THE RELATIONSHIP BETWEEN AGGRESSIVE AND ASSERTIVE COMMUNICATION BEHAVIORS: EXAMINATION AND SCALE DEVELOPMENT OF THE AGGRESSIVE ASSERTIVE COMMUNICATION INSTRUMENT (AACI)

by

VALERIE BERENICE COLES CONE

(Under the Direction of Jennifer A. Samp)

ABSTRACT

This project considers the relationship between aggressive and assertive communication behaviors; two concepts rarely studied in tandem with one another. The goal of this project was to develop and assess the construct validity of the Aggressive Assertive Communication Instrument (AACI). In order to examine the content validity, internal consistency, and associations between the AACI and external variables, three studies were conducted. Study 1 was a pilot study designed to examine the theorized factor structure and item composition of the AACI. To assess the validity of the measure, the proposed items were correlated with individual difference variables commonly examined and associated with interpersonal conflict (i.e., agreeableness, extraversion, locus of control, and taking conflict personally). The aims of Study 2 were to further examine the factor structure and item composition of the AACI and to cross-validate the AACI with dispositional traits (i.e., agreeableness, entitlement, exploitativeness, extraversion, family communication patterns, self-esteem, and trait anger). In Study 3, convergent and divergent validity were assessed with existing aggressive and assertive measures (i.e., BAAI, BPAQ, VAS, and AI) and dispositional tendencies (i.e., conflict management style and argumentativeness). Additionally, three conditions were developed to assess

how the AACI may change or differentially relate to tested variables when individuals reflected on their behavior with an acquaintance, close friend, or romantic partner. Results from these studies revealed a consistent and stable four-factor structure comprised