Persuasion through Other-Orientedness: An Exploration in Empathic Influence Tactics

by Kirsten E. Johnson

B.A. in Psychology with a Certificate in Global Studies, University of Minnesota (Twin Cities)
M.A. in Psychology, Northeastern University

A dissertation submitted to

The Faculty of
the College of Science of
Northeastern University
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy

August 8, 2018

Dissertation directed by

Judith A. Hall
University Distinguished Professor of Psychology
Acknowledgements

There are many people to thank but I must first address my adviser, Judy Hall. Your critical thinking, your insights, your undying belief in the field of psychology, and especially your patience with me, has made my experience as a graduate student one I will look back on fondly for the rest of my life. You pushed me to be a better researcher, to always be thoughtful and knowledgeable of whatever I was interested in. I cannot imagine having worked with any other adviser. Thank you so much for everything, you have been more than just an academic mentor, you have been a friend.

Next, I absolutely must thank my research assistants. Your tireless efforts to code hours of video, to enter and clean data, and to run my studies made it possible for me to focus my cognitive efforts on study design and data analysis. I will be forever grateful for the efforts of Cord Meyer, Katie Sorensen, Emily Jones, Alissa Yap, Donna Appia, Kerri Ruffo, and Jill Laquidara (to name a few). Your smiling faces helped me get my PhD, so my sincere appreciation goes out to each and every one of you.

I also want to acknowledge the support of the Psychology Department, including the office staff, the professors, and graduate students. When I earned a grant from APA’s Peace Division, Joanne made sure to match the grant amount so that my research could have a wider impact by drawing in more participants from the Boston community. Furthermore, each year I was able to go to SPSP to present my research because the department covered the costs. I am so grateful for those experiences, made possible by this department. I should also mention the general feeling of warmth and encouragement I always received from the faculty of the department and from the wonderful women in the main office. Thank you all for your teaching, advice, constructive criticisms, and your delightful humor. It helped me grow into the researcher I am today.

Last, I acknowledge my friend family here in Boston. Prabarna and Garima, you have been especially meaningful to my time as a graduate student, aching and laughing with me along the way,
experiencing our trials and tribulations together as graduate students—both in the context of academics, and in our personal lives outside of school. To all other friends and graduate students who have been involved in my life in any way, I thank you too. I am aware how important a strong social network is to well-being and it is because of all of you that I am such a satisfied individual. You make me strong.

Again, a huge acknowledgement of appreciation for all of you—thank you! I will look back on these years with a deep sense of gratitude and with happiness, and I hope to keep you all in my life as I proceed into the next stage of my career. Cheers!
Abstract of Dissertation

Qualities that make a person persuasive have been well-studied in the persuasion literature, typically considering such qualities as credibility, expertise, attractiveness, similarity, or likeability (Briñol & Petty, 2006; Chaikan, 1980; Maddux & Rogers, 1980; Pornpitakpan, 2004). Work manipulating written messages has additionally assessed the persuasive impact of various message frames (e.g., positive or negative frame), message relevance, and high or low argument quality (Briñol & Petty, 2006; Smith & De Houwer, 2014). By manipulating aspects of persuasive content, the field has gained tremendous knowledge regarding the influence of different qualities (such as credibility or attractiveness), and the ways in which these qualities engage a target’s information processing routes.

In prior work, researchers have manipulated qualities of the source message—through framing or labeling the source as credible, friendly, etc. Researchers have done much experimental work manipulating aspects of a message’s persuasiveness but have done less to explore the evaluation of the persuasiveness of these qualities when being used as influence tactics. A significant amount of work in social influence indicates that establishing a relationship with a target makes a target more susceptible to a source’s demands or influence (Cialdini & Goldstein, 2003; Cialdini & Trost, 1998). For example, evidence indicates that (1) expressing concern and understanding to a target (empathic expression), (2) seeing from a target’s point of view (perspective taking), or (3) attending to a target’s nonverbal cues (nonverbal attentiveness) positively predicts rapport, trust, and liking in a target (e.g., Ivey & Ivey, 2008; Norfolk, Birdi, & Walsh, 2007; Vecchi, Van Hasselt, & Romano, 2005). Therefore, it was plausible that these behaviors could be repurposed as valuable influence tactics.

Study 1 (empathic persuasion) did not manipulate a source’s message or label but instead the source was provided 1 of 3 influence tactics and was free to determine how to implement and alter
their message to persuade their target while using the tactic. In brief, the empathic persuasion study addressed the persuasiveness of three separate empathic tactics when used in debate. The empathic compliance study (Study 2) explored the effectiveness of empathically-delivered requests on obtaining compliance (agreement to a suggestion) and compared how compliance rates differed when a target was under stress or not. Both studies are forerunners in experimentally exploring the influential power of empathy.

In Study 1 (N = 155 same gender dyads; 51% male), it was predicted that the three tactics would enable a source to be more persuasive in a debate relative to a control condition in which no tactics were used. It was also predicted that these tactics would enhance bond-formation between source and target. Results indicated that, relative to control (n = 31 dyads), sources equipped with the nonverbal attentiveness tactic (n = 44 dyads) were harmed in their ability to persuade a target, those equipped with the empathic expression tactic (n = 39 dyads) were not impacted in their ability to persuade, and those equipped with the perspective taking tactic (n = 41 dyads) were not impacted in their ability to persuade but became resilient to their target’s ability to persuade them. None of the tactics were associated with greater bond-formation relative to control.

In the empathic compliance study (N = 126; 63% female), it was predicted that a target would be more willing to comply with an experimenter’s request if the request was delivered in an empathic (n = 42), rather than friendly (n = 42) or neutral manner (n = 42). It was also predicted that a target would be more willing to comply when under stress (n = 66) compared to neutral (n = 60), if the message was conveyed in an empathic, rather than friendly or neutral way. Results indicated empathy enhanced compliance rates, as predicted, but counter to prediction, empathy’s impact on compliance was not enhanced when a target was stressed. Cumulatively, findings indicate empathy enhances compliance but certain components of empathy differently impact persuasion. Ensuring a source properly displays empathic behavior would likely enhance the source’s ability to persuade.
# Table of Contents

Acknowledgements .................................................................................................................. 2  
Abstract of Dissertation ........................................................................................................ 4  
Table of Contents ..................................................................................................................... 6  
Introduction ............................................................................................................................ 8  
Persuasion ................................................................................................................................ 11  
Counseling: Motivational Interviewing .................................................................................... 14  
Negotiation: Crisis and Business ......................................................................................... 15  
Source Tactics ......................................................................................................................... 19  
  *Summary and additional points* ............................................................................................ 24  
Overview of Study 1: Empathic Persuasion .......................................................................... 26  
Overview of Study 2: Empathic Compliance .......................................................................... 26  
Chapter 1 .................................................................................................................................. 27  
Empathic Persuasion Study Method ...................................................................................... 27  
  Overview ............................................................................................................................... 27  
  Participants .......................................................................................................................... 28  
  Materials .............................................................................................................................. 28  
  Behavioral Coding and Reliability ....................................................................................... 31  
  Averaging of Pure Controls’ Scores .................................................................................... 32  
  Procedure ............................................................................................................................ 33  
Empathic Persuasion Results .................................................................................................. 35  
Persuadedness .......................................................................................................................... 36  
Manipulation Checks ............................................................................................................. 37  
Hypotheses .............................................................................................................................. 40  
  Hypothesis 1 ....................................................................................................................... 40  
  Hypothesis 2 ....................................................................................................................... 45  
  Hypothesis 3 ....................................................................................................................... 47  
  Hypothesis 4 ....................................................................................................................... 48  
  Summary of Empathic Persuasion Findings ....................................................................... 51  
  Additional Analyses ............................................................................................................ 52  
Chapter 2 .................................................................................................................................. 57  
Empathic Compliance Study Method ................................................................................... 57  
  Overview ............................................................................................................................. 57  
  Study Design ....................................................................................................................... 58  
6
Introduction

Persuasion has been of great interest to social psychologists since the advent of the field. Ancient Greek philosophers, politicians, and strategists were enchanted by the power of rhetoric long before psychology existed as a discipline. Aristotle identified three rhetorical influence tactics, ethos (appear credible), logos (give a well-reasoned argument), and pathos (play on the crowd’s emotions; Higgins & Walker, 2012). Even without today’s experimental design methods, the influential impact of various strategies—such as those put forth by Aristotle in ancient Greece—was evident to those who paid attention. Over centuries of thinking about persuasion, compliance, attitude change, and social influence, our understanding has become more nuanced. Strategies have been implemented in marketing, in the work setting, and in the political realm (e.g., Barker, 2005; Hogan, Hogan, & Murtha, 1992; Karmarkar & Tomala, 2010). Of course, we also mistakenly (or intentionally) influence our friends and colleagues on a daily basis.

Within the past decade, law enforcement agencies charged with the responsibility of negotiating with hostage-takers and with preventing other life-threatening social crises (e.g., suicide or domestic abuse) have taken a serious interest in persuasion research. Many of the techniques adopted by the crisis negotiation field have come from the psychological literature, particularly work on suggestibility (i.e., the influence of susceptible targets; Rieser & Sloane, 1983; Erickson & Rossi, 1979). For crisis negotiators, it is critical to identify tactics that can enhance their influence but the paucity of work focusing on source tactics has left them little to work with. The intent of the present research is to aid in the remedy of this issue by focusing on influence tactics, particularly those which are other-oriented in nature.

I have been privileged to work with members of the New York Police Department (NYPD), particularly Jeff Thompson, PhD, a detective who trains crisis negotiation teams throughout the country. Through conversations with him, and as evidenced by the literature, it has become evident
that behavioral research could greatly benefit the development of crisis and hostage negotiation influence tactics. Thus far, their field has not utilized social psychological research to assess source tactics that could facilitate target persuasion. In the case of crisis negotiation, the target is the subject at the center of an incident. This person could be a man in the midst of a dangerous domestic dispute with his wife, a hostage-taker holding innocent members of society captive, or a person threatening their own life, among a number of other possibilities. In all instances, the target is the person to be persuaded. Ultimately, a crisis negotiator’s goal is to successfully persuade a target to comply with a nonviolent outcome.

The complexities of the differences between these targets was not considered for this project, however. Any subject, regardless of their qualities, is referred to in this text as a target (of the source’s influence tactic) and the focus of my dissertation research was on influence tactics and target compliance. My hope was to advance both the psychological and crisis negotiation fields through this work. To do this, I drew upon research from multiple literatures, primarily persuasion (including social influence, attitude change, and compliance), negotiation, and counseling. I describe two studies to analyze source persuasiveness; the first included a debate in which the source was randomly assigned an empathic tactic to persuade a target and the second includes an empathically-delivered request. In both studies, the source was manipulated with the intention to influence a target. Going forward, persuasion is understood as a change in opinion to become more like that of one’s partner and less like one’s original opinion. Compliance is understood as a willingness to accept a source’s request or favor. Influence is a broader term which encompasses both persuasion and compliance; both studies explore empathy as a tool of influence; the first focuses on persuasion or opinion change while the second focuses on compliance to a request. The term empathy is used as a broad term to encapsulate personal qualities that are “empathy-like” or those that might function to build relationships, for example, qualities that require a source to focus their attention on
another person, such as expressing concern and understanding for another person, taking their perspective, or tuning in to their nonverbal cues to deduce their emotional state or perspective. Here it is also worth noting that researchers have reached no consensus on the definition of empathy (Hall & Schwartz, 2018), so empathy and its related terms will be defined throughout this project.

In the empathic persuasion study (Study 1), pairs of participants debated 2 topics they disagreed on. One participant acted as the target and the other as the source. A source was either assigned no influence tactic (control) or was provided one of three empathic tactics (tactics which are other-oriented and relevant to understanding others): express concern and understanding (empathic expression), take the target’s perspective (perspective taking), or attend to the target’s nonverbal cues (nonverbal attentiveness). Both the target and the source were told to persuade their partner of the correctness of their position, with the hypothesis being that an influence tactic increases a source’s ability to persuade their target that their opinion is the correct one. Persuasion was defined by the extent to which a participant’s opinion changed in the direction of their partner’s opinion and away from their own original opinion. In the empathic compliance study (Study 2), a target was asked to comply with an experimenter’s request that was delivered by the experimenter in one of three ways: empathically, friendly, or neutral. It was expected that empathic delivery would yield greater target compliance than either friendly or neutral.

The crisis negotiation field currently lacks evidence-based influence tactics and police departments have yet to fully benefit from the work of behavioral psychologists. It was the goal of this dissertation to critically evaluate source tactics, particularly ones which could be useful to crisis negotiators. These tactics were selected primarily for their relevance to crisis negotiation, but also for their novelty within the domain of influence research. Variants of these tactics are already being taught in negotiation courses, and although supported theoretically, they have not been validated using methods from social psychology. For example, negotiators are trained to work toward building
a relationship with a target as soon as a means of communication is established, and they are taught to do this by displaying compassion for the target as well as an interest in their perspective, all the while maintaining an awareness of their target’s emotional and cognitive state (McMains & Mullins, 2015).

Before proceeding to a detailed description of the studies’ methods, I present evidence from a variety of literatures to better support my emphasis on empathy when devising tactics to gain influence or obtain compliance. I begin with a broad overview of what has been studied in the persuasion literature. I then give an explanation of motivational interviewing as used by counselors interested in changing their clients’ bad behaviors, which underlies the persuasion model currently used by crisis negotiators, the Behavioral Change Stairway Model, which I will describe immediately thereafter. Last, I present the rationale supporting the selected empathic persuasion tactics in Study 1 as well as the empathic compliance tactic in Study 2. Findings from this dissertation will contribute to our knowledge of influence, and that knowledge can be used not only to alter or develop currently existing influence tactics but also to enrich the field’s understanding of influence tactics which are based on other-oriented, relationship building qualities.

**Persuasion**

A significant amount of work in social influence indicates that establishing a relationship with a target makes a target more susceptible to a source’s demands or influence (Cialdini & Goldstein, 2003; Cialdini & Trost, 1998). Therefore, it is plausible that qualities associated with relationship-building may be repurposed as valuable influence tactics. For example, evidence indicates that expressing concern and understanding to a target (empathic expression), seeing from a target’s point of view (perspective taking), or attending to a target’s nonverbal cues (nonverbal attentiveness) positively predicts rapport, trust, and liking in a target (e.g., Ivey & Ivey, 2008; Norfolk, Birdi, & Walsh, 2007; Vecchi, Van Hasselt, & Romano, 2005). These associations may be
the result of higher communication quality (Mercer & Reynolds, 2002) or the affiliative behaviors they produce in the source (i.e., gestures of warmth or friendliness; Lynn & Simons, 2000).

Other research shows that targets who feel well-treated are more willing to comply with a suggestion (Schwarzwald, Koslowsky, & Agassi, 2001). Even before responding to a suggestion, targets use their feelings as cues to evaluate how willing they are to acquiesce (Whatley, Webster, Smith, & Rhodes, 1999). Furthermore, a target experiencing positive affect who likes the source they are engaging with, is more susceptible to that source’s influence (Cialdini & Goldstein, 2003; Forgas, 1998). Altogether, the literature suggests empathic influence tactics are effective through the rapport, trust, and positive affect they engender in a target, thereby providing the conduit necessary for a source to build a relationship with their target. The characteristics that enable a source to establish a relationship with a target may be critical to understanding source persuasiveness.

**Source characteristics.** Source characteristics have been well-studied in the persuasion literature, typically considering such qualities as credibility, expertise, attractiveness, similarity, or likeability (Briñol & Petty, 2006; Chaikan, 1980; Maddux & Rogers, 1980; Pornpitaakpan, 2004), and a single study considered personality (Oreg & Sverdlik, 2013). Work manipulating written messages has additionally assessed the persuasive impact of various message frames (e.g., positive or negative frame), message relevance, and high or low argument quality (Briñol & Petty, 2006; Smith & De Houwer, 2014). By manipulating aspects of persuasive messages, the field has gained tremendous knowledge regarding the influence of different qualities (such as credibility or attractiveness), and the ways in which these qualities engage a target’s information processing routes.

Attitude change models, perhaps dual process models especially, have provided a working framework for understanding the ways in which attitude-relevant information is processed. The Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1986) claims two routes to a target’s persuasion: central and peripheral. Central processing requires motivated effortful attention; when a
target utilizes central processing, they are less susceptible to weak arguments or irrelevant information (distractions). Peripheral processing is comparatively more automated, requires little effort, and is likely to be engaged by targets when the subject matter is deemed unimportant or when the target is unable to effortfully attend to it, either due to distractions or lack of motivation. A target relying on peripheral processing is more susceptible to weak arguments and biasing cues such as attractiveness or friendliness of the source (Petty & Wegener, 1999). Marketers frequently rely on their audiences to engage in peripheral route processing when they select an attractive, well-liked celebrity to advertise a product.

