

Interaction Patterns in Crisis Negotiations: Persuasive Arguments and Cultural Differences

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Running Head: Persuasive strategies and Cultural patterns

Abstract

This research examines cultural differences in negotiators' responses to persuasive arguments in crisis (hostage) negotiations over time. Using a new method of examining cue-response patterns, we examined 25 crisis negotiations in which police negotiators interacted with perpetrators from low- or high-context cultures. Compared to high-context perpetrators, low-context perpetrators were found to use more persuasive arguments, to reciprocate persuasive arguments in the second half of negotiations, and to respond to persuasive arguments in a compromising way. Further analyses found that low-context perpetrators were more likely to communicate threats, especially in the first half of the negotiations, but that high-context perpetrators were more likely to reciprocate them. The implications of these findings for our understanding of inter-cultural interaction are discussed.

Interaction Patterns in Crisis Negotiations: Persuasive Arguments and Cultural Differences

On August 12, 2002, a Dutch volunteer named Arjan Erkel was kidnapped while working on the Médecins sans Frontières medical aid program in Dagestan, a Republic of the Russian federation. The response of the authorities to this incident was to engage the perpetrators in dialogue and persuade them to release, and not physically harm, the volunteer. The subsequent negotiations involved multiple threats to the volunteer's life, and resulted in 607 days of captivity before the volunteer was released (Hargreaves & Cunningham, 2004). One factor that undoubtedly complicated the negotiations was the misconceptions that arose from the different cultural backgrounds of those involved. For example, in his review of the negotiations, Van Zwol (2005) shows how the Russian perpetrators were not only rather circuitous in their approach, but also how they anticipated indirect messages from the Dutch negotiators, who were in contrast more explicit and upfront in their communication. Understanding how such high-stakes negotiations are influenced by cultural differences can help authorities to manage hostage incidents effectively in an increasingly violent and globalizing world.

Police forces in the US and Europe have reported a significant growth in the cultural diversity of the perpetrators of kidnappings and extortions (Giebels, 1999; Ostermann, 2002; Taylor & Donohue, 2006). This trend reasserts the need for scholars to identify cultural differences in approaches to interaction, as well as understand how violent individuals from these cultures are likely to react to efforts to dissuade them from causing harm. Such an understanding has applications in a range of settings where factors such as high-stakes and distrust can make individuals suspicious of behavior that diverges from their culturally-driven expectations (Ember, 1988). In the crisis negotiation context, a more sophisticated understanding of cross-cultural communication will help police formulate culturally sensitive negotiation strategies and enhance their appreciation of why perpetrators react the way they

do (Yang, Wu, & Huang, 2007). For example, understanding the different ways in which cultures respond to and use persuasive arguments will enable a police team to frame negotiation strategies in a way that works with, rather than against, a perpetrator's interpersonal approach. In this article, we respond to these possibilities by examining the negotiation dynamics of 25 actual crisis negotiations perpetrated by individuals from different cultural backgrounds. Culture is often defined as the characteristic profile of a society with respect to its values, norms, and institutions (Lytle, Brett, Barsness, Tinsley, & Janssens, 1995). It is an important determinant of people's attitudes, self-construal, and behavior, and hence their strategic choices in conflict situations (cf. Pruitt & Kim, 2004). Efforts to understand the impact of intercultural dynamics on negotiation have generally taken one of two perspectives. One line of research has sought to understand how the outcomes of conflicts are affected by cultural factors such as social identities and cultural stereotypes (Faure, 2002, 2003; Gelfand, Nishii, Holcombe, Dyer, Ohbuchi, & Fukuno, 2001; Macduff, 2006; Tjosvold & Sun, 2000). This research has revealed, for example, how divergent framing of messages and poor understanding of cultural values can lead to non-optimal outcomes and escalations of conflict (Hammer & Rogan, 2002). A second line of research has considered how negotiators respond to key negotiation behaviors, such as information sharing and pressure tactics (Adair & Brett, 2005; Adair, Okumura, & Brett, 2001; Tinsley, 1998, 2001). These studies examine the way in which negotiators use culturally normative negotiation behaviors and how their use is linked to the utilization or otherwise of integrative potential. By focusing on the actual building blocks of negotiation, these studies are able to make a significant contribution to our understanding of the communicative process that underlies and structures negotiation.

In this article, we take the second of these two approaches and build on the existing literature in two ways. First, we extend the focus of previous studies, which has typically been

on the use of integrative bargaining strategies (e.g., information sharing), by emphasizing the role of distributive forcing strategies. Forcing strategies are those strategies of influence (French & Raven, 1959) by which a negotiator tries to satisfy individual goals and gain advantage over the other party (Deutsch, 1974; Lewicki, Saunders, & Minton, 1997). Forcing strategies may be particularly prevalent in high-stakes, crisis scenarios because they are not bound by the normative framework of cooperation and role obligation that define day-to-day negotiations (Roger & Schumacher, 1983). Moreover, crisis negotiations are typically win-lose in structure and usually contain little integrative potential. In line with this reasoning, research by Donohue and Roberto (1993) shows that negotiators in crisis situations focus on power issues such as “who is in charge” and “how can I force the other”, rather than on substantive issues such as identifying win-win solutions.

In conceptualizing forcing strategies, research distinguishes between two main categories of forcing behavior: persuasive arguments and threats. Persuasive arguments aim to convince the other party to comply with one’s own proposals by using task-related arguments and logic (Giebels, De Dreu, & Van de Vliert, 2003). In contrast, threats communicate the intention to punish the other party if they do not concede (Deutsch & Krauss, 1962). Research addressing the use of forcing behavior in negotiation traditionally focuses on the communication of threats (Deutsch & Krauss, 1962; Tedeschi, Schlenker, & Bonoma, 1973). More recently, research has also taken into account persuasive arguments (e.g., Adair & Brett, 2005; Adair et al., 2001), although little research has considered both strategies simultaneously, nor differentiated persuasive arguments from the communication of threats. This is surprising, since there is evidence to suggest that both types of forcing behavior are different in their effects. For example, two experiments by Giebels et al. (2003) demonstrate that threats and persuasive arguments are not correlated and that a negotiator’s social value orientation influences the use of threats but not persuasive arguments. Another study by

Giebels, De Dreu, and Van de Vliert (1998) shows that negotiators with a power advantage communicate more threats than negotiators with a power disadvantage, while the opposite is true for persuasive arguments. In this study, therefore, we differentiate persuasive arguments from the communication of threats. We also focus our hypothesis development on persuasive arguments, since this strategy is the less examined of the two and one that it arguably important to cross-cultural crisis negotiations. Specifically, while the precise effects of persuasive arguments on negotiation have yet to be explored, many negotiation handbooks advice negotiators to develop and use arguments to support their claims, based on the notion that persuasion may change the opponent's understanding of reality, enhance the probability that one's claim is seriously considered, and reduce the chance that the other person feels personally attacked (e.g., Fisher, Ury, & Patton, 1991; Lewicki, Hiam & Wise Olander, 1996; Neale & Bazerman, 1991; cf. Harinck, 2004). This is a concern since evidence suggests that the salience of such rational strategies may be dependent on culture (Drake, 1995; Fu & Yukl, 2000; Grice, 1975), which in turn opens up the possibility that they may be more or less effective as a strategy in different cultures. Moreover, this dependence on culture may be particularly prevalent in negotiations with win-lose structures and a focus on individual gains (Adair & Brett, 2004), which are both factors that characterize crisis negotiations. Thus, given this evidence, it appears particularly important to better understand the role of persuasive arguments in cross-cultural negotiations.

Second, we focus our examination of cultural differences at the micro-level of cue-response patterns. This focus represents a significant departure from previous research, which has typically examined cultural differences in terms of the frequency of behavior use across several time periods. A focus on the interrelationships among behaviors allows our analysis to consider how culture impacts on the way in which negotiators interpret and respond to a message or series of messages. Indeed, there is growing evidence to suggest that the order in

which behaviors occur—the interrelationships among behaviors—has a significant impact on their meaning and influence on the negotiation (Adair, 2003; Adair & Brett, 2005; Giebels & Noelanders, 2004; Taylor, 2002a; Taylor & Donald, 2003, 2004). Interestingly, these impacts are not always the result of conditional responses, but are often the result of delayed responses to a key behavior, or responses to a particular pattern of previous behaviors (Taylor & Donald, 2007). Thus, understanding the actual make up of interaction is important for negotiation theory because it provides insight into the process by which various cues and responses come together to allow a conflict to begin, unfold, and resolve. It is also important to an applied psychology of negotiation, since crisis negotiators can make best use of strategies that work to influence a perpetrator at any given moment, rather than in an aggregate fashion.

