

DISSERTATION

COMMUNICATION PATTERNS IN VERBAL VERSUS NON-VERBAL HOSTAGE
NEGOTIATIONS

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Roxanne M. Rassti

Department of Psychology

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Colorado State University

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Doctoral Committee:

Advisor: Larry Bloom

Deana Davalos

Ernest Chavez

N. Prabha Unnithan

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ABSTRACT

COMMUNICATION PATTERNS IN VERBAL VERSUS NON-VERBAL HOSTAGE NEGOTIATIONS

While the use of mobile phones and text messaging has made it easier for hostage negotiators to communicate with other law enforcement personnel in crisis situations, little research has examined how text messaging could be used to communicate with the perpetrator. The purpose of this preliminary, qualitative study was to explore the similarities and differences in communication patterns of two hostage negotiations, one that took place verbally and one that occurred through text message. Both transcripts were analyzed using the Crisis Communication Rating Scale (CCRS), a behavioral coding system developed by McClain (2004). The study provided initial insight into several important similarities and differences between the modes of communication. First, the hostage negotiator relied heavily on the use of personal and situational disclosures to resolve the situation, regardless of the mode of communication. Additionally, both the hostage negotiator and barricaded suspect used reflective statements more frequently when they were able to communicate verbally. Lastly, when communicating through text message, the hostage negotiator used persuasive statements more frequently, while the barricaded suspect used expressive statements of anger more frequently. Possible implications for training and practice are discussed.

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Communication Patterns in Verbal versus Non-Verbal Hostage Negotiations

Hostage negotiators are skilled in the art of defusing crisis situations. Crisis situations often involve people who are threatening violence, including barricaded subjects, hostage takers, stalkers, threats, workplace violence, or persons threatening suicide. Negotiators are placed in the position of bargaining with a person or groups of persons, for the release of one or more hostages. As a result of their increasing use in various types of crisis events (i.e., events that threaten the safety of the community), hostage negotiators are now called crisis negotiators (McClain, Callaghan, Madrigal, Unwin, & Castoreno, 2006). Law enforcement agencies have been utilizing negotiators and negotiation strategies in their responses to hostage/barricade situations, kidnappings, personal crises, and other critical incidents since they were first introduced by the New York City Police Department in 1973 (Vecchi, Van Hasselt, & Romano, 2005).

Regini (2002, p. 1) asserts, "Crisis negotiation is one of law enforcements most effective tools. The successful resolution of tens of thousands of hostage, barricade, attempted suicide, and kidnapping cases throughout the world repeatedly has demonstrated its value." This statement has been supported by data from the Hostage Barricade Database System (HOBAS), which was established by the Crisis Negotiation Unit of the FBI. HOBAS serves as a centralized database of hostage and barricade incidents in the United States. In Flood's analysis (as cited in Van Hasselt et al., 2006) of HOBAS data between 2002 and 2003, results showed that approximately 82 percent of reported incidents were resolved without death or injury to the subject or the victim.

History of Hostage Negotiations

The practice of taking hostages is as old as recorded time, and has been used constantly in negotiations with conquered nations, and in cases such as surrenders and armistices. Within the Old Testament, there are multiple accounts of Israelites and their enemies taking each other captive as spoils of war, to deplete the resources of the opposing enemy, and to convert potential enemies to the cause (McMains & Mullins, 1995). The Romans were accustomed to take the sons of tributary princes and educate them in Rome, thus holding the individuals as security for the continued loyalty of the conquered nation and also instilling a possible future ruler with ideas of Roman civilization. Around 51 B.C., Helen of Troy was abducted and Julius Caesar was kidnapped for ransom. African nations across time have often captured their enemies and held them hostage for ransom or to be used as slaves. During the Middle Ages, hostages were taken by European nations to enforce the compliance of enemy nationals during wartime. Additionally, merchants took hostages as insurance so that other merchants would pay their debts. Prior to the 20th century, hostage incidents were most commonly perpetuated as a method for guaranteeing payment or as a security against war (Hatcher, Mohandie, Turner, & Gelles, 1998).

Even though hostage incidents date back to ancient times, modern hostage negotiation principles are fairly new. The historical events that laid the foundation for the need for hostage negotiation as a police approach include the Munich massacre of Jewish Olympic athletes in 1972, as well as an epidemic of airline hijackings that occurred in the 1970's (Kocsis, 2009). For example, during a three-day period in 1970, there were five airplane hijackings. Additionally, in 1971, 39 hostages were killed during the tactical resolution of the prison riots at Attica Correctional Facility in New York. During this time

period, there were only three options to handling these scenarios: 1) verbal resolution through an on-scene police officer; 2) leaving or walking away from the scene; or 3) force (Hatcher et al., 1998).

Most often, the tactical response to these situations was force. This response came under extreme scrutiny after the FBI's decision to intervene with force during an airplane hijacking in 1971 resulted in the death of two hostages and a hijacker in 1971. Post-incident litigation generated the landmark *Downs vs. United States* decision (*Downs vs. U.S.*, 1975). The United States Court of Appeals wrote that "there was a better suited alternative to protecting the hostages' well-being" and expressed that the FBI had turned "what had been a successful 'waiting game', during which two persons safely left the plane, into a 'shooting match' that left three persons dead." The court concluded, "a reasonable attempt at negotiations must be made prior to a tactical intervention" (p. 51). This incident served as a glaring example of everything not to do in a hostage event and influenced the subsequent development of fundamental knowledge, training, and skills for hostage negotiations.

In response to the continued concerns about the use of a force-only approach, the New York City Police Commissioner tasked New York Police Department (NYPD) Lieutenant Frank Bolz and psychologist/police detective Harvey Schlossberg to create a verbal alternative to the force-only approach (Hatcher et al., 1998). They were assigned to build the first hostage negotiation team by selecting and training a group of officers specifically for this purpose. This resulted in creating a full-time unit – the Emergency Services Unit – that would be responsible for responding to crisis incidents as opposed to

the first officers on scene (Noesner, 2010). They also established protocols emphasizing proper containment of the situation as well as nonviolent approaches.

In January 1973, the unit had its first opportunity to apply this new, more restrained approach when officers responded to a robbery in progress at John and Al's Sporting Goods Store in Brooklyn. During the incident, a police officer was killed and a number of civilians taken hostage by four Sunni Muslims. But, instead of using brute force, the police used their new techniques to end the incident with no further loss of life and the new method of hostage negotiation was given institutional support (Noesner, 2010). Over time, what has been referred to as "first generation" hostage negotiation (the police response to terrorist and political activities), gradually evolved into "second-generation" crisis intervention (applying crisis intervention principles to criminal encounters and domestic disturbances) (Herndon, 2009). Since then, many hostage negotiation teams have been renamed crisis negotiation teams and almost every law enforcement agency in the United States has established either a hostage recovery team or has a crisis negotiator on staff (Herndon, 2009; Rogan, Hammer, & Van Zandt, 1997).

Early Training and Development of Basic Models

Prior to 1973, the application of negotiation principles simply meant talking to the suspect or using force. Talking was seen as a better approach to force, especially when the lives of innocent hostages were at stake (Kocsis, 2009). Fuselier (1981) identifies five main strategies available to the law enforcement community in order to neutralize a hostage situation. These strategies consist of containing and attempting to negotiate, demanding the hostage taker to surrender, using non-lethal chemical agents to force surrender, using sharpshooters to neutralize the subject, or using special weapons and tactical (SWAT)

assault. Most of these strategies are considered a violent resolution and conflicted with the “negotiate first” policy that police agencies in the United States began implementing after the Munich Massacre and airline hijackings (Bolz, 1979.) With the guiding principle being to minimize and eliminate the loss of life, the only non-violent tool available is a crisis negotiator.