In prior work, researchers have manipulated qualities of the source message—through framing or labeling the source as credible, friendly, etc. Study 1 does not manipulate a source’s message or label but instead the source is provided an influence tactic. After being given a tactic, the source is free to determine how to implement and alter their message to persuade their target. As far as I am aware, this has not been done in the persuasion literature per se, so the empathic influence study (Study 1) will be worthwhile in helping to determine whether this is a worthy direction for research to move in. In brief, Study 1 addresses the persuasiveness of three separate empathic tactics while the empathic compliance study (Study 2) functions to explore the influence of empathically-delivered requests on compliance, and will compare how compliance rates differ when the target is under stress or not. Although Study 2 similarly follows prior work by manipulating a source characteristic (message framing), it differs in that an experimenter delivered the request orally rather than being read by the target as a written message. The empathic compliance study will help to determine whether empathically-infused language and nonverbal expressions are relevant to compliance, particularly if a source is experiencing stress, and if so, whether empathically-infused requests should be implemented as a tactic that engages a target’s peripheral route processing.
Counseling: Motivational Interviewing

Research from a variety of literatures, especially counseling, support the significance of relationship-building to influence attitude and behavior change. Motivational interviewing is an intervention technique that relies on empathic, yet directive communication, to elicit behavior change. Therapists engage in empathic listening as a means to encourage collaboration and defuse a patient’s (“target’s”) defensiveness to suggestion (Miller & Rollnick, 1991; Miller, Leckman, Delaney, & Tinkcom, 1992; Morton, Beauchamp, Prothero, Joyce, Saunders, Spencer-Bowdage, Dancy, & Pedlar, 2015). To do this, they intentionally ask open-ended questions, summarize, and reflect targets’ statements back to them, all with the intention to indicate to the target that they are being listened to and understood. Therapists communicate respect, listen rather than tell, and gently persuade a target while strictly avoiding any displays of aggression that may heighten defensiveness and decrease likelihood of behavior change.

The effectiveness of motivational interviewing techniques has been substantiated by years of evidence-based research (Lundahl & Burke, 2009). Randomized controlled trials of interventions indicate that motivational interviewing is effective and theorizing has identified a number of possible mechanisms: expressing empathy to reduce a target’s resistance to suggestions, taking a target-centered approach that allows the target to set their own pace for change, mobilizing the target’s intrinsic values and goals to encourage their own desire for change, resolving ambivalence by helping the target to realize costs and benefits of change, among others (Rubak, Sandbæk, Lauritzen, & Christensen, 2005).

Therapists are trained to exhibit these behaviors but the influential strength of any one of them has not been assessed so it remains unclear which behaviors make motivational interviewing a successful intervention method (Rollnick & Allison, 2004). It is possible that some of these behaviors influence a target’s attitude or behavior change while others play no role at all. The goal of
studies 1 and 2 is to identify tactics that result in opinion change and behavioral by targeting three empathic persuasion tactics and one empathic compliance tactic, respectively.

Negotiation: Crisis and Business

Crisis negotiation. Negotiators follow a process similar to that of motivational interviewers; they utilize empathic listening skills to make a target feel understood in order to facilitate behavior change. Theoretically, actively listening, displaying empathy, and creating rapport are relationship-building techniques that prepare a target to accept a negotiator’s suggestions (Johnson, Thompson, Hall, & Meyer, 2018; Vecchi, Van Hasselt, & Romano, 2005). Supporting this, research from the persuasion literature indicates that targets who trust (or who like, or can relate to) a source are particularly susceptible to the source’s suggestions (Cialdini & Goldstein, 2004). The heuristic value of such relationship-building skills within crisis negotiation has been evidenced through the successful nonviolent resolution of multiple critical incidents (Dalfonzo, 2002; Flood, 2003; Noesner & Webster, 1997). These methods seem to be effective, as indicated by the number of successfully resolved incidents, but it is not clear which behaviors contributed to a negotiator’s ability to obtain compliance. It remains necessary to consider select behavioral persuasion and compliance tactics with respect to a source’s ability to influence a target. This dissertation attempts to fill this gap.

Behavioral Change Stairway Model (BCSM). According to this negotiation model, persuading a target to agree to a nonviolent outcome is the ultimate goal (this could include obtaining their voluntary compliance). To get there, a negotiator must (1) use active listening skills to (2) facilitate empathic expression, which allows for (3) the development of rapport with the target; in turn, rapport provides a basis to (4) influence the target toward meaningful behavior change that
leads to a peaceful settlement of the critical incident (Dalfonzo, 2002; Vecchi, Van Hasselt, & Romano, 2005).

Following the BCSM, a negotiator uses active listening to express (moreso than experience) empathy, where empathy should be understood as ‘[perceiving] the world as if you were the [target], but with the awareness that the [target] remains separate from you’ (Ivey & Ivey, 2008, p. 322). Ultimately, a crisis negotiator nurtures rapport and trust as a means to influence their target by empathically listening for the target’s message, feelings, and their ‘story,’ or life events and beliefs that guide their actions and life (McMains & Mullins, 2015). In the process, the negotiator remains aware that his or her emotions and experiences are separate from the target’s. The negotiator must maintain this awareness of separateness to avoid becoming emotionally overwhelmed and succumbing to the target’s feelings (Soskis & Van Zandt, 1986). Negotiators tend to distinguish empathy from sympathy by defining sympathy as taking on the target’s emotional experiences instead of understanding them while remaining aware that their own emotions are separate from the target’s (Misino, 2004). Sympathy is something to be avoided, whereas empathy is the bedrock for building rapport and trust that paves the way to a target’s behavioral change. Sympathy is similar in concept to what psychologists often refer to as emotion sharing or emotion contagion, which in this case might involve a source experiencing personal anxiety and unease in response to a target’s distress, also referred to as personal distress (Davis, 1980; Parkinson & Simons, 2009).

Sympathy is discouraged for multiple reasons, one being that sympathy’s emotional contagion could increase a negotiator’s susceptibility to a target’s baiting, or their attempt(s) to unravel the negotiator, putting the target in a position over the negotiator (Soskis & Van Zandt, 1986). Baiting is related conceptually to countertransference processes in psychotherapy, whereby the therapist can be pulled too much into the patient’s world and become vulnerable to manipulation and to taking a role that is congruent more with the patient’s goals than with their own
Negotiators are expected to remain levelheaded and in control of their emotions. Practicing empathy rather than sympathy helps to achieve this.

**Business negotiation.** While crisis negotiators have emphasized differences in empathy and sympathy, research conducted in the business negotiation literature has tried to disentangle perspective taking from empathy. For example, Galinsky and his colleagues (2008) have compared the distinct roles of perspective taking and empathy when predicting negotiation outcomes. Trait perspective taking and empathy were measured using two subscales of the Interpersonal Reactivity Index (IRI; Davis, 1980), namely perspective taking and empathic concern. According to the IRI, perspective taking is the tendency to adopt the psychological point of view of others while empathic concern is assessed as the tendency to have other-oriented feelings of sympathy and concern for unfortunate others. Here, perspective taking involves seeing another person’s perspective while empathic concern involves feeling concerned for someone in an unfortunate situation. Empathic concern is similar to a negotiator’s understanding of sympathy in that a source experiences feelings for an unfortunate other but it is different in that the feelings are not so overwhelming that the source becomes susceptible to the target’s influence, making it more like their understanding of empathy.

Perspective taking and empathy were experimentally manipulated through instructions guiding a participant to: “try to understand what [your target] is thinking, what their interests and purposes are…imagine what you would be thinking in that role (perspective taking)” or “try to understand what [your target] is feeling, what emotions they may be experiencing…imagine what you would be feeling in that role (empathy; note its overlap with sympathy as explained above).” In their work, they found that both trait perspective taking and behavioral perspective taking contributed to a negotiator’s ability to obtain greater personal gain. Comparatively, trait empathic concern and behavioral empathy had no impact on negotiation outcomes except when negotiating
for mutual gains. In those instances, empathy, but not perspective taking, was positively associated with earning gains that benefited both the negotiator and their counterpart.

Following this work, Gilin and her colleagues (2012; many who were the same as in the previous 2008 study) again considered the distinct roles of perspective taking and empathy. In four studies, they explored whether perspective taking and empathy would have differential impacts in mixed-motive negotiations where the critical skills necessary to succeed were either more cognitively or emotionally-based. When the necessary skills were more cognitive in nature, requiring participants to understand an opponent’s strategic intentions in a war game, trait and behavioral perspective taking predicted success but empathy did not. However, when it was essential to identify strengths of interpersonal connections in a relationship-based coalition game, trait and behavioral empathy predicted successful outcomes while perspective taking did not. Finally, in a fourth study, the researchers identified what they believed to be a key difference between these two qualities: perspective takers were more accurate at understanding the cognitive processing of others while empaths were more accurate at understanding the emotional processes of others (Gilin, Maddux, Carpenter, & Galinsky, 2012).

Their work suggests that perspective takers are influential in situations which require the ability to understand a target’s cognitive processes (e.g., strategizing) while empaths are influential in situations requiring accurate emotional understanding (e.g., coalition-building). Crisis negotiators are expected to utilize perspective taking as a strategizing method to help them establish a relationship with their target without becoming emotionally overwhelmed by their target’s emotions. In business negotiations, it helped to consider a target’s perspective but not their feelings when the goal involved strategic gains. If coalition building was important, considering the target’s feelings mattered to successfully establishing a relationship. Such findings indicate these two source characteristics serve
different purposes, but both working in tandem should help a crisis negotiator—perspective taking to assist with strategizing and empathy to assist with coalition-building.

Source Tactics

The following segments present three behaviors selected to function as empathic influence tactics in Study 1: empathic expression, perspective taking, and nonverbal attentiveness. Next, a combination of empathic expression and perspective taking was selected to function as an empathic compliance tactic in Study 2. In addition to the supporting evidence provided above, more evidence underlying the selection of each tactic will be provided to further substantiate their selection as influence tactics for Studies 1 and 2. Thus far, mention of nonverbal attentiveness has been minimal as it is the least explored of these qualities, but arguably as relevant. Evidence for this is provided in the respective segment below, along with its definition.

Empathic expression. Stress has serious detrimental effects on a person’s physiological, behavioral, emotional, and cognitive processes (Cox, 1979). People under stress experience an increase in blood sugar, catecholamines (a neurotransmitter involved in the control of emotional behavior), and corticosteroids (a steroid produced by the adrenal glands that helps to regulate emotional states). Rising levels of corticosteroids are associated with feelings of helplessness, depression, and a rise in feelings of aggression. Blood pressure, heart rate, and sweating also increase, as do feelings of anxiety, boredom, and fatigue. Under these conditions, a person’s ability to concentrate and make decisions becomes impaired and functioning begins to rely more on habit than on reason.

A person (in this case, the target) undergoing such an experience will benefit from feeling understood. A source can assist in the regulation of the target’s emotions by focusing on the target’s feelings and demonstrating an understanding of their experiences, their frustration and anxiety, and show respect for those experiences, perhaps also relating a time when they experienced similar
feelings, thereby making the target feel understood and accepted (McMains & Mullins, 2015). It is this demonstration of concern and understanding for the target that I refer to when I use the term empathic expression. *Empathic expression* refers to demonstrating understanding and concern for the target’s cognitive and affective states. A person expressing empathy, then, need not understand or feel what the target is experiencing; they need only convince their target of their empathy for them.

Research in counseling has established empathic expression as a necessary condition for facilitating change in a person (Carkhuff & Berenson, 1967; Carkhuff, 2000; Egan, 2002). Empathic expression serves to reduce stress and anxiety through displays of understanding and acceptance (Vecchi, Van Hasselt, & Romano, 2005). By reducing a target’s stress, aggressive responses are derailed, thereby allowing the source to have a relaxed and open conversation with the target. A target now open to interacting with a source is a target more susceptible to influence. In the crisis negotiation literature, demonstrating empathy is essential to developing rapport, which is what enables a negotiator to influence a target (Vecchi, Van Hasselt, & Romano, 2005), and because level of volition associated with compliance is a function of the quality of treatment they receive (Tyler, 1997), a source benefits from making a target feel cared for and understood. In other words, a target who feels well-treated, and with whom the source has greater rapport, is more likely to accept a source’s suggestion.

According to Hogewood (2005) empathy can be expressed to varying degrees of quality. At the lowest level, subtractive empathy, expression can be detrimental to the fostering of rapport and trust. This occurs when a source demonstrates an inaccurate understanding of the target’s experiences. The moderate level, basic empathy, occurs when a source is adequately correct in their demonstration of the target’s experience. The highest quality level of empathic expression, is termed additive empathy. A source demonstrates additive empathy when they can help the target see new
connections in previous ideas that lead them to re-establishing their perspective. In this way, additive empathy embodies what it is to use empathic expression as a means of persuasion.

**Perspective taking.** For the purposes of this research, *perspective taking* is understood as “experiencing the world as if you were the [target], but with the awareness that the [target] remains separate from you” (Ivey & Ivey, 2008). It is imperative that a source (especially a crisis negotiator) remain separate from their target by refraining from adopting the target’s perspective, and from projecting their own thoughts, feelings, or values onto the target (Vecchi, Van Hasselt, & Romano, 2005). In the counseling literature, perspective taking (often referred to as empathy) helps a therapist foresee how a client will respond to different suggestions or specific skills used during a therapy session (McMains & Mullins, 2015). Perspective taking acts as a tool for a counselor to anticipate how a client will respond to various suggestions. The same rationale can be used here; a source can use understanding of a target’s perspective to anticipate responses to different suggestions.

In the crisis negotiation literature, awareness of the target’s perspective allows the negotiator to understand where things started (according to the target), how events have played out so far, and where they are expected to go. A negotiator uses this knowledge to devise a strategy to guide the target’s thinking and behavior, with the goal being persuasion toward voluntary compliance. Here, it is worth noting that taking a target’s perspective only facilitates this process of understanding a target, it does not ensure an accurate understanding of the target’s cognitive or affective processes (e.g., Funder, 1995). For example, a target who is threatening to attempt suicide might verbally indicate feelings of sadness and anxiety while simultaneously expressing anger, contempt, or facetiousness nonverbally (in their body language and vocal tone). In these instances where verbal and nonverbal behaviors are mismatched, the attentive source may decide to guide the conversation in such a way as to uncover how the target is truly feeling, and work toward identifying the target’s motives.
Researchers examining hierarchical influence in the workplace find that demonstrating consideration of a target’s perspective elicits more favorable compliance rates (Schwarzwald, Koslowsky, & Agassi, 2001). Some have suggested stepping into a target’s shoes provides the understanding necessary for a source to reach a desired outcome, whether it be peaceful resolution or manipulating a target to yield more resources in a business negotiation (Galinsky, Ku, & Wang, 2005; Galinsky, Maddux, Gilin, & White, 2008; Hodges, Clark, & Myers, 2011). The mechanism for this link is not clear, but some argue that knowing a target’s desires is useful for predicting future behavior (Ivey & Ivey, 2008; Galinsky, Maddux, Gilin, & White). Others propose perspective taking sometimes results in perceptions of similarity, which serves to decrease hostility toward a target, and to increase understanding, concern, and a desire to listen (Galinsky, Ku, & Wang; Hodges, Clark, & Myers, 2011). Alternatively, it may serve both functions by providing anticipatory knowledge and by increasing consideration of the target. The latter may encourage affiliative behaviors in the source that would increase a target’s desire to comply (Cialdini & Trost, 1997), aiding the link between perspective taking and persuasive outcomes.

**Nonverbal attentiveness.** As hinted at by additive empathy and perspective taking, having a nuanced understanding of a target’s states or traits is critical to a source’s persuasiveness. Any source tactic pertaining to understanding a target, then, may facilitate persuasion through the earning of a target’s trust and liking, in addition to illuminating how the target will respond to various suggestions. Along this line of thinking exists the third source tactic of interest: nonverbal attentiveness. Nonverbal attentiveness is the act of attending to a target’s nonverbal expressions: their vocal tone, gestures, facial expressions, and other body movements. In both the counseling and crisis negotiation literatures, attending to a target’s nonverbal expressions is important to understanding their emotion state, well-being, and to anticipating how the target will respond to a suggestion (Hall, 2011; Hoegewood, 2005; Ivey & Ivey, 2008; McMains & Mullins, 2015). For
example, if a therapist suggests his depressed client increase her Zoloft dosage and she verbally agrees but also shrugs her shoulders and scoffs, the therapist can infer from her nonverbal cues that it is unlikely his client favors taking the higher dosage.

Nonverbal communication also assists in developing rapport with a target. This has been well-studied in a clinical setting, where health providers’ nonverbal communication skills, or their ability to communicate and understand their patients’ facial expressions, body movements, and voice cues, predicted greater patient satisfaction (DiMatteo, Taranta, Friedman, & Prince, 1980). Attending to nonverbal cues improves quality of communication, likely because the richness of the cues provides a wealth of information about the target’s cognitive and affective states. A significant amount of work has shown that from nonverbal cues alone, a source can draw inferences about a target’s emotions, attitudes, interpersonal roles, severity of pathology, intelligence, sexual orientation, political association, trustworthiness, and personality characteristics (Ekman & Friesen, 1965, 1969; Penton-Voak, Pound, Little, & Perrett, 2006; Rule & Ambady, 2008, 2010; Rule, Krendl, Ivcevik, & Ambady, 2013).

It should not be surprising that attending to a target’s nonverbal expressions could provide the necessary information a source needs to understand what the target’s position is and why, and to devise a way to successfully persuade them. The information exists in the target’s nonverbal expressions, a source need only attend to the information to tap into its potential. Of course, a more skilled source could better use the information, but the average person can accurately judge many of these cues above chance in a matter of seconds (Knapp, Hall, & Horgan, 2013).

**Combined empathic expression and perspective taking.** As briefly alluded to earlier, crisis negotiators are expected to take their target’s cognitive perspective, be aware of but separate from their emotional perspective, and to express feelings of concern and understanding for their target (verbally and nonverbal). These behaviors are a conflation of perspective taking and empathic
expression, while incorporating attentiveness to the source’s own nonverbal expressions (rather than to the target’s as in Study 1). Study 1 intentionally keeps these qualities separate (i.e., as distinct source characteristics) but Study 2 conflates perspective taking with empathic expression to enhance ecological validity (but in a controlled experimental manner). In the empathy condition, the experimenter delivers their request in such a way that suggests they feel concern and understanding for their target’s perspective, while monitoring their voice cues to ensure they sound empathetic.

