

## Testing the Role Effect in Terrorist Negotiations

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**Abstract.** This article examines the effects of role on terrorists' use of power and affiliative strategies in negotiation as a function of terrorist ideology, incident type, and the outcome that is achieved. Data were scores on eight behavioral scales designed to reflect the dynamics of 186 terrorist negotiations, as reported in detailed chronological accounts. Results supported the hypothesized one-down effect with terrorists' use of power-oriented strategies complemented by authority's use of affiliation-oriented strategies. The extent to which terrorists used aggressive strategies was related to the resolution of the incident, with attenuated outcomes more likely for those using more aggressive strategies. These dynamics differed across incident type, with aerial hijackings involving more overt power strategies than barricade-siege incidents, which were more likely to involve bargaining for certain outcomes. Finally, terrorist ideology and the associated identity concerns magnified the one-down effect, with religious fundamentalists engaging in more violence and less compromising strategies than terrorists with other ideological backgrounds.

**Keywords:** role, one-down effect, power, affiliation, complementarity, terrorism, ideology.

In a recent paper, Donohue and Taylor (2003) reviewed seven lines of research that provided data about the effects of role on strategy use in negotiations. Central to each line of work was evidence for a one-down effect. Specifically, negotiators who saw themselves as having fewer options than their opponents were more likely to resort to aggressive strategies as a way of seeking change in the power structure. The emphasis of these negotiators' dialogue was on defending a personal position by attacking the other party's social legitimacy and attempting to force the other into unnecessarily yielding on critical issues. In contrast, negotiators who perceived themselves as having a greater number

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of options were less threatened by the power structure of the situation and, consequently, were more likely to risk their social identity with affiliative and conciliatory dialogue. In other words, the role associated with the less powerful, "one-down" position typically fostered use of competitive, aggressive messages as a means of shifting power, even though that strategy can be least effective in reaching agreement (Levine and Boster 2001).

The purpose of this article is to explore this effect in the context of terrorist hostage-taking and negotiation. Data used to examine the role effect were derived from 186 descriptive accounts of terrorist incidents collected from the chronologies compiled by Mickolus and his colleagues (Mickolus 1980, 1993; Mickolus, Sandler, and Murdock 1989; Mickolus and Simmons 1997). The accounts selected contained sufficient descriptive material to enable a coding of the power and affiliative behaviors that occurred during the incidents as well as a coding of the way in which the incident ended. Of greatest interest are role differences exhibited by the various kinds of terrorists involved in these incidents. To understand these role differences, this article begins with a review of the literature that is perhaps most informative about the terrorist negotiation context. The article then considers these findings in the theoretical framework of the one-down effect, and uses this review to form hypotheses about the effect of role on terrorists' behavior and incident outcome.

## **Hostage Negotiation Research**

Early research into terrorist hostage-taking highlighted the interdependence between parties' cooperative and aggressive behavior and how this influences the dynamics of incidents. For example, Corsi (1981) used decision trees to show that acts of force by both terrorists and authorities can influence the response of the other party, as well as shape how the incident unfolds. By systematically modeling these relationships, other researchers (e.g. Sandler and Scott 1987) have noted the importance of complementary and reciprocal dynamics in the bargaining process between terrorists and authorities. As might be expected, these dynamics also associate differently with the possible outcomes of terrorist incidents. For example, in their descriptive analysis of politically motivated attacks, Friedland and Merari (1992) found relationships between factors such as the degree terrorists were armed and their subsequent commitment to the act. Finally, in developing this research from a psychological script perspective, Wilson (2000) highlighted the importance of negotiators' identity, as measured by differences in terrorist group, on the type of behaviors terrorists are prepared to use and the outcomes that they achieve.

More direct evidence of how role influences these behavioral relations

comes from research that focuses on the various language strategies used in hostage negotiation. For example, Donohue and Roberto (1993) studied communication strategies across 10 actual incidents in which police negotiators talked to hostage-takers with a variety of different role backgrounds (i.e. experienced criminals, mentally disturbed, domestic problems). The results indicated that the police negotiators controlled the amount and pace of the discussions and the topics that were considered. The police were also more likely than the hostage-takers to use collaborative relational messages that show support and provide information, whereas the hostage-takers were significantly more likely to use power strategies such as threats, demands, and language containing negative affect. Thus, while police negotiators sought to control interactions by controlling the emphasis on dialogue, they also recognized the need for affiliative messages to manage the disparity in power between the two parties.

Rogan and Hammer (1994) used another set of hostage negotiations to explore the importance of identity or facework in negotiations. Facework focuses on the issue of controlling one's identity and threatening the others' identity in an attempt to alter the individual's view of him or herself as being competent and in control of the situation. Rogan and Hammer discovered that the police negotiators relied heavily on trying to restore the hostage-taker's face (i.e. used language to portray the hostage-taker in positive terms) while the hostage-takers relied more on restoring their own face or making themselves look strong and in control. Thus, the perpetrators were much more focused on defending their own identities than the police negotiators, who showed little concern for personal identity and concentrated more on trying to support the perpetrators' identities.

In further exploring the importance of identity within role differences, Donohue and Roberto (1996) found that the hostage-takers in authentic contexts used more distributive or power-seeking strategies, made more demands, and proposed fewer integrative or win-win options than the hostage-takers or police negotiators in simulated contexts. Although these simulations were conducted by actual police negotiators, the role effect was not as significant as that found with actual hostage-takers, presumably because negotiators in simulated sessions have a lower commitment to their identity. The actual hostage-takers were significantly more interested in protecting their identities than individuals in any other category of negotiation.