Crisis negotiators play a vital role in a crisis event, as they are the mediators between the police personnel and the hostage taker. It is the goal of the crisis negotiator to establish a relationship with the hostage taker and obtain information for the crisis team (Fuselier, 1981; and McMains & Mullins, 2010). It is important for the crisis negotiator to learn as much about the person taking hostages as possible, such as why that person has taken hostages and what that person may or may not do during the situation. In addition, it is important to understand the types of behaviors (e.g., motivation, personality type, mental status) that cause a hostage taker to react the way they do, as these behaviors will dictate the course of the negotiation. The more information provided to the hostage negotiator, the greater chance the negotiator might be able to convince the hostage taker to release the hostages and surrender.

With a large emphasis being placed on understanding the hostage taker, research on hostage negotiations has tended to focus on the psychological features of the hostage taker rather than examining the communication process that occurs during a negotiation (Madrigal, Bowman, & McClain, 2009). While some research has examined structural communication features of negotiation (i.e., bargaining and relational limits between the negotiator and hostage taker), there are few theories or models of hostage negotiation that have examined the process of crisis communication and attempted to explain the dynamic

interaction between a crisis negotiator and hostage taker (Madrigal, Bowman, & McClain, 2009). However, researchers commonly agree that the way a negotiation is conducted will affect how a negotiation is resolved (McClain et al., 2006).

Aristotle was one of the first people to recognize that rhetoric, as an art of communication, was morally neutral. That is, it could be used for good and evil. He defined rhetoric as the art of persuasion and described the three modes of persuasion as the personal character of the speaker, the frame of mind of the audience, and the argument of the speech (Kennedy, 1991). First, people of good character are more readily believed than others. Second, when the audience is pleased, their judgments are affected. Third, the speech may prove the truth by reasoning. Thus the abilities needed to persuade are logical reasoning, understanding human character and goodness, and understanding emotions. Statements can be persuasive, because they are self-evident or by using the inductive reasoning of examples or deductive syllogisms (Kennedy, 1991).

Models of Hostage Negotiation

There are few theories or models of hostage negotiation that have examined the process of crisis communication and attempted to explain the dynamic interaction between a crisis negotiator and hostage taker. In 1979, Dr. Harvey Schlossberg and Captain Frank Bolz at the New York Police Department established the first non-tactical approach to resolving crisis situations (Hare, 1997). They described a two-dimensional communication model that classified communication into two types of verbal communication: instrumental and expressive (McClain et al., 2006). Instrumental behaviors were defined as actions that facilitate a form of progress toward an outcome while expressive behavior was defined as statements that communicate an emotional experience to the hostage negotiator or hostage

taker (Madrigal, Bowman, & McClain, 2009). For example, if a hostage taker made a deal with the crisis negotiator to release hostages, they would be performing an instrumental act because the communication between them was instrumental to the release of the hostages (McClain, 2004). On the other hand, expressive behaviors communicate the emotional significance of the hostage taker or hostage negotiator, with the goal of establishing a relationship. Schlossberg and Bolz (as cited in McClain, 2004) found that when both parties use expressive and instrumental behaviors together during the negotiation, a peaceful resolution is more likely to occur than if either behavior were expressed alone. The strength of this two-dimensional communication model is its ability to inform the hostage negotiator about what is going on during the negotiation process, but it fails to account for every verbal behavior presented in the negotiation process.

The theory behind the two-dimensional communication model came from Amidon and Flander's (1967) student-teacher interaction model. Their model was one of the first communication models to use observational coding as a validation method. The researchers transcribed verbal behaviors and analyzed behavioral interactions between teachers, counselors, and students, ultimately allowing them to examine how the behavior of the teacher or counselor was affected by the student behavior and vice-versa (Amidon & Flanders, 1967). The effectiveness of this system prompted Fowler, DeVivo, and Fowler (1985) to adapt the behaviors to fit for hostage negotiations. The categories established included verbal behaviors such as trust-building (i.e., establishing rapport and building a personal relationship); finessing (i.e., influencing and persuading); tranquilizing (i.e., calming and relaxing); and squelching (i.e., reprimanding), and they were validated using observational coding methodology (Fowler, DeVivo, & Fowler, 1985). Through these

studies, valuable information was provided about the importance of trust and relationship building while establishing a precedent to use observational coding methodology with hostage negotiations.

Subsequent research defined the interpersonal relationship that develops in negotiations. Donahue and Roberto's (1993) Negotiated Order Theory focused on relational limits during hostage negotiation situations but did not address other aspects of the negotiation, such as the situational and expressive information. Taylor (2002) attempted to incorporate statement content and speaker motivation into a model of hostage negotiation communication, which he termed the Cylindrical Model. Taylor's (2002) Cylindrical Model is a three-dimensional model of communication that attempts to comprehensively reproduce the communication process of a negotiation by factoring in the motivations of the hostage taker and how they can dictate the negotiation outcome. These two models represent attempts to understand and model the communication dynamic occurring in hostage negotiations. However, these models focus primarily on the communication and psychological issues of the hostage taker without accounting for the communication of the negotiator, thereby limiting their utility in the field.

Vecchi, Van Hasselt, and Romano (2005) created the Behavioral Change Stairway Model (BCSM), which focuses heavily on relationship building through active listening, empathy, rapport, influence, and behavioral change. Unlike the Cylindrical model, the BCSM focuses on the negotiator and how the negotiator can affect change in the hostage taker through communication. Building on this idea, Madrigal, Bowman, and McClain (2009) developed a four-phase model of hostage negotiation that focuses primarily on the negotiator and the actions taken in a successful negotiation. Theoretically, the phases occur

in sequential order but allows for the negotiation to regress to previous stages at any time. The four phases are called Establishing Initial Dialogue, Building Rapport, Influencing, and Surrender (Madrigal, Bowman, & McClain, 2009). The first phase usually involves active listening in order to begin establishing rapport while the second phase focuses on building trust. The negotiator may use active listening skills with the hope of building a personal relationship with the hostage taker. During the third phase, the negotiator uses the information gathered during previous phases and persuasive communication to influence the hostage taker to surrender, which is the final phase. Madrigal, Bowman, and McClain (2009) posit that this model is more beneficial for hostage negotiators because it involves active listening skills that can be trained and a conceptual framework that is more helpful than memorizing models of hostage-taker behavior. However, little research has been conducted on models of hostage negotiation, and they have yet to be empirically validated. Despite a lack of empirical evidence supporting them, these models are important to explore because they are what inform trainings on hostage negotiation tactics and skills.

Thomas (2011) identifies the skill sets required in the negotiation process as active listening, the use of empathy statements, the ability to paraphrase, and knowledge about the situation. He explains that to be successful, a negotiator must be adept in these skills, with the understanding that a crisis does not happen in a vacuum but is associated with one event or a series of events that create a dynamic (Thomas, 2011). These skill sets accompanied by the negotiators experiences are deemed as the key to success, with good negotiators having the life experience as well as police experience to apply that knowledge to the appropriate situation (Thomas, 2011).