Cultural Dimensions and Negotiation Behaviors

The preceding section presented the foundation of our approach to examining negotiation behavior and, in particular, persuasive arguments. In this section, we consider the existing literature on cross-cultural interaction and draw hypotheses about the types of cue-response contingencies that will dominate the behavior of perpetrators from different cultural backgrounds. Because culture influences the way in which people communicate, and our study focuses on the communicative dynamics of crisis negotiations, we use Hall's (1976) theory of low/high context communication to build our hypotheses. According to Hall, low-context communication involves the use of explicit and direct messages in which meanings are principally contained in the transmitted messages. In contrast, high-context communication is characterized by messages in which information is more hidden and meaning is located in the social or physical context of the negotiation. Hall argues that people in a culture use both low and high context communication, but that one tends to be dominant (cf. Gudykunst & Matsumoto, 1996). Generally, low context communication is predominant

in individualistic cultures while high context communication is found to be predominant in collectivistic cultures (Gudykunst & Ting-Toomey, 1988; Hofstede, 2001; Triandis & Suh, 2002). For example, Triandis (1994; p. 184-185) states that "...while people in collectivistic cultures pay more attention to context...in individualistic cultures people speak clearly ...and it is possible to discuss different viewpoints objectively". Ting-Toomey and Oetzel (2001, p. 31) explain this strong link, particularly in relation to conflict management, by arguing that for cultures that emphasize "I-identity" and self-initiative, the ideal way of resolving conflict is to talk and discuss it directly. In contrast, in cultures that emphasize values of relational harmony, the ideal way of conflict management is to talk around the point and not deal directly with the issues at stake. This means that the majority of individualistic, Western societies, especially in Northern Europe and the US, can be considered low-context cultures, while the majority of collectivistic, non-Western societies, such as China and Russia, may be considered high-context cultures (Hofstede, 2001, p. 212; see also, Adair, 2003; Adair & Brett, 2005).

Use of Persuasive Arguments

Hall (1976) identified fundamental differences in the way people from different cultures communicate and labeled these differences as "low-context" or "high-context", referring to the importance of the explicit content of the message versus the context. This distinction suggests that negotiators from low-context cultures, in comparison to their high-context counterparts, will focus on sending and receiving accurate messages and defining the interaction principally in terms of message content (i.e., low-context communication). In contrast, those from high-context cultures will focus on sending and receiving messages in which information is more hidden and meaning is located in the social or physical context of the negotiation (i.e., high-context communication). These notions are consistent with previous

research showing that low-context US negotiators are more likely than high-context Japanese negotiators to exchange information directly (Adair et al., 2001; Graham, 1993).

However, it may also have consequences for different types of forcing behaviors. An important assumption that is characteristic of low-context communication is what Grice (1975; see also Gudykunst & Matsumoto, 1996) labeled the *quality maxim*: one should state only that which is believed to be true with sufficient evidence. This maxim implies that low-context communication is typically centered around logic and rationality compared to high-context communication (cf. Adair & Brett, 2004). In a similar vein, Triandis (1994) suggests that low-context but not high-context cultures focus on explicit logic and proof. This implication is consistent with research in a number of areas. For example, Ting-Toomey's work on cross-cultural communication (e.g., Ting-Toomey, 1988) suggests that confronting the other party with rational arguments and factual evidence is more central to American than to Chinese conflict environments (see also, Fu & Yukl, 2000). Similarly, research has shown that U.S. negotiators use more analytic statements than Taiwanese negotiators in a simulated negotiation scenario (Drake, 1995), and that European Canadians rely on more arguments when justifying their choices than Asian Canadians (Hoshino-Browne, Zanna, Spencer, Zanna, Kitayama, & Lackenbauer, 2005). Combined, this evidence leads us to hypothesize that:

H1: Low-context perpetrators make more use of persuasive arguments than high-context perpetrators.

Reciprocity of Persuasive Arguments

Related to the possibility of identifying differences in the use of persuasive arguments is the possibility of identifying differences in the degree to which the other party reciprocates persuasive arguments. Consistent with previous research, we use the term *reciprocation* for patterns of behavior in which negotiators respond to each other's strategies by matching them

with the exact same behavior (Adair & Brett, 2005; Brett, Shapiro, & Lytle, 1998; Friedman, Anderson, Olekalns, Goates, & Lisco, 2004; Olekalns & Smith, 2000; Weingart, Prietula, Hyder, & Genovese, 1999; Weingart, Thompson, Bazerman, & Carroll, 1990). The possibility of observing cross-cultural differences in reciprocation is significant, since previous research has shown that reciprocation of communications is common in dyadic interactions, including negotiations (e.g., Axelrod, 1984; Gouldner, 1960; Putnam & Jones, 1982). Yet, if logic and rationality are considered core elements in low-context communication, then reciprocation of rational arguments should occur more frequently in negotiations with low-context perpetrators compared to negotiations with high-context perpetrators. This proposal is certainly consistent with more general research on message strategies and cross-cultural differences in preference and effectiveness (Hong, Muderrisoglu, & Zinkham, 1987; Tai, 2004). For example, two comparisons of low- and high-context negotiators by Adair and her colleagues (Adair, 2003; Adair & Brett, 2005) found differences in the reciprocation of information exchange that matched the elements Hall (1976) associates with the two cultural groups. The Adair studies focus on information exchange because they consider an integrative negotiation task, where information sharing is likely central to good outcomes. However, parallel differences might be expected in win-lose negotiations where influence strategies such as persuasive arguments may be central to success (cf. Adair & Brett, 2004).

Other evidence suggests that the propensity to reciprocate rational arguments might be dependent on negotiation phase. Unlike in more normative contexts, where deadlines and ultimatums can lead to arousal in later stages of negotiations, research suggests that crisis negotiations involve the most stress and arousal in the initial stages of interaction (Donohue, Ramesh, Kaufmann, & Smith, 1991; Taylor & Donald, 2007; Vecchi, Van Hasselt, & Romano, 2004). This occurs because of the intense emotional and physical reaction that perpetrators have to the overwhelming and threatening nature of law enforcement

involvement (Vecchi et al., 2004). Such arousal is likely to inhibit a negotiator's capacity to process information (De Dreu & Weingart, 2003). However, this capacity is arguably critical if he or she is to understand the other party's reasoning, evaluate their arguments (i.e., to identify weak spots in other's argumentation), and construct reasoned responses to further their own goals. The inhibiting effect of arousal is, therefore, likely to limit the ability of negotiators to use and respond to persuasion during the early stages of negotiation. In contrast, the efforts of police negotiators to reduce tension and create a problem-solving environment (Donohue et al., 1991) will mean that later stages of negotiation involve less arousal and, consequently, are relatively more open to persuasive arguments playing a more central role. Thus, we hypothesize that:

H2: The reciprocation of persuasive arguments will be higher in negotiations with low-context as opposed to high-context perpetrators, particularly in the second part of the negotiations.

Efficiency of Persuasive Arguments

Finally, persuasive arguments may be regarded as having significant parallels with influence tactics, which we define as deliberate actions by one individual (the influence agent) toward another individual (the target) that are intended to alter his or her attitudes in a way that would not have otherwise occurred (Perloff, 1993). This suggests that the effectiveness of influence strategies may be measured as the extent to which they alter the other party's behavior in the desired direction. If persuasive arguments are considered more central to interaction in low- rather than high-context cultures, then this strategy is also likely to be more influential in low- rather than high-context cultures. This expectation is consistent with the results of a scenario study by Fu and Yukl (2000), which found that low-context US managers perceive persuasive arguments as more effective in influencing people and resolving differences than high-context Chinese managers. It is also consistent with wider

research on the commitment and consistency principle, defined as the human desire to achieve apparent consistency between previous beliefs or behavior and current attitudes or behavior (Festinger, 1957; Heine & Lehman, 1997). As such, the commitment and consistency principle appeals to logic and rationality and tends to be developed in “if-then” linear terms, both of which are associated with low-context cultures (cf. Adair & Brett, 2004). Thus, while the consistency principle is robust in its influence of behavior, research (Cialdini, Wosinska, Barrett, Butner, & Gornik-Durose, 1999) has found that low-context US students are more likely to feel compelled to act in a way that is consistent with previous behavior than high-context Polish students. Similarly, Choi and Nisbett (2000) found that East Asians have a higher tolerance for contradictions and react less to cognitive inconsistencies than their American counterparts. This collection of research suggests that influence exercised through the use of cognitive, rational strategies is likely to be more effective in negotiations with low-context than high-context perpetrators. Furthermore, and in line with our previous reasoning, we propose that an important prerequisite for cognitive strategies to influence an interaction is a context in which individuals have the cognitive capacity to process them. This is less likely in the early stages of crisis negotiation than in the later stages. Accordingly, we hypothesize that:

H3: Persuasive arguments by the police negotiator will be more effective in negotiations with low-context perpetrators rather than high-context perpetrators, particularly in the second part of the negotiations.