The possibility of role orientations influencing negotiators' language choices is also evident in Taylor (2002a), who showed that messages typically orient around avoidance (withdrawn), distributive (competitive) and integrative (co-operative) approaches to interaction. Taylor argued that these broad orientations emerge from negotiators' interpersonal predispositions and personal

role expectations in the conflict, and showed that their characteristic behaviors formed a single dimension running from extreme crisis to normative problem solving. Consistent with Donohue and Roberto (1993), Taylor demonstrated that those negotiators holding firm to specific orientations tend to use communication behaviors that seek to aggressively increase power or concede power to open dialogue to more normative problem solving. Moreover, Taylor found that negotiators generally adopt consistent orientations to instrumental (task-focused), relational (trust and liking-focused), and identity (identity or face-focused) concerns at any one time, reasserting the central importance of roles to many aspects of negotiation dynamics (Wilson and Putnam 1990).

### **Theoretical Explanations for the One-Down Role Effect**

Based on this hostage negotiation research and findings from other contexts reviewed by Donohue and Taylor (2003), it appears that negotiators who see themselves as having fewer options in comparison to their opponents often seek to regain power through competitive, attacking dialogue, even though that strategy can be least effective in reaching agreement (Levine and Boster 2001). Hostage-takers, buyers, union negotiators, low-power political groups and husbands in a divorce negotiation rely on more power-oriented messages to promote a more competitive and more power-focused negotiation context. The emphasis of their dialogue is on gaining control in the interaction by attacking the other party's social legitimacy and attempting to force the other into unnecessarily yielding on critical issues. In contrast, the hostage negotiators, sellers, management negotiators, high power international negotiators, and wives use a broader range of communication choices including more affiliative and interest-focused messages. Because these negotiators have more options available that do not impinge on their overall position, they feel able to risk their social identity with more open and conciliatory dialogue.

The regulation of control and its attendant focus on power is an often used theoretical tool for explaining negotiation processes (Bacharach and Lawler 1986) as well as behavior in other interpersonal contexts (Bales 1970; Leary 1957; Mahalik 2000; Schmidt, Wagner, and Kiesler 1999). For example, the concept of losing control is the most widely accepted explanation for domestic violence in which violence emerges as a strategy for regulating control that has been threatened in some way (Eisikovits, Goldblatt, and Winstok 1999). According to this perspective, the extent to which the regulation of control becomes necessary depends on the prominence of identity. For violence to emerge there needs to be a high degree of concern and commitment to the social and personal identity that underlies an individual's position. Individuals

must value their identities, integrate them into all aspects of their social life, and work to defend them often. In order to defend their identity, individuals must also recognize norms and values in the social context that sanction violence as an acceptable and appropriate means of restoring one's identity. Being competitive and power-focused, or integrative and affiliation-focused, must be viewed as a normatively-sanctioned strategy for identity management. Finally, individuals need to frame situations in a way that calls for the use of violence or power strategies. That is, they must work to actively structure the situation so that power, threats, or violence are viewed as a legitimate response to that situation. Thus, for negotiators whose personal or professional lives grow from their identity as competent negotiators, situations that threaten control need to be perceived in such a way that power messages are seen as a legitimate way of responding to restore identity. The focus is on the identity and on the legitimization of force to restore it.

The importance of regulating control and power suggests that achieving symmetrical power may reduce the magnitude of the one-down effect. Pfetsch and Landau (2000) focus on the effect of power symmetry in international conflict. They contend symmetry is a necessary but not sufficient condition for successful negotiations. Properties of symmetry/asymmetry largely describe the relative potential power and strength of parties and thus power-role status. Patterns of role behavior along these dimensions are seen in the process of negotiation – lower-power parties will seek to negotiate on equal terms as the stronger party by cultivating non-material resources (e.g. actor, joint, procedural, issue-related techniques, etc.). Again, the lower-power party is likely to concentrate more on non-substantive issues as a means of equalizing power and reestablishing identity. In this context, police negotiators often talk about the need to quickly restore the hostage-taker's identity as a means of focusing on substantive issues (Donohue, Kaufmann, Smith, and Ramesh 1991).

However, role differences can also emerge from non-identity based biases (see Putnam and Holmer 1992 for a review). For example, Neale, Huber and Northcraft (1987) found that the assignment of negotiator roles, such as seller or buyer, was sufficient to cue gain and loss frames. Negotiators playing the role of sellers tend to view an outcome as a potential gain (i.e. those in an offensive role), and typically make more concessions and engage in more information seeking behaviors than buyers who tend to hold a negative frame. Negative frames are linked to escalation of conflict, potential impasse, strikes, and third party intervention. Negotiators entering interactions with negative frames are somewhat more likely to engage in defensive facework and somewhat less likely to engage in protective facework than are people entering negotiations with cooperative frames. For example, research indicates that buyers are more likely to have a negative frame than sellers, which is consistent with evidence

suggesting that buyers typically use more distributive behaviors than sellers (Drake 2001; Morley and Stephenson 1977).

The notion that power and expectations interact is evident in Olekalns and Frey's (1994) study of buyer-seller negotiations, in which framing was shown to be exaggerated by differences in power. High power positively framed and negatively framed negotiators are significantly advantaged by an imbalanced negotiation market in their favor. The interaction between expectations and perceptions of power may also account for the longer term oscillation between integrative and distributive behavior use reported by Druckman (1986). Evidence suggests that expressions of positive affect reverse the one-down phenomenon, prompting bargainers with positive frames to take advantage and engage in more risk seeking, more non-agreement, and less concession making than negotiators with negative frames. In other words, when a negotiator in a powerful offensive role perceives significant benefits to using the power, they may well use their advantage. This prompts an aggressive counter-response from the low-powered defender, which in turn forces the offensive negotiator to adopt more cooperative strategies to avoid a crisis or breakdown of the interaction. This pattern of interdependence may presumably continue indefinitely, so long as interactions do not cross a threshold of extreme hostility that leads to a breakdown irrespective of any subsequent cooperation (Taylor 2002b).

