of target sites was limited in this experiment, the general pattern of reactions observed suggested that the degree of retaliatory conflict recommended by citizens depended on where the attack took place. Citizens seemed to respond differently and more intensely to terrorist attacks occurring at a military base (such as in the bombing of the United States military barracks in Beirut) than in a nonmilitary setting (as in the tour bus bombing

in Egypt or the school bus bombing in Israel), possibly because an attack on the military is a more warlike act than an attack in a civilian setting. This possibility was explored more thoroughly in the next experiment.

Targets of Terrorist Attacks

In a final study, we varied systematically the site of the terrorist acts, distinguishing between clearly military and clearly cultural—educational sites. The offending country, Calderon, was described as democratic for half of the participants and as nondemocratic for the remaining participants. The nature of the terrorist act varied over six rounds, in this case all within the United States. For three rounds the target was military (a naval ship, an air force base, or a military barracks) and for the remaining rounds it was cultural—educational (a library, an art museum, or a university campus).

Target site had a major impact on participants' level of retaliation against a terrorist attack. Specifically, and possibly counterintuitively, participants responded with a significantly higher level of conflict overall to attacks on military targets than to attacks on culturaleducational targets. This outcome was expected given the results of the previous experiment and might be attributed to the fact that attacks by

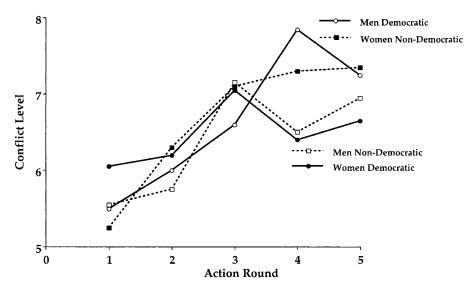


Figure 7. Mean conflict level as a function of action round, gender, and form of government of the attacking nation (data from Healy et al., 2002).

one country on the military establishment of another have historically led to escalation of conflict and eventually to states of war. Attacks on nonmilitary targets, in contrast, are often (or at least sometimes) discounted by the target country. Once again, it is possible that the events of September 11 have changed public opinion in this regard. In general, the results of this study, like the previous study, were inconsistent with predictions from the democratic peace hypothesis in that there was no main effect of type of government of the terroristsupporting country for either men or women. However, in the last round of the experiment, women responded with a somewhat higher level of conflict in the face of an attack by a nondemocracy than a democracy. Men, in contrast, showed the opposite pattern, responding with a somewhat higher level of conflict in the face of an attack by a democracy than in the face of an attack by a nondemocracy during the last round. Thus, the Gender × Form of Government interaction was evident numerically once again, as depicted in Figure 8, but, as in the last experiment, only after participants had experienced some number of previous aggressive episodes.

A division of participants in each counterbalancing group in this experiment into those relatively high and those relatively low on the submissive—dominant scale of the 16 PF yielded a significant interaction between personality group and round. This interaction reflects the fact that the more dominant participants responded with a higher level of conflict than did the more submissive participants, showing greater escalation of retaliation; however, as with form of government, gender, and certain other variables, the effect was evident only in the later rounds, as shown in Figure 9.

General Conclusions

We undertook these simple experiments as studies of the influence of media reports on public opinion regarding international disputes and terrorism. As such, they might or might not contain a larger message for international policymakers. After an overview of what these studies demonstrate, we briefly consider the question of generality and of possible implications for a deeper understanding of international relations. First, there are systematic action—reaction effects in simulated situations of interna-

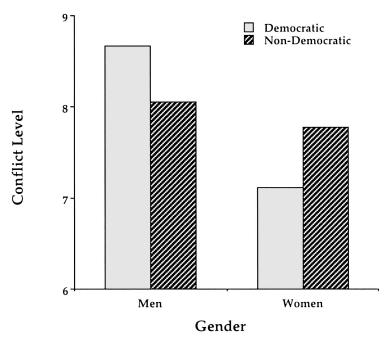


Figure 8. Mean conflict level in Action Round 6 as a function of gender and form of government of the attacking nation (data from Healy et al., 2002).