Study 2 also addresses how the combination of perspective taking and empathic expression differentially impacts a relaxed or stressed target’s willingness to comply. Targets in high-stress conflicts may be particularly receptive to empathic requests, when compared to targets in either positive or neutral affective states. If it is the case that stressed targets are compliant when a request is delivered empathically but not when it is friendly or neutral, crisis negotiators will want to be aware of this. Therefore, a stress induction is included in Study 2 for its relevance to crisis negotiation. Targets in crises are especially stressed (McMains & Mullins, 2015), and their stress is likely to impair their ability to process information (Cox, 1979), thereby increasing their likelihood of relying on automated processing (Petty & Wegener, 1999). If stress pushes a target to rely more on automated than central processing, then they may be more susceptible to an empathic delivery via the affiliative response it engenders.

Summary and additional points. Each of these three qualities, empathic expression, perspective taking, and nonverbal attentiveness, provides a persuader (source) with tools to express concern and understanding (empathic expression) or to absorb information that provides understanding of a target (perspective taking and nonverbal attentiveness). Understanding a target, whether it be through taking their perspective, attending to their nonverbal cues, or simply displaying concern and understanding, serves multiple purposes within the context of influence. Foremost, these tactics engender liking and trust in a target, making the target more likely to comply.
with suggestions (Cialdini & Goldstein, 2004); they also encourage affiliative behaviors in both the target and the source. The combination of a source’s affiliative behaviors with a target’s liking and trust, together establishes a positive environment that sets the stage for persuasion and compliance (Lynn & Simons, 2000; McCall, 1997). However, what distinguishes these tactics from others relying on liking or positive affect, is what is gained from their unique empathic qualities: increasing the target’s comfort by making them feel accepted and understood, reducing their anxieties, communicating in a way tailored to their understanding, and anticipating their future behaviors.

Based on what has been discussed thus far, I present two studies, both which pertain to the role of a source’s empathic qualities in the influence process. The first study attends to three distinctive empathic influence tactics while the second considers a single empathic compliance tactic that is a conflation of two influence tactics from Study 1. Additionally, Study 1 includes experimentally manipulated source behaviors as well as trait measures of perspective taking, empathic concern, and an interpersonal accuracy skill relevant to nonverbal attentiveness, emotion recognition accuracy. Specifically, it includes the IRI and Geneva Emotion Recognition Test (GERT, Schlegel & Scherer, 2016). Furthermore, Study 1 includes a Big Five measure of personality, the Big Five Inventory (BFI; John & Srivastava, 1999). The BFI was included as a broad trait measure that might capture more general traits that are not specific to any of the source tactics.

As stated previously, empathic concern is the tendency to feel concern and sympathy for others while perspective taking is the tendency to spontaneously take another person’s perspective, and the GERT captures the ability to accurately read and decode emotion-relevant nonverbal cues (mapping onto Study 1’s three conditions: empathic expression, perspective taking, and nonverbal attentiveness, respectively). Participants scoring high on these traits may be advantaged in their ability to persuade due to their natural inclination to take other-oriented perspectives or build relationships. By including these measures, it was possible to explore the impact of traits versus
intentional behaviors on source persuasiveness, much like Galinsky et al. (2008) and Gilin et al. (2012) did in their negotiation studies. Note, any analysis of traits will be considered exploratory to maintain emphasis on the behaviorally manipulated influence tactics.

Overview of Study 1: Empathic Persuasion

As mentioned previously, the first study considers three persuasion tactics: empathic expression, perspective taking, and nonverbal attentiveness. The study has four experimental conditions, one for each persuasion tactic and one control. In the experimental conditions, a source is given one of the tactics to help them be persuasive while their target is given parallel control instructions; both source and target are told their goal is to persuade their opponent of the correctness of their position. A pair (source and target) debates two topics, each for seven minutes. After the debates are completed, they rate one another on questions pertaining to positive affiliation. It was hypothesized that experimental sources would (1) be more persuasive than control, (2) receive higher scores on positive affiliation as rated by their partner, and (3) ratings of positive affiliation would mediate the relationship between a source’s tactic and their persuasiveness.

Overview of Study 2: Empathic Compliance

Study 2 is a 3 (delivery of request: empathic, friendly, neutral) x 2 (stress induction or neutral) design. Participants came in to complete a one hour study that was manipulated to finish within 30 minutes, thereby leaving 30 minutes before the hour completed. All participants completed a series of neutral tasks for roughly 25 minutes, after which point, half of them were randomly assigned to complete a stress-inducing writing task. The remaining half completed a neutral writing task. Following the writing task, participants believed they completed the study. It was at this point that the female experimenter made her request, asking if they would be willing to stay to complete up to 25 minutes of additional tasks to help with the study. The experimenter made this request (decided by randomization) in an empathic way that suggested concern, understanding,
and perspective taking, in a friendly way that was upbeat, or in a neutral way that was professional in tone. Participants could then choose to leave immediately and be credited or to stay for 5 – 25 minutes longer, according to their preference, where greater time was considered greater compliance. It was hypothesized that (1) participants assigned to hear the empathic request would be more compliant than those who heard the neutral request, (2) and more compliant than those who heard the friendly request. Last, it was hypothesized that (3) those who completed the stress-inducing writing task would be more compliant if the experimenter was empathic compared to neutral or friendly.

Chapter 1
Empathic Persuasion Study Method

Overview

In this study, same-gender dyads debated two topics on which they reported disagreement. Before engaging in the debates, the experimenter randomly assigned a dyad to have one experimentally manipulated “source” participant, or to be a pure control dyad made up of two participants who received control instructions. Experimentally manipulated dyads were composed of one source and one target, where the source was randomly assigned one of three influence tactics to use on their target during the debates: empathic expression (express concern and understanding toward the target), perspective taking (consider the target’s perspective), or nonverbal attentiveness (attend to the target’s gestures, vocal tone, and body posture). Pure control dyads and targets in experimental conditions were not given an influence tactic to use during the debates but were instead instructed only to be persuasive. All participants, regardless of condition assignment, were told to persuade their opponent of the correctness of their position. The difference between sources and targets was that sources were given an influence tactic to assist them in their attempt to
persuade, while targets were told only to persuade without receiving any tactic to implement.

Greater details of the study’s design and method are given below.

**Participants**

Participants were Northeastern University undergraduates receiving course credit for completion of the study (N = 155 dyads; 79 of which were male, male), aged 17 – 23 (M = 19). The number of dyads within each condition was as follows: empathic expression (n = 39 dyads), perspective taking (n = 41 dyads), nonverbal attentiveness (n = 44 dyads), and control (n = 31 dyads). Demographics were representative of the Northeastern University undergraduate population, 49% Caucasian, 29% Asian or Pacific Islander, 9% Hispanic, 7% reported Other, and 6% African American.

**Materials**

**Personality assessments.** Personality measures included an emotion recognition test (GERT; Schlegel, Grandjean, & Scherer, 2014; Schlegel & Scherer, 2016) and two personality questionnaires: the Big Five Inventory (BFI; John & Srivastava, 1999) and two subscales of the Interpersonal Reactivity Index (IRI; Davis, 1980). The BFI captured Big Five traits, openness, conscientiousness, extraversion, agreeableness, and neuroticism, while the IRI captured facets of empathy, namely empathic concern and perspective taking.

Interpersonal accuracy was measured by the short version of the Geneva Emotion Recognition Test (GERT; Schlegel & Scherer, 2016). The GERT required participants to view brief video clips of a man or woman, and to infer emotional states from that person’s facial, vocal, and bodily emotional cues (the language used by the actors in the GERT clips was invented by the researchers and is not a real language). The GERT was created when researchers recognized a need for an updated aptitude test that was more ecologically valid (e.g., using video clips rather than still photos), and that portrayed a range of emotions expressed by multiple people. The short version
including a range of 14 positive and negative emotions was used in this study due to time constraints. However, this should not be a problem as it has been shown to have good internal consistency, to correlate positively with other tests of emotion recognition ability, and to correlate positively \( r = .89, p < .001 \) with the original long version of the GERT (Schlegel & Scherer, 2016).

The BFI was rated on a scale of 1 to 5, where 5 indicated the participant agreed strongly with the statement. It included statements such as: I see myself as someone who “is inventive” (openness to experience), “is a reliable worker” (conscientiousness), “is outgoing, sociable” (extraversion), “is helpful and unselfish with others” (agreeableness), and “gets nervous easily” (neuroticism).

The IRI was also rated on a scale of 1 to 5, where 5 indicated the statement captured the participant very well. Sample statements from the IRI are “I often have tender, concerned feelings for people less fortunate than me” (empathic concern) and “I try to look at everybody’s side of a disagreement before I make a decision” (perspective taking). Although not analyzed in this research, the two remaining IRI traits capture personal distress and fantasy, respectively, with statements such as “I tend to lose control during emergencies” (personal distress) and “after seeing a play or movie, I have felt as though I were one of the characters” (fantasy scale).

**Opinion survey.** In addition to personality assessments, participants completed an opinion survey in which they reported their beliefs on nineteen different topics (see Appendix for a full list). For example, they were asked to respond to questions such as, “Do you support the following: Guns increase a society’s safety, and citizens should be able to own them.” They first responded with a yes or no, then rated how strongly they felt about their position on a 1 (not strongly) to 9 (very strongly) scale; Although not intended for inclusion in analyses, they also reported on how certain they were about their position on a 1 (not confident) to 9 (very confident) scale.

**Role-specific instructions and writing task.** Experimental sources completed writing tasks aimed at preparing them to use their particular influence tactic in the debates while targets and
controls completed a parallel task they were led to believe would help them be persuasive during the debates. There were four unique writing tasks, one for each condition: empathic expression, perspective taking, nonverbal attentiveness, and control (see Appendix A for detailed samples of the worksheets). All worksheets contained condition-relevant instructions for the debates, as well as a vignette with an accompanying writing task designed to prepare participants for their unique role assignment. To give an example, a source assigned to the nonverbal attentiveness condition read instructions special to their condition:

As you are debating, pay close attention to your counterpart’s NONVERBAL EXPRESSIONS.

- pay attention to their vocal tone and how it changes
- be aware of their facial expressions
- notice their gestures and posture

Your goal is to persuade them that your position is the correct one; use their nonverbal cues to inform the construction of your arguments. This will help you to be more persuasive!

In the vignette, an old woman was walking across a busy street and was nearly hit by a car, but she ultimately made it safely across:

Imagine you were walking to campus when you heard a car slam on its brakes, just missing Evelynn (an older woman) clutching onto a walker. No one was hurt, but Evelynn was clearly upset.

The target or control participant who received control instructions was simply told to write down their thoughts about the near-accident and what occurred. A source assigned to a condition with a tactic was given condition-relevant instructions. For example, a source in the nonverbal attentiveness condition was asked to write a thorough description of what they expected the old woman’s nonverbal expressions to look like prior to, during, and after her upsetting experience:

Write down some nonverbal cues Evelynn (the older woman) might have expressed during this upsetting experience. Think about which cues Evelynn would express prior to the event, during the event, and after the event, and write them down.
Nonverbal cues include all bodily and vocal expressions that are not verbal (i.e., not words). Please take 2-3 minutes to write about this, being as thorough as you can.

A source in the perspective taking condition was asked to take the old woman’s perspective and to write a thorough description of it, whereas a source in the empathic expression condition described ways to demonstrate concern and understanding toward the old woman.

**Debate partner questions.** The final survey contained questions about participants’ debate partners, including questions regarding how much they liked their partner, trusted their partner, felt their partner expressed understanding, and whether they felt their partner took their perspective. These questions were rated on a 1 (not at all) to 7 (very much) scale.

**Behavioral Coding and Reliability**

Two pairs of coders rated participants on a variety of behaviors relevant to relationship-building and therefore theoretically relevant to target persuadedness. One pair rated all participants on: **apparent trust felt for partner, expression of perspective taking, expression of empathy, apparent interest in partner, summarizing partner’s statements, apparent openness to partner’s ideas, and dyadic rapport** (scored once for a dyad). The second pair of coders rated all participants on: **expression of positive nonverbals** (i.e., immediacy behaviors), **calm tone of voice**, and **apparent confidence** (see Appendix A for the complete coding guide with scoring instructions). To reduce work load, rather than watching the full debate video, every recording was divided into three 45-second segments that the coders viewed and rated. Coders viewed videos in a randomized fashion, first scoring behaviors of all participants seated on the left side, then viewing the videos again in a randomized order and scoring behaviors of participants seated on the right side. All three segments of a debate were always scored in order: the first 45 seconds followed by the middle 45 seconds, and then the last 45 seconds of the debate.
Reliability was assessed by correlating scores given by each pair of coders on an item after all participants received scores. Coders were trained by discussing items with one another and myself and by watching videos collected for a previous study and scoring participants in those videos. After consistency in scoring was apparent, coders independently rated videos. Note that for the first pair of coders, only one coder was able to score the entire corpus of 310 videos twice, once for each participant in the dyad (save the videos unable to load remotely; see below). The second coder was able to score only 67 videos because the semester ended. Sometimes, coders were unable to score a video due to technical complications when trying to load a video remotely from the lab’s shared cloud drive. The second pair of coders was able to score the entire corpus of videos in lab.

The inter-rater reliability correlations were as follows: rapport \((r = .21, n = 134\) coded participants, \(p = .01\)), apparent trust felt for partner \((r = .20, n = 620\) coded participants, \(p = .02\)), summarizing partner’s statements \((r = .23, n = 620, p = .01\)), expression of perspective taking \((r = .73, n = 620, p < .01\)), apparent interest in partner \((r = .15, n = 620, p = .08\)), apparent openness to partner’s ideas \((r = .28, n = 620, p < .01\)), and expression of empathy (occurred too infrequently to assess). Perspective taking was considered the only item to have been coded reliably by the first pair of coders; most items were statistically significant but effect sizes were small relative to what is typical for establishing inter-rater reliability. All of the items scored by the second pair of coders were reliable: expression of positive nonverbals \((r = .88, n = 620, p < .01\)), calm tone of voice \((r = .74, n = 620, p < .01\)), and apparent confidence \((r = .83, n = 620, p < .01\)). Exploratory analyses examined all variables but emphasis was placed on reliably coded items: expression of perspective taking, expression of positive nonverbals, calm tone of voice, and apparent confidence.

**Averaging of Pure Controls’ Scores**

It should be noted that in the ‘pure control’ condition, persuadedness scores, partner ratings, and coded behaviors were averaged across the two participants within each dyad. This was done in
order for the pure control data to be as solid as possible and was justified because the dyad members were both operating under the same instructions (to be persuasive, with no instruction about tactics). Specifically, an experimental group of 45 dyads was compared to 90 dyads that had been averaged so that there were 45 dyads.

**Procedure**

Experimenters of the study included myself, a male research assistant, and 2 female research assistants. Research assistants were undergraduates aged 19-21. As participants read and signed their consent forms, the experimenter randomly assigned participants to one of the four conditions: pure control (made up of two controls, neither given an influence tactic), empathic expression, perspective taking, or nonverbal attentiveness (made up of one source and one target/control). Participants in an experimental dyad were then assigned their role as target or source; their roles were known only to the experimenter at this point. After participants signed their consent forms they completed the opinion survey. Participants answered these questions while sitting opposite each other at a round table in the center of the lab space (they could not see each other’s responses).

The experimenter collected the surveys after they were completed and guided the participants to two laptops situated on opposite sides of the room where they completed a demographics questionnaire, then the GERT, IRI, and BFI personality questionnaires. While participants completed these tasks, the experimenter selected two topics on which the participants reported meaningful levels of disagreement. The topics were selected per the level of disagreement present; if participants reported opposing beliefs and moderate to high levels of feeling strongly about their position, then the topic could be selected for debate (captured by values 6-8 from a 1-9 scale). If two topics did not meet these criteria, the experimenter terminated the session early. If only one topic met these criteria, then participants engaged in only one debate (this occurred only three times). When more than two topics could be selected from, those on which the participants
disagreed and felt equally strongly about were given preference (e.g., when both participants reported an ‘8’ to represent how strongly they felt about the topic). In other cases where multiple topics could be selected, two were randomly chosen so that no topic was given unfair preference.

While still sitting on opposite sides of the room, they completed the printed worksheet giving instructions regarding their assigned role. Both the source and the target were told their goal was to be persuasive, what differed was the tactic utilized by the source—empathic expression, perspective taking, nonverbal attentiveness, or no tactic—while the target was never given a tactic but was simply told to be as persuasive as possible. The writing task varied according to condition while the vignette always depicted the same story. Participants read instructions and completed the writing task within 5 minutes. After this was completed, they returned to their seats on opposite sides of a round table. The experimenter then described the format of the debates, in which dyads were given seven minutes per debate to discuss a given topic, totaling a maximum of 14 minutes for both debates.

After the first debate finished, participants re-read their condition-relevant instructions as a reminder to use their designated tactic (or lack of) to be persuasive. Before moving on to the second debate, the experimenter reminded them of their second topic and told them that they again have seven minutes. When both debates finished, participants returned to the laptops on opposite sides of the room to complete the final survey containing questions regarding their debate partner. Finally, participants re-rated their positions on the two topics they debated. The amount of change toward their partner’s original opinion (i.e., pre-debate) determined a participant’s persuadedness. As before, they reported on whether they agreed with the statement, how strongly they felt about their position, and how certain they were of their position. Note that persuadedness was calculated for both members of a dyad so that analyses could consider how sources were influenced during the debates in addition to how targets and controls were influenced by their partners. After completing the last
survey, participants were debriefed and any questions were answered before they left. They were then credited for their participation.