Active Listening

Despite the popular notion that listening is a passive behavior, abundant clinical evidence and research suggest that active listening is an effective way to induce behavioral change in others (Noesner & Webster, 1997). During the crisis negotiation course at the FBI Academy, instructors do not emphasize insight-oriented therapy skills to train negotiators; instead, they teach an interactional, brief, problem-focused approach to negotiation that centers on the use of active listening skills.

Regardless of the technology in use, active listening is described as “the backbone of negotiation” (Strentz, 2010; and Thomas, 2011). Active listening deals with listening constructively, with a focus on an understanding of the other person’s feelings or an emphasizing of what the other person is saying (Noesner & Webster, 1997). Much of the literature on crisis negotiations suggests that one of the most important negotiator skills to settle a crisis is to have expertise in “discussing or conferring,” and that integral to this is the ability to hear what the other person is saying (Strentz, 2012). This is considered one of the most essential elements of active listening.

Research in psychotherapy indicates that when individuals feel listened to, they tend to listen to themselves more carefully and to evaluate and clarify their own thoughts and feelings. In addition, they tend to become better problem solvers, growing less defensive and oppositional and more accepting of others points of view (Noesner & Webster, 1997). As a strategy for lowering an individual’s emotions, defusing anger, and returning the individual to more rational thinking, active listening also builds trust and rapport by demonstrating understanding and concern for the subject (Royce, 2005). As

trust and rapport build, the other person is more inclined to adopt a realistic appraisal of their own position.

In recent years, the FBI and a growing number of law enforcement agencies have used active listening to resolve crisis situations successfully, leading the FBI to incorporate these skills in crisis negotiation training. The necessary active listening skills for a negotiator include:

- Minimal encouragements: The negotiator gives occasional, brief, and well-timed vocal replies, demonstrating that they are following what the subject is saying (i.e., “yes,” “O.K.,” or “I see,”).
- Paraphrasing: The negotiator repeats the perpetrator’s message back in their own words to convey understanding and to show that they are listening.
- Emotion Labeling: This allows negotiators to attach a tentative label to the feelings expressed or implied by the perpetrator’s words or actions. Labeling shows that the negotiator is paying attention to the emotional aspects of what the perpetrator is conveying.
- Mirroring: The negotiator repeats the last words or phrases of the perpetrator’s message. This technique frees negotiators from the pressure of directing the conversation and is helpful in the early stages of a crisis to gain initial intelligence and build rapport.
- Open-ended questions: The negotiator asks questions that require more than a yes/no answer to get the perpetrator to stimulate conversation and gain greater insight into the perpetrators intent. “Why” questions should be avoided as open-ended questions due to the fact that they foster a feeling of interrogation.

- “I” messages: Negotiators express how they feel when the perpetrator does or says certain things in an effort to personalize himself [or herself] and seem like a real person to the perpetrator. For example, a negotiator might say, “I feel frustrated that we haven’t been able to come to an agreement” or “I feel frustrated when you scream at me because I am trying to help you.” When employing this technique, it is important to avoid an argumentative, sarcastic, or hostile tone.
- Effective Pauses: Occasionally, the negotiator consciously creates a space or void in the conversation that encourages the subject to speak and, in the process, provide additional information that may help the negotiator resolve the situation.

It is assumed that by using active listening skills, negotiators demonstrate that their goal is to help rather than harm the perpetrator. When negotiators display empathy and understanding, they build rapport, which, in turn, enables them to influence the perpetrator’s actions (Noesner & Webster, 1997). If the negotiator cannot understand or reply in a language that the perpetrator recognizes and understands, how will the negotiator ever gain the perpetrator’s trust in order to build the rapport necessary to effectively resolve the crisis?

Changes in Communication

The goal or mission of negotiation is to utilize verbal strategies to buy time and intervene so that the emotions of the perpetrator can decrease and rationality can increase (Hatcher, Mohandie, Turner, & Gelles, 1998). Historically, this communication has taken place through the use of telephones, with law enforcement officers being able to control the flow of communication, perhaps by cutting the phone lines to a building. However, the

creation of computer and mobile phone technology has enabled faster and more efficient use of communication through text messaging (Almond & Budden, 2012).

Text messaging has become a popular method of communication that has encouraged a variety of novel uses. Research suggests that the trajectory of text messaging will continue to grow as habits transfer from teenagers, college students, and into the workplace (Battestini, Setlur, & Sohn, 2010). It is not surprising that this younger generation has embraced text messaging and found it to be faster, less obtrusive, low-cost, and more discrete mechanism to communicate (Barkhuus, 2005). With this, a new language of communication has resulted: so-called text talk.

Similar to speaking, text talk is a skill and an art, yet it is different from speaking in important ways (Suler, 2004). Suler (2004) proposes that proficiency in one form of communication does not guarantee success in the other. The most problematic scenarios in communicating via text message often revolve around the inherent ambiguity in this type of communication, more so than other types of communication. One cannot see and hear the other person, which deprives them of the visual and auditory cues of facial expression, body language, and voice dynamics that convey emotion and meaning. The lack of these cues may activate the imagination, stir up fantasies, enhance the tendency to project your own expectations, wishes, and anxieties onto the individual sitting at the other end of the connection (Suler, 2004). People will have different reactions to the lack of face-to-face cues. For some, the lack of physical presence may reduce the sense of intimacy, trust, and commitment, whereas others may be attracted to the silent, less visually stimulating, non-tactile quality of the interaction. Texting also occurs in a flexible temporal zone that might involve relatively slow asynchronous exchanges over the course of days, weeks, or months,

as well as much quicker synchronous connections that approximate face-to-face verbal dialogue (Suler, 2004).

Additionally, research shows that people say and do things in cyberspace that they ordinarily would not do in the face-to-face world (Suler, 2004). People in general tend to be disinhibited in text communication because they cannot see each other, allowing them to send a text message and then “run away.” This disinhibition effect allows for the loosening of psychological barriers that serve to block the release of the innermost, private thoughts, feelings, and needs. It serves as a double-edged sword in that some people will share very personal things about themselves while others may act out in ways unimaginable. However, disinhibition is not always so constructive, as one can experience harsh criticisms, rude language, threats, hatred, or explore territory they would never explore in the real world (i.e., pornography, violence, crime, et cetera) (Suler, 2001).

Suler (2001) conceptualizes disinhibition as a shift to a constellation within self-structure as opposed to thinking of it as the revealing of an underlying “true self.” He explains that this self-structure involves clusters of affect and cognition that differ from the in-person constellation (Suler, 2001). Within this constellation, Suler (2001) identifies several factors that interact and supplement each other in causing the disinhibition effect: anonymity (you don’t know me), invisibility (you can’t see me), delayed reactions (see you later), solipsistic introjections (It’s all in my head), and neutralizing of status (we’re equals). It is important to note that the disinhibition effect is not the only factor that determines how an individual will interact through text messages. Individual differences, such as underlying feelings, needs, and drive as well as personality style play an important role (Suler, 2004).

Use of Text in Crisis Negotiation

Littlejohn Shinder (2009) discusses how the pervasive use of mobile phones and text messages has made it easier for law enforcement personnel involved in a crisis intervention to communicate with each other without being present with the hostage taker. Law enforcement agencies are also utilizing text messaging in many areas of their work, including hostage barricade situations, suicide interventions, and negotiating with people in crisis who are wanted for serious offenses (Freiner, 2010). But to date, little research has examined how text messaging could be used to communicate with the perpetrator; ultimately meaning that hostage negotiators are not receiving training in effectively communicating via text message.