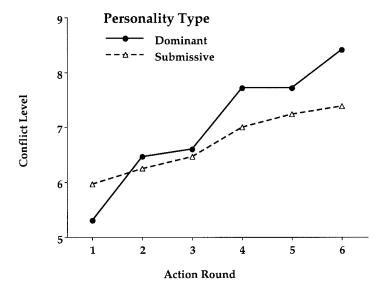


Figure 9. Mean conflict level as a function of action round and personality dominance level (data from Healy et al., 2002).

tional crisis and tension. College students, young voting-age citizens of this country, recommend measured reactions to reports of aggressive attacks by another country, either terrorist or conventional military attacks, discounted and tempered initially by forgiveness. But they become less tolerant if attacks persist, even when the target of attack changes across rounds. This pattern of forgiveness followed by escalation was enhanced for terrorist acts relative to military acts. Participants responded to terrorist acts less conflictually than to military attacks at the outset but more conflictually in the later rounds. Thus, to justify a strong and commensurate response to an opposing country, repeated acts of either state-sponsored terrorism or military action appear to be necessary. Once respondents have overcome their initial reluctance, however, they react even more strongly to terrorism than to a military attack. Note further that the specific target of a terrorist act has a significant effect on intensity of reaction. Perhaps counterintuitively, participants in our experiments responded with more overall conflict to terrorist attacks on military targets than to attacks on cultural-educational targets.

But these overall effects do not tell the complete story. There are major individual-differences variables operating in our experiments. Dominant individuals are more aggressive in their responses to an attack, especially when first primed by reminders of previous wars; submissive individuals are less aggressive with war priming. Moreover, identical international events appear to have substantially different meanings to men and women. With a peace treaty in place between nations, men, faced with reports of transgression, recommend strong retaliation. Under similar circumstances, women moderate their response relative to a no peace treaty condition. Further, along the same lines, gender of decision maker interacted with form of government of a terrorist-sponsoring nation. Participants appeared to interpret a shared form of government (democracy) as tantamount to an implicit peace treaty. By virtue of their common democratic form of government, two countries in dispute have ready-made formal diplomatic (i.e., nonconflictual) mechanisms for resolving their differences. But again, women appear to interpret these preexisting contractual relationships among nations differently than men. And

¹ In an informal seminar discussion of this effect, a student reported on a magazine interview with Virginia Woolf, published in the 1930s, that he had recently come across. Apparently, when asked what she would do to preserve world peace at that time of growing unrest in Europe, Woolf said, "Put women in charge." This answer, although simple and possibly naive, parallels some of our findings.

for that reason, women ultimately respond with less conflict in the face of an attack by a democratic country (with an implicit peace treaty) than by a nondemocratic country. Men, on the other hand, retaliate against contractual violation, ultimately responding with greater conflict to an attack by a democratic country than one by a nondemocratic country.

It is important to note that these interactive effects of gender and form of government were evident only in the later rounds of international dispute. There seems to be a general principle that certain variables exert their influence only after participants have had some amount of exposure to a conflictual international climate. Some conflictual acts may initially be ignored, excused, or forgiven, minimizing the impact of relatively subtle political variables (e.g., form of government) and individual-differences variables (e.g., gender). However, after repeated assaults, these variables become overriding and significantly influence the level of counterattack. The situation is similar for certain personality variables. More dominant participants responded with a higher level of conflict than did more submissive participants, but mostly in the later rounds or after being primed by war vignettes.

Thus, reactions to international disputes and attacks of one country on another change over time. Individual decision makers start out in a forgiving mode, such that some critical variables have little effect on their decision behavior initially. But as conflict and reaction to conflict escalate, these variables begin to manifest themselves. Thus, one possible bottom-line lesson from this research for policymakers who wish to take account of public opinion is that initial public reactions are likely to be quite different from subsequent reactions in the face of a continuing conflict. The current Arab–Israeli dispute is a poignant example.

One final comment is in order. The international system in which we live brings with it order and disorder, peaceful agreements and violent disturbances. Peace treaties, even tentative or preliminary ones, as for example in the Middle East or Northern Ireland, are usually seen as evidence of progress into a new age. But, as the world has often experienced, treaty violations can amplify conflict. The desirability of treaty agreements in real-life international relations might depend, as it does in our artifi-

cial laboratory situation, on the gender and personality of individuals in power. Although we are aware of the limits on psychological experiments, it might not be unreasonable to try out some of these laboratory-based principles in the real world. Even if there are fewer women than men or fewer submissive than dominant personalities active in today's international arena, politicians and diplomats might be well advised to take account of the facts of general psychology and of the psychology of individual differences. General psychology actually might have something to contribute to further peaceful progress in the current fragile post-cold war, terrorismthreatened international environment. In international relations, as elsewhere, general psychological variables involving memory, personality, and gender probably make a bigger difference than they are typically given credit

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