### **Using the Role Effect to Understand Terrorist Negotiations**

This review suggests that the one-down role effect of increased aggression during negotiation revolves around three key issues. First is the issue of *power complementarity*. In comparison to the other party, terrorists find themselves in a role that imposes more constraints on their ability to control the negotiation process and attain their desired outcomes. This reduced power places the terrorist in a one-down position that becomes more prominent over time as authorities develop tactical and negotiation positions. The response of many terrorists is to adopt this one-down position and threaten or actually use violence to generate fear, coercion, or intimidation in an effort to realign the balance in power (Russell, Banker, and Miller 1979). However, not only is the power structured differently, but also the strategic responses to the discrepancy are typically complementary. That is, the one-up party (e.g. the authorities) generally responds to this discrepancy with less aggression and more affiliative strategies.

However, associated with the one-down effect is a limit to power complementarity that comes in the form of attenuated outcomes. If terrorists adopt a

cooperative orientation to interaction, then the parties are able to develop normative dialogue that retains power complementarity and achieves better outcomes. In contrast, terrorists that adopt the one-down position are less likely to secure their desired outcomes because the increased aggression discourages the one-up party (i.e. authorities) from helping the other maximize gains. In particular, when the one-down party's behavior becomes extreme, then the one-up party often withdraws affiliation in favor of more aggression (Alexandrov 1979).

Second is the *prominence of identity*. For individuals more committed to sustaining their role identities for their professional or personal pursuits, such as terrorist and police negotiators, a key goal is to vigorously defend that public identity. Central to the beliefs and attitudes that form the terrorists' identity is an ideology (Crenshaw 1988; Hoffman 1999). A terrorist's ideological perspective provides a set of beliefs about the external world that not only fosters an identity around commitment to a cause, but also shapes expectations about the rewards of terrorism and dictates the extent to which the terrorists' goals are dependent on the cooperation of the authorities.

Although every terrorist has an individual identity, researchers have identified three major ideological perspectives (Hoffman 1999; Post, et al. 2002). The *nationalist-separatist* seeks to establish a geographically separate political state based on either ethnic or political criteria (e.g. Irish Republican Army, Popular Front for the Liberation of Palestine). These terrorists are often accountable to a developed criminal organization and are both trained and experienced in the terrorist role. The ideology itself is generally an extreme example of the beliefs and backgrounds of the immediate social group, such that these communities treat the role of terrorist with respect and importance (Silke 2003). However, because the community's beliefs also dictate the legitimacy of the terrorism, violence is typically planned, only used as necessary, and more likely to be directed away from harming innocents.

The *social revolutionist* uses terrorism as a way of drawing attention and applying pressure on the authorities to promise changes in social or economic order (e.g. Japanese Red Army). These terrorists necessarily possess a degree of interdependence with the authorities because their goals focus on fighting for improvement or change in a system of which they are already part. By using the threat of killing hostages as a bargaining tool, these terrorists expect to force authorities to compromise on a position or make concessions in support of their cause. However, since one of their aims is to gain support for the revolution, they are likely to avoid levels of aggression that would serve to reduce the public's sympathy (Wilson 2000).

Radically different from the two secular groups is *religious fundamentalist* terrorism, which is viewed as a "sacramental act" carried out in fulfillment of

some theological order (Hoffman 1999). While the focus of secular terrorists is on using terrorism to change some aspect of the current political or social order, the religious terrorist seeks to cause damage directly to a society. Their role is one of an extreme martyr figure who, in making an honorable sacrifice, would expect to receive both social recognition and rewards in the afterlife (Silke 2003). This set of goals means that religious terrorists have a clear out-group mentality and are likely to show little interdependence with authorities or hostages. They consider themselves as being at “total war”, such that greater use of violence is not only morally justified but a necessary expedient for the attainment of their goals (Hoffman 1999).

The third issue is *individual bias* from situational, task, and frame perspectives. The one-down role effect appears most likely to emerge when a number of individual biases start to develop. For example, when individuals define the task as revolving around a single issue they remove options for more collaborative trade-offs and more nuanced views of the conflict. Also, more aggressive strategies emerge when individuals perceive that violent means of addressing the issues are socially sanctioned, and they enter the conflict with a fixed sum bias and a negative frame. As noted by Corsi (1981), the propensity for these dynamics to emerge will vary across the types of terrorist incidents, since each type differs in terms of its setting, the available possibilities, and the way in which the interaction is played out. In this study, where the data are aerial hijackings and barricade siege incidents, these differences are likely to affect the degree terrorists use power-gaining and affiliative strategies. Specifically, the mobile nature of some aerial hijackings means that they are associated with extreme time-critical interactions, where the traditional attrition approach to negotiation is not necessarily appropriate or possible. In such contexts, negotiators often focus on the prominent alternative and take a more aggressive approach to interaction in an effort to reach a conclusion (Donohue et al. 1991). Moreover, the confined context of the aerial hijacking may lead hostage-takers to perceive themselves as being under greater threat from tactical strategies. Again, the response is to use power strategies that make overt threats in an attempt to discourage such actions.

## Hypotheses

To test the role effect in the terrorist negotiation context it is useful to focus on the power and affiliation negotiation strategies displayed by terrorists and their negotiation counterparts. These strategies are coded in the incident reports used as the dataset for this study. Power moves are defined as aggressive attempts to gain leverage in the incident. Affiliation moves are defined as direct

attempts to cooperate and bargain for suitable outcomes.