Method

Negotiation Sample

Data were transcripts produced from audiotapes of interactions from 25 crisis negotiations that began in the Netherlands or Belgium and were therefore available in Dutch or Belgian police files. These cases were selected on the basis that they took place over the

last 10 years and that they included at least 10 minutes of conversation between the negotiator and perpetrator (M = 39 minutes). The transcript for each case contained all of the conversation that was recorded during the incident. This was essentially the complete negotiation minus possible lead in time where the police were still connecting the recording devices. Of the 25 cases, 15 involved kidnapping and 10 involved extortion. All 25 cases concerned the negotiation of instrumental issues. Specifically, in all of the 25 incidents the perpetrators demanded money or other valuable items. All of the incidents were conducted by phone and ended with the perpetrators being arrested. None of the incidents involved simultaneous negotiation with a third party. All police negotiators and perpetrators were male.

Twelve of the negotiations were with hostage takers from societies that can be regarded as low-context: The Netherlands (3), Belgium (6) and the United Kingdom (3)(cf. Brett, 2001; Hall, 1976; Hall & Hall, 1990; Hofstede, 2001; Triandis, 1994). Of these 12 cases, 6 were kidnappings and 6 were extortions. The remaining thirteen negotiations concerned perpetrators from societies that can be regarded as high-context: China (4), Kurdistan (1), Morocco (2), Surinam (1), Russia (2), Turkey (1), and Poland (2)(cf. Adair, 2003; Adair & Brett, 2005; Brett, 2001; Fu & Yukl, 2000; Hall, 1976; Hall & Hall, 1990; Hofstede, 2001; Kozan & Ilter, 1994; Triandis, 1994). Of these 13 cases, 9 were kidnappings and 4 were extortions. In all cases, the police files showed that the non-Dutch and non-Belgian perpetrators were born and lived the largest part of their lives in their country of origin.

Based on the notion that high-context communication is typical for collectivist societies and low-context communication is typical for individualistic societies, our distinction is consistent with Hofstede's (2001) collectivism-individualism country index score. This index contrast the extent to which individuals are autonomous individuals versus embedded in groups and is validated against a large number of country data from other

sources (e.g., Schwartz, 1992; Smith, Trompenaars, & Dugan, 1995). On the index, the high-context countries in our study are associated with index scores ranging from 20 through to 60 ($M = 37.8$), while the low-context countries are associated with index scores ranging from 75 to 89 ($M = 79.8$). Thus, there is no overlap in the index scores associated with cases in the low-context and high-context groups, supporting our assertion that they represent groups that differ on Hall's high/low-context distinction. Furthermore, even for Poland, the country in the high-context group with the highest index-score of 60, research indicates that individual behavioral reactions are characterized by collectivistic rather than individualistic tendencies (Cialdini et al., 1999; see also Reykowski, 1998). Moreover, our categorization is supported by considerable previous research (e.g., Adair, 2003; Adair & Brett, 2005; Fu & Yukl, 2000; Kozan & Ilter, 1994, Vrij, Dragt, & Kippelaar, 1992).

In 19 cases, the negotiation occurred in a language other than Dutch. To facilitate analysis, the audio-taped dialogue in these interactions was translated into Dutch by professional translators who were associated with the police but blind to the research hypotheses. These translators were bilingual, native speakers of the language in which the negotiation was conducted. Because of the sensitive nature of this material, it was not possible to use back-translation to evaluate the reliability of the transcription. However, a number of factors serve to mitigate against the possibility of mistaken translation. First, the translator facilitated interpretation of the transcripts by providing "advisory notes" in which she or he indicated culturally-specific meanings of particular words or phrases. Second, in their role with the police, the translators had prepared a large amount of material for legal proceedings (e.g., court), such that they were experienced in providing translations with high levels of accuracy. Third, as described in the next section, the dialogue was examined at the level of speaking turn and not in terms of the use of individual words. An analysis pitched at this level

arguably minimizes the impact that single word ambiguities will have on the analysis (cf. Taylor, 2002b).

Coding the Transcripts

Based on transcriptions of audiotapes of the 25 negotiations, two trained judges (unaware of the hypotheses) coded all the speaking turns as one of eleven codes. These codes were derived in previous research (Giebels & Noelanders, 2004), and capture the use of major influence tactics that occur in crisis negotiations. Three of the codes (being kind, being equal, and being credible) are primarily connected with the sender and his or her relationship with the other party. For example, the code being equal is used to capture an utterance that aims to highlight something that the parties have in common (e.g., “You and I, we will work this thing out together”). The remaining eight codes (compromise, direct pressure, emotional appeal, imposing a restriction, information sharing, legitimizing, persuasive arguments, and threats) are primarily connected with the content of the message and the information conveyed to the other party. For example, the code emotional appeal is used to measure occasions when a negotiator plays on the emotions of the other party (e.g., “Please take good care of her”). In contrast, the code legitimizing is used to measure occasions when a negotiator refers to what has been agreed upon in society or with the other party (e.g., “I’m sorry but I have to conform to regular bank procedures”). Finally, note that the code information sharing is unique as it does not necessarily involve an attempt at influence, but captures behaviors such as negotiators discussing priorities, comparing or contrasting positions, or acknowledgment of the other’s message. A full description of this coding scheme and its derivation is given in Giebels and Noelanders (2004).

The judges were a 29-year old female from the Netherlands holding an MA in psychology, and a 31-year old female from Belgium holding an MA in criminology. Both were especially recruited to work on a crisis negotiation research project (see Giebels &

Noelanders, 2004) because they had experience with content-coding of cross-cultural interactions. They were trained to use this coding scheme on unrelated negotiation material. This training material included interactions that were translated by the same type of professional translator who translated the 25 negotiation transcripts. This ensured that judges gained exposure not only to the dialogue of high-context negotiators, but also to the advisory notes made by translators to aid the interpretation of the translation (the negotiation data also included these notes). Thus, the training sought not only to ensure that the judges could apply the codes properly, but also that they were able to incorporate into their coding the transcribers' notes on how to read the messages by high-context negotiators. For example, the Chinese statement "then we did 'it'" was interpreted as "in that case, we will kill (him)" and therefore coded as an explicit threat. This training continued until inter-rater reliability, as measured Cohen's Kappa (Cohen, 1960), reached .75. This required approximately 30 hours of training.

The judges then coded the 25 negotiations by assigning each speaking turn of the police negotiator and perpetrator to one of the coding categories. This assignment was a placement of each speaking turn into a coding category, and we did not attempt to assess the degree to which a speaking turn reflected an influence tactic. This approach, which is in line with previous research (e.g., Donohue & Roberto, 1996; Weingart et al., 1999), allowed the analysis to focus on the transitions across speaking turns. The inter-rater reliability of this coding was very good, with an average Kappa of .85 and a range across the incidents of .70 to .92¹ (Bakeman & Gottman, 1997). In cases of disagreement, the raters discussed the particular speaking turn and decided jointly which code was the best to apply.