**Empathic Persuasion Results**

In the empathic tactics study, a participant (“source”) was assigned one of three tactics: take the partner’s perspective, express empathy, or attend to the partner’s nonverbals. Therefore, the source was the persuader assigned a tactic to employ on their partner. A source’s goal was to persuade their target (i.e., their partner) using one of the randomly assigned tactics while the goal of the partner (“target”) was simply to persuade the source with no tactic given. The targets and sources were unaware that they had different instructions (but the same goal – to persuade). Remember also, the source-target dyads engaged in two debates, each focusing on a unique topic that the participants reported disagreement on. Persuadedness was defined by a participant’s change in opinion toward their partner’s original, pre-debate, opinion. Persuadedness was calculated for sources and targets, separately for debates one and two. Note that target persuadedness can also be understood as source persuasiveness and vice versa.

It was expected that targets in experimental conditions would report higher levels of persuadedness relative to averaged pure controls. Additionally, it was expected that targets of sources assigned to express empathy, especially, would report higher levels of persuadedness than pure controls as research suggests relationship-building behaviors associated with these tactics are linked to positive affiliation. No hypotheses were made regarding source persuadedness, but source persuadedness, which could occur or not along with target persuadedness, was explored to assess whether employing a tactic enhanced or detracted from a source’s ability to persuade a target. As mentioned earlier, it was possible that a source focused on a target’s perspective, emotional state, or nonverbal cues, rather than becoming more persuasive, could instead be made susceptible to a target’s goals by focusing more on their needs. It was possible, then, that a source tactic could
predict either target persuadedness or source persuadedness. Specifically, hypotheses were as follows:

(1) Targets of sources engaging in empathic expression, perspective taking, and nonverbal attentiveness would be more persuaded than participants in the pure control condition, and

(2) Sources would be rated higher than pure controls on partner-reported feelings of positive affiliation.

(3) Positive affiliation with the source would mediate the relationship between a source tactic and target persuadedness.

Descriptive data on persuadedness are provided first, followed by manipulation checks on the experimental (i.e., tactics) conditions. Results are addressed in order of hypothesis. Note that when comparing two groups, paired samples t-tests were used to compare experimental sources to their corresponding targets, while independent samples t-tests were used to compare experimental sources and targets to pure controls. ANOVAs were used when more than two groups were compared, except in the case of an exploratory analysis comparing experimental sources to their corresponding targets; in that instance a repeated-measures design was utilized to account for within-dyad nesting of sources and targets. LSD post-hoc analyses determined whether differences identified between groups were significant or not.

**Persuadedness**

Persuadedness scores were calculated for all participants; persuasion occurred in both debates, for targets as well as sources. Persuadedness was calculated by evaluating the extent to which a participant’s opinion changed from their original opinion before the debate, while direction of change was also considered. Persuadedness scores could range from -18 to 18, where negative values indicated a participant’s opinion became more polarized and less like their partner’s than
before, while a positive value indicated a participant’s opinion became more like their partner’s original opinion. These values were tested against zero using one-sample t-tests, which showed that opinions did change after the debates, and in a positive direction, indicating that targets’ and sources’ opinions changed toward their partners’. For targets, persuadedness scores ranged from -5 to 16 in debate 1 (M = 2.84, SD = 4.80); t(154) = 7.36, p < .001, and -3 to 17 in debate 2 (M = 2.76, SD = 5.02); t(151) = 6.79, p < .001. For sources, persuadedness scores ranged from -6 to 18 in debate 1 (M = 2.61, SD = 4.84); t(154) = 7.59, p < .001, and -3 to 18 in debate 2 (M = 2.70, SD = 5.44); t(151) = 7.04, p < .001.

Correlations between source and target persuadedness were examined in each experimental condition. Persuadedness between targets and sources was as follows: in the perspective taking condition for debate 1, r = -.47, n = 41, p < .01 and for debate 2, r = -.09, n = 41, p = .55; in the empathic expression condition for debate 1, r = -.13, n = 39, p = .42 and for debate 2, r = -.29, n = 37, p = .07; and in the nonverbal attentiveness condition for debate 1, r = -.10, n = 44, p = .50 and for debate 2, r = -.01, n = 43, p = .84. The persuadedness of sources and targets was most often unassociated, but in instances where persuadedness was correlated, the association was negative. The negative correlation indicates that when one participant’s persuadedness score increased, the other person’s decreased. More specifically, this means that if one person was persuaded (i.e., changed their opinion to become more like their persuader’s original pre-debate opinion), then their partner became more staunch in their original opinion (i.e., changed their opinion to indicate stronger disagreement than originally stated).

**Manipulation Checks**

Variables relevant to perspective taking and empathic expression were included in partner-reported ratings as well as coded behavior to assist in determining whether participants behaved as instructed. It may not be possible to capture whether a participant engaged in perspective taking
because it is more an internal cognitive process than a behaviorally evident one, but a manipulation check was included nonetheless in case it was possible to capture, either from partner-reports or from coded exhibited behaviors. Relevant to perspective taking, all participants rated their partners on *my partner took my perspective*, and coders also assessed *expression of perspective taking*. For empathic expression, participants rated their partners on combined variable consisting of two partner-reported items: *my partner listened to me* and *I felt cared for*. Empathic expression was coded for but reliability was unsatisfactory so it is not discussed below. Nonverbal attentiveness is difficult to capture as defined in instructions, so no manipulation check was included. However, after the debates completed, participants in all conditions reported on their understanding of their assignment during the debates.

**Reported understanding of assigned tactic.** To ensure sources understood their assignment during the debates, participants responded to a question asking them to describe their assignment. Written responses were read to determine whether understanding was satisfactory. If a response referred to persuasion or, for those who were sources, to a tactic, then the participant’s understanding was considered satisfactory for inclusion. Responses to this question were also used during piloting to adjust instructions until they became clear for participants. No participants required exclusion from the study—rather, sources provided explanations indicating sufficient understanding of their assigned tactics, and that their goal was to use the tactic to be persuasive. Targets responded to the same question and their responses indicated they understood that their goal was to be persuasive.

**Partner-reported perspective taking.** An independent samples *t*-test compared targets’ ratings of their source’s perspective taking (i.e., sources’ scores on perspective taking, as assigned by their targets) to pure controls and found no significant difference between them in either the perspective taking or empathic expression conditions. In the perspective taking condition, perspective takers’ targets reported similar levels of perspective taking (*M* = 8.07, *SD* = 1.21) relative
to pure controls ($M = 7.87, SD = 1.76$), $t(70, \text{from 72 total dyads}) = -.57, p = .56, d = .13$. In the empathic expression condition, targets of empathic sources reported sources to have similar levels of perspective taking ($M = 8.05, SD = 1.29$) relative to pure controls, $t(68) = -.49, p = .62, d = .12$. Nonverbally attentive sources were not expected to perspective take more, and this was as expected. Nonverbally attentive sources ($M = 7.39, SD = 1.76$) did not receive higher scores on perspective taking from their partners relative to pure controls, $t(73) = 1.19, p = .23, d = .27$.

**Coded perspective taking.** An independent samples $t$-test compared sources assigned to perspective take to averaged pure controls for debates 1 and 2. Results indicated a significant difference for debate 1 but not for debate 2, such that perspective takers in debate 1 ($M = .35, SD = .61$) made more perspective taking statements as rated by coders than did pure controls ($M = .12, SD = .30$), $t(64) = 1.95, p = .05, d = .48$. In debate 2, $t$-tests compared perspective taking statements from perspective takers ($M = .10, SD = .31$) to pure controls ($M = .11, SD = .29$) and was not significant, indicating perspective takers in debate 2 did not verbally express more perspective taking as rated by coders, $t(67) = .21, p = .83, d = .03$.

**Partner-reported empathic expression.** Two variables were combined to capture empathic expression as defined in the source instructions, *my partner listened to me* and *I felt cared for* ($r = .74, n = 309, p < .01$). An independent samples $t$-test comparing empathic sources ($M = 16.00, SD = 1.93$) to averaged pure controls ($M = 16.11, SD = 2.60$) did not find a difference in means, $t(68) = .45, p = .65, d = .05$. A paired samples $t$-test comparing empathic sources ($M = 16.00, SD = 1.93$) to their targets ($M = 15.86, SD = 2.29$) also found no difference, $t(37) = -.34, p = .74, d = .05$.

**Summary of manipulation checks.** Participants indicated they understood their instructions for the debate, either by indicating the particular tactic they were assigned to help them be persuasive (for sources) or by indicating they were simply told to be persuasive (for targets), but neither partner ratings nor coded behaviors were able to confirm whether sources followed the
instructions they were given. As noted earlier, confirming whether a participant engaged in perspective taking is difficult to capture from observable behaviors so these manipulation checks do not necessarily indicate whether a source engaged in perspective taking or not. There are also numerous ways empathy could have been expressed that were not captured by behavioral coding (see Appendix A for complete guide); coders watching the video recorded debates attempted to capture statements of empathic expression but statements were too infrequent to assess (e.g., statements such as “I can see why you feel that way”). Empathic sources were instructed to express concern and understanding, but they were not told how to do this. As such, although manipulation checks via partner-reported and observer-reported variables could not confirm whether experimental sources engaged in behaviors relevant to their tactics, participants indicated they understood their instructions and differences in outcomes between the conditions appear below, indicating that sources did engage in condition-specific behaviors that impacted target persuadedness.

Hypotheses

**Hypothesis 1.** Hypothesis 1 predicted that targets would receive higher persuadedness scores than pure controls. To address targets compared to pure controls and to compare persuadedness across the conditions, a one-way ANOVA was conducted that excluded the sources; another ANOVA was conducted comparing sources to pure controls, excluding the targets. Target persuadedness was expected to be higher in the empathic expression condition, but there were no hypotheses regarding the way experimental conditions should relate to one another, so source persuadedness analyses were exploratory.

**Target persuadedness.** A one-way ANOVA that included condition (four conditions, 3 experimental and 1 control) as the independent variable and target persuadedness as the dependent variable was conducted separately for debates 1 and 2. A significant effect for target condition was
observed for both debates. In debate 1, $F(3, 151) = 3.33$, $p = .02$ and in debate 2, $F(3, 148) = 2.67$, $p = .05$. LSD post-hoc testing was used to compare target persuadedness across the conditions. Targets in all experimental conditions were hypothesized to be significantly more persuaded than pure controls, and empathically expressive sources were expected to be more persuasive relative to other experimental sources.

Results indicated targets of perspective taking sources (in debate 1, $M = 4.39$, $SD = 5.85$; in debate 2, $M = 3.58$, $SD = 5.92$) did not differ from pure controls (in debate 1, $M = 3.45$, $SD = 3.13$; in debate 2, $M = 3.90$, $SD = 3.76$) in either debate, $p = .40$, $d = .20$ in debate 1 and $p = .78$, $d = .06$ in debate 2; the same was true for targets of empathically expressive sources (in debate 1, $M = 2.46$, $SD = 5.09$; in debate 2, $M = 2.89$, $SD = 5.74$), $p = .38$, $d = .23$ in debate 1 and $p = .40$, $d = .21$ in debate 2. In both debates, targets of nonverbally attentive sources (in debate 1, $M = 1.29$, $SD = 3.98$; in debate 2, $M = 1.04$, $SD = 3.75$) were significantly less persuaded than pure controls (in debate 1, $M = 3.45$, $SD = 3.13$; in debate 2, $M = 3.90$, $SD = 3.76$), $p = .05$, $d = .60$ in debate 1 and $p = .01$, $d = .76$ in debate 2.

The next comparisons were between the tactics conditions. LSD post-hoc analyses for debate 1 indicated targets in the perspective taking condition were significantly more persuaded than those in the nonverbal attentiveness condition ($p < .01$) and marginally more than those in the empathic expression condition ($p = .06$). LSD post-hoc analyses for debate 2 indicated targets in the perspective taking condition were significantly more persuaded than those in the nonverbal attentiveness condition ($p = .02$) but not significantly more than those in the empathic expression condition ($p = .53$). In debate 1, mean persuadedness for the targets in each condition was as follows (in descending order of means), for perspective taking ($M = 4.39$, $SD = 5.85$), empathic expression ($M = 2.46$, $SD = 5.09$), and nonverbal attentiveness ($M = 1.29$, $SD = 3.98$). In debate 2, mean persuadedness for the targets in each condition followed the same pattern, for perspective taking ($M$
To summarize, when compared to pure controls, only targets of nonverbally attentive sources reported significantly different levels of persuadedness; opposite of what was predicted, these targets were less persuaded in both debates. Nonverbal attentiveness hindered a source’s ability to persuade in the debates. Targets of perspective takers reported highest levels of persuadedness in both debates, and these means were higher than those reported by pure controls, but the difference was not statistically significant. Perspective taking enhanced a source’s performance, but perhaps not substantially. Targets of empathically expressive sources reported persuadedness levels equivalent to those in pure control; thus, empathic expression did not enhance or hinder a source’s performance.

**Source persuadedness.** To explore source persuadedness, an ANOVA was run including condition as the independent variable and source persuadedness for debates 1 and 2 in separate analyses. A significant effect for source condition was not observed in debate 1 but was observed in debate 2: in debate 1, $F(3, 151) = 1.34, p = .26$ and in debate 2, $F(3, 148) = 3.54, p = .02$. In debate 1, mean persuadedness for the sources in each condition was as follows (in descending order of means), for nonverbal attentiveness ($M = 3.54, SD = 5.55$), pure control ($M = 3.45, SD = 3.13$), empathic expression ($M = 2.38, SD = 4.82$), and perspective taking ($M = 1.83, SD = 3.92$). In debate 2, mean persuadedness for the sources in each condition followed the same pattern, for nonverbal attentiveness ($M = 4.00, SD = 6.09$), pure control ($M = 3.90, SD = 3.76$), empathic expression ($M = 3.29, SD = 6.31$), and perspective taking ($M = .80, SD = 2.87$).

LSD post-hoc analyses for debate 1 indicated sources in the perspective taking condition were marginally less persuaded than those in the nonverbal attentiveness condition ($p = .08, d = .35$), but no other differences were detected. LSD post-hoc analyses for debate 2 indicated sources in the
perspective taking condition were significantly less persuaded than those in every condition: nonverbal attentiveness \((p < .01, d = .67)\), empathic expression \((p = .03, d = .51)\), and pure control \((p = .01, d = .92)\). The other conditions were not significantly different from one another (nonverbal attentiveness, empathic expression, and control).

**Summary of hypothesis 1 findings.** It was expected that targets would be more persuaded than pure controls, and targets would be most persuade in the empathic expression condition. When comparing target persuadedness to pure control persuadedness, only mean levels in the nonverbal attentiveness condition were significantly different from pure controls in both debates (they were lower). In contrast to what was predicted, targets in the nonverbal attentiveness condition were significantly less persuaded than pure controls. Note that targets in the perspective taking condition reported higher levels of persuadedness relative to pure controls, but this difference was not statistically significant. Finally, targets in the empathic expression condition were no more persuaded than those in the nonverbally attentive or perspective taking conditions. Rather, targets reported highest persuadedness in the perspective taking condition.

When comparing sources to pure controls, perspective taking sources were less persuaded than sources in all other conditions, including the pure control condition, in both debates. In both debates, perspective takers reported the lowest mean persuadedness while nonverbally attentive sources reported the highest levels of persuadedness. Empathically expressive and nonverbally attentive sources did not significantly differ in persuadedness relative to pure controls. Put simply, results suggested targets of perspective takers trended toward greater persuadedness, while those of nonverbally attentive sources trended toward lesser persuadedness. Targets of empathically expressive sources showed no greater or lesser likelihood of being persuaded than pure controls.

**Targets compared to experimental sources.** Two additional ANOVAs were conducted to establish a clearer picture of source-target dynamics in both debates. Rather than comparing
targets to pure controls or sources to pure controls, these analyses compared targets to experimental
sources to determine whether targets differed from sources in persuasiveness. It was possible that
target persuasiveness differed meaningfully from source persuasiveness, particularly within a given
condition. This exploratory repeated-measures ANOVA compared source and target persuasiveness
where condition was the independent between-subjects variable (all 4 conditions), role (target and
source) was the within-subjects independent variable, and persuasiveness was the dependent
variable.

There was a significant interaction of condition with role, such that persuasiveness differed
for targets and sources according to condition: $F(3, 151) = 3.45, p = .02$. There was not a significant
main effect of role as target or source, $F(1, 151) = .03, p = .86$. Multiple comparisons revealed mean
target persuasiveness to be highest relative to source persuasiveness in the perspective taking
condition ($M_{target} = 4.39, M_{source} = 1.83$) and lowest in the nonverbal attentiveness condition
($M_{target} = 1.29, M_{source} = 3.54$). Paired samples $t$-tests showed these within condition source-
target differences were significant for perspective taking, $t(40) = 1.94, p = .05, d = .51$, and for
nonverbal attentiveness, $t(43) = -2.08, p = .04, d = .47$. In the perspective taking condition, targets
were more persuaded by perspective taking sources than the sources were persuaded by the targets.
In contrast, in the nonverbal attentiveness condition, nonverbally attentive sources were more
persuaded by targets than their respective targets were. In the remaining experimental condition,
empathic expression, there was no difference between source and target persuasiveness ($M_{target} =
2.38, M_{source} = 2.46$), $t(38) = .06, p = .95, d = .02$.