Based on these concepts and the issues that drive the one-down effect we put forward the following hypotheses:

- H1: Terrorists who reject the one-down role effect and rely more on affiliation moves by spending more time negotiating and showing a willingness to make concessions are more likely to secure their desired outcomes.
- H2: Terrorists who respond with the one-down effect will resort to power strategies as a way of seeking change in the power structure and are less likely to secure their desired outcomes.
- H3: Religious fundamentalist-oriented terrorists who are more personally committed to their identities are more likely than the other two terrorist groups to resort to power strategies as a means of seeking change in the power.
- H4: Aerial hijackings are more likely to involve overt power strategies compared to barricade-siege incidents, which are more likely to involve bargaining for certain outcomes.

## **Method**

### *Data Sample*

Data were 186 descriptive accounts of terrorist incidents collected from the chronologies compiled by Mickolus and his colleagues (Mickolus 1980, 1993; Mickolus, Sandler, and Murdock 1989; Mickolus and Simmons 1997). The accounts selected contained sufficient descriptive material to enable a coding of behaviors that occurred during the incidents as well as a coding of the way in which the incident ended. 100 of these accounts were aerial hijackings in which the perpetrators took control of an airplane or helicopter for a sustained period of time. The remaining 86 accounts were barricade-siege incidents in which the perpetrators took control of a public building (e.g. embassy) or a private location (e.g. bank). The selected incidents took place between 1968 and 1991, and were located in over 50 different countries. The incidents were reportedly committed by both autonomous perpetrators and perpetrators affiliating themselves with known terrorist organizations including the Black Panther Party, Islamic Jihad, the Irish Republican Army, and the Popular Front for the Liberation of Palestine. These affiliations allowed the incidents to be grouped according to whether they were associated with a nationalist-separatist, social revolutionary, or religious fundamentalist ideology (Post et al. 2002).

A content analysis of the descriptive accounts revealed a number of variables that reflected overt power moves and affiliative acts within the terrorist incidents. These behaviors were identified through a grounded approach to categorizing descriptions in which the coding scheme was continually expanded and refined until it effectively reflected the behavior of both terrorists and authorities (Glaser and Strauss 1967; Holsti 1969; Krippendorff 1980). The behavioral variables were scored in a dichotomous format as either absent (or information missing) or present across all of the 186 incidents. This method of analyzing the data was adopted following previous research findings (Taylor, Bennell, and Snook 2002; Wilson 2000) that show a dichotomous approach as effective in producing interpretable results from descriptive material whilst minimizing the opportunity for subjective and unreliable coding of the data.

The behavioral variables were found to form eight scales on which the terrorist incidents could differ. These scales focused on differences in negotiation behavior, but also reflected the other actions used by parties within the broader context of the terrorist attack. Table 1 reports the final eight scales with a definition of the categories that constitute each scale. Four of the scales depict power moves and were scored such that higher scores reflect more aggressive attempts to gain leverage in the incident. For example, the Control scale depicts terrorists' treatment of their hostages during the incident and runs from no attempt to control to killing of a hostage. Two of the scales depict the degree of affiliation shown by the terrorist and are scored with higher scores reflecting more direct attempts to cooperate and bargain for a suitable outcome. For example, the Negotiate scale runs from no dialogue to conciliation and so captures the extent to which terrorists are prepared to engage in substantive problem-solving. The remaining two outcome scales reflect the actions of the authorities in response to the terrorists. The Force scale measures the extent to which authorities carried out tactical behaviors beyond negotiation, with higher scores representing the use of more aggressive strategies during the incident. The Capitulation scale depicts the extent to which authorities complied with terrorists' demands and goals and was calculated so that higher scores reflect larger concessions.

Reliability of the transcript coding was assessed by having one independent coder apply the coding dictionary to descriptions of the aerial hijackings and a second coder apply the scheme to the barricade-siege incidents. The reliability of coding, measured at the individual behavior level with Cohen's Kappa (Cohen 1960), was .64 with 75 percent agreement for the Control scale (Range = .52 – .82); .87 with 92 percent agreement for the Damage scale (Range = .76 – .94); .74 with 76 percent agreement for the Demands scale (Range = .55 – .85); and .84 with 91 percent agreement for the Use of weapons scale (Range = .83 – .87). The two affiliation scales showed similar levels of reli-

*Table 1.* Definitions and scoring methods for power, affiliation, and outcome scales.

<i>Behavioral Scale</i>	<i>Description</i>	<i>Scores</i>
<i>Power Scales</i>		
Control	Extent to which the terrorists controlled or mistreated their hostages during captivity.	0 = No control 2 = Tied or gagged 1 = Threatened 3 = Physically harmed 4 = Killed
Damage	Extent to which the terrorists damaged the infrastructure of the plane or building being used.	0 = No damage 1 = Threaten damage 2 = Non-deliberate damage 3 = Deliberate damage
Demands	Number of the following demanded by the terrorists: asylum, general and specific release of prisoner, money, publicity, travel, or other.	0 = No demands 1 = One demand 2 = Two demands 3 = Three demands 4 = Four demands 5 = Five demands
Weapon use	Conditions in which the terrorists used their weapons.	0 = No use 1 = In response 2 = Spontaneously
<i>Affiliation Scales</i>		
Negotiate	Extent to which terrorists interacted with Authorities to reach a resolution.	0 = No dialogue 1 = Dialogue 2 = Negotiation 3 = Suggest alternative 4 = Conciliation
Release	Extent to which terrorists released hostages during the incident.	0 = Retention 1 = Release Women / Children 2 = Release some passengers 3 = Release All passengers
<i>Outcome Scales</i>		
Capitulation	Extent to which Authorities conciliated with terrorists to reach a resolution.	0 = Attrition 1 = Offers 2 = Concessions 3 = Allowed escape
Force	Extent to which Authorities use aggressive strategies to resolve the incident.	0 = No strategy 1 = Containment 2 = Tactical raid 3 = Terrorists killed

bility with Kappa equaling .97 with 98 percent agreement for the Conciliate scale (Range = .80 – 1.00) and .69 with 75 percent agreement for Negotiation scale (Range = .62 – .76). Finally, the reliabilities of the outcome scales were .79 with 88 percent agreement for the Capitulation scale (Range = .62 – .95) and .67 with 83 percent agreement for the Force scale (Range = .60 – .76). According to Fleiss (1981), a Cohen's Kappa of .40 to .60 is fair, .60 to .75 is good, and greater than .75 is excellent. Thus, these results indicate that the scales developed from the coded descriptions of the incidents are reliable.