Negotiators are highly trained in the intricacies of communication and are skilled in using their senses to pick up on an individual's body language or hear the change of inflection in their voice. Attempting the negotiation process when negotiators do not have the benefit of seeing the person's face or expressions, or where they cannot hear the person speak or listen for subtle changes in voice patterns can be incredibly difficult (Almond & Budden, 2012). In an exploratory study, Almond and Budden (2012) found that hostage negotiators were able to identify both positive and negative aspects to using text messaging during a negotiation.

Overall, most participants had strong reservations about using text messaging as a means to communicate while negotiating. With regard to technological/logistical issues, negotiators struggled with the speed of text exchange, both when the response rate was rapid and when it was slow. The negotiators also expressed concern about their inability to understand the meaning of the texts, ultimately leading them to fear being misunderstood.

For example, negotiators feared that a genuine attempt to show sympathy or empathy would be seen as either sarcastic or cynical (Almond & Budden, 2012). Furthermore, negotiators felt that the lack of nonverbal communication cues that are present in face-to-face interactions and the lack of tone and inflection in a voice that can be picked up in a telephone conversation mean that they lose the ability to implement the skills they are trained to employ in these situations.

While most negotiators expressed real concern about utilizing text in a negotiating environment, some indicated that it had positive technological and psychological aspects. As for positive technological/logistical issues, negotiators expressed that utilizing text messaging can help to initiate contact when a perpetrator refuses to answer the phone. It was also found to be useful in creating time delays if a negotiator needed to make inquiries, develop intelligence, or simply build up trust and rapport with the perpetrator by delivering on promises made during the negotiation (Almond & Budden, 2012). Finally, it served as a constant record of the conversation that took place.

Present Study

Hostage negotiation continues to be a compelling area of interest for the general public, professionals, and academics. However, research on this topic is still in its early stages. There are pockets of research examining different aspects of hostage negotiations such as the psychological properties of individuals who take hostages and various negotiation techniques used to bargain with hostage takers. In addition, some studies explore how the hostage taker and negotiator interact with one another verbally during the negotiation. Nonetheless, few studies follow a clear and consistent path of investigation (McClain, Callaghan, Madrigal, Unwin, & Castoreno, 2006). In 1997, Rogan, Hammer, and Van Zandt (1997) conducted a review of several hostage negotiation surveys and found that negotiators desired research that examines the relationship between negotiation behaviors and negotiation outcome. The study highlighted the need and desire of law enforcement entities for research that leads to a greater understanding of what is going on during a hostage negotiation situation, in hopes of developing more effective training tools for negotiators.

Research by McClain et al. (2006) began to examine the exchange of verbal behaviors by both the crisis negotiator and hostage taker, in an attempt to record changes in verbal behavior and make predictions of outcomes based on those changes. As a result of this research, the Crisis Communication Rating Scale (CCRS) was created for the purpose of coding interactions between a crisis negotiator and a hostage taker or barricaded suspect. The CCRS was found to be reliable as a coding system that tells the negotiator what happened. But what if, during the negotiation process, verbal strategies are just not possible?

With changes in technology and the increased use of text messaging during hostage negotiations, it is important to understand how it may impact the negotiation process. The purpose of this study was to compare observable behavior in hostage negotiations conducted verbally versus those conducted through text message by using the CCRS. The CCRS was found to exclusively and exhaustively capture relevant verbal behaviors in transcripts during hostage negotiations in which verbal communication was used. In the present study, the CCRS was used for two hostage negotiations, one that occurs via text message and one that occurs verbally. The behavior codes from each negotiation were compared to one another in order to determine how the negotiation process may be similar or different, depending on the type of communication used.

Method

Participant

The author of this study examined a text message transcript from a hostage situation. The hostage situation examined involved a single male who barricaded himself in his home after his partner ended their relationship. The data, that is the subject of this analysis of communication behavior, was collected from the on-scene psychologist. In this particular case, the suspect was former military and had fired shots in the home. The second transcript, which was conducted verbally, was obtained from a fellow colleague in the field. This transcript involved an adult male who barricaded himself in his home with his children. Both coders in this study were blind to the outcome of either transcript.

Design and Procedures

Both transcripts were analyzed using the Crisis Communication Rating Scale (CCRS), a behavioral coding system developed by McClain (2004). The CCRS manual contains an introduction section that describes the purpose of the manual, necessary prerequisite training, sources of coder biases and general guidelines for assigning codes. Specific instructions on how to code each turn and how to make a decision about which code to apply to a turn were included. In addition, a definition, code example, and explanation of the code example are provided for each code.

Two individuals familiar with observational coding research methodology coded the transcripts. The number of coders chosen for this study was based on literature that states only two participants are needed to establish inter-rater reliability when testing the usability of a coding system (Bakeman & Gottman, 1986). The two coders were trained to use the CCRS and practiced coding hostage negotiation using transcripts by trained FBI

crisis negotiators. The transcripts used for practice coding were obtained from the developers of the CCRS. Once an agreement level of .60 was reached, the coders coded each transcript for the present study independently. An agreement level of .60 is statistically considered good and acceptable for observational coding (Neuendorf, 2002).

Reliability was determined using the Kappa statistic. Kappa was determined by the coder's ability to record the appropriate code for each statement made by the hostage negotiator and barricaded subject. In order to determine reliability when more than one code was applied to a single statement, only the first response to each statement was included in the data analysis. The first statement was used because of the ambiguity of determining when one sentence ends and another begins. The main problem was that the coders were not coding the same number of statements made from the hostage negotiator and barricaded suspect. For example, there were occasions when one coder would combine and code the second and third statement and the second coder would code each of the statements independently. This caused some problems because there were a different number of codes in each turn for each coder. To address this inconsistency in the application of codes, only the first sentence coded was used in the Kappa analysis.

Data Analysis

The CCRS is a coding system that is accompanied with a manual that provides coders with marginal code examples and counter code examples. A marginal code example is an example of an alternative code similar to the code in question. A counter code example is an alternative code that is clearly not representative of the code in question, but has a similar attribute that may cause confusion. The manual also details how coders are to rate each turn using the coding system and how to decide on a code when more than one

code is presented during each turn. A turn is a statement followed by a response. This code represents that statement and is used during the qualitative analysis.

The CCRS contains a total of 29 behavioral codes in the manual (McClain et al, 2006). The codes are applied to both the crisis negotiator and the perpetrator. The behavioral codes are separated into three domains based on the type of code. Instrumental codes represent behaviors that serve as a means to direct action, provide situational information or facilitate transition to relational communication. Relational Communication codes represent behaviors that serve as a means to form a personal relationship through statements that increase relative intimacy. Aversive Communication codes represent behaviors that do not facilitate the formation of a relationship and that may be detrimental to the relationship. There are 11 instrumental codes, 12 relational codes, and six aversive codes, all listed in the CCRS manual. For specific codes, see Table 1.

Since the data will be classified on the basis of pre-defined categories, qualitative content analysis will be used. This approach will be used to interpret themes from the content of the text data while adhering to the naturalistic paradigm (Neuendorf, 2004). A deductive or direct approach is most fitting for this case study since McClain et al. (2006) outlined the 29 behavioral codes in the manual. Once codes and themes have been identified for each transcript independently, they will be compared to the other transcript in order to highlight similarities and differences between the two types of communication.

Results

Reliability

There were a total of 1,263 verbal behaviors recorded by Coder 1 and Coder 2.