For the purposes of this research, we focus on the use of four categories of behavior. The focus of our analysis was on patterns in negotiators use of the behavior *persuasive arguments*, coded as message behaviors that used rational persuasion or logic to assert a point

of view or idea. Examples of persuasive arguments include “You just said you have the money available, so why can’t you bring it to me right away?” (Perpetrator) and “I don’t think it is a good idea to let her parents drive the car because they are really stressed” (Police negotiator). To test our assumption about the difference between persuasive arguments and threats, and to enable comparisons with previous research (e.g., Adair & Brett, 2005; De Dreu, Giebels, & Van de Vliert, 1998; Giebels, De Dreu, & Van de Vliert, 2000; Giebels et al., 2003; Van de Vliert, Nauta, Giebels, & Janssen, 1999), we also examined negotiators use of the behaviors *threats* and *information sharing*. We defined threats as message behaviors that intimidate, accuse or suggest punishment for not acting a particular way. Their inclusion in the analysis made it possible to test our assumption that persuasive arguments and threats are used by and influence negotiators in different ways. We defined information sharing as message behaviors that provide information about procedural, emotional or substantive issues. Their inclusion in the analysis, prompted by the fact that information sharing is the most frequently observed behavior in cross-cultural normative interactions (Adair & Brett, 2005; Adair et al, 2001), enabled a comparison between crisis negotiations and normative interactions, and allowed us to gauge the extent to which variation in information sharing might provide an alternative explanation for any observed difference in the degree to which negotiators compromised. Examples of threat message behaviors from the data include “I will kill [the hostage] if I do not get the money soon” (Perpetrator) and “When you are hurting [the hostage] I cannot help you any more” (Police negotiator). Examples of information sharing message behaviors from the data include “There is no-one else here at the moment” (Perpetrator) or “I have no preference for any of the places you mention, but the exact timing is more important to me” (Police negotiator).

Finally, to provide an indication of police negotiator efficiency (see below), we examined negotiators use of *compromising* behavior, defined as an act of concession or

engagement in give-and-take behaviors. To be coded as a compromise behavior, a speech turn had to indicate that the negotiator was taking action that would benefit the other party or the hostages. This may be a concession in terms of getting something to the hostage(s) (e.g., a message or medicine), agreeing on providing proof of live, improving the physical circumstances of the hostages, or even releasing a hostage. Similarly, police negotiators may concede on issues of importance to the perpetrator, often in relation to money and the terms under which this money is provided. Examples of compromising behaviors from the data include “Ok, I will give ‘the victim’ his medicine in time” (Perpetrator) or “Ok, we will have the money available before next Friday” (Police negotiator).

Police negotiator efficiency. The efficiency of police negotiator behavior was assessed by establishing the extent to which they were successful in eliciting compromising behavior from the perpetrator. This measure recognizes that police negotiators pursue goals that are more immediate and recurrent than are captured by the final outcome of a negotiation. Arguably, the main goal for police negotiators is ensuring the physical and psychological safety of the hostage(s), which is clearly promoted by the types of perpetrator concession making mentioned above (cf. Giebels, Noelanders, & Vervaeke, 2005). Furthermore, an important goal for police negotiators is to turn the negotiation into a more normative interaction characterized by mutual concession making. It is also consistent with research examining the behavioral correlates of successful win-lose negotiations (De Dreu, 1995; Hornstein, 1965; Michener, Vaske, Schleifer, Plazewski, & Chapman, 1975).

The decision to focus on the occurrence of compromising behavior, rather than overall negotiation outcome, is consistent with our focus on cue-response dynamics. If we had used overall negotiation outcome as a measure of efficiency, it would be difficult to identify which of the persuasion strategies led to compromising behavior. For example, in the early stages of an incident a police negotiator may be effective at influencing a perpetrator to release the

hostages, but in the later stages when the perpetrator becomes suicidal, he or she may use an influence approach that is ineffective at dissuading the perpetrator from taking his life. In an analysis that uses final outcome as the measure of effectiveness, all of the police negotiators' attempts at influence would likely be associated with the final unsuccessful act of the perpetrator taking his life. Such an analysis would not simply overlook the influence strategies that contributed to the successful release of the hostages, but it would inappropriately associate these strategies with an unsuccessful outcome. All negotiations involve periods of persuasion that move the interaction toward and away from success, and it is impossible to distinguish how each of these patterns contribute to the unfolding negotiation without using a measure that captures the "outcomes" associated with different parts of the same interaction. Such a measure is provided by compromise behavior.

Time periods. To test whether or not the impact of influence behaviors is systematically related to time, it was necessary to divide each negotiation into a series of interactions. Consistent with previous research (e.g., Olekalns & Smith, 2000), we partitioned each negotiation into two equally sized periods. This allowed for a comparison of the early period of interaction, often considered to be dominated by crisis and extreme reactions, from the later, usually more normative period of interaction (Donohue et al., 1991).

Analyzing Cue-Response Sequences

To examine the interrelationships among the four negotiation behaviors, we constructed event sequences (Bakeman & Gottman, 1997) from the coded transcripts. Specifically, for each transcript, the series of assigned codes were used to create a single sequence in which one code appeared on one line of a data file. This sequence represented the codes across the complete negotiation transcript. Because the coding was based at the level of utterance, the resulting file contained a sequence in which the codes alternated between representing the police negotiator's utterances and the hostage taker's utterances.

There are currently a number of methods available to researchers interested in examining the extent to which particular cues (e.g., police negotiator behaviors) lead to particular responses (e.g., perpetrator responses). One common approach is to conduct a log-linear analysis that examines the likelihoods of different responses occurring after a cue (Olekalns & Smith, 2000). However, as Giebels and Noelanders (2004) note, the predominant focus of these analyses is the immediate relationship between behaviors (i.e., whether a behavior at time t impacts on behavior at time $t + 1$). This focus has the potential of overlooking important relationships between cues and responses that are delayed for a range of interpersonal reasons, including cultural dynamics. Even in advanced analyses where delayed responses are considered (Adair, 2003; Adair & Brett, 2005), the method employed restricts the analysis so that only one type of delay or “lag” (e.g., $t + 3$) is considered. By not considering the full range of intervals, these analyses lose valuable information about the range and type of interrelationships among behaviors. To overcome this problem, we examine the interrelationships among behaviors using proximity coefficients (Taylor, 2006). Rather than consider the immediate relations among behaviors, the proximity approach considers the relationships among all behaviors as degrees of proximity. This captures more of the complex interconnections among behaviors in an interaction. As recent publications have shown, this allows for sophisticated comparisons across speakers and between single cases (Taylor, 2006; Taylor & Donald, 2007).

The proximity approach is based on the notion that behaviors contribute to the same part of the interaction and have more in common—in terms of the speaker’s motivating concerns, strategies and cognitions—when they occur close together within an interaction than when they occur far apart. The importance of this behavioral “inter-connectedness” (Auld & White, 1959, p. 100) has long been recognized in theory and research. For example, in the social interaction literature, proximity underlies the notion of channeling, whereby

every exchange of messages is seen as narrowing down the probability that other categories of talk will occur (Argyle, 1969; Kelly, 1997; Putnam, 1985). Those behaviors that occur immediately prior to current behavior may be shown to have the most influence on the direction of interaction development (Gottman, Markman, & Notarius, 1977; Thomas, 1985; Weingart et al., 1999). But those farther back in history may also have their own unique “lagged” association with current behavior (Olekalns & Smith, 2000; Taylor & Donald, 2003). A police negotiator’s persuasive argument may lead to an immediate concession by the perpetrator, but it may also lead to a concession following a number of intermittent behaviors. The difference between these two circumstances, according to the proximity approach, is that the intermittent behaviors have a bearing on the perpetrator’s concession behavior. The effect of these intermittent behaviors is what Watzlawick, Beavin, and Jackson (1968, p. 131) describe as “limitation”. Each intermittent message reduces the number of possible next moves and is ultimately most predictive of the perpetrator’s response. This dynamic is reflected conceptually in the proximity approach by associating less immediate, lagged relationships with lower proximity (see Taylor, 2006, Taylor & Donald, 2007, for more details).

This notion of proximity among two behaviors is measured using a proximity coefficient (Taylor, 2006). This coefficient, which varies between .00 and 1.00, expresses the relationship between two types of behavior as a direct function of their relative placements in a sequence. The coefficient equals .00 if the behaviors occur only once at the first and last position of the entire sequence, and it equals 1.00 if one behavior immediately precedes the second behavior without exception. A coefficient score between these two extremes reflects differing amounts of proximity between the two behaviors. A greater value indicates a more proximal relationship (i.e., fewer intermediate behaviors) while a lower value indicates a less proximal relationship (i.e., more intermediate behaviors and a significantly lagged

relationship). Thus, the impact of various negotiation behaviors may be assessed by examining the relative proximity of particular responses to a speaker's cue. A significantly high proximity indicates a strong relationship between the occurrence of a particular behavioral cue and the desired response.