## Results

A preliminary analysis of the interdependence among the scales revealed a positive correlation for power (Mean  $r = .23$ ) and a positive correlation for affiliation (Mean  $r = .30$ ), but no relationship between power and affiliation (Mean  $r = .03$ ). The small correlation between the power and affiliation measures was principally due to the power-orientated Demand scale, which correlated positively with both of the affiliation scales (Mean  $r = .30$ ). Recalculating the correlation between the power and affiliation scales with the Demand scale removed revealed a negative relationship between the two dynamics ( $r = -0.37$ ).

To test Hypotheses 1 and 2 that examine the impact of the terrorists' behavior on the incident resolution, we correlated the power and affiliation scales with the two outcome measures. Table 2 presents non-parametric correlations (Spearman's rho) that were calculated without taking into account cases in which both scale scores were zero (i.e. no behavior occurred). This modification is a common approach to dealing with accounts where the absence of a given behavior may not be taken as a definite indication that the behavior did not occur but only that it was not reported as having occurred. By ignoring joint non-occurrences, the correlations minimize the possible error created by this ambiguity and so are likely to provide a more accurate picture of the interrelationships among behaviors (e.g. Bennell and Canter 2002; Taylor, Bennell, and Snook 2002).

Consistent with predictions, the data presented in Table 2 indicate that the use of power and affiliation behaviors by terrorists have quite different associations with the degree that authorities capitulate. Of the power-orientated strategies, violently controlling hostages, damaging the building or aircraft, and extensively using weapons were all associated with lower levels of concessions from the authorities. The exception to this trend was the correlation for the Demand scale, which suggested a positive relationship between making more demands and concessions by the authorities. In contrast to the over-

Table 2. Pearson's distribution free correlation (rho) for behavioral scales by Authority's behavior.

Behavioral Scale	Authority's Behavior	
	<i>Capitulation</i>	<i>Force</i>
<i>Power</i>		
Control	-.43*	.26*
Damage	-.49*	-.08
Demands	.23*	-.11
Weapon use	-.56*	.20
<i>Affiliation</i>		
Negotiate	.47*	-.36*
Release	.28*	-.52*

NOTE: \*  $p < .05$  (two-tailed).

all negative correlations associated with the power scales, terrorists' use of affiliation strategies correlated positively with authorities' behavior. Both increases in terrorists' willingness to negotiate and their willingness to give up hostages were significantly associated with more concession-making by the authorities. Thus, consistent with Hypothesis 1, negotiators who take a more problem-orientated approach to the negotiation achieved better outcomes.

Correlations in the second column of Table 2 test the hypothesis that terrorists' use of aggressive behavior will influence the way authorities respond (Hypothesis 2). The correlations indicate that terrorists' use of aggressive strategies had a mixed effect on whether or not the authorities reciprocated with force. Specifically, higher levels of controlling behavior and weapon use were both related to greater use of force by the authorities, but the opposite was the case for the Damage and Demand scales. This suggests that the authorities may respond to attempts to gain power with personal aggression, but only after the occurrence of certain types of behavior, and not to a significant degree. In particular, only scores on the Control scale showed a significant correlation with the Force scale, which is consistent with the view that authorities will resort to aggressive tactics if hostages are being physically harmed or killed (McMains and Mullins 2001). This is a key exception to the role effect. The effect generally reveals a complementary behavioral pattern with the one-down participant demonstrating increased aggression while the one-up respondent is generally more affiliative. In the case of response to extreme terrorist power strategies, respondents appear to engage in reciprocal rather than complementary behavior.

Consistent with the expected complementary behavioral pattern of the role effect, the relationship between terrorists' use of affiliative behaviors and authorities' use of force was overwhelmingly negative. Both a greater willingness to negotiate and a greater willingness to release hostages showed a significant negative association with the Force scale, suggesting that the authorities were unlikely to use aggressive strategies when terrorists' were not acting to change the power structure of the situation.

Examining Hypothesis 3, Table 3 reports the mean score for each of the power and affiliation scales as a function of ideology, where the highest mean score is shown in bold. Consistent with Hypothesis 3, religious fundamentalists showed greater levels of aggressive strategies than both nationalist-separatist and social revolutionary terrorists on all but the Demand scale. Specifically, non-parametric one-way ANOVA's (Kruskal-Wallis 1952) revealed significant differences among the three groups in the degree of violence towards hostages,  $H(2,183) = 9.59, p < .05$ , the degree of damage during the incident,  $H(2,183) = 7.49, p < .05$ , and the use of weapons during the incidents,  $H(2,183) = 13.17, p < .05$ . For all three scales, post-hoc comparisons (Marascuilo and McSweeney 1977) revealed that religious fundamentalists used significantly higher levels of aggression than social-revolutionists (respectively,  $\psi = 37.8, 30.5, \text{ and } 40.6, p < .05$ ) and higher but non-significant levels of aggression compared to nationalist-separatists (respectively,  $\psi = 20.9, 15.5, \text{ and } 21.3, p > .05$ ). In terms of affiliative behavior, there was a significant difference among terrorist groups in their willingness to conciliate,  $H(2,183) = 11.21, p < .05$ , with religious fundamentalists being significantly less likely to release hostages compared to nationalist-separatists ( $\psi = -41.0, p < .05$ ) and social revolutionists ( $\psi = -21.7, p < .10$ ). There were no significant differences across the three ideologies in the willingness to use negotiation ( $H < 1, ns$ ).