There were a total of 900 verbal behaviors used in the analysis to determine reliability. Not all behaviors by Coder 1 and Coder 2 were used because only the first response to each statement was used in the analysis. The first response was used because the coders were unable to consistently apply the same number of codes to each turn in the transcripts.

Prior to coding the transcripts used in the present study, coders were consistently checked for reliability throughout their training. Reliability checks were conducted to determine the progress of each coder as they became more efficient in using the coding system. These adherence checks were used to determine when the coders achieved a level of reliability that would be sufficient to code the real transcripts used in the present study. Coders were required to code each week and bring the results to the following meeting. Not all of the coding conducted each week was used for reliability checks but was conducted to enhance the coder's skills on specific codes and difficult phrases that occurred frequently.

An examination of the reliability between coders across the two transcripts indicated that the coders were very similar in their coding abilities. For Transcript One, inter-rater reliability was $K = .78$ and for Transcript Two, $K = .88$. Reasons for the drift between the transcripts were discussed above and are most likely a result of the transcript itself, in that transcript one was more difficult contextually and caused some confusion for the coders when trying to determine which codes to apply and where.

Frequency of Verbal Behaviors

The two transcripts contain a total of 1,263 coded verbal behaviors, of which 269 were coded in Transcript One and 994 were coded in Transcript Two. In Transcript One, the distribution of codes included 145 (54%) by the hostage negotiator and 124 (46%) by the barricaded suspect. For Transcript Two, the distribution of codes included 542 (55%) by the hostage negotiator and 452 (45%) by the barricaded suspect. For a breakdown by frequency of the codes for both the hostage negotiator and barricaded suspect in each transcript, see Table 2. For a breakdown by percentage for both the hostage negotiator and barricaded suspect in each transcript, see Table 3.

Hostage Negotiator. In Transcript One, the most frequent code for the hostage negotiator was Personal Disclosure (PDC), which accounted for nearly 16 percent of the codes. Personal Disclosure was coded when the hostage taker or barricaded suspect provided personal information that would otherwise remain unknown. According to the CCRS manual (2004), personal disclosure includes information regarding personal history, motivations, or emotions. The following are examples of personal disclosure behavior by the hostage negotiator:

Barricaded Suspect (B): "Thank you. I'm sorry this is ur (*sic*) job." (FIT, EPY)

Hostage Negotiator (H): "At times like this, me too" (PDC)

(H): "Today I need to talk to you." (PDC)

(H): "I am usaf ret E8 gulf war. (PDC) I keep my word. (PDC)"

Following personal disclosures, persuasion (PSN) was the second most frequent code by the hostage negotiator in Transcript One. Persuasion was coded when the hostage negotiator or barricaded suspect made statements to persuade the opposing individual to perform actions or behaviors. According to the CCRS (2004), the goal of these statements was to promote a change in behavior or thoughts through statements such as a suggestion for action. The following are examples of persuasion by the hostage negotiator in Transcript One:

(H): "Come on man help me out" (PSN)

(H): "You have an open window to make a good choice." (PSN)

The third most frequent code by the hostage negotiator in Transcript One was Situational Disclosure (SDC). Situational Disclosure was coded when the hostage negotiator or barricaded suspect provided information about the situation alone. This included statements about the surroundings, the hostages as a group, or other information regarding the situation that does not include personal information about the speaker. The following are examples of situational disclosures by the hostage negotiator in Transcript One:

(B): "Well im not going to push it out the door you can get them no worries." (SDC)

(H): "Tyler we can't come in." (SDC)

(H): “No, this is an issue that can be worked out.” (SDC)

In Transcript Two, the most frequent code for the hostage negotiator was Situational Disclosure (SDC), which accounted for approximately one-fourth of the codes. The following are examples of situational disclosures by the hostage negotiator in Transcript Two:

(H): “No, you’re not going to be in trouble.” (SDC)

(H): “OK, I have to- I have to check with the officials.” (SDC)

(H): “Ok. Barbara Stewart just come up to a policeman, OK? (SDC) They’re gonna bring her down to me, OK?” (SDC)

Following situational disclosures, Reflective Statement Behavior (RFS) was the second most frequent code for the hostage negotiator in Transcript Two, which occurred in 13 percent of codes. Reflective Statement Behavior was coded when the hostage taker or barricaded suspect responded to a statement of personal or situational disclosure through paraphrasing or reiteration. The purpose of a reflective statement behavior is to build rapport through the demonstration of understanding or listening, or serve to clarify a statement made by the other person. The following are examples of reflective statement behavior by the hostage negotiator in Transcript Two:

(B): "101" (IDC)

(H): "It's apartment 101, OK." (RFS)

(B): "And I did it, right, and then the dude found out I did it, right?" (PDC)

(H): "Right, OK." (RFS)

Personal Disclosure (PDC) was the third most frequent code for the hostage negotiator in Transcript Two. The following are examples personal disclosures by the hostage negotiator in Transcript Two:

(H): "I don't know if they would or not." (PDC)

(H): "I have no idea. I'm being honest, you know, I'm being straight with you, I don't know." (PDC, PDC)

(H): "I think, I- I you each policeman has his own way of policing and I probably would have taken care of it much better than that – than what he has" (PDC)

Barricaded Suspect. In Transcript One, situational disclosure (SDC) and personal disclosure (PDC) occurred the most frequently for the barricaded suspect, accounting for approximately 37 percent of the total codes. After situational and personal disclosures, criticism behavior and distrust behavior were the most frequent codes for the barricaded suspect in Transcript One. Distrust behavior was coded when the barricaded suspect

indicated doubt regarding the hostage negotiator's statement, while criticism behavior was coded when the barricaded suspect made statements indicating disapproval of the hostage negotiator. This also included statements of disapproval regarding decisions, feelings, past experiences, or the current situation. The following are examples of the most frequent codes by the barricaded suspect in Transcript One:

(B): "I have had more than enough practice at killing shit in the military" (PDC)

(B): "Nice try I am not coming out." (SDC)

(B): "yeah well having my phones bugged and cops outside year not going to happen" (DST)

(B): "What kind of question is that" (CRT)

As for the barricaded suspect in Transcript Two, the most frequent code in was Reflective Statement Behavior (RFS), accounting for approximately 14 percent of the codes for the barricaded suspect. The second most frequent code for the barricaded suspect in Transcript Two was Personal Disclosure (PDC). PDC accounted for 71 out of the 452 codes for the barricaded suspect.

Both Affirmative Statement (AFS) and Personal Inquiry (PIQ) accounted for nearly 12 percent of the codes for the barricaded suspect in Transcript Two. Affirmative Statement (AFS) was coded when the hostage negotiator or barricaded suspect responded

to statements with an affirming response, such as “yes,” “yeah,” or “ok.” Personal Inquiry (PIQ) was coded when the hostage negotiator or barricaded suspect made an inquiry regarding personal information that is directed to the other person. These inquiries included questions about the emotions, thoughts, intentions, desires, actions, or personal history of the other person (CCRS, 2004). The following are examples of personal inquiries by the barricaded suspect in Transcript Two:

(B): “What’s your name again?” (PIQ)

(B): “You kill people, right?” (PIQ)

(B): “If you were in the same situation what can I do man?” (PIQ)

There were four codes that were used in either one or both of the transcripts, but their frequency of use was not sufficient enough to make comparisons for the purpose of the present study (i.e., less than 10 percent of overall codes). These codes included: Praise (PRS), plea for assistance (PLE), uncertainty (UCT), and avoidance behavior (AVD). Praise was coded when the hostage negotiator or barricaded suspect made a statement indicating approval of the other person’s thoughts or actions, while plea for assistance was coded when the hostage negotiator or barricaded suspect requested unspecified assistance from the other person. Uncertainty was coded when the hostage negotiator or barricaded suspect made statements that indicated doubt regarding decisions, feelings, or actions related to the current situation. Avoidance behavior was coded when the hostage

negotiator or barricaded suspect showed an action of eluding or withdrawing from the topic of conversation.