There are a number of ways to assess the significance of proximity as measured by the coefficients (Taylor & Donald, 2007). Since our hypotheses require comparisons of coefficients derived from negotiations with low- and high-context perpetrators, we adopt Taylor's (2006) suggestion of using randomization tests. A randomization test (sometimes called a permutation test) is a statistical significance test that compares the resulting test statistic (e.g., an F value) not to a traditional theoretical distribution but to a distribution obtained from re-sampling of the available data (see Edgington, 1995; Good, 1994; Ninness, Rumph, Vasquez, & Bradfield, 2002). The advantage of this approach is that it avoids many of the data assumption of traditional significance tests (Dunlap, Burke, Smith-Crowe, 2003; Switzer, Paese, & Fritz, 1992), and so provides a reliable way to derive significance levels for the proximity coefficients.

A randomization test begins by making a traditional statistical comparison of the dependent variable across two or more conditions (e.g., an ANOVA comparison). Then, rather than compare the resulting statistic to a table of critical values, the test derives a sampling distribution from the available data and examines the extent to which the test statistic falls toward the tail of this distribution. As with other statistical tests, the more the resulting statistic falls into the tail of the sampling distribution, the less likely it is that the difference between conditions occurred by chance. The sampling distribution used during a randomization test is derived using repeated, random sampling of the available data. Specifically, after making the initial comparison across conditions, a randomization test shuffles the observed values (e.g., P coefficients) randomly between the conditions, calculates

(from the newly formed groups) the same test statistic as computed for the original comparison (e.g., F), and repeats this process a large number of times (in our case 10,000 times). The result of this repetition is a set of test statistic values that form a distribution of the values likely to be observed for the statistic. From this distribution, it is possible to estimate the likelihood of observing a value of the test statistic that equals or exceeds the value actually observed in the data (i.e., in what proportion of the randomized data sets did the derived test statistic exceed the statistic obtained from the original data?). This likelihood provides the equivalent of a p -value, which may be understood in the same way as p -values derived through traditional parametric tests (e.g., ANOVA).

To further illustrate the basic idea of a randomization test, suppose we are comparing high-context (HC) and low-context (LC) negotiations on one cue-response contingency, the reciprocation of persuasive arguments. Further, suppose the observed mean coefficients are .85 for the HC group and .96 for the LC group, and that we want to test whether the difference between these sample means (i.e., .11) is large enough to reject the null hypothesis of no difference in proximity. Given n_{HC} and n_{LC} as the sample size of each group, the test proceeds as follows: i) the difference between the two samples is measured using a familiar test statistic (e.g., F); ii) the observations of the HC and LC groups are pooled; iii) from these pooled values, n_{HC} observations are sampled at random without replacement; iv) this new group of n_{HC} observations is compared against the remaining n_{LC} observations using the same statistic as used in step (i) and the result recorded; v) steps (ii) to (iv) are repeated many times to produce a reliable distribution of the test statistic. This distribution is an estimation of the distribution of the test statistic under conditions where the null hypothesis is true (i.e., no difference between groups); vi) a p -value for the test is calculated as the proportion of values in this distribution that are equal to, or more than, the original observed test statistic.

In the analyses that follow, we derive proximity coefficients for all possible contingencies among police negotiator and perpetrator behaviors. These are derived separately for each of the 25 case sequences. We then use a 2 (High- and Low-Context) by 2 (Time 1 and Time 2) factorial ANOVA and the associated F statistics as a means of measuring the differences between the proximity coefficients derived for the high- and low-context cases. Specifically, after each re-sampling of the data, we calculate F for the main and interaction effects and form a distribution of F for each effect. The significance of the difference between groups is then determined by locating the observed F value in the distribution provided by the re-sampling of F , rather than the sampling distribution used in traditional ANOVA testing. Thus, on some occasions, the absolute value of the F statistic may be very small but the chance of observing it unlikely (i.e., $p < .05$). On other occasions the absolute value may seem large but such differences are regularly observed within randomized data.

Results

Frequency of Behavior

The 25 incidents contain a total of 6,980 coded speaking turns, of which 3,498 were spoken by the police negotiator and 3,482 were spoken by the perpetrator. Of these speaking turns, 2,045 (29%) could be typified as one of the four negotiation behaviors as spoken by the perpetrator, while 1,810 turns (25%) could be typified as one of the four negotiation behaviors as spoken by the police negotiators. So, in total, our analyses include 54 % of all coded behaviors. A series of chi-square tests indicate that there are no significant differences in the frequency of police negotiators use of behaviors across extortion and kidnapping cases (all $\chi^2 < 1.0$, *ns*), and no significant differences in the frequency of perpetrators use of behaviors across extortion and kidnapping cases (all $\chi^2 < 1.0$, *ns*).

To test our predictions about the frequency of occurrence of persuasive arguments across cultures, we calculate the frequency of occurrence of the four negotiation behaviors included in this study as a function of perpetrator's culture and time period. Table 1 shows the average frequency of speaking turns coded as one of the four behaviors in the negotiations, as a function of culture and time period. These frequencies have been standardized to take account of the fact that the low-context negotiations contained more coded speaking turns than the high-context negotiations. Specifically, the frequencies for high- and low-context negotiations have been adjusted to sum to an overall number of speaking turns of 3,490, which is the mean of the coded speaking turns for low-context negotiations (3,616) and high-context negotiations (3,364). Without this adjustment, the frequency of occurrence of behaviors in low-context negotiations would be marginally higher than in high-context negotiations simply due to the length of the interaction, thereby obscuring the differences in behavior use that result from police negotiator and perpetrators' choices.

The data in Table 1 enable a test of hypothesis 1. Consistent with hypothesis 1, low-context perpetrators made significantly more use of persuasive arguments compared to high-context perpetrators, $\chi^2(1) = 5.59, p < .05$. The analysis also revealed an effect of culture in the use of threats. Specifically, low-context perpetrators communicated significantly more threats compared to high-context perpetrators, especially in the first half of the negotiations, $\chi^2(1) = 4.39, p < .05$. Finally, our analysis found no significant differences in the use of information sharing and compromising across low- and high-context perpetrators. We also examined whether or not the police negotiator's behavior differed as a function of the perpetrator's cultural background. We found only an effect for compromising behavior, with police negotiators making significantly more use of compromising when interacting with a high-context perpetrator compared to a low-context perpetrator, $\chi^2(1) = 5.47, p < .05$.

To determine whether or not this difference in the use of compromising represented a difference in the magnitude of compromises being made to high- and low-context perpetrators (i.e., that police negotiator's used regular small compromises with high-context perpetrators and fewer larger compromises with low-context perpetrators), we had 2 raters rank order the 44 police negotiator compromises from most significant to least significant in each incident. These rank orderings, which were made reliably across raters (Spearman's $\rho = .91, p < .01$), were correlated with a dichotomous variable denoting whether the compromise occurred in a negotiation with a high-context perpetrator (scored as 0) or low-context perpetrator (scored as 1). Specifically, we separately compared each rater's rank ordering of the compromise utterances to the dichotomous culture variable using a rank-biserial correlation (Cureton, 1956; Willson, 1976). There was no significant relationship between the ranked magnitude of compromises and the perpetrator's cultural group ($r = .14, ns$, for rater 1; $r = .03, ns$, for rater 2), suggesting that the difference in police negotiators' compromise behavior across low- and high-context groups may not be explained simply as variation in type of compromise being made. A similar result was found when we correlated time (Time 1 scored as 0, Time 2 scored as 1) against the rank ordering of compromises ($r = .02, ns$, for rater 1; $r = -.05, ns$, for rater 2), suggesting that the magnitude of police negotiators' compromises also did not vary systematically over time.