Finally, the predicted differences (Hypothesis 4) among aerial-hijackings and barricade-siege incidents were examined by calculating the mean score for each of the power and affiliation scales as a function of incident type. Table 3 gives these means and reports in bold the larger of the scores between barricade-siege and hijacking incidents. A series of Mann-Whitney U tests across incident type revealed that aerial hijackers were significantly more likely to inflict damage to the incident location compared to perpetrators of barricade-sieges ( $U = 3441.0, z = -2.63, p < .05$ ) and that hijackers had a non-significant tendency to make greater use of their weapons than barricade-siege perpetrators ( $U = 4035.0, z = -0.82, p > .05$ ). In contrast to the hijackers focus on violence, perpetrators of barricade-siege incidents typically asserted power through verbal demands ( $U = 3546.0, z = 2.19, p < .05$ ). They also showed a non-significant tendency to support these demands by threatening and carry-

Table 3. Mean scale scores as a function of terrorist ideology.

Terrorist ideology			
Behavioral scale	<i>Nationalist-separatist</i>	<i>Social revolutionary</i>	<i>Religious fundamentalist</i>
<i>Power</i>			
Control	1.84 (1.69)	1.27 (1.60)	<b>2.47</b> (1.73)
Damage	0.86 (1.08)	0.52 (0.83)	<b>1.27</b> (1.28)
Demands	1.60 (0.78)	<b>1.87</b> (1.11)	1.53 (0.92)
Weapon use	0.78 (0.85)	0.46 (0.75)	<b>1.13</b> (0.83)
<i>Affiliation</i>			
Negotiate	<b>1.68</b> (1.49)	<b>1.68</b> (1.54)	1.60 (1.40)
Release	<b>1.89</b> (1.22)	1.43 (1.24)	0.93 (1.10)

NOTE: Standard deviations in parentheses.

ing out threats on the hostages compared to hijackers ( $U = 3894.0$ ,  $z = 1.17$ ,  $p > .05$ ). Consistent with this focus, barricade-sieges involved significantly more negotiation than aerial hijackings ( $U = 3545.0$ ,  $z = 2.15$ ,  $p < .05$ ) and were significantly more likely to involve the release of hostages than aerial hijackings ( $U = 3291.5$ ,  $z = 2.92$ ,  $p < .05$ ).

## Discussion

The data generally provide support for the three key dimensions of the one-down effect in the context of terrorist negotiation: a) complementary strategy

Table 4. Mean scale scores as a function of incident type.

Behavioral scale	<i>Type of incident</i>	
	<i>Aerial hijacking</i>	<i>Barricade siege</i>
<i>Power</i>		
Control	1.48	<b>1.71</b>
	(1.64)	(1.72)
Damage	<b>0.86</b>	0.55
	(1.03)	(0.94)
Demands	1.60	<b>1.90</b>
	(0.95)	(0.99)
Weapon use	<b>1.69</b>	1.58
	(0.85)	(0.79)
<i>Affiliation</i>		
Negotiate	1.50	<b>1.88</b>
	(1.60)	(1.36)
Release	1.31	<b>1.87</b>
	(1.27)	(1.16)

NOTE: Standard deviations in parentheses.

use with the one-down party behaving more aggressively and, as a result, achieving attenuated outcomes, b) the prominence of identity that can magnify the role effect, and c) the impact of situation on individual biases that affect the degree and type of behavior.

Specifically, the first dimension of the effect holds that those who define themselves in the one-down role and resort to aggressive strategies as a way of seeking change in the power structure are less likely to obtain the outcome they desire. In contrast, terrorists who spend more time negotiating and showing a willingness to make concessions are more likely to secure their desired outcomes. Interestingly, in the context of terrorist attacks, the behaviors that increase affiliation between the parties and led to better outcomes included

making excessive demands. Although this contradicts our expectations from other forms of negotiation where making excessive demands is considered an aggressive strategy, authorities in intense conflict situations may conceivably view any form of dialogue as cooperative and a helpful inroad to resolving the incident.

Regarding the prominence of role identity, when compared to nationalist-separatists and social-revolutionaries, the terrorists with a religious ideology typically used more aggressive strategies. This use was pervasive across the different kinds of aggressive strategies, which is consistent with the idea that these terrorists aim to maximize fear and threat rather than use these dynamics to achieve some other goal. Consistent with this notion, religious terrorists engaged in very little affiliative behavior compared to nationalist-separatists and social-revolutionaries. This unwillingness to engage in normative interaction illustrates the religious terrorist's lack of interdependence with the system they are attacking and their determination to achieve a set of goals without giving consideration to alternatives (Silke 2003). These findings suggest that identity plays a significant role in the evolution of terrorist negotiations and, consequently, that it is important to understand the cultural and social background of those terrorists authorities engage in negotiation.

However, it is important to note that there were some important variations across the hijacker and barricade-siege roles. Compared to barricade-siege incidents, hijackers typically i) used more overt aggression as a means of shifting power; ii) tended not to engage in negotiation; iii) tended not to use threats to the hostages as a way of gaining leverage in the incident or negotiation, and iv) were less likely to make concessions, presumably because they were less prepared to engage in any form of bargaining to obtain a certain outcome. The focus of aerial hijacks was on overt aggression to maximize the threat of the situation and force the authorities into capitulating. In contrast, the barricade-siege incidents were focused on more indirect attempts to change the power structure combined with normative bargaining for a resolution.

Perhaps the most significant implication of these findings is that in extreme circumstances the role effect takes some interesting twists. In less extreme conditions, such as buyer-seller negotiations, the one down effect generally reveals more conciliatory behavior from the higher-power party. The higher-power party experiments with reaching out to propose more negotiated options while focusing on the substantive nature of the conflict. However, in the current findings, when the lower-power party (i.e. the terrorist) engaged in extreme aggression, the higher-powered authorities quickly reciprocated with tactical attempts to resolve the dispute.