Results followed the same pattern for debate 2. Again, a 2-way (role: target or source)
repeated measures ANOVA included condition (4 conditions) as the independent variable and role
persuasiveness as the dependent variable. There was a significant interaction of condition with role,
such that persuasiveness between roles varied according to condition, $F(3, 151) = 4.69, p < .01$. 44
There was not a significant main effect of role, $F(1, 151) = .06, p = .80$. As in debate 1, target persuadedness was highest relative to source persuadedness in the perspective taking condition ($M_{\text{target}} = 3.58$, $M_{\text{source}} = 0.80$), $t(40) = 2.61, p = .01, d = .60$, and lowest in the nonverbal attentiveness condition ($M_{\text{target}} = 4.00$, $M_{\text{source}} = 1.05$), $t(42) = -2.74, p < .01, d = .58$, and paired-samples $t$-tests indicated these source-target differences were significant. Perspective taking was associated with greater target persuadedness while nonverbal attentiveness was associated with less target persuadedness. There was no association between target persuadedness and empathic expression, $t(36) = -.25, p = .80, d = .06$.

**Overall summary of hypothesis 1 findings.** Refer to Figures 1 and 2 to observe that patterns in source-target persuadedness were consistent with respect to condition when targets were compared to pure controls and when targets were compared to sources. Targets of perspective takers report highest levels of persuadedness while those of nonverbally attentive sources report lowest levels of persuadedness. Of the sources, perspective takers report lowest levels of persuadedness while nonverbally attentive sources report highest levels of persuadedness. As such, results indicate perspective taking may enhance target persuadedness (or source persuasiveness) while attending to nonverbal cues reduces target persuadedness (or source persuasiveness).

Expressing empathy seems to have no impact. It is important to note that although these trends were the same in both debates when comparing targets to pure controls and when comparing targets to sources, remember that only targets of nonverbally attentive sources responded significantly differently from pure controls.

**Hypothesis 2.** Participants rated their partners on the following ten items: *I trusted my partner, I felt connected to my partner, I would debate my partner again, my partner listened to me, my partner took my perspective, I felt cared for, my partner was honest, my partner was genuine, I would trust my partner to argue on
my behalf, and I felt respected. Items significantly correlated with one another (r's ranged .37 to .87) and were combined to create a single variable labeled *positive affiliation*.

**Positive affiliation between sources and targets.** Independent samples *t*-tests were conducted to compare feelings of positive affiliation experienced toward sources by their targets against partner-ratings of averaged pure controls. When compared against pure controls (*M* = 7.74, *SD* = .72), perspective takers (*M* = 7.61, *SD* = 1.09) were not rated differently on partner ratings of positive affiliation, *t*(70) = .61, *p* = .54, *d* = .14. The same analyses compared empathically expressive sources to pure controls: partner ratings of empathically expressive sources (*M* = 7.69, *SD* = .92) were not different from pure controls, *t*(68) = .28, *p* = .78, *d* = .06. Next, focus turned to the nonverbal attentiveness condition. Nonverbally attentive sources (*M* = 7.11, *SD* = 1.32) scored differently from pure controls on partner ratings of positive affiliation, such that nonverbally attentive sources were rated lower, *t*(73) = 2.41, *p* = .02, *d* = .59.

Last, as an exploratory analysis, an ANOVA was conducted to detect mean differences across all conditions, *F*(3, 151) = 3.01, *p* = .03. Target-reported feeling of positive affiliation toward a source was included as the dependent variable while condition was included as the independent variable. An LSD post-hoc test comparing targets’ ratings of source positive affiliation across the four conditions revealed sources assigned to the nonverbal attentiveness condition received significantly lower scores relative to those in the perspective taking (*p* = .05), empathic expression (*p* = .02), and pure control conditions (*p* = .04).

**Summary of hypothesis 2 findings.** Hypothesis 2 was not supported; sources were not rated higher by their partners than pure controls were on feelings of positive affiliation. Sources in the perspective taking and empathic expression conditions received scores equivalent to pure controls, while sources in the nonverbal attentiveness condition received significantly lower scores.
when compared to all other conditions. As such, hypothesis 3 was moot but positive affiliation was explored regardless.

**Hypothesis 3.** Target ratings of positive affiliation toward sources were not associated with target persuadedness ($r = .13, n = 124, p = .13$ in debate 1 and $r = .15, n = 121, p = .09$ in debate 2) or source persuadedness ($r = .04$ in debate 1, $n = 123, p = .68$ and $r = .10, n = 120, p = .24$ in debate 2).

*Positive affiliation disregarding experimental condition and role assignment.*

However, when analyzed without regard for experimental assignment as source or target, positive affiliation was positively correlated with persuadedness in both debates, being marginally significant in debate 1 ($r = .10, n = 309, p = .07$) and significant in debate 2 ($r = .13, n = 303, p = .02$), producing small effect sizes. Additional analyses considered the individual items that made up the *positive affiliation* partner-reported variable to see if any individual items of the composite variable were associated with persuasion. As stated earlier, the individual items were: *I trusted my partner, I felt connected to my partner, I would debate my partner again, my partner listened to me, my partner took my perspective, I felt cared for, my partner was honest, my partner was genuine, I would trust my partner to argue on my behalf, and I felt respected.* Only one item was positively associated with persuasion in both debates, *I would trust my partner to argue on my behalf* ($r = .17, n = 309, p < .01$ in debate 1, and $r = .14, n = 303, p = .01$ in debate 2).

This item was explored in an independent samples *t*-test comparing perspective takers to pure controls to assess whether it was the mechanism (or one of them) underlying perspective takers’ persuasiveness. If so, it could be explored as a potential mediator. The independent *t*-test found no difference on the partner-rated variable, *I would trust my partner to argue on my behalf* as assigned by targets to perspective taking sources ($M = 7.03, SD = 2.07$) when compared to pure controls ($M = 6.76, SD = 2.32$), $t(67) = 1.31, p = .19$; 31 pure controls and 41 perspective takers rated by their
targets) = .81, \( p = .42 \). Therefore, this was not explored further. Correlations of all partner-rated variables with persuadedness when disregarding role and condition in debates 1 and 2 can be seen in Table 1.

**Summary of hypothesis 3 findings.** Hypothesis 3 was not supported; target ratings of positive affiliation with a source was not associated with target persuadedness. Positive affiliation was, however, associated positively with persuadedness when disregarding condition or assignment, but none of the items that comprised positive affiliation were associated with a perspective taking source’s persuasiveness (i.e., their target’s persuadedness).

**Behavioral Coding**

Negotiators, salesmen, therapists, and medical doctors engage in relationship-building to develop rapport and trust with a target by making the target feel heard and understood and to point out relationships in the target’s story as they share their opinions (Comer & Drollinger, 2013; Heller & Levitt, 2008; Lang, Floyd, & Beine, 2000; McMains & Mullins, 2015). Behaviors relating to relationship-building were coded to assess the strength of the relationship between various relationship-building behaviors and a target’s persuadedness. Behaviors included: *expression of positive nonverbals, calm tone of voice, and apparent confidence*. With behavioral coding, a new hypothesis was included:

**(4)** Sources would receive higher scores on coded behaviors and these behaviors would be positively associated with target persuadedness.

**Hypothesis 4.** Independent samples \( t \)-tests between source and pure control were conducted for each experimental condition. Only reliable behaviors were reported in text (i.e., *expression of positive nonverbals, calm tone of voice, and apparent confidence*). Means of pure controls are presented only once, in the results for the perspective taking condition. For the remaining
conditions, refer to the control means presented in the perspective taking condition to compare to experimental means.

1. Perspective taking condition

   a. *Expression of positive nonverbals.* Debate 1: perspective taking sources \((M = 4.56, SD = 1.13)\) were compared to pure controls \((M = 4.85, SD = .79)\) and no difference was observed, \(t(67) = 1.17, p = .24, d = .30\). Debate 2: perspective taking sources \((M = 4.57, SD = 1.14)\) were again compared to pure controls \((M = 4.67, SD = 1.18)\), and no difference was observed, \(t(68) = .37, p = .71, d = .18\).

   b. *Calm tone of voice.* Debate 1: perspective taking sources \((M = 5.48, SD = .83)\) were compared to pure controls \((M = 5.28, SD = .75)\) and no difference was observed, \(t(67) = -1.02, p = .31, d = .25\). Debate 2: perspective taking sources \((M = 4.70, SD = .85)\) were again compared to pure controls \((M = 4.70, SD = .24)\), and no difference was observed, \(t(68) = -.03, p = .97, d = 0\).

   c. *Apparent confidence.* Debate 1: perspective taking sources \((M = 4.44, SD = .88)\) were compared to pure controls \((M = 4.18, SD = .52)\) and no difference was observed, \(t(67) = -1.36, p = .18, d = .36\). Debate 2: perspective taking sources \((M = 4.67, SD = .63)\) were again compared to pure controls \((M = 4.67, SD = .67)\), and no difference was observed, \(t(68) = -.39, p = .69, d = 0\).

2. Empathic expression condition

   a. *Expression of positive nonverbals.* Debate 1: empathic sources \((M = 4.12, SD = 1.27)\) were compared to pure controls and a difference was observed such that controls expressed more positive nonverbals, \(t(66) = 2.75, p = .01, d = .69\). Debate 2: empathic sources \((M = 4.06, SD = 1.19)\) were again compared to pure controls and a
significant difference was observed indicating controls expressed relatively more positive nonverbals than sources, \( t(65) = 2.09, p = .04, d = .51 \).

b. Calm tone of voice. Debate 1: empathic sources \((M = 5.31, SD = 1.01)\) were compared to pure controls and no difference was observed, \( t(66) = -.13, p = .89, d = .03 \).

Debate 2: empathic sources \((M = 5.09, SD = .85)\) were again compared to pure controls and no difference was observed, \( t(65) = -1.47, p = .15, d = .62 \).

c. Apparent confidence. Debate 1: empathic sources \((M = 4.28, SD = .99)\) were compared to pure controls and no difference was observed, \( t(66) = -.51, p = .61, d = .12 \).

Debate 2: empathic sources \((M = 4.66, SD = .67)\) were again compared to pure controls and no difference was observed, \( t(65) = .05, p = .96, d = .01 \).

3. Nonverbal attentiveness condition

a. Expression of positive nonverbals. Debate 1: nonverbally attentive sources \((M = 4.72, SD = 1.39)\) were compared to pure controls and no difference was observed, \( t(71) = .47, p = .63, d = .11 \). Debate 2: nonverbally attentive sources \((M = 4.35, SD = 1.15)\) were again compared to pure controls and no significant difference was observed, \( t(69) = 1.14, p = .26, d = .27 \).

b. Calm tone of voice. Debate 1: nonverbally attentive sources \((M = 4.97, SD = 1.00)\) were compared to pure controls and no difference was observed, \( t(71) = 1.47, p = .14, d = .35 \). Debate 2: nonverbally attentive sources \((M = 4.56, SD = .97)\) were again compared to pure controls and no difference was observed, \( t(69) = .53, p = .59, d = .20 \).

c. Apparent confidence. Debate 1: nonverbally attentive sources \((M = 4.36, SD = 1.09)\) were compared to pure controls and no difference was observed, \( t(71) = -.86, p = .39, d = .21 \). Debate 2: nonverbally attentive sources \((M = 4.84, SD = 1.03)\) were
again compared to pure controls and no difference was observed, \( t(69) = -0.86, p = .39, d = .19. \)

**Summary of hypothesis 4 findings.** Hypothesis 4 was largely not supported; few differences were detected on coded behaviors between sources and targets. A significant difference of note is that between empathic sources and pure controls. Controls expressed more positive nonverbals than empathic sources in both debates. When disregarding experimental assignment or condition, correlations of coded variables with persuadedness were not interpretable (see Table 2 for correlations of coded items with persuadedness in debates 1 and 2) because the one variable with a significant association in debate 2 was not also significant in debate 1. Therefore, coded behaviors did not seem to predict target persuadedness.

**Summary of Empathic Persuasion Findings**

According to manipulation checks, participants’ written descriptions of their role indicated they understood their assignment to be persuasive (or to adopt a persuasion tactic if a source), but experimental sources did not score higher on partner ratings of perspective taking, empathic expression, or on coded expressions of perspective taking. As stated previously, this does not necessarily indicate sources did not adopt tactic-specific behaviors because these qualities are difficult to capture from observed behaviors (they are primarily cognitive not behavioral). Furthermore, the differences in target and source persuadedness observed across the conditions suggest manipulated sources were behaving differently from one another even though these differences were not captured by manipulation checks.

Persuadedness analyses compared targets to pure controls and found only targets of nonverbally attentive sources to differ significantly. However, rather than being more persuaded as predicted, these targets were less persuaded than pure controls. When targets in experimental conditions were compared to one another, those in the perspective taking condition reported
highest persuadedness and those in the nonverbally attentive condition reported least persuadedness (and therefore scored highest in persuasiveness of the targets). When comparing sources to pure controls, perspective takers were less persuaded than pure controls, but empathically expressive and nonverbally attentive sources were not different in persuadedness when compared to pure controls. When sources in experimental conditions were compared to one another, perspective takers were lowest in persuadedness (and therefore highest in persuasiveness) while those in the nonverbally attentive condition were highest in persuadedness (persuaded by their targets). Finally, when comparing targets to sources, targets significantly differed from sources in two experimental conditions: targets of perspective takers were more persuaded than sources and targets of nonverbally attentive sources were less persuaded than sources.

Overall trends suggest that targets of perspective takers were persuaded, targets of nonverbally attentive sources were persuasive, and targets of empathically expressive sources were unaffected. When considering sources, perspective takers were not persuaded by their targets while nonverbally attentive sources were persuaded by their targets. Empathically expressive sources were no more or less persuaded than their targets. Therefore, although manipulation checks and partner-reported variables were unable to capture behavioral differences among the manipulated sources with respect to behaviors, it seems likely that they were in fact engaging in behaviors relevant to their assigned roles that impacted persuadedness outcomes.

**Additional Analyses**

Additional analyses were conducted to explore gender and personality in an attempt to identify any roles they may have played with regard to target or source persuadedness.

**Gender.** First, an ANOVA was conducted with two independent variables, condition and gender, and one dependent variable, target persuadedness in debate 1. The same analysis was performed for debate 2.
**Target persuadedness (or source persuasiveness).** Gender did not interact significantly with condition in either ANOVA to predict target persuadedness, in debate 1: $F(3, 147) = .41, p = .74$, in debate 2: $F(3, 144) = 1.60, p = .19$.

**Source persuadedness.** Next, the same analyses were done to evaluate gender differences in source persuadedness. This ANOVA included two independent variables, condition and gender, and one dependent variable, source persuadedness. Gender did not interact significantly with condition in either debate to predict source persuadedness, in debate 1: $F(3, 147) = .32, p = .81$, in debate 2: $F(3, 144) = .34, p = .80$.

**Personality.** According to the first hypothesis, it was expected that sources engaging in perspective taking, expressing empathy, or attending to a target’s nonverbals, would be relatively more persuasive than controls with no tactic. Along these lines, it was expected that those who scored high in trait perspective taking, empathic concern, or emotion recognition accuracy (i.e., similar to nonverbal attentiveness) regardless of their condition or assignment as source or target, would be more persuasive than those scoring lower on these traits. Individuals high in these traits are relatively more likely to exhibit these behaviors than those scoring lower. Therefore, these traits should positively predict persuadedness.

**Traits predicting persuadedness irrespective of experimental condition or assigned role.** Scores on trait perspective taking, empathic expression, and the GERT were not correlated with persuadedness when disregarding condition or assignment as source or target. In debate 1, results were as follows: perspective taking ($r = -.03, n = 310, p = .59$), empathic concern ($r = -.02, n = 310, p = .79$), and GERT ($r = .02, n = 154, p = .77$). In debate 2, results were: perspective taking ($r = .04, n = 304, p = .46$), empathic concern ($r = .01, n = 304, p = .89$), and GERT ($r = -.01, n = 148, p = .91$). Given these results, these traits do not seem to significantly impact one’s susceptibility to being persuaded.
Empathic Persuasion Discussion

Study 1, the empathic persuasion study, considered three tactics: perspective taking, empathic expression, and nonverbal attentiveness separately. The study’s findings suggest that perspective taking might help a source to be more persuasive, but it is not clear whether its impact is large enough to successfully change a target’s opinion. Expressing empathy to a target seems to be unhelpful and to have no impact on the target’s persuadedness. Of the three tactics, the most stunning findings come from nonverbal attentiveness. Attending to a target’s facial expressions, gestures, and tone of voice, was debilitating, rather than helpful, for a source trying to persuade their target to change to their opinion.

Each of the three tactics were expected to help a source to be more persuasive, primarily through the other-oriented or relationship-building qualities associated with them. A significant amount of work in social influence indicates that establishing a relationship with a target makes a target more susceptible to a source’s demands or influence (Cialdini & Goldstein, 2003; Cialdini & Trost, 1998). Therapists engage in similar empathic behaviors to encourage collaboration and defuse a patient’s (“target’s”) defensiveness to suggestion (Miller & Rollnick, 1991; Miller, Leckman, Delaney, & Tinkcom, 1992; Morton, Beauchamp, Prothero, Joyce, Saunders, Spencer-Bowdage, Dancy, & Pedlar, 2015). Crisis negotiators follow a nearly identical process through their Behavioral Change Stairway Model (BCSM). According to the model, a negotiator must (1) use active listening skills to (2) facilitate empathic expression, which allows for (3) the development of rapport with the target; in turn, rapport provides a basis to (4) influence the target toward meaningful behavior change that leads to a peaceful settlement of the critical incident (Dalfonzo, 2002; Vecchi, Van Hasselt, & Romano, 2005). There is an underlying assumption that empathic behaviors defuse a target’s defensiveness to suggestion, thereby providing the receptivity a source needs in a target to successfully influence their target.
Future work should continue to evaluate the efficacy of these different methods to clarify when, and perhaps how, they are useful. Sources in the nonverbal attentiveness condition were rated by their targets lower than pure controls on positive affiliation, and it is possible that this was detrimental to their ability to persuade, although positive affiliation was not associated with persuadedness in either debate. An unlikeable source may be at a disadvantage in the arena of influence. Remember that prior work has shown positive affiliation, i.e., likeability or rapport, to be associated with source persuasiveness (Cialdini & Goldstein, 2003; Forgas, 1998). Nonverbally attentive sources may have been attending too much to their target’s nonverbal cues and not enough to the target themselves. By focusing on what nonverbal cues were expressed, the source may not have had the cognitive capacity to focus on the ideas being verbally communicated by the target (or on their own argument). Cognitive load, then, may be partially responsible for reducing a nonverbally attentive source’s ability to persuade. A source intending to form a positive relationship with a target needs to be able to empathically listen to their target and make the target feel as though they are being listened to (McMains & Mullins, 2015); a source who is not focused on the ideas being conveyed by their target is likely unable to make their target feel heard.