Cross-Cultural Differences in the Organization of Influence

Table 2 shows mean proximity coefficients for the responses of high-context perpetrators to police negotiator's cues (upper panel) and low-context perpetrators to police negotiator's cues (lower panel). The panels are divided into time periods (Time 1 and Time 2) to allow a comparison of proximities over time. As can be seen from Table 2, the overall value of the coefficients across the contingencies is high. This is the case because most of the behaviors occur regularly across the interaction, and not in discrete periods of interaction,

which would lead to “blocks” of high and low value coefficients. This patterning is consistent with the previous finding (Donohue et al., 1991) that crisis negotiations involve a complex organization of cues and responses, with negotiators quick to move through issues and respond using diverse influence tactics. However, despite their absolute values, the relationships between police cues and perpetrator responses vary considerably. In some cases, the behavior of the police negotiator almost always resulted in an immediate reciprocation by the perpetrator. For example, as indicated by the coefficient of .97, perpetrators from low-context cultures often reciprocated a police negotiators’ information sharing almost immediately. In contrast, other responses were rarely given to a police negotiator’s cue, as is true for example of both low-context and high context perpetrators’ reciprocation of compromising in the second half of the negotiation ($P = .53$ and $P = .56$). These cue-response relationships are quite different during the first period of the same negotiations ($P = .92$ and $P = .94$).

The proximity coefficients reveal a number of other characteristics of the data. For example, the variance of proximity coefficients in the four panels of Table 2 provides an indication of the extent to which perpetrators varied the way in which they responded. This variance differs significantly across the high and low-context perpetrators. At time 1, the variation of proximity coefficients, measured using the coefficient of variation (Howell, 1997), was .18 for high-context perpetrators and .12 for low-context perpetrators ($M = .15$). At time 2, the variation of proximity coefficients was .17 for high-context perpetrators and .12 for low-context perpetrators ($M = .15$). One possible explanation for this finding, consistent with the Hall’s (1976) original proposal and subsequent findings of Adair and Brett (2005), is that perpetrators from high-context cultures show greater flexibility in the way in which they respond to cues compared to perpetrators from low-context cultures. Finally, note the asymmetry in most of the contingencies. For example, during time 1 of negotiations with

high-context perpetrators (Table 2, upper panel), the response of information sharing following a cue of Persuasive arguments (.93) is typically more immediate than the response of persuasive arguments following a cue of information sharing (.80). These asymmetries in coefficients provide clues about the overall organization of the interaction since those that initiate more proximal responses may be thought of as dominant in terms of the relationship between the two forms of influence (cf. Gottman & Notarius, 2000). In the above example, therefore, the dominant relationship between persuasive arguments and information sharing may be understood as one where persuasive arguments more often lead to information sharing than information sharing leads to persuasive arguments.

Comparisons across the top and bottom panel of Table 2 enable an analysis of our predictions relating to the cue-response differences between low- and high-context perpetrators. In partial support of hypothesis 2, results show that low-context perpetrators are faster than high-context perpetrators in their reciprocation of persuasive arguments, but only during the second half of the negotiation (i.e., an interaction effect, $F = 3.04$, $p < .05$, $\eta^2 = .09$), with high-context negotiators tending to reciprocate persuasive arguments more quickly in the first half of the negotiations. Thus, over time, high-context perpetrators reduce the immediacy with which they reciprocate persuasive arguments, while low-context perpetrators increase the immediacy with which they reciprocate persuasive arguments. We also found significant differences in the immediacy with which negotiators reciprocated threats. Interestingly, the reciprocation of threats by negotiators from high-context cultures was significantly more immediate than it was by negotiators from low-context cultures ($F = 2.66$, $p < .05$, $\eta^2 = .08$).

In line with previous research (Adair et al., 2001), the coefficients reveal a significant main effect of culture for information sharing across low- and high-context cultures. Specifically, perpetrators from low-context cultures were more likely than perpetrators from

high-context cultures to directly reciprocate information sharing ($F = 2.65, p < .05, \eta^2 = .06$)².

Furthermore, the reciprocity of compromising behavior reduced over time from Time 1 to Time 2, regardless of the perpetrator's cultural background ($F = 12.81, p < .05, \eta^2 = .65$).

Our final hypothesis relates to the extent to which the negotiation behaviors were effective in bringing about cooperation (i.e., compromising) from the perpetrator. Hypothesis 3 predicted that persuasive arguments by the police negotiator would be more effective in negotiations with low-context perpetrators than with high-context perpetrators, particularly in the second half of the negotiations. The analysis revealed a main effect of culture for the response of compromising following a police negotiator's cue of persuasive arguments ($F = 4.72, p < .01, \eta^2 = .25$). This response was significantly more immediate following persuasive arguments in low-context cultures compared to high-context cultures, but this effect was not moderated by time. Thus, we found only partial support for hypothesis 3. No such effect was found for the communication of threats. The analysis, however, revealed a significant main effect of culture for the response of information sharing following communication of threats. Specifically, this strategy was more effective at eliciting information sharing in low-context cultures compared to high-context cultures ($F = 3.17, p < .01, \eta^2 = .09$). Interestingly, there was also a significant main effect of time for this contingency, with communication of threats leading to less immediate information sharing at time 2 compared to time 1 ($F = 2.89, p < .01, \eta^2 = .08$).

Discussion

On a daily basis, newspapers report on individuals who have been kidnapped in crisis areas around the world, ranging from Dagestan to Iraq. The growing professional reporting of such incidents suggests that they are heavily influenced by the cultural background of the perpetrators. In this study, we examined the communicative dynamics of 25 crisis negotiations with perpetrators from low- and high-context cultures. Taking the opportunity to

examine message behavior in these extreme, win-lose structured negotiations, we focused on forcing strategies and, in particular, persuasive arguments. To date, negotiation research and theory has largely neglected this type of negotiation behavior. This is surprising because research shows that negotiators usually devote a relatively large share of their time to discussing arguments, sometimes up to 40 % (Giebels et al., 2003). Moreover, particularly in crisis negotiations, persuasive strategies are expected to be an important building block to resolving the crisis at hand (cf. Vecchi et al., 2004).

Culturally Dependent Negotiation Behaviors

We found evidence to confirm our expectation that persuasive arguments are more central to negotiations with low-context perpetrators compared to negotiations with high-context perpetrators. Compared to their high-context counterparts, low-context perpetrators were more likely to use persuasive arguments and were faster to reciprocate police negotiator's persuasive arguments in the second half of the negotiation where stress was likely to have reduced. Furthermore, low-context perpetrators were more immediate in responding to persuasive arguments in a compromising way.

These results identify culture as a factor associated with the relative frequency with which negotiators use persuasive arguments in distributive negotiations, in much the same way as previous research has shown information sharing to be a factor of culture in integrative negotiations (Adair, 2003; Drake, 2005). The results also suggest that persuasive arguments are more effective at bringing about compromise from low-context perpetrators. This is consistent with Adair et al.'s (2001) suggestion that behaviors are most effective when they are "culturally consistent" with the communication style characteristic of the other party. In our case, previous evidence suggest that rational arguments and factual evidence are characteristic of low-context communication (Ting-Toomey, 1988), and it is in this context that persuasive arguments were found to be more effective.

We did not find complete support for our hypotheses. One interesting and unexpected finding to emerge from our analysis concerns the difference in reciprocation of persuasive arguments across cultural groups in the first half of the negotiations. Rather than finding that low-context perpetrators were more immediate in reciprocating persuasive arguments, we found that, in the first half of negotiation, high-context perpetrators were more immediate in their reciprocation of persuasive arguments. A possible explanation for this finding may relate to differences in the manner with which high- and low-context perpetrators process persuasive arguments. Given that persuasive arguments are less central to a high-context communication style, we speculate that the high-context perpetrators may have processed the police negotiator's persuasive arguments more superficially (and perhaps responded with counter-arguments less well-developed) than their low-context counterparts. Since the first half of crisis negotiations are associated with high stress and degraded cognition (Donohue et al., 1991), this superficial processing of persuasive arguments would potentially allow the high-context perpetrators to give faster responses to the police negotiator's persuasive arguments. The idea that differences in processing may account for our findings has parallels with recent research on information sharing, which found that high- and low-context negotiators process shared information in different ways during the first half of negotiations (Adair, Weingart, & Brett, 2007).

A second interesting finding concerns the extent to which low-contexts negotiators responded to persuasive arguments with compromises. We predicted that persuasive arguments would be particularly effective during the second part of a negotiation, but we found that they elicited compromises from low-context perpetrators irrespective of negotiation phase. This suggests that persuasive arguments elicit compromising behavior regardless of whether the other party is experiencing the cognitive deterioration associated with the crisis phase of interaction. The reason for this may be that logic and deductive

thinking are generally highly valued in low-context cultures (Gelfand & Dyer, 2000), and tactics that make use of this way of thinking are being rewarded.