One explanation for this role-effect twist comes from research in game theory. Some studies in this area have explored the relative impact of small and

large discrepancies in initial power between subjects. Research supports an “inverted U-shaped” relationship between relative threat capacity (how much each side can harm the other’s position) within a bargaining game and indexes of contending (e.g. counterthreats, penalty use, unwillingness to yield to a threat). Hornstein (1965) and Vitz and Kite (1970) found that contending was more prominent when there was mild discrepancy in threat capacity than when there was equal or highly unequal threat capacity. Hornstein, in particular, provided evidence that the low-power negotiator was unwilling to accept lower status in the mild discrepancy condition, and fought for equal treatment (i.e., followed threats with aggressive behavior) to a much greater extent than when confronted with a highly unequal discrepancy.

This discrepancy-size explanation would predict that terrorists who perceive mild discrepancies in power levels would be more willing to use highly contentious and deadly strategies to equal power whereas those who perceive highly unequal threat capacity would be more willing to negotiate. Does this finding suggest that an important strategy for fighting terrorism is continuous muscle-flexing by the higher-power party to discourage terrorist aggression? There is considerable debate about the appropriateness of using force in general to combat terrorism, with critics highlighting that such action can confirm the terrorists’ self image as heroic martyrs, increase the demand for revenge, and potentially add to those who identify with the cause (Enders, Sandler, and Cauley 1990; Seger 2003). However, within the context of negotiating with terrorists, it may prove a useful strategic complement to traditional attrition-focused techniques.

Future research examining the role effect in a terrorist context ought to extend into more in-depth analyses of actual terrorist incidents. For example, in the current analysis we implicitly viewed the behaviors of terrorists as leading to certain “responses” by the authorities. However, the actions of authorities and terrorists are necessarily intertwined, such that an authority’s actions are likely to have an equally significant effect on the strategies terrorists’ perceive as useful to pursue and the way they expect the authorities to react. The result is that certain actions by the authorities will work to lower the aggression used by terrorists, while others may shift the focus of aggression away from afflicting damage and towards attempts to control the bargaining process. Extending this line of argument to the longer-term, we might also consider the possibility that terrorists’ initial behaviors are shaped by expectations derived from authority’s responses to previous incidents.

Understanding how negotiators influence one another during the bargaining process could be addressed by obtaining actual interactions between terrorists and authorities to gain a more refined understanding of how these negotiations evolve. The data set examined here offers only secondhand accounts of activ-

ities in these incidents, and the utility of the analysis hinges on whether the behavioral scales adequately capture the complex dynamics of the interaction (Mickolus 1987). Actual interactions would provide a far more detailed picture of how terrorists and authorities define and implement their roles. Far from being a mere academic exercise, the development of such a body of knowledge can be of direct use to negotiators and policymakers attempting to save lives in terrorist crisis negotiations.

## References

- Alexandroff, A. (1979) *Symmetry in international relations*. Ithaca, NY: Cornell University Press.
- Bacharach, S.B., and Lawler, E.J. (1986) "Power dependence and power paradoxes in bargaining". *Negotiation Journal* 86: 167–174.
- Bales, R.F. (1970) *Personality and interpersonal behavior*. New York: Holt, Rinehart, and Winston.
- Bennell, C., and Canter, D.V. (2002) "Linking commercial burglaries by modus operandi: Tests using regression and ROC analysis". *Science and Justice* 42: 153–164.
- Cohen, J.A. (1960) "A coefficient of agreement for nominal scales". *Educational and Psychological Measurement* 20: 37–46.
- Corsi, J.R. (1981) "Terrorism as a desperate game: Fear, bargaining, and communication in the terrorist event". *Journal of Conflict Resolution* 25: 47–85.
- Crenshaw, M. (1988) "The subjective reality of the terrorist: Ideological and psychological factors in terrorism". In R.O. Slater and M. Stohl (eds.), *Current perspectives on international terrorism*. London: Macmillan Press.
- Donohue, W.A., and Roberto, A.J. (1993) "Relational development as negotiated order in hostage negotiation". *Human Communication Research* 20: 175–198.
- Donohue, W.A., and Roberto, A.J. (1996) "An empirical examination of three models of integrative and distributive bargaining". *International Journal of Conflict Management* 7: 209–229.
- Donohue, W.A., and Taylor, P.J. (2003) "Role effects in negotiation: The one-down effect". Unpublished manuscript, Michigan State University.
- Donohue, W.A., Kaufmann, G., Smith, R. and Ramesh, C. (1991) "Crisis bargaining: A framework for understanding intense conflict". *International Journal of Group Tensions* 21: 133–154.
- Drake, L.E. (2001) "The cultural-negotiation link: Integrative and distributive bargaining through an intercultural lens". *Human Communication Research* 27: 317–349.
- Druckman, D. (1986) "Stages, turning points, and crises: Negotiating military base rights, Spain and the United States". *Journal of Conflict Resolution* 30: 327–360.
- Eisikovits, Z., Goldblatt, H., and Winstok, Z. (1999) "Partner accounts of intimate violence: Towards a theoretical model". *Families in Society: The Journal of Contemporary Human Services* 80: 606–619.
- Enders, W., Sandler, T., and Cauley, J. (1990) "UN conventions, technology and retaliation in the fight against terrorism: An econometric evaluation". *Terrorism and Political Violence* 2: 83–105.