Out of the 29 possible behavior codes in the CCRS, only two codes were not used in either transcript: demand (DMD) and direct assistance (DAS). Demand is coded when the hostage negotiator or taker makes an authoritative request where a specific consequence is stated, while direct assistance is coded when the hostage negotiator or taker makes a statement indicating an intention to provide assistance to the other person.

Instrumental Communication Behaviors

According to the CCRS (2004), instrumental communication refers to behaviors that serve as a means to direct action, provide situational information, or assist a transition to relationship communication. Instrumental behaviors include: affirmative statement (AFS), direct assistance (DAS), directive statement (DRS), disconfirming statement (DCS), fill-talk (FIT), impersonal disclosure (IDC), impersonal inquiry (IIQ), request (REQ), situational disclosure (SDC), situational inquiry (SIQ), and uncertainty (UCT).

Transcript One. In Transcript One, half of the codes for the hostage negotiator were identified as instrumental communication behaviors. Of the 11 behaviors, directive statement, impersonal disclosure, and situational disclosure were coded more frequently. When these three codes were combined, they accounted for over half of the instrumental communication behavior codes. Directive statement behavior was coded when the hostage negotiator or barricaded suspect made a comment toward the other to perform an action with no ultimatum, while impersonal disclosure was coded when the hostage negotiator or barricaded suspect provided information about a third party that did not include information about the speaker of the situation. This could include information about a

hostage, family member, or friend (CCRS, 2004). Examples of the most frequent instrumental communication codes for the hostage negotiator in Transcript One include:

(H): "Come out with mom's medication" (DRS)

(H): "Leave the gun come outside" (DRS)

(H): "Ur (*sic*) mom is tired and needs to come home" (IDC)

Affirmative statement, fill-talk, impersonal inquiry, situational inquiry, and request were used infrequently by the hostage negotiator (i.e., accounted for less than 10 percent of the codes). Direct assistance, disconfirming statement, and uncertainty were not coded for the hostage negotiator in Transcript One. Impersonal inquiry was coded when the hostage negotiator or barricaded suspect made an inquiry about a third party that did not include information about the speaker or the situation, while situational inquiry was coded when the hostage negotiator or barricaded suspect made an inquiry regarding information specific to the situation at hand.

Fill-talk behavior was coded when the hostage negotiator or barricaded suspect made a statement without situational relevance that initiated or maintained conversation, such as discussing sports, weather, or current events. Request behavior was coded when the hostage negotiator or barricaded suspect made a statement indicating a voluntary action that was desired by the other, which included appeals to the listener to perform an action with the recognition that the listener has the option of compliance or noncompliance

(CCRS, 2004). Examples of these instrumental communication codes by the hostage negotiator in Transcript One include:

(H): "Help me out on this" (REQ)

(H): "What about ur (*sic*) mom?" (IIQ)

(H): "So how do we get thru this? (SIQ)

For the barricaded suspect in Transcript One, instrumental communication behaviors accounted for roughly one-third of the coded behaviors. Of the instrumental behaviors, situational disclosure accounted for over half of the codes for the barricaded suspect. After situational disclosure, directive statement, disconfirming statement, fill-talk, impersonal disclosure, and request were used infrequently, with affirmative statement, direct assistance, uncertainty, and situational inquiry not being coded at all. Examples of the most frequent codes for the barricaded suspect in Transcript One include:

(B): "She stayed in touch with Jordyn for sure they r (*sic*) in Temecula ca" (IDC)

(B): "So just reach in and grab them" (DRS)

(B): "Have a good afternoon" (FIT)

Transcript Two. In Transcript Two, a little more than half of the codes for the hostage negotiator were instrumental communication behaviors. Of these codes, 43 percent were accounted for by situational disclosures. After situational disclosures, affirmative statement, directive statement, impersonal inquiry, and situational inquiry accounted for the majority of the codes. Fill-talk, impersonal disclosure, request, and uncertainty occurred infrequently, with direct assistance not occurring at all. Examples of the most frequent instrumental communication behavior codes for the hostage negotiator in Transcript Two include:

(H): “ Your balcony, does it face the street, or does it face the parking lot?” (SIQ)

(H): “So I want you to stay where, until I let you know to go out. Just hold on the phone. Don’t make no moves. Stay where you are, OK?” (DRS)

(H): “What’s your friend’s name, will you tell me that? (IIQ)

(H): “I know, we won’t let nobody make any noise, and I’ll try and get your wife here to talk to ya, OK?” (SDC, SDC)

Similar to the hostage negotiator in Transcript Two, approximately half of the codes for the barricaded suspect were instrumental communication behaviors. However, unlike with the hostage negotiator, affirmative statements accounted for the majority of the instrumental behavior codes. After affirmative statements, impersonal disclosure,

situational disclosure, and situational inquiry were the most frequent codes, with directive statement, fill-talk, impersonal inquiry, and request occurring infrequently. Directive assistance and uncertainty were not coded for the barricaded suspect in Transcript Two. Examples of the most frequent instrumental communication behavior codes for the barricaded suspect in Transcript Two include:

(B): "Hold on a minute" (DRS)

(B): "She always abandoned me and the children. That's why I got the children because she ran on us. You know that?" (IDC, SDC, PIQ)

(B): "Do you want me to stand in front of the balcony?" (SIQ)

Relational Communication Behaviors

Relational communication refers to behaviors that serve as a means to form a personal relationship through statements that increase relative intimacy (CCRS, 2004). According to the CCRS (2004), relational behaviors include: bargaining (BRG), compromise (CPS), de-escalating talk behavior (DE T), empathy (EPY), expressive: relational type (EXP-R), personal disclosure (PDC), personal inquiry (PIQ), persuasion (PSN), plea for assistance (PLE), praise (PRS), reflective statement behavior (RFS), situational empathy (S-EPY), and self-pity behavior (S-PTY).

Bargaining was coded when the hostage negotiator or barricaded suspect proposed an action that accommodated the needs of either one or both parties, but the offer was only

needed by one party; whereas compromise was coded when the hostage negotiator or barricaded suspect proposed an action that accommodated the needs of both parties and usually involved a partial alteration of the original demand or request. De-escalating talk behavior was coded when the hostage negotiator or barricaded suspect attempted to resume facilitative reciprocal conversation by providing assurance through calming statements.

Empathy was coded when the hostage negotiator or barricaded suspect made a statement indicating identification with, or an understanding of, the emotional state of the opposing person, while situational empathy was coded when the hostage negotiator or barricaded suspect made a statement indicating identification with, or an understanding of the situation. This included the emotional state of the hostages or third parties. Self-pity behavior was coded when the hostage negotiator or barricaded suspect showed sorrow for himself. Expressive: relational type was coded when the hostage negotiator or barricaded suspect made a statement that indicated the emotional state of the speaker without disclosing information or opinions, such as crying or sighing (CCRS, 2004). Finally, praise was coded when the hostage negotiator or barricaded suspect made a statement indicating approval of the other person's thoughts or actions.