Interestingly, our data provide some indirect support for this explanation. While the proximities between persuasive argument and compromise are on average higher for negotiations with low-context than high-context perpetrators, the frequency of occurrence of compromise behaviors is higher for negotiations with high-context than low-context perpetrators. This reversal across proximity and frequency has at least two implications. First, it serves to eliminate the possibility that the greater use of persuasive arguments by low-context negotiators is an artifact of the fact that these negotiations happened to contain more compromise behavior. Second, and more importantly, it suggests that there may be an alternative form of social influence that is more effective at eliciting compromise behavior from high-context perpetrators. This alternative form is likely to involve types of influence tactic other than persuasive arguments that were not considered in our analysis, and which might be expected to revolve around issues of relationship or face (Hammer & Rogan, 2002).

As expected, the analysis of threat behavior revealed a different pattern. While low-context perpetrators were more likely to communicate threats, especially in the first phase of the negotiations, high-context perpetrators were faster to reciprocate them. These seemingly contradictory findings are arguably explained by the same mechanism. Threats refer to a confrontational and assertive way of handling conflict, which is consistent with low-context communication and considered more inappropriate in high-context cultures (Fu & Yukl, 2000). Consequently, the communication of threats was not only higher for low-context rather than high-context perpetrators, but this strategy was also more effective at eliciting information sharing from low-context perpetrators compared to high-context perpetrators. Moreover, high-context perpetrators were quick to “punish” police negotiators who use them with counter-threats, particularly given that crisis negotiation centre on issues of “who is in

charge” (Donohue & Roberto, 1993) and high-context negotiators may be more concerned with establishing dominance (Adair & Brett, 2004). The confrontational nature of threats may also draw attention to the need to preserve face, something that is considered more important within high- rather than low-context cultures (Ting-Toomey & Oetzel, 2001).

To allow for further comparison with the findings of previous research, we also examined information sharing. We found evidence to suggest that low-context perpetrators were more immediate in their reciprocation of information sharing than high-context perpetrators. However, recall that the absolute value of this difference in our data, while statistically significant, was small in magnitude.² This makes it difficult and inappropriate to draw any firm conclusions in the absence of further evidence, although we do note that our finding is consistent with previous research by Adair and Brett (2005; see also Adair et al., 2001). Interestingly, in contrast to what might be expected, we also found that low-context perpetrators did not use information sharing to a greater extent than high-context perpetrators. An explanation for this finding is that mutual information sharing requires cooperative goals and trust (De Dreu et al., 1998) and therefore is less prominent in win-lose negotiations directed at the value-claiming aspects of negotiation (cf. Adair & Brett, 2004). Yet, this reasoning seems inconsistent with the relatively high occurrence rate of information sharing for both low- and high-context perpetrators. Considering the fact that all police negotiators originated from low-context cultures, and therefore negotiations with high-context perpetrators were in fact intercultural negotiations, adaptation processes may have occurred. Indeed, there is some evidence to suggest that high-context communicators are more flexible in their behavior and therefore may have adapted more to low-context police negotiators than their low-context counterparts (cf. Adair, 2003; Adair et al., 2001). This successful adaptation might also explain why police negotiators tended to compromise more when dealing with a high-context perpetrator compared to a low-context perpetrator. Furthermore, this raises the

possibility that in-group/out-group processes associated with cultural differences may have played a role in shaping behavior. It is possible to argue that the reciprocation of persuasive arguments is higher in low-context negotiations because the opponent is perceived as an in-group rather than out-group member. This alternative explanation is based on the assumption that people sharing similar behavioral norms are more likely to match each other's behaviors, and that such matching is on the whole beneficial (Adair, 2003; Patterson, 1983; Taylor & Thomas, in press). However, if this was the case, we would expect to find an overall pattern of higher proximity coefficients for the same culture interactions compared to the mixed high-context, low-context interactions. Since we did not find this pattern, we suspect that in crisis negotiations, cultural identities are less salient than identities associated with the role of perpetrator versus police, and that, consequently, both low- and high-context perpetrators regard police negotiators as out-group members.

Taken together, our findings support the general expectation that persuasive arguments are more central and effective in negotiations with low-context opponents, and should be distinguished from other negotiation behaviors that may be considered similar in terms of being distribution focused (threats) or in terms of being consistent with low- instead of high-context communication (information sharing). At an epistemological level, our findings highlight the need for negotiation researchers to compliment their analyses of the impact of psychological variables (e.g., emotion, van Kleef, De Dreu, & Manstead, 2004; trust, Kim, Ferrin, Cooper, & Dirks, 2004) with an understanding of how this impact emerges in actual behavior. A single outcome may emerge from a myriad of different interactions, such that any linking of independent variables (e.g., distrust) with particular outcome does little to help us understand why it is that variable had the impact on negotiation that it did. Such questions about why variables have an effect can only be understood by looking under the hood of the

communicative process and learning how such variables impact on negotiator's strategic behavior.

Alongside these theoretical and methodological implications, our findings also have implications for practicing negotiators. Indeed, given the previously discussed similarities between instrumental crisis negotiations and day-to-day business negotiations, our findings have relevance to a range of (cross-cultural) normative negotiations. Consistent with the advice given in handbooks of negotiation (e.g., Fisher et al., 1991), our findings suggest that developing and communicating persuasive arguments to support claims is a beneficial approach, but particularly with opponents from low-context rather than high-context cultures. Similarly, our analysis suggests that threats will often have negative consequences in a negotiation, but that this is particularly true with opponents from high-context cultures who will often be quick to punish the threatening party. Thus, at a general level, our findings point to the importance of negotiators to develop culturally refined understandings of persuasion tactics, and they highlight the need for negotiators to be alert to the responses of their opponent.

Limitations and Questions for Future Research

While our research extends previous work by examining the communicative dynamics of protracted real-life negotiations, it leaves unanswered a number of important questions. For example, in order to compensate for the small number of interactions available for analysis, we divided interactions into only two time periods. This ensured that the proximity coefficients were calculated on sufficiently long sequences of interaction. However, if a larger pool of interaction were available, such that it were possible to study a subset of longer negotiations, it is likely that separating interaction into more periods would reveal further, important variations in the cue-response dynamics across high- and low-context cultures (Adair & Brett, 2005).

A second area of unaccounted for variation lies in the differences among the national cultures we assigned to low- and high-context categories. By assigning individuals to one of the categories on the basis of what is known about the culture of their country-of-origin, we essentially inferred rather than measured cultural differences. There is potentially considerable within-country variation in interpersonal and cognitive style that may affect how negotiators respond to persuasive arguments. For example, research suggests that some of the different national cultures included in our study may vary on other cultural dimensions, such as uncertainty avoidance (Hofstede, 2001). Moreover, while our categorization of countries into high- and low-context groups is consistent with research linking these communication styles with individualistic and collectivistic national cultures (e.g., Hall, 1976), we cannot rule out the possibility that other factors associated with individualistic and collectivistic cultures may have been (partially) responsible for our results. Finally, other factors unrelated to culture per se may also explain differences between high- and low-context individuals. These include issues associated with translation or interpretation of messages, or differences in the amount of stress or anxiety experienced due to being in a home or foreign country. Such factors may cause considerable within-group variability, although the data support our theorizing and hypotheses on persuasive arguments as well as previous research on other behavioral categories (e.g., Adair & Brett, 2005).

A third set of questions stem from the fact that our analysis does not shed much light on the impact of different manifestations of the behavioral categories that we examined. For example, in light of recent evidence showing that some types of arguments are less effective at eliciting compromise than others (cf. Harinck, 2004), it will be useful to determine whether or not specific types of arguments are particularly effective at eliciting compromises from low-context perpetrators but not from high-context perpetrators. This analysis will undoubtedly benefit from a refined coding scheme that captures the different forms of

persuasive arguments. Similarly, and as argued above, the type of arguments used by high-context perpetrators may differ systematically from those made by low-context perpetrators. Evidence of such a difference in type of argument should help to provide an explanation for the more immediate reciprocation observed for high-context perpetrators at time 1. Similarly, the type (but not magnitude) of compromise behaviors may have been different in the first half of the negotiations compared to the second half. This difference might explain why perpetrators' reciprocation of police compromise behavior occurred with much lower proximity in the second half than in the first half of the negotiations. However, it may also be the case that, as the negotiations unfold over time, the range of issues on which compromising was possible became restricted. This possibility is in line with the general decline in compromise behavior that we observed between time 1 and time 2 (see Table 1). Thus, by using a content analysis based approach to examining interaction, we inevitably lost our ability to uncover some of the rich conversational dynamics that occurred during the interaction between negotiators (Lombard, Snyder-Duch, & Bracken, 2002). To examine such conversational dynamics would likely require a different conceptual and methodological approach to the data (e.g., Sacks, Schegloff, & Jefferson, 1974), but the findings would compliment and clarify those derived from our analyses (Chapman, 2001).