However, keep in mind that participants in the study were given only five minutes to learn their roles. Practice and experience with nonverbal communication could reduce cognitive load, and ultimately benefit a skilled source trying to influence a target. As mentioned previously, both the counseling and crisis negotiation literatures find that attending to a target’s nonverbal expressions is important to understanding their emotion state, well-being, and to anticipating how the target will respond to a suggestion (Hall, 2011; Hoegewood, 2005; Ivey & Ivey, 2008; McMains & Mullins, 2015). Nonverbal attentiveness may hinder persuasive performance if the source is unskilled and the cognitive load too heavy, but a well-trained source may find nonverbal attentiveness a valuable tactic.
that informs their understanding of the target’s emotional and cognitive states. Future work should consider increasing training time before evaluating nonverbal attentiveness as a source tactic.

Next, I would like to consider what impact perspective taking may have had on sources during Study 1’s debates. If you look again at Figures 1 and 2 there are striking differences between a source and target in the perspective taking condition. The pattern is particularly interesting for perspective taking sources when compared to targets and to controls. Although the differences in persuadedness between targets and pure controls were not significant, differences between the perspective taking source and their target always were. It is surprising that perspective taking sources were significantly less persuaded than all other sources, including pure controls. This could suggest that perspective taking sources are less open to opinion change. It is unclear why perspective taking sources had such low persuadedness scores, but it may in part be due to the cognitive rather than emotional focus on their targets. Future work may want to consider the impact that perspective taking has on the perspective taker focused on persuading a target. Does it decrease a source’s openness to suggestion? If so, does that impact how a perspective taker communicates?

Targets in the perspective taking condition reported the highest levels of persuadedness, relative to targets in remaining conditions and to pure controls, but the difference between targets and pure controls was not significant. Therefore, it seems that perspective taking’s strongest impact was more on the source than on the target. Comparatively, sources who expressed empathy were neither benefited nor harmed with respect to their ability to persuade. Now it is worth returning to findings discussed in the Introduction, comparing perspective taking to empathy. Expressing empathy was expected to enhance affiliative behaviors in the sources and targets, thereby forming a bond that would serve as the conduit for source persuasiveness. However, empathic expression was not positively associated with greater feelings of warmth from the target. It may be that expressing empathy was less relevant to persuasion in the debates than perspective taking, and so it did not
occur. Remember that Gilin and her colleagues (2012) concluded that perspective taking is more relevant to having an accurate understanding of the cognitive processing of others while empathy is relevant to having an accurate understanding of the emotional processing of others.

During competitive negotiations, manipulated perspective taking (i.e., “Take the target’s perspective and guess their rationale”) predicted success in games of strategy whereas manipulated empathy (i.e., “Take the target’s emotional perspective and imagine their feelings”) predicted success in relationship-based coalition games. Brief debates in which the goal is to persuade an opponent that your own opinion is the correct one are arguably more cognitive in nature, and so more likely to draw on perspective taking than empathic expression. In a crisis, negotiators are often speaking with a target for hours (Van Hasselt, Romano, & Vecchi, 2008), giving a source much more than seven minutes to form a bond with the target. If the debates were longer and more emotions were expressed, then the empathic source might have had more opportunities to display their concern and build a relationship with their target.

Chapter 2

Empathic Compliance Study Method

Overview

The second study directed focus to the role of empathic language, tone, and gestures in obtaining a target’s compliance, particularly when a target felt stressed. This study was conducted to consider how empathy’s power to persuade changes or not when a target experiences stress. To determine the impact of source empathic language use, Study 2 adopted methods familiar to the persuasion literature to investigate the effect of an empathic appeal on persuasive outcomes (e.g., DeSteno, Petty, Rucker, Wegener, & Braverman, 2004). However, this work expanded on prior research using emotionally-framed messages by creating an empathic frame and by having experimenters orally deliver the message in person as a request. Coordinating with the Empathic
Persuasion Study, empathy was defined as a demonstration of concern and understanding for the perspective of the target (i.e., a conflation of empathic concern and perspective taking).

Experimenters were instructed to make a request of a participant in one of three ways: empathic, friendly, or neutral. Neutral was included as a control condition while friendly was included to ensure participants were responding to qualities particular to empathic expression rather than factors relating to friendliness.

**Study Design**

The empathic message study was a 3 (empathically infused request, friendly, or neutral) x 2 (stress induction or not) design. Participants were led to believe they were completing an hour’s worth of tasks that the experimenter was considering for use in a future research study. Unbeknownst to participants, the tasks took roughly 30 minutes to complete. The last task included a five minute writing assignment that was either a stress-induction or that was kept innocuous. When a participant completed all of the tasks, the experimenter asked the participant whether they would prefer to end the study session then or whether they would be willing to stay longer to complete more tasks to fill the hour. The experimenter made their request using empathic language and tone, friendly language and tone, or neutral language and tone. A participant could choose to leave the study session at that time or continue to complete additional tasks that would last 5 to 25 minutes, depending on their willingness to contribute. Compliance was defined by the number of additional five tasks a participant stayed to complete.

**Pilot Testing**

Northeastern University undergraduates (N = 12) were asked to rate the text of each of three messages from 1 (not at all) to 5 (very much) on the extent to which they felt the message was neutral, empathic, and friendly; this was completed on Qualtrics. The scripts for each condition were kept equivalent in length and similar in level of vocabulary. Results indicated participants could not
distinguish between the messages, so all messages were altered to include clearer indicators associated with each message type. Results from the first study were as follows, for the neutral message \((M_{\text{neutral}} = 2.50, SD = 1.08; M_{\text{empathic}} = 2.75; SD = 1.29; M_{\text{friendly}} = 2.36; SD = 1.20)\), for the empathic message \((M_{\text{neutral}} = 2.36, SD = 1.21; M_{\text{empathic}} = 2.18; SD = 1.41; M_{\text{friendly}} = 2.45; SD = 1.01)\), and for the friendly message \((M_{\text{neutral}} = 2.53, SD = .98; M_{\text{empathic}} = 2.66; SD = 1.00; M_{\text{friendly}} = 2.59; SD = 1.19)\). These were not analyzed further as it was clear participants were not distinguishing between empathy, friendly, and neutral messages.

A second Qualtrics study \((N = 18)\) had participants listen to, as well as read, three new messages designed to better convey friendliness, empathy, or a neutral emotion. As before, the scripts for each condition were kept equivalent in length and similar in level of vocabulary. After listening to an audio recorded message and reading it, participants this time rated the messages separately on how friendly and on how empathic they felt it was, on a scale of 0 (neutral) to 5 (very friendly/very empathic). Results from the second pilot study indicated the message scripts exclusively reflected their condition well (i.e., each script was distinguishable from the remaining conditions; finalized scripts are presented below). Results for the neutral message \((M_{\text{friendly}} = 1.61, SD = .85; M_{\text{empathic}} = 1.50, SD = .79)\) indicated it was more neutral than friendly or empathic (i.e., the scores were low on both the friendly and empathic scales). Results for the empathic message \((M_{\text{friendly}} = 3.22, SD = .27; M_{\text{empathic}} = 4.39, SD = .21)\) indicated it was more empathic than friendly; \(t(17) = -3.58, p < .001\). The friendly message was more friendly than empathic \((M_{\text{friendly}} = 4.94, SD = .24, M_{\text{empathic}} = 3.56, SD = .34); t(17) = 4.41, p < .001\).

Eight of the 30 participants also identified which message was most friendly, most empathic, and most neutral. All eight participants ranked the empathic message as most empathic of the messages, the friendly message as friendliest, and the neutral message as most neutral. Last, pilot testing of the full study session was conducted to ensure the tasks were completed within 25 to 35
minutes and to ensure there were no ceiling or floor effects in response to the experimenter’s request.

**Finalized scripts.** The finalized scripts are provided below. Note also that experimenters were told to understand empathy as the tendency to show concern and understanding for another's perspective and friendliness as the tendency to be nice and jovial toward another person. Helpful reminders regarding the tone in which an experimenter should deliver the message were included in brackets:

1. **NEUTRAL** (rote; bored with the 9 to 5): ‘So, there are still about 30 minutes left in the hour. You can stay for the rest of the hour and keep on writing about other life events or you can leave right now since you’re finished with the survey. If you’d be willing to stay here longer, you can just go ahead and indicate that by clicking ‘yes’ on the screen. If not, you can go ahead and click ‘no’ and finish up your hour right now.”

2. **EMPATHY** (therapist/consoling a sad sad friend): “There are about 30 minutes left in the hour. You’re welcome to stay and write about other life events, or you can leave since you’ve already finished the survey. We care about how you might feel when writing about such personal stories and can see how it might be unsettling. But, if you’re comfortable with describing more of your life stories, you can ‘click’ yes on the screen, if not you’re free to click ‘no’ and finish now.”

3. **FRIENDLY** (talking to a dog): “So, there are still 30 minutes left in the hour, thanks for your participation so far, we really appreciate it. Since there’s extra time, you’re welcome to stay and write about other life events or you can leave right now since you’re finished with the survey. If you’d be willing to stay, you can just go ahead and indicate that by clicking ‘yes’ on the screen. If not, you can go ahead and click ‘no’ and finish now.”

**Participants**

Participants were Northeastern University undergraduates receiving course credit for completion of the study (N = 126; 63% female), aged 17 – 23 (M = 19). There were an equal number of participants within each condition: empathic (n = 42), friendly (n = 42), and neutral (n = 42). Sixty-six of the participants were randomly assigned to complete the stress induction task and 60 to complete the neutral writing task. Demographics were representative of the Northeastern
University undergraduate population, 53% Caucasian, 36% Asian or Pacific Islander, 6% African American, 4% Hispanic, and 1% reported Other.

Measures

**Filler tasks.** Participants completed a 5-minute word completion task in which they were presented a list of 8 words with letters missing and their goal was to determine the letters needed to complete a word and answer accordingly. Most of the word fragments had several possible correct completions so participants could enter multiple responses until the task ended after five minutes. Items for the word completion task were taken from a pre-existing database of 98 fragmented words created by Anderson (1999). Next, participants filled out the same Big Five Index (BFI; John & Srivastava, 1999) measure used in the Empathic Tactics study to capture a participant’s Big Five personality traits, then they completed a divergent thinking task in which they were asked to list every use for a knife they could think of and to move on only after their list was completed. After listing all possible uses for a knife, they completed the same measure of empathic concern and perspective taking as that used in the Empathic Tactics study, the Interpersonal Reactivity Index (IRI; Davis, 1980). Next was a word sorting task in which participants were asked to move a set of 12 items to one of three boxes, according to their own reasoning. The goal was to group items into three categories recognized by the participant. Items included: diary, CD player, closet, velociraptor, cat, emblem, mouse, tree, rock, dog, hippo, and shark. This task was made from a template provided by Qualtrics.

The next task was also made from a template provided by Qualtrics; participants were presented with 22 words and asked to indicate whether they liked, disliked, or felt neutral about the word. Sample items include: starry, bright, weeds, jaundice, stellar, rickety, and glaring. Following this, participants listed five additional words they found to be very neutral, bland, or innocuous. After thinking of five neutral words, participants completed the Cognitive Reflection Test (CRT;
The test consisted of 3 items and was designed to assess a person’s tendency to over-ride their gut reactions and engage in further reflection to find a correct answer. The items were 3 problem questions:

1. A bat and a ball cost $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost?

2. If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? ____ minutes

3. In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake? ____ days

**Non-filler tasks.** Participants completed a set of non-filler tasks relevant to the study’s hypotheses. Non-filler tasks included self-reported feelings of personal distress before and after a writing task in which participants described a life event. Participants slid a bar to indicate the degree to which they felt one of the following emotions: happy, distressed, neutral, entertained, and focused. Distressed was the only item of interest. They then either wrote about a stressful life event (i.e., those in the stress-induction condition) or provided a neutral description of a daily activity for five minutes. All participants were told the following:

We are collecting an inventory of life event narratives. Life is complex and involves many different types of experiences: positive, negative, stressful, neutral, exciting, etc. You will be randomly assigned to recall a life event that reflects one of the above experiences (positive, negative, etc.). You will reflect on the event, doing your best to recall as many details as possible. Click next to proceed.

Those in the stress-induction condition wrote about a particularly traumatic event (adapted from Briñol, Petty, & Barden, 2007):

Think of a particularly traumatic (i.e., very emotionally upsetting and/or anxiety-inducing) event in your life, especially one that occurred within the past year (but not necessarily, you may select whichever event most stands out to you). Take 5 minutes to describe the event in as much detail as you can. What happened? What were your
thoughts? What were you experiencing physically and emotionally? Reveal only what you are comfortable revealing. Nothing of what you write here will be shared outside of this lab.

Participants in the neutral condition were told exactly the same instructions, except rather than thinking of a particularly traumatic event, they were asked to think about a particularly neutral (i.e., typical, uneventful, or mundane) event their life and to describe that event in detail. After the writing task was completed, participants again reported on their feelings of happiness, distress, neutral, entertainment, or focus. Participants’ reported change in distress was used to assess whether the stress-induction was successful.

**Measure of compliance.** Last, participants who were willing to stay longer after completing all above-mentioned tasks, continued to complete additional writing tasks. The additional writing tasks were reported to take five minutes each, where one additional task was the minimum and five additional tasks was the maximum. Writing tasks were identical to the stress-inducing and neutral writing tasks, except participants were allowed to write about any type of emotional life event they wanted, and to label the primary emotion experienced in each life event described. As stated before, the number of tasks a participant wrote functioned as the measure of compliance.

**Procedure**

Participants signed a consent form after a female experimenter described the study. To describe the study, the experimenter told the participant they would complete a series of tasks that would inform task selection for future research. Unbeknownst to the participant, the tasks would not be used for future task selection but were instead neutral filler tasks intended to mask the study’s goal of assessing compliance after completing a stressful or neutral writing task. Half of the participants were randomly assigned to complete a stress-inducing writing task in which they described in great detail a particularly stressful life event for five minutes. The remaining half of
participants completed a neutral writing task in which they wrote about an innocuous life event for five minutes. The induction was randomized on Qualtrics so the experimenter was blind to this.

Participants completed filler tasks for 20-30 minutes according to their own pace, then answered questions about their feelings, namely how distressed they felt, after which they completed a five-minute writing task and again reported their feelings, with my interest being how distressed they felt after the writing task. Next, participants read a message on their computer screen asking them to get their experimenter because the study was completed. As the participant was completing these tasks, the female experimenter randomly assigned the participant to one of the three experimental conditions: empathic, friendly, or neutral. After the experimenter was called by the participant, she told the participant they completed the study earlier than expected and proceeded to offer the participant the opportunity to leave and receive credit or offered the option to stay and complete any additional tasks for anywhere from 5 to 25 more minutes as a favor. The experimenter made her request following a script with empathic language, friendly language, or neutral language. Experimenters were extensively trained during pilot-testing to deliver the messages in a correspondingly empathic, friendly, or neutral tone. After piloting, when running sessions during the semester, the two female experimenters recorded two of their five sessions for quality weekly checks and trainings (audios are available to listen to).

Participants who preferred to end the study without completing more tasks were thanked for their participation and immediately given credit. Those who agreed to stay longer were guided to another survey where their instructions read:

We are collecting an inventory of life event narratives. Life is complex and involves many different types of experiences: positive, negative, stressful, neutral, exciting, etc.

As part of this study, you will reflect on one or more life events you have experienced, doing your best to recall as many details as possible. You may choose any life events you would like to share and describe, but be sure to label what type of emotional event each one was: happy, exciting, sad, scary, etc.
First, please indicate how many life event descriptions you are willing to provide today. Each will require five minutes of your time.

They first indicated how many life event descriptions they would provide, then proceeded to write about their lives and to label each description with whatever emotion they believed best described the event. After writing as many life event descriptions as they indicated they would, the participants were thanked for participating and given credit after they left.

**Empathic Compliance Results**

The empathic request study included 3 conditions in which the experimenter (two female research assistants) made a request that the participant could choose to accept or reject. A female experimenter manipulated her voice and language in one of three ways: to be friendly, empathic, or neutral. Additionally, half of the participants were randomly assigned to complete a stress-inducing writing task while the remaining half completed a neutral writing task. Participants spent 20 – 30 minutes completing neutral tasks, followed by a five-minute writing task asking them to describe a life event that was either particularly stressful or typical (i.e., neutral). After completing the writing task, the experimenter asked the participant if they would stay longer to complete additional writing tasks to fill the hour. It was at this point that the experimenter manipulated the language and tone of their request to be friendly, empathic, or neutral. Participants were free to leave the session at that point or to stay anywhere from 5 to 25 minutes longer. Hypotheses were as follows:

1. Participants would be willing to complete the hour (i.e., do more writing tasks) if the experimenter asked in an empathic or friendly way, but less so if asked in a neutral way.