Transcript One. In Transcript One, relational communication behaviors accounted for half of the codes for the hostage negotiator. Of the 13 behaviors, over half of the codes were personal disclosures and persuasive statements. De-escalating talk behavior, empathy, bargaining, personal inquiry, situational empathy, and reflective statement behavior were coded infrequently, with praise, compromise, expressive: relational type, situational pity, and plea for assistance being coded once or not at all for the hostage

negotiator. Examples of the most frequent relational communication behavior codes for the hostage negotiator in Transcript One include:

(H): "It sounds like you got the shaft with crystal" (EPY)

(H): "You fired a gun in the house of xourse (*sic*) she is scared" (SDC, S-EPY)

(B): "Minimal!!! I still get fucked over by the cops" (RFS, DST)

(H): "I know a deputy has recently tlked (*sic*) to u and u weren't fucked over then"
(SDC, DET).

For the barricaded suspect in Transcript One, approximately one-third of the codes were relational communication behaviors. Personal disclosures accounted for over half of the codes, while compromise, empathy, bargaining, situational empathy, self-pity, and reflective statement behavior occurred infrequently. Praise, de-escalating talk behavior, expressive: relational, persuasion, and personal inquiry were not coded for the barricaded suspect in transcript one. Examples of the most frequent relational communication behavior codes for the barricaded suspect in Transcript One include:

(H): "We cant do that I need them out the door. I need u out the door to work this
out" (SDC, RDC, PSN)

(B): "You have my work im not going to anything when you go get them" (CPS)

(B): "She can come grab them im not walking out their to toss it any farther" (BRG)

(B): "Just like everyone else making me the asshole" (S-PTY)

(B): "I'm sorry this is ur *(sic)* job" (EPY)

(B): "I'm on the phone with my buddy john: (PDC)

Transcript Two. In Transcript Two, approximately half of the codes for the hostage negotiator were relational communication behaviors. Of the 13 codes, personal disclosure, personal inquiry, and reflective statement behavior combined to total more than half of the codes. Next, persuasion accounted for 10 percent of the relational communication codes, while compromise, de-escalating talk behavior, empathy, bargaining, and situational empathy were coded infrequently. For the hostage negotiator, expressive: relational type and self-pity were not coded in Transcript Two. Examples of the most frequent relational communication behavior codes for the hostage negotiator in Transcript Two include:

(H): "I know you don't want to get hurt and we don't want no kids hurt" (DET)

(H): "I know, I know, I know it's rough. I know" (EPY)

(H): "Tell me what you need, so I can get everybody out of this. What do you need?

What your family need, so we can try and work this out" (BRG)

(H): "Well maybe she doesn't know what's going on." (S-EPY)

(H): "Can I give you a ring back?" (PIQ)

For the barricaded suspect in Transcript Two, reflective statement behavior, personal disclosure, and personal inquiry accounted for the vast majority of the relational behavior codes. Expressive: relational type, bargaining, self-pity behavior, and plea for assistance were coded infrequently, while praise, compromise, de-escalating talk behavior, empathy, persuasion, and situational empathy were not coded. Examples of the most frequent relational communication behavior codes for the barricaded suspect in Transcript Two include:

(B): "Please, I'm in so much trouble. That's what I don't understand. (whining) All I did was try to tell my wife (...?...) I went to the FBI and tried to tell them too." (S-PTY, EXP-R, PDC)

(B): "Oh my God, I'm a dead man!" (S-PTY)

Aversive Communication Behaviors

As defined in the CCRS (2004), aversive communication refers to behaviors that do not facilitate the formation of a relationship and that can be detrimental to the relationship. Aversive behaviors include: avoidance behavior (AVD), criticism behavior (CRT), demand

behavior (DMD), distrust behavior (DST), expressive: aversive type (EXP-A), and threat (THT).

Aversive behaviors were not coded for the hostage negotiator in either of the transcripts. However, aversive behaviors were coded in both transcripts for the barricaded suspect. Avoidance behavior was coded when the barricaded suspect showed action of eluding or withdrawing from the topic of conversation. Threat was coded when the barricaded suspect implied or stated an intention to perform an action such as harm. Finally, expressive: aversive type was coded when the barricaded suspect made a statement that indicated their emotional state without disclosing information or opinions, such as cursing.

Transcript One. In Transcript One, distrust behavior and criticism behavior totaled 68 percent of the aversive behavior codes. Avoidance behavior, expressive: aversive type, and threat were coded infrequently, while demand was not coded at all. Examples of aversive communication behavior codes in Transcript One include:

(B): "Fucking stupid dumbass" (EXP-A)

(H): "Come out and lets get u and mom together" (BRG)

(B): "Ha ha you think im a dumb ass don't you" (AVD)

(B): "Your full of shit" (DST)

Transcript Two. In Transcript Two, threat and distrust behavior accounted for the majority of the aversive behavior codes, while avoidance behavior and criticism were coded infrequently. Demand behavior and expressive: aversive type was not coded for the barricaded suspect in Transcript Two. Examples of aversive communication behavior codes in Transcript Two include:

(B): "The moment you all try to come in through here, is, that's what's going to happen then, something's gonna happen then, you hear?" (THT)

(B): "You know what? You're going to sacrifice me and my two children" (THT)

(B): "You all don't never cooperate with nobody" (CRT)

(H): "We're wrapped together so we can get out. Get everybody to come out, all together." (BRG)

(B): "(starts crying again) If I go to that jailhouse, you know what? Those niggers in there, those fuckers are going to try and get me." (AVD)

(B): "Let you get the kids – you gonna get me." (DST)

Discussion

The purpose of this preliminary study was to explore the similarities and differences between hostage negotiations that take place verbally versus those that take place through text message. Although the size of the data set limits the generalizability of the results, the study nonetheless generated some rather important findings. The first of which concerns the similarities in codes between the two transcripts. It was fascinating to discover that regardless of the mode of communication, the hostage negotiator in both situations used situational disclosures and personal disclosures the most. Personal disclosures were among the most frequent codes for the barricaded suspect in both transcripts as well. Both personal and situational disclosures focus on building the relationship with the barricaded suspect while resolving the situation, and did not appear to be altered by whether the speaker was communicating verbally or through text message.

As for differences in the codes between the two transcripts, it was interesting to find that reflective statement behavior occurred much more frequently, for both the negotiator and barricaded suspect, when the negotiation was conducted verbally. Reflective statements were responses to personal or situational disclosures in which the speaker indicated their understanding through paraphrasing or reiteration. There should not have been a difference between the number of reflective statements between the transcripts since both personal and situational disclosures were coded frequently for both the hostage negotiator and barricaded suspect. In finding that there was a difference, it raises the question of whether the difference was a result of the type of communication used. This finding is an indication that there may be added barriers in conveying that one is tracking

the conversation and listening when the conversation is taking place over text message, as opposed to verbally.

Additionally, it was surprising to find that the hostage negotiator in Transcript One used persuasion more frequently than the hostage negotiator in Transcript Two. Since the hostage negotiator in Transcript One was at a disadvantage with having to communicate through text message, it raises the question of whether the hostage negotiator was unable to use reflective statements similarly to the hostage negotiator in Transcript Two; thus, resorting to the use of persuasive statements more frequently. Hostage negotiators are trained to use an interactional, brief, problem-focused approach to negotiating that focuses on the use of active listening skills; so, the hostage negotiator in Transcript One may have redirected their focus to skills that aid in resolving the situation rather than focusing on building the relationship through active listening skills, such as reflective statements. This focus on a different aspect of their training may have been a result of not being able to communicate verbally with the barricaded suspect.