A fourth set of questions arise out of our conceptual approach to understanding behavioral relationships, as encapsulated in the proximity coefficient. Our approach was based on the assumption that behaviors occurring close together within an interaction are more related than those that occur further apart. For example, we assumed that persuasive arguments were more effective at eliciting compromises when the compromise behavior occurred quickly after the persuasive argument compared to when it occurred after a delay. While this assumption is the dominant position in both theory (e.g., Watzlawick, Beavin, & Jackson, 1968) and research (e.g., Adair & Brett, 2005), it is possible that delays in

responding might be expected in high-context negotiations, where direct responses to the other party's communication would not be normative, and might even be seen as inappropriate. Against this possibility, our data suggest that this is not the case for all behaviors for which we might expect avoidance of direct responding to be the case. For example, we found that high-context negotiators are faster to reciprocate threats compared to low-context negotiators, despite threats being a very direct response to the police negotiator's cue. However, this does not rule out the possibility that there may be something unique to high-context negotiators' responses to persuasive arguments that leads to delayed responding, and this possibility merits further examination.

Finally, the kidnappings and extortions included in our research can be typically seen as instrumental crisis situations. Instrumental crisis situations look much like business transactions in which the victims are used by the perpetrators as "bargaining chips". These situations can be contrasted with the expressive crisis incidents that have dominated research in the area so far (e.g., domestic crises, Van Hasselt, Flood, Romano, Vecchi, de Fabrique, & Dalfonzo, 2005). In expressive situations, the communication is usually intense and emotional, and the police response may be regarded as adopting a crisis counseling role rather than a negotiation role per se. It is thus an open question as to whether similar parallels will be observed when the dynamics of expressive situations are examined. In these situations, we expect other negotiation strategies, such as cooperative statements (Vecchi et al., 2004) or affective influence strategies (Adair & Brett, 2004), to play a more important role.

In this study we consciously departed from the perspective of police negotiators and a focus on how the behavior of police negotiators influences the subsequent behavior of perpetrators. That is, from a practical point of view we are interested in strategies that work to influence a perpetrator and result in a peaceful resolution of the incident at hand. However, interesting additional information may be obtained by examining to what extent the behavior

of perpetrators influences the behavior of police negotiators. For example, it might be that immediate retaliation of threat behavior by high-context perpetrators is responsible for the somewhat higher occurrence of compromising behavior of police negotiators in encounters with high rather than low-context perpetrators. As mentioned previously, our research also lacks insight into possible adaptation processes occurring in negotiations with high-context perpetrators. Future research should aim at including police negotiators from high-context cultures as well.

Practical Implications and Conclusion

An important implication of our findings is that police negotiators should be sensitive to the influence strategies that they use when interacting with perpetrators from low- and high-context cultures. Our research suggests that persuasive arguments, usually found to be a central element of negotiations (Giebels et al., 2003), may be particularly effective when seeking to influence low-context perpetrators. In contrast, threats appeared as ineffective at gaining conciliation from perpetrators, especially from high-context perpetrators, where threats often lead to counter-threats and escalation. Interestingly, for both persuasive arguments and threats, the evident differences were found to be greater during the second half of interaction. Thus, cultural differences in responding seem to be particularly acute when the initial crisis response has given way to a more normative form of interaction.

These findings are important considering our general observation that police negotiators appear to be quite consistent in their approach. While the existing police approach has been relatively successful (Greenstone, 1995), our findings suggest that there are opportunities for further fine-tuning of the use of message tactics to incorporate growing knowledge of cultural differences. This may be particularly important considering the significant growth in the cultural diversity of the perpetrators of kidnappings and extortions (Giebels & Noelanders, 2002; Ostermann, 2002; Taylor & Donohue, 2006). At the micro-

level of ongoing crisis negotiations, our findings suggest the value of critically reviewing the interaction process and the pathways that may allow negotiators to break through undesirable interaction patterns.

Footnotes

¹ The individual Cohen Kappa for the four behaviors that were the focus of our analysis were, .78 for persuasive arguments, .72 for threats, .75 for information sharing, and .87 for compromising.

² Note that, in absolute terms, the difference between coefficients for the reciprocation of information sharing in the high- and low-context negotiations is negligible ($M = .96$ compared to $.97$). The reason we find a significant main effect for this small absolute difference may be explained by the low within-group variance found for the coefficients, particularly for the low-context negotiations. This is best illustrated by the 95% Confidence Interval for the difference between coefficients across culture, which ranged from $-.024$ to $.002$. However, since this 95% CI passes through zero, albeit only slightly, we urge a cautious approach to interpreting this finding.

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Table 1.

Relative Frequency of Occurrence for the Four Negotiation Behaviors as a Function of Cultural Context and Time Period (Unadjusted Frequencies in Parentheses).

		Culture					
		<i>High-Context</i>			<i>Low-Context</i>		
	<i>Behavior</i>	Time 1	Time 2	Overall	Time 1	Time 2	Overall
Perpetrator	Persuasive arguments	66.4* (64)	66.4* (64)	132.8* (128)	92.6* (96)	96.6* (100)	189.2* (196)
	Threats	155.6* (150)	143.2 (138)	298.8* (288)	201.6* (209)	150.6 (156)	352.3* (365)
	Information sharing	244.8 (236)	273.9 (264)	518.7 (500)	257.6 (267)	247.2 (256)	504.8 (523)
	Compromise	14.5 (14)	10.4 (10)	24.9 (24)	13.5 (14)	6.8 (7)	20.3 (21)
Police Negotiator	Persuasive arguments	94.4 (91)	66.4* (64)	160.8 (155)	88.7 (92)	95.6* (99)	184.3 (191)
	Threats	51.9 (50)	55.0 (53)	106.9 (103)	58.8 (61)	41.5 (43)	100.4 (104)
	Information sharing	291.5 (281)	295.7 (285)	587.2 (566)	277.8 (288)	269.4 (279)	547.2 (567)
	Compromise	15.6 (15)	14.5 (14)	30.1* (29)	8.7 (9)	5.8 (6)	14.5* (15)

NOTE: * $p < .05$ for chi-square difference across high- and low-context.

Table 2.

Mean Proximity Coefficients for Perpetrator's Responses to Police Negotiator's Cues as a Function of High-context Negotiations (top panel) and Low-context Negotiations (bottom panel) and Time Period

<i>Perpetrator's Response</i>								
<i>Time 1</i>					<i>Time 2</i>			
<i>Police Negotiator's Cue</i>	<i>Persuasive arguments</i>	<i>Threats</i>	<i>Information sharing</i>	<i>Compromise</i>	<i>Persuasive arguments</i>	<i>Threats</i>	<i>Information sharing</i>	<i>Compromise</i>
Persuasive arguments	.95	.91	.93	.66	.88	.88	.92	.65
Threats	.91	.93	.96	.84	.87	.93	.92	.65
Information sharing	.80	.85	.96	.73	.89	.91	.96	.70
Compromise	.66	.88	.90	.94	.94	.98	.93	.56

<i>Perpetrator's Response</i>								
<i>Time 1</i>					<i>Time 2</i>			
<i>Police Negotiator's Cue</i>	<i>Persuasive arguments</i>	<i>Threats</i>	<i>Information sharing</i>	<i>Compromise</i>	<i>Persuasive arguments</i>	<i>Threats</i>	<i>Information sharing</i>	<i>Compromise</i>
Persuasive arguments	.86	.94	.95	.88	.92	.93	.94	.84
Threats	.92	.89	.98	.94	.93	.85	.96	.77
Information sharing	.81	.87	.97	.79	.90	.88	.97	.88
Compromise	.81	.95	.97	.92	.78	.85	.96	.53