2. Empathically delivered requests would be most appealing, leading to the greatest amount of compliance relative to friendly or neutral.
(3) Participants assigned to the stress-inducing writing task would be more compliant when the experimenter made their request in an empathic way, as compared to those assigned to the neutral task.

Descriptive information and the stress-induction manipulation check were addressed first, followed by hypotheses, which were addressed in ascending order. Note that compliance was operationalized as the number of tasks a participant stayed to complete after being told they could leave the session early and still receive participation credit.

**Descriptives**

Roughly one third of the 126 participants (34%) reported a willingness to complete additional tasks to fill the hour, while 66% chose to terminate the study session when given the opportunity. Most who stayed completed two tasks (10 minutes; 21%), 8% completed only 1, and 6% completed 3 to 5.

**Stress-induction Manipulation Check**

All participants were asked to rate their level of stress (amongst other feelings variables) before and after completing a stress-inducing or neutral writing task. Before completing the task, participants reported their distress, which ranged from 0 to 100 ($M = 35.35, SD = 27.51$), and there was no difference in ratings given by those in the neutral ($M = 35.05, SD = 28.01$) or stress-induction conditions ($M = 33.45, SD = 26.91$), $t(82) = .27, p = .79, d = .06$. Two variables were first calculated to quantify a participant’s change in distress following the writing task. This was done by subtracting the original reported distress value from the post-induction distress value separately for the stress induction and neutral conditions. Those in the stress induction condition were expected to report a positive change value, indicating their distress reported post-induction was greater than their distress reported before the induction; a lower value would indicate a decrease in stress. Those who completed the neutral writing task ($n = 56$) reported slightly lower distress after the writing task
(range = -61 – 49, M = -3.38, SD = 16.60). Those who completed the stress inducing writing task (n = 66) reported an increase in distress (range = -27 – 81, M = 14.95, SD = 22.51). An independent samples t-test found the difference between inductions to be significant, such that those in the stress induction experienced significantly greater stress in response to the writing task, t(120) = -4.96, p < .001, d = .92.

**Hypotheses 1 and 2.** A one-way ANOVA included condition (friendly, empathic, or neutral) as a predictor of compliance and a significant difference in means across the conditions was observed, F(2, 123) = 13.85, p < .01. Individuals in the empathic request condition reported highest compliance levels (M = 1.28, SD = 1.17), followed by those in the friendly condition (M = .57, SD = 1.01), then those in the neutral condition (M = .19, SD = .63). Post-hoc LSD tests indicated those in the neutral request condition responded significantly differently from those in the empathic request condition (p < .01, d = 1.16), and marginally differently from those in the friendly condition (p = .07, d = .65). The difference in compliance between empathic and friendly was significant (p < .01, d = .45).

**Summary of hypotheses 1 and 2.** Hypothesis 1 was supported. Participants reported a greater willingness to comply with the experimenter’s request when the request was delivered in an empathic or friendly way, but the difference between neutral and friendly was marginal. Hypothesis 2 was supported, in that participants were more willing to stay when the request was empathic relative to friendly.

**Hypothesis 3.** A two-way ANOVA included condition and stress induction (stress or neutral) as independent variables with compliance as the dependent variable. There was a significant main effect of condition (as observed already with hypothesis 1), indicating there was meaningful difference in means across the conditions; F(2, 123) = 13.21, p < .01. There was not a main effect of induction on compliance, F(1, 123) = .00, p = .95, and no interaction between induction and
condition $F(2, 123) = .03, p = .97$. Delivery of the request impacted compliance but whether a participant was stressed or not had no impact on their compliance in any condition. Of particular interest to hypothesis 3, those in the empathic delivery condition who were assigned to the stress-inducing writing task were not more likely ($M = 1.28, SD = .89$) to comply than those assigned to the neutral task ($M = 1.29, SD = 1.36$).

**Summary of hypothesis 3.** Hypothesis 3 was not supported, as stress had no impact on compliance in any condition, including the empathic delivery condition.

**Exploratory Gender Analyses**

There were no expected gender differences but analyses were run to determine whether any arose. First, a univariate ANOVA was run with gender and condition as predictors of compliance. There was not a main effect of gender but the interaction of gender with condition was marginally significant, suggesting that genders varied in compliance across the conditions, $F(2, 125) = 2.66, p = .07$. Women ($M = .37, SD = .89$) in the neutral condition were slightly more willing to comply than men ($M = .04, SD = .21$). Men ($M = 1.71, SD = .99$) in the empathic condition were slightly more willing to comply than women ($M = 1.07, SD = 1.21$), while no gender difference was visible in the friendly condition. For men and women, respectively: $M = .50, SD = .85; M = .59, SD = 1.07$. Keep in mind that regardless of gender, participants in the empathic condition were most compliant and those in the neutral condition were least compliant. Any findings are difficult to interpret because the experimenters were both female.

Last, a three-way ANOVA included gender, condition, and stress induction as predictors of compliance to assess whether men and women behaved differently when under stress. There was not a significant interaction of gender and stress induction to indicate genders behaved differently under stress, $F(1, 124) = 1.95, p = .16$. 
Summary of Empathic Compliance Findings

Hypotheses 1 and 2 were supported, in that compliance rates were highest when a request was delivered empathically relative to neutral or friendly, and participants’ compliance rates were slightly higher in the friendly condition than the neutral condition. In other words, neutral requests produced lowest compliance rates.

Empathic Compliance Discussion

Crisis negotiators use multiple tactics in tandem when resolving a crisis (McMains & Mullins, 2015). Intuitively this makes sense, as their goal is to establish rapport before requesting a subject (target) peacefully to rescind their hostile demands. Rapport can be established in many ways so limiting oneself to a single tactic hardly makes sense for a negotiator in crisis (e.g., Drolet & Morris, 1999; Lakin & Chartrand, 2003). Study 2 expanded on Study 1 by combining tactics, perspective taking and empathic expression. When the experimenter asked a participant (target) whether they would be willing to commit more time to the study, having already received participation credit for completion, participants were more willing to stay and commit more time if asked in an empathic, rather than friendly or neutral, way. Study 2 additionally considered stress but found it did not alter a participant’s willingness to stay or desire to leave. Stress was considered for its relevance to crisis negotiation, much in the way the tactics were selected. In crises, the individuals perpetrating them tend to be experiencing especially high levels of stress (McMains & Mullins, 2015), so it was important to consider whether stressed individuals would behave differently than others not under stress. Together, findings from Study 2 indicate a source aiming to obtain behavioral compliance from a target is benefited by delivering their request in an empathically-loaded manner. This might include monitoring vocal tone so that it sounds caring and soothing, speaking slowly, and indicating that you care about the target’s situation. Whether a target is stressed or not may not matter, so such a tactic will be effective regardless of the target’s stressed emotional state.
Chapter 3

Overall Discussion

It was the goal of this dissertation to critically evaluate three influence tactics and one compliance tactic, all of which are other-oriented tactics known to be employed by crisis negotiators. Empathic influence tactics were selected primarily for their relevance to crisis negotiation, but also for their novelty within the domain of influence research. Negotiators currently implement variants of these tactics, and although the tactics are supported theoretically, they were never validated using methods from social psychology. This project worked toward filling this gap in two studies designed to evaluate the efficacy of three empathic persuasion tactics (Study 1) and one empathic compliance tactic (Study 2).

Empathic Persuasion and Empathic Compliance

Study 1 focused on manipulating a source’s behavior to obtain target persuasion, or attitude change, while Study 2 focused on obtaining a target’s compliance, or behavior change. It is possible that compliance is more easily obtained than attitude change, particularly when time is limited. If given more time to establish a bond with a target, perhaps especially an emotionally distraught target, perspective taking and expressing empathy would likely increase a source’s ability to influence attitude change. In other words, because attitude change is difficult for a source to obtain, and because building a foundation of rapport and trust defuses an unwilling target, a source with more time and with opportunities to express concern and understanding is more equipped to successfully alter a target’s opinion and to be persuasive. Future work may want to address time constraints and situational opportunities that intentionally draw out empathic expression from a source.

Study 2’s findings regarding compliance are promising. Simply (or not so simply) controlling your tone of voice so that it is soothing and altering your language to be other-focused rather than self-focused, can increase your chances of obtaining a target’s compliance. However, future work
could consider the costs faced by a target. If costs are higher, the empathic exchange may need to counter this by expressing higher levels of empathy. It would be interesting to identify how compliance rates change as costs to the target change. What are targets willing to accept given the costs, and at what point are empathic tactics rendered useless to a source? If not rendered useless, then how could empathic tactics be infused more heavily with empathic language and nonverbal cues to ensure compliance is obtained? Again, time is likely to play a role, and an important one. If there is more time, the source has the opportunity to develop a bond with their target before requesting any behavior change. Research from the persuasion literature indicates that targets who trust, like, or can relate to, a source are particularly susceptible to the source’s suggestions (Cialdini & Goldstein, 2004). If this is true, then time is not a persuader’s enemy, but an ally.

Ultimately, the findings of this project suggest that influence (1) can be reduced by focusing too much on a target’s nonverbal behavior, (2) and can be enhanced by expressing a concern for the target’s perspective, when expressed in a soothing manner. Furthermore, (3) when trying to persuade a target to change their opinion, perspective taking may reduce a source’s tendency to change their own attitudes, and (4) an empathic source may more readily obtain a target’s compliance than their attitude change.

**Contribution**

Both studies build on years of illuminating and productive research on topics of persuasion, social influence, and attitude change, primarily by (Study 1) evaluating the efficacy of empathic persuasion tactics, and by (Study 2) exploring the influence of an empathically-delivered message to stressed and unstressed targets. This is an exciting new venue for persuasion research and one which is particularly helpful in an applied realm. By understanding whether empathic qualities—the behaviors as well as traits—are associated with influence, crisis negotiators can be better informed as to how they can use persuasion and compliance tactics to guide a hostage-taker toward voluntary
compliance. This work additionally benefits the persuasion literature as these are other-oriented tactics that have not been explored or experimentally manipulated.

Even without reaching into an applied realm, it is worth understanding whether empathic qualities play a vital role in persuasion—how is attention captured? How are language and nonverbal cues being intentionally (or not) utilized to influence others? Which tactics are the most effective, and how does effectiveness vary from situation to situation or person to person? Humans have been fascinated by these questions for thousands of years and attitude change models have contributed significantly to our current understanding, but there is so much more to learn about influence tactics, and particularly the role of empathic tactics.

An especially interesting contribution is made by Study 1. No study I am aware of has evaluated the persuasion of a source by the target. Study 1 goes beyond prior work considering target influence by collecting opinion change information from sources as well as targets. This made it possible to identify minimally trained nonverbal attentiveness as detrimental to a source. Rather than focusing on the target, these sources may have turned their immediate attention to nonverbal expressions, thereby rendering themselves susceptible to their targets’ opinions. The cognitive burden of focusing on a target’s expressions likely deteriorated the source’s capacity to attend to the target’s verbal arguments, or to make strong arguments themselves.

**Limitations and Future Directions**

Study 1 has some limitations, namely: participants assigned to adopt an influence tactic would benefit from a longer training session tailored to that tactic, and chances of experimenter bias could be decreased by blinding the experimenter to the participant’s condition assignments. As the study was designed, the experimenter was aware of which participant was the source and which was the target, as well as what the source’s influence tactic was (if assigned a tactic).
Prior research on the observer-expectancy effect suggests leaking cues can influence a study’s outcome (Rosenthal, 1966). The complexity of the study’s design made it difficult to blind the experimenter to participant’s roles during the debates because the experimenter assigned the roles. However, this was not problematic, as the only opportunity for the experimenter to bias the participants was during the debate while participants are engaging with one another and not with the experimenter. Any persons running the study were strictly instructed to maintain a neutral expression throughout the debates and to be aware of any cue leakage.

Future work should continue to explore different source tactics that might enhance persuasive ability, while simultaneously taking source status into account. It would be especially intriguing if the mechanisms underlying source persuasiveness could be identified, and models could be structured around these identified mechanisms (e.g., verbal and nonverbal behaviors expressed by those who are successfully persuasive). Also, throughout this project you will notice there have been references to the valuable work of crisis negotiators. Results from these studies help to assess their teaching paradigms, which assume empathic expression, perspective taking, and nonverbal attentiveness, positively impact a source’s ability to influence. More work is needed to more firmly identify when these qualities are beneficial and when they are harmful, but of the tactics assessed, only one seems potentially harmful to persuasiveness: nonverbal attentiveness (and likely due to cognitive load rather than the information provided by attending to nonverbal information). Expressing empathy and perspective taking were shown to enhance compliance rates but to have no impact on target attitude change, thereby leaving researchers with an excellent gift: unanswered questions.
“One of the best ways to persuade others is with your ears, by listening to them.”

Dean Rusk
References


Table 1

*Partner ratings correlated with persuadedness in debates 1 and 2 disregarding role.*

<table>
<thead>
<tr>
<th>Partner rated variable</th>
<th>Debate 1</th>
<th>Debate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felt connected to debate partner</td>
<td>.05</td>
<td>.16*</td>
</tr>
<tr>
<td>Would debate with partner again</td>
<td>.10</td>
<td>.02</td>
</tr>
<tr>
<td>Felt listened to</td>
<td>-.01</td>
<td>.06</td>
</tr>
<tr>
<td>Felt partner understood their perspective</td>
<td>.01</td>
<td>.14*</td>
</tr>
<tr>
<td>Felt partner cared about their position</td>
<td>.06</td>
<td>.15**</td>
</tr>
<tr>
<td>Felt partner was honest</td>
<td>.05</td>
<td>.04</td>
</tr>
<tr>
<td>Felt partner genuinely expressed him/herself</td>
<td>.11</td>
<td>.08</td>
</tr>
<tr>
<td>Would trust partner to argue on their behalf</td>
<td>.17**</td>
<td>.14*</td>
</tr>
<tr>
<td>Felt partner respected them</td>
<td>-.01</td>
<td>.16**</td>
</tr>
<tr>
<td>Positive affiliation</td>
<td>.10</td>
<td>.13*</td>
</tr>
</tbody>
</table>

Note: Positive affiliation is a composite of the partner-rated variables.

N = 310, *p < .05, **p < .001
Table 2
*Correlations of coded items with persuadedness in debates 1 and 2 disregarding role.*

<table>
<thead>
<tr>
<th>Coded items</th>
<th>Debate 1</th>
<th>Debate 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expression of positive</td>
<td>0.08</td>
<td>0.13</td>
</tr>
<tr>
<td>nonverbals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calm tone of voice</td>
<td>0.09</td>
<td>-0.07</td>
</tr>
<tr>
<td>Apparent confidence</td>
<td>-0.07</td>
<td>-0.06</td>
</tr>
</tbody>
</table>

N = 310, *p < 0.05
Figure 1
Mean persuadedness compared across conditions in debate 1: pure control, target, and source.

† p < .08, * p < .05
Figure 2

Mean persuadedness compared across conditions in debate 2: pure control, target, and source.

†p < .08, *p < .05
Appendix A: Study 1 Materials

Personality Measures

Big Five Index

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please select a number next to each statement to indicate the extent to which you agree or disagree with that statement. Questions are answered on a scale from 1 (disagree strongly) to 5 (agree strongly).

I see myself as someone who...

1. Is talkative
2. Tends to find fault with others
3. Does a thorough job
4. Is depressed, blue
5. Is original, comes up with new ideas
6. Is reserved
7. Is helpful and unselfish with others
8. Can be somewhat careless
9. Is relaxed, handles stress well
10. Is curious about many different things
11. Is full of energy
12. Starts quarrels with others
13. Is a reliable worker
14. Can be tense
15. In ingenious, a deep thinker
16. Generates a lot of enthusiasm
17. Has a forgiving nature
18. Tends to be disorganized
19. Worries a lot
20. Has an active imagination
21. Tends to be quiet
22. Is generally trusting
23. Tends to be lazy
24. Is emotionally stable, not easily upset
25. Is inventive
26. Has an assertive personality
27. Can be cold and aloof
28. Perseveres until the task is finished
29. Can be moody
30. Values artistic, aesthetic experiences
31. Is sometimes shy, inhibited
32. Is considerate and kind to almost everyone
33. Does things efficiently
34. Remains calm in tense situations
35. Prefers work that is routine
36. Is outgoing, sociable
37. Is sometimes rude to others
38. Makes plans and follows through with them
39. Gets nervous easily
40. Likes to reflect, play with ideas
41. Has few artistic interests
42. Likes to cooperate with others
43. Is easily distracted
44. Is sophisticated in art, music, or literature
**Interpersonal Reactivity Index**

The following statements ask about your thoughts and feelings in a variety of situations. For each item, show how well it describes you by choosing the appropriate number on the scale at the top of the page: 1, 2, 3, 4, or 5. When you have decided on your answer, fill in the letter in the blank next to the item. **READ EACH ITEM CAREFULLY BEFORE RESPONDING.** Answer as honestly and as accurately as you can.