Another interesting finding in the results was the differences in expressive communication between the two transcripts. From the outset of the study, an obvious difference between the transcripts was predicted to be the lack of information about the emotional state of the other person in transcript one. This is mainly because it is much more difficult to convey one's emotional state through text message than verbally, especially when taking into account sound cues such as sighing or crying. While this was found to be true for distressed emotional states, the anger of the barricaded suspect in transcript one was clear, as evidenced by the number of expressive: aversive behavior codes. Additionally, the total number of aversive behaviors was greater in Transcript One

than Transcript Two, despite Transcript Two having a much larger number of overall codes.

These differences could be attributed to the underlying nature of the two barricaded suspects, or it could be more indicative of differences one will find between the two forms of communication (i.e., verbal versus text message). Suler (2004) proposed that people in general tend to be disinhibited in text communication because they have an added barrier between themselves and the intended recipient. This “disinhibition effect” allows for the loosening of psychological barriers that serve to block the release of the innermost, private thoughts, feelings, and needs (Suler, 2004). This may be why the barricaded suspect was more likely to engage in aversive, distrusting, and criticizing behavior with the hostage negotiator. With this in mind, it may be important to prepare negotiators for that difference if they are engaging in a hostage negotiation through the use of text messaging.

Overall, there were important similarities and differences between the two transcripts that highlighted how the hostage negotiation may be impacted by the mode of communication. It is clear that changing the mode of communication in a hostage negotiation impacts the communication of both the hostage negotiator and perpetrator, whether it is a hostage taker or barricaded suspect. Given that more hostage negotiators are likely to encounter negotiations that may take place through non-verbal means, it is important to continue to explore the impact that technology has on communication in order to better inform hostage negotiation training. Although these findings are preliminary, this study highlights the need and desire of law enforcement entities for research that leads to a greater understanding of what is going on during a hostage negotiation situation, to develop more effective training tools for negotiators.

Limitations

While this study has revealed some similarities and differences between hostage negotiations that take place verbally with those that are conducted via text message, there are several limitations. First, only one transcript was used for each mode of communication, which is certainly not an exhaustive list of all potential observable behaviors that could occur in either hostage negotiation situation. Even though the number of transcripts was appropriate for qualitative analyses, it does not lend itself to quantitative analyses of the coded behaviors.

Another limitation in this study is the discrepancy in the number of codes for each of the transcripts. There were significantly more codes in Transcript Two than Transcript One, which made it difficult to determine whether there were statistical differences between transcripts or if it was better explained by chance. Finally, since the outcome of both the hostage situations was unknown, this study could not explore if any of the similarities or differences between communication styles impacted the outcome of the negotiation.

Directions for Future Research

Despite the high number of writings and anecdotal reports, empirical research in crisis negotiation is at an early stage. Further development and assessment of communication strategies for negotiator training and outcome evaluation is imperative. This preliminary study serves as a springboard for some of the upcoming challenges that hostage negotiators will face as technology continues to evolve. As law enforcement agencies continue to train hostage negotiators, it is imperative to have evaluation research be an ongoing effort that continues to inform their practices.

As for the use of the CCRS as an assessment tool, the relational communication behavior codes are consistent with the identified active listening skills that are used in training FBI hostage negotiators (i.e., minimal encouragements, paraphrasing, emotional labeling, mirroring, open-ended questions, “I” messages, and effective pauses). However, the CCRS consists many more codes that do not fit under the umbrella of active listening skills (i.e., instrumental communication and aversive communication behaviors), and these codes accounted for a significant portion of the overall behavior codes. This appears to be indicative of a gap between the research and what is informing hostage negotiation training.

Greater cooperation between law enforcement agencies and researchers will lead to more effective strategies in crisis negotiation. It could also be beneficial to apply this research to other areas such as suicide intervention or conflict resolution. It is likely that these areas are also experiencing some of the challenges that come with changes in technology, and could be helpful to see how they are addressing those changes.

Table 1

Code Abbreviations and Names

Code	Name of Code	Code	Name of Code
AFS	Affirmative Statement	PSN	Persuasion
DAS	Direct Assistance	PLE	Plea for Assistance
DRS	Directive Statement	AVD	Avoidance
DCS	Disconfirming Statement	CRT	Criticism
FIT	Fill Talk	DMD	Demand
IDC	Impersonal Disclosure	DST	Distrust
IIQ	Impersonal Inquiry	EXP-A	Expressive: Aversive Type
REQ	Request	THT	Threat
SIQ	Situational Inquiry	SDC	Situational Disclosure
PRS	Praise	BRG	Bargaining
CPS	Compromise	RFS	Reflective Statement
DET	De-escalating Talk	S-EPY	Situational Empathy
EPY	Empathy	S-PTY	Self-pity
EXP-R	Expressive: Relational Type	UCT	Uncertainty
PDC	Personal Disclosure	PIQ	Personal Inquiry

Table 2

Frequency of Codes per Transcript

Code	Transcript 1		Transcript 2	
	Hostage Negotiator	Barricaded Suspect	Hostage Negotiator	Barricaded Suspect
AFS	1	-	31	52
DAS	-	-	-	-
DRS	17	5	29	19
DCS	-	5	11	9
FIT	1	3	3	9
IDC	16	9	4	38
IIQ	4	-	32	3
REQ	4	1	17	15
SDC	20	26	120	39
UCT	-	-	1	-
SIQ	9	-	34	35
PRs	1	-	-	-
CPS	1	2	5	-
DET	4	-	15	-
EPY	3	1	11	-
EXP-R	-	-	-	12
PDC	23	25	69	71
PSN	21	-	27	-
BRG	2	3	2	1
PIQ	9	-	56	52
S-EPY	5	1	4	-
S-PTY	-	1	-	6
RFS	4	4	71	74
PLE	-	-	-	1
AVD	-	4	-	1
CRT	-	12	-	2
DMD	-	-	-	-
DST	-	14	-	5
EXP-A	-	7	-	-
THT	-	1	-	8

Table 3

Percentage of Codes per Transcript

Code	Transcript 1		Transcript 2	
	Hostage Negotiator	Barricaded Suspect	Hostage Negotiator	Barricaded Suspect
AFS	.7	-	5.7	11.5
DAS	-	-	-	-
DRS	11.7	4	5.4	4.2
DCS	-	4	.6	2
FIT	.7	2.4	.5	2
IDC	11	7.3	.7	8.4
IIQ	2.8	-	5.9	.7
REQ	2.8	.8	3.1	3.3
SDC	13.8	21	22	8.6
UCT	-	-	1	-
SIQ	6.2	-	.2	7.7
PRS	.7	-	-	-
CPS	.7	1.6	.9	-
DET	2.8	-	2.8	-
EPY	2	.8	2	-
EXP-R	-	-	-	2.7
PDC	15.9	20.2	12.7	15.7
PSN	14.5	-	5	-
BRG	1.4	2.4	.4	.2
PIQ	6.2	-	10.3	11.5
S-EPY	3.4	.8	.7	-
S-PTY	-	.8	-	1.3
RFS	2.8	3.2	13.1	16
PLE	-	-	-	.2
AVD	-	3.2	-	.2
CRT	-	9.7	-	.4
DMD	-	-	-	-
DST	-	11.3	-	1
EXP-A	-	5.6	-	-
THT	-	.8	-	1.8

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