- Fleiss, J.L. (1981) *Statistical methods for rates and proportions*. New York: Wiley.
- Friedland, N., and Merari, A. (1992) "Hostage events: Descriptive profile and analysis of outcomes". *Journal of Applied Social Psychology* 22: 134–156.
- Glaser, B.G. and Strauss, A.L. (1967) *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Hoffman, B. (1999) *Inside Terrorism*. New York: Columbia University Press.
- Holsti, O.R. (1969) *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley.
- Horstein, H.A. (1965) "Effects of different magnitudes of threat upon interpersonal bargaining". *Journal of Experimental Social Psychology* 1: 282–293.
- Krippendorff, K. (1980) *Content analysis: An introduction to its methodology*. Beverly Hills, CA: Sage.
- Kruskal, W.H., and Wallis, W.A. (1952) "Use of ranks in one-criterion variance analysis". *Journal of the American Statistical Association* 47: 583–621.
- Leary, T. (1957) *Interpersonal diagnosis of personality*. New York: The Ronald Press.
- Levine, T.R., and Boster, F.J. (2001) "The effects of power and message variables on compliance". *Communication Monographs* 68: 28–48.
- Mahalik, J.R. (2000) "Gender role conflict in men as a predictor of self-ratings of behavior on the interpersonal circle". *Journal of Social and Clinical Psychology* 19: 276–292.
- Marascuilo, L.A., and McSweeney, M. (1977) *Nonparametric and distribution-free methods for the social sciences*. Belmont, CA: Wadsworth.
- McMains, M.J., and Mullins, W.C. (2001) *Crisis negotiations: Managing critical incidents and hostage situations in law enforcement and corrections* (2nd ed.). Cincinnati, OH: Anderson.
- Mickolus, E.F. (1980) *Transnational Terrorism: A Chronology of Events, 1968–1979*. London: Aldwych Press.
- Mickolus, E.F. (1987) "Comment – Terrorists, governments, and numbers: Counting things versus things that count". *Journal of Conflict Resolution* 31: 54–62.
- Mickolus, E.F. (1993) *Terrorism 1988–1991: A Chronology of events and a selectively annotated bibliography*. Westport, CT: Greenwood Press.
- Mickolus, E.F., and Simmons, S.L. (1997) *Terrorism 1992–1995: A chronology of events and a selectively annotated bibliography*. Westport, CT: Greenwood Press.
- Mickolus, E.F., Sandler, T., and Murdock, J.M. (1989) *International Terrorism in the 1980s (vol. 2, 1984–1987)*. Ames, IO: Iowa State University Press.
- Morley, I., and Stephenson, G. (1977) *The social psychology of bargaining*. Cambridge, MA: Harvard University Press.
- Neale, M.A., Huber, V.L., and Northcraft, G.B. (1987) "The framing of negotiations: Contextual versus task frames". *Organizational Behavior and Human Decision Processes* 39: 228–241.
- Olekals, M., and Frey, B.F. (1994) "Market forces, negotiator frames and transaction outcomes". *European Journal of Social Psychology* 24: 403–416.
- Pfetsch, F.R., and Landau, A. (2000) "Symmetry and asymmetry in international negotiation". *International Negotiation* 5: 21–40.
- Post, J.M., Ruby, K.G., and Shaw, E.D. (2002) "The radical group in context 2: Identification of critical elements in the analysis of risk for terrorism by radical group type". *Studies in Conflict and Terrorism* 25: 101–126.
- Putnam, L.L., and Holmer, M. (1992) "Framing, reframing, and issue development". In L. Putnam and M. Roloff (eds.), *Communication and negotiation* (pp. 128–155). Newbury Park, CA: Sage Publications.

- Rogan, R.G., and Hammer, M.R. (1994) "Crisis negotiations: A preliminary investigation of facework in naturalistic conflict discourse". *Journal of Applied Communication Research* 22: 216–231.
- Russell, C.A., Banker, L.J., and Miller, B.H. (1979) "Out-inventing the terrorist". In Y. Alexander, D. Carlton, and P. Wilkinson (eds.), *Terrorism: Theory and Practice*. Boulder, CO: Westview.
- Sandler, T., and Scott, J.L. (1987) "Terrorist success in hostage taking incidents: An empirical study". *Journal of Conflict Resolution* 31: 35–53.
- Schmidt, J.A., Wagner, C.C., and Kiesler, D.J. (1999) "Covert reactions to big five personality traits: The impact message inventory and the NEO-PI-R". *European Journal of Psychological Assessment* 15: 221–232.
- Seger, K.L. (2003) "Deterring terrorists". In A. Silke (ed.), *Terrorists, victims and society: Psychological perspectives on terrorism and its consequences*. Chichester, UK: Wiley.
- Silke, A. (2003) "Becoming a terrorist". In A. Silke (ed.), *Terrorists, victims and society: Psychological perspectives on terrorism and its consequences*. Chichester, UK: Wiley.
- Taylor, P.J. (2002a) "A cylindrical model of communication behavior in crisis negotiations". *Human Communication Research* 28: 7–48.
- Taylor, P.J. (2002b) "A partial order scalogram analysis of communication behavior in crisis negotiation with the prediction of outcome". *International Journal of Conflict Management* 13: 4–37.
- Taylor, P.J., Bennell, C., and Snook, B. (2002) "Problems of classification in investigative psychology". In K. Jajuga, A. Sokolowski, and H.H. Bock (eds.), *Classification, clustering, and data analysis: Recent Advances and applications*. Heidelberg: Springer.
- Vitz, P.C., and Kite, W.R. (1970) "Factors affecting conflict and negotiation within an alliance". *Journal of Experimental Social Psychology* 5: 223–247.
- Wilson, M.A. (2000) "Toward a model of terrorist behavior in hostage-taking incidents". *Journal of Conflict Resolution* 44: 403–424.
- Wilson, S.R., and Putnam, L.L. (1990) "Interaction goals in negotiation". In J. Anderson (Ed.), *Communication yearbook* 13: 374–406. Newbury Park, CA: Sage.