1. I daydream and fantasize, with some regularity, about things that might happen to me.
2. I often have tender, concerned feelings for people less fortunate than me.
3. I sometimes find it difficult to see things from the “other guy’s” point of view.
4. Sometimes I don’t feel very sorry for other people when they are having problems.
5. I really get involved with the feelings of the characters in a novel.
6. In emergency situations, I feel apprehensive and ill-at-ease.
7. I am usually objective when I watch a movie or play, and I don’t often get completely caught up in it.
8. I try to look at everybody’s side of a disagreement before I make a decision.
9. When I see someone being taken advantage of, I feel kind of protective towards them.
10. I sometimes feel helpless when I am in the middle of a very emotional situation.
11. I sometimes try to understand my friends better by imagining how things look from their perspective.
12. Becoming extremely involved in a good book or movie is somewhat rare for me.
13. When I see someone get hurt, I tend to remain calm.
14. Other people’s misfortunes do not usually disturb me a great deal.
15. If I’m sure I’m right about something, I don’t waste much time listening to other people’s arguments.
16. After seeing a play or movie, I have felt as though I were one of the characters.
17. Being in a tense emotional situation scares me.
18. When I see someone being treated unfairly, I sometimes don’t feel very much pity for them.
19. I am usually pretty effective in dealing with emergencies.
20. I am often quite touched by things I see happen.
21. I believe that there are two sides to every question and try to look at them both.
22. I would describe myself as a pretty soft-hearted person.
23. When I watch a good movie, I can very easily put myself in the place of a leading character.
24. I tend to lose control during emergencies.
25. When I’m upset at someone, I usually try to “put myself in his shoes” for a while.
26. When I’m reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.
27. When I see someone who badly needs help in an emergency, I go to pieces.
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.
Shortened Geneva Emotion Recognition Test (GERT-S)

The 10 minute Geneva Emotion Recognition Test contains 14 video clips of actors displaying a positive or negative emotion that falls on this list:

Please select the word that describes best the emotion that the actor tried to express in the previous video.

Anger Pride
Irritation Joy
Disgust Amusement
Sadness Pleasure
Despair Relief
Fear Interest
Anxiety Surprise

Participants guess which emotion was being conveyed by the actor (half male, half female) and receive a score at the end to indicate their accuracy.
Opinions Survey

Please read the following questions and answer to the best of your ability. Circle your answers clearly, and don’t spend too much time on any one question. You will be given opportunity to expand during the discussion.

1. Do you support the following: Guns increase a society’s safety, and citizens should be able to own them
   
   Yes  No
   
   How strongly do you feel about your position?
   (Not strongly)  1  2  3  4  5  6  7  8  9 (very strongly)

   How confident are you in your position?
   (Not confident)  1  2  3  4  5  6  7  8  9 (very confident)

   If you were given $1000, how much would you be willing to give to a charity that supports your position? $_____

2. Do you support the following: If a pregnant woman is told genetic tests revealed that her child will be born with Down Syndrome, it is acceptable to get an abortion
   
   Yes  No
   
   How strongly do you feel about your position?
   (Not strongly)  1  2  3  4  5  6  7  8  9 (very strongly)

   How confident are you in your position?
   (Not confident)  1  2  3  4  5  6  7  8  9 (very confident)

   If you were given $1000, how much would you be willing to give to a charity that supports your position? $_____

3. Do you support the following: War is necessary
   
   Yes  No
   
   How strongly do you feel about your position?
   (Not strongly)  1  2  3  4  5  6  7  8  9 (very strongly)

   How confident are you in your position?
   (Not confident)  1  2  3  4  5  6  7  8  9 (very confident)

   If you were given $1000, how much would you be willing to give to a charity that supports your position? $_____

4. Do you support the following: GMOs (genetically modified organisms) are acceptable in produce
   
   Yes  No
   
   How strongly do you feel about your position?
   (Not strongly)  1  2  3  4  5  6  7  8  9 (very strongly)
How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $______

5. Do you support the following: Robots should replace low-level workers
   Yes  No

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $______

6. Do you support the following: Creationism should be taught alongside science
   Yes  No

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $______

7. Do you support the following: Physical education should be mandated at the university level
   Yes  No

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $______

8. Do you support the following: Studying abroad should be mandated, at least one semester
   Yes  No

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $_____

9. Do you support the following: Mandate learning a second language at Northeastern (for those without)

Yes  No

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $_____

10. Do you support the following: Patriotism should be encouraged in a country’s citizens

Yes  No

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $_____

11. Do you support the following: Endorsing affirmative action to enlist more non-white students

Yes  No

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $_____

12. Do you support the following: Mandate a course on global warming at Northeastern
13. Do you support the following: Mandate a liberal arts experience, requiring all Northeastern majors to explore liberal arts

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How strongly do you feel about your position?</td>
<td></td>
</tr>
<tr>
<td>(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)</td>
<td></td>
</tr>
<tr>
<td>How confident are you in your position?</td>
<td></td>
</tr>
<tr>
<td>(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)</td>
<td></td>
</tr>
<tr>
<td>If you were given $1000, how much would you be willing to give to a charity that supports your position? $_______</td>
<td></td>
</tr>
</tbody>
</table>

14. Do you support the following: Mandating a 5 year enrollment at Northeastern

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How strongly do you feel about your position?</td>
<td></td>
</tr>
<tr>
<td>(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)</td>
<td></td>
</tr>
<tr>
<td>How confident are you in your position?</td>
<td></td>
</tr>
<tr>
<td>(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)</td>
<td></td>
</tr>
<tr>
<td>If you were given $1000, how much would you be willing to give to a charity that supports your position? $_______</td>
<td></td>
</tr>
</tbody>
</table>

15. Do you support the following: Art can be anything as long as it’s expressive

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>How strongly do you feel about your position?</td>
<td></td>
</tr>
<tr>
<td>(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)</td>
<td></td>
</tr>
<tr>
<td>How confident are you in your position?</td>
<td></td>
</tr>
<tr>
<td>(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)</td>
<td></td>
</tr>
<tr>
<td>If you were given $1000, how much would you be willing to give to a charity that supports your position? $_______</td>
<td></td>
</tr>
</tbody>
</table>
16. Do you support the following: IQ tests are important measures of intelligence

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $______

17. Do you support the following: Genetic modification of humans could make this world a better place

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $______

18. Do you support the following: If there were no unintelligent people in the world, the world would be a better place

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
(Not confident) 1 2 3 4 5 6 7 8 9 (very confident)

If you were given $1000, how much would you be willing to give to a charity that supports your position? $______

19. Do you support the following: Money makes people happier

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

How strongly do you feel about your position?
(Not strongly) 1 2 3 4 5 6 7 8 9 (very strongly)

How confident are you in your position?
If you were given $1000, how much would you be willing to give to a charity that supports your position? $______
Partner Ratings and Role Question

Please read the following statements and rate how much you agree with them, 1 (not at all) to 9 (very much).

1. I trust the person I debated with.
2. I felt a connection to this person.
3. I would debate this person again.
4. This person listened to my side.
5. This person tried to understand my perspective.
6. This person cared about my position.
7. This person was honest with me.
8. This person genuinely expressed him/herself.
9. I would trust this person to argue on my behalf.
10. This person respected me.

What instructions were you given prior to the debates? Do you remember what you were told to do to be more persuasive during the debates?
Condition Worksheets

There are four unique worksheets, one for each condition assignment (targets always receive the control worksheet): empathic expression, perspective taking, nonverbal attentiveness, and control.

As you are debating, express CONCERN AND UNDERSTANDING.

- express concern to your counterpart
- express understanding of their position
- but remember that their feelings are separate from yours

Your goal is to persuade them that your position is the correct one; express concern and understanding to help you do this. This will help you to be more persuasive!

The task below is intended to prepare you for the upcoming debates. It will encourage you to begin thinking about how to express understanding and concern, which is relevant to your debate instructions.

Imagine you were walking to campus when you heard a car slam on its brakes, just missing Evelynn (an older woman) clutching onto a walker. No one was hurt, but Evelynn was clearly upset.

Describe how you would express empathy to Evelynn (the older woman) regarding this upsetting experience while remaining aware that your feelings are separate from hers. Think about what you would express to her while maintaining your own emotional independence from her. What would you say and how would you behave to show Evelynn your concern for her? Please take 2-3 minutes to write about this, being as thorough as you can.

Please write here:
As you are debating, consider your counterpart’s PERSPECTIVE.

- be aware of their perception of the situation
- try to understand things from their viewpoint
- but remember that their perspective is separate from yours

Your goal is to persuade them that your position is the correct one; use their perspective to inform the construction of your arguments. This will help you to be more persuasive!

The task below will prepare you for the upcoming debates. It will encourage you to begin thinking about how to take another person’s perspective, which is relevant to your debate instructions.

Imagine you were walking to campus when you heard a car slam on its brakes, just missing Evelynn (an older woman) clutching onto a walker. No one was hurt, but Evelynn was clearly upset.

Describe what you think Evelynn’s (the older woman) perspective was regarding this upsetting experience. Focus on her perspective **(point of view)**: what she saw, heard, or was thinking, prior to the event, during the event, and after the event, and write them down. **Please take 2-3 minutes to write about this, being as thorough as you can.**

Please write here:
As you are debating, pay close attention to your counterpart’s NONVERBAL EXPRESSIONS.

- pay attention to their vocal tone and how it changes
- be aware of their facial expressions
- notice their gestures and posture

Your goal is to persuade them that your position is the correct one; use their nonverbal cues to inform the construction of your arguments. This will help you to be more persuasive!

The task below will help prepare you for the upcoming debates. It will encourage you to begin thinking about how to pay attention to the nonverbal cues that people elicit, which you will be attempting to do throughout the debate.

*Imagine you were walking to campus when you heard a car slam on its brakes, just missing Evelynn (an older woman) clutching onto a walker. No one was hurt, but Evelynn was clearly upset.*

Write down some nonverbal cues Evelynn (the older woman) might have expressed during this upsetting experience. Think about which cues Evelynn would express prior to the event, during the event, and after the event, and write them down. Nonverbal cues include all bodily and vocal expressions that are not verbal (i.e., not words). Please take 2-3 minutes to write about this, being as thorough as you can.

Please write here:
The task below asks you to describe your thoughts about a particular event. We’d like you to think about the debates you are going to engage in. This will help you to be more persuasive!

The task below is intended to prepare you for the upcoming debates.

Imagine you were walking to campus when you heard a car slam on its brakes, just missing Evelynn (an older woman) clutching onto a walker. No one was hurt, but Evelynn was clearly upset.

Think about this near-accident and what occurred and describe your thoughts. Please take 2-3 minutes to write about this, being as thorough as you can.

Please write here:
Empathic Persuasion Coding Guide

Rules
Score all on a scale of 0 & 1 to 7, where 0 indicated the behavior didn’t occur, 1 is low, 4 is neutral, and 7 is high. Take into consideration (1) frequency of occurrence as well as (2) depth or skill of occurrence. A 3 is an ‘average’ score, so it serves as the baseline from which you move upward or downward as called for.

You’ll rate each video in 3 45 second slices: beginning, middle, and end. Each 30 sec slice must be treated independently. In round 1, you’ll score all videos for person A (whoever is seated on the left side), then all for person B (seated on the right side).

First, create a list of numbers randomized 1 - 160, then code the corresponding dyads in that order (first for A then for B). Last, remember to code the first, middle, and last 45s of a dyad. Make sure both of you are coding the exact same times! The first 45s should BEGIN when a participant starts speaking. The last 45s should END when both participants have stopped speaking. The middle 45s should be calculated by first converting mins to secs, subtracting the beginning time from the end time, then dividing by two. The value divided by two is the very middle of the video, so subtract 22.5s from that value—that’s the starting time for the middle 45s.

Example -
Start time @ 4s
End time @ 404s
To find middle, 404-4 = 400s/2 = 200s + 22.5s = 222.5s
Middle starts at 222.5s or 222.5/60 = 3 mins 43 secs

Note: anchor low scores based on dyad 006, high on dyad 003 and neutral on dyad 001.

Rapport: to what extent do the participants work well together? Listen to one another? Get along? Like one another? No 0.

Apparent trust: the degree to which the person seems to trust the other, where trust is confidence in the other person’s reliability in telling what is true; trust they won’t feel judged for their opinions (so comfortable expressing freely)
No 0.

Summarizing or paraphrasing: this is used to confirm information; it involves the person re-stating or summarizing the main statements of their partner in their own words to clarify their understanding. Score this item according to frequency and longevity relative to others. In other words, does the person (1) summarize more than once, and (2) summarize more deeply relative to others, or paraphrase accurately/well.

Empathy: expression of concern or understanding for their partner’s feelings
   a) “That’s understandable.”
   b) “I can see why you might feel that way.”
   c) “I care about how you feel.”
   d) Any other expression of concern for their partner’s emotional state/well-being, including the stating of their partner’s feelings.
**Perspective taking:** expression of understanding for their partner’s thoughts
  a) “I can see why you might think so.”
  b) “I get where you’re coming from.”
  c) “I care about what you think.”
  d) Expressing understanding of the other person’s ideas; an elaboration on why their partner’s perspective make sense. (following a - c)

**Apparent interest in their partner** (No 0.)
  a) Distracted vs. attentive to partner’s thoughts/ideas
  b) If speaking, speaking with intention? (carefully)
  c) Show they care about hearing partner’s statements

**Apparent openness to their partner’s ideas:** encouraging other to share their ideas or feelings (No 0.)
  a) “Tell me more.”
  b) Use of ‘back channel cues’ like “mhm” or “yeah” or giving head nods to suggest they’re listening and waiting to hear more
  c) Speaks without aggression; considerate of their partner’s views; not ‘in your face’ way of speaking

**Nonverbal coding (METTA; Thompson, 2016)**
**IMPRESSION of positive nonverbal involvement** (Hall, Harrigan, & Rosenthal, 1995)
Examples of positive nonverbal involvement includes (these are only examples, rely on your impression of what is positive):
  a) Smiling
  b) Forward leaning in chair; leaning toward other person (any closeness in proximity, or closing the distance between them)
  c) Open arm postures (not crossed)
  d) Frequent eye contact
  e) Postural relaxation; hands left open or palms upward facing
  f) Head nodding to indicate attentiveness

Score your impression on a 1 - 7 scale, where 1 = not at all and 7 = occurs frequently (no sound)

**Calm and regulated tone:** smooth speaking/not distressed in tone
  Score on a 1 - 7 scale, where 1 = very upset in tone and 7 = very calm, 4 = typical/not clearly more or less calm

**Confidence** (verbal and nonverbal): the speaker exhibits a confident tone and posture; they sound certain of their statements and position
  Score on a 1 – 7 scale, where 1 = not confident at all to 7 = very confident/certa
Appendix B: Study 2 Measures (only those not included in Study 1)

Word Completion Task

In this first task you will be presented a list of words with letters missing. Your goal is to determine what letters are needed to complete the words and answer accordingly.

Enter the completed word in the blank space provided. Take your time and complete only what you can within 5 minutes. After 5 minutes, the task will finish and you will automatically be moved on to the next.

If you notice multiple words can be created, please add a semicolon (;) after each word entry.

1. b_h____ (6 letters, 4 missing)
2. in__re (6 letters, 2 missing)
3. ex_e__ (6 letters, 3 missing)
4. mu__er (6 letters, 2 missing)
5. pr__e (5 letters, 2 missing)
6. w__m (4 letters, 2 missing)
7. k i__ (4 letters, 2 missing)
8. t_p_ (4 letters, 2 missing)
Flexible Thinking Task

Take some time now to consider the various ways you could use a knife. List every use you can think of, each separated by a semicolon. Identifying more uses is sometimes associated with greater flexibility in thinking.

e.g., use; a; semicolon; between; each; use; you; can; think; of
Categorization Task

Review the items below, then sort them into groups as you see fit. Click and drag each item to its respective group. Groups were displayed on the right and labeled Group 1, Group 2, Group 3.

Items: diary, CD player, closet, velociraptor, cat, emblem, mouse, tree, rock, dog, hippo, shark
Emotional Association Word Tasks

Please select and highlight the words you like in green, those you dislike in red, and those you feel neutral toward in yellow.

Words: starry, bright, yes, glaring, song, dire, clamor, rickety, soil, shoe, absurd, boil, household, weeds, smells, jaundice, hostile, glamor, stellar, placebo, no, absolute

Now list 5 additional words you find to be very **neutral, bland, or innocuous** (for whatever reason you wish: appearance, sound, ideas brought to mind, etc.). Separate each word with a semicolon.
Cognitive Reflection Test

Please answer the following questions as accurately as you are capable of:

1. A bat and a ball costs $1.10 in total. The bat costs $1.00 more than the ball. How much does the ball cost? _____ cents
2. If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? _____ minutes
3. In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake? _____ days
Emotions Questions (answered before the writing task and following the writing task)

Slide the bars to indicate the degree to which you are experiencing the feeling presented (they then slid bars to the right indicate the strength of their feelings): happy, distressed, neutral, entertained, focused.
**Writing Tasks**

We are collecting an inventory of life event narratives. Life is complex and involves many different types of experiences: *positive, negative, stressful, neutral, exciting, etc.*

You will be randomly assigned to recall a life event that reflects one of the above experiences (i.e., positive, negative, etc.). You will reflect on the event, doing your best to recall as many details as possible.

**Stress-inducing**

Think of a particularly traumatic (i.e., very emotionally upsetting and/or anxiety-inducing) event in your life, especially one that occurred within the past year (but not necessarily, you may select whichever event most stands out to you). Take 5 minutes to describe the event in as much detail as you can. What happened? What were your thoughts? What were you experiencing physically and emotionally? Reveal only what you are comfortable revealing. Nothing of what you write here will be shared outside of this lab.

**Neutral**

Think of a particularly neutral (i.e., typical; uneventful; mundane) event in your life, especially one that occurred within the past year (but not necessarily, you may select whichever event most stands out to you). Take 5 minutes to describe the event in as much detail as you can. What happened? What were your thoughts? What were you experiencing physically and emotionally? Reveal only what you are comfortable revealing. Nothing of what you write here will be shared outside of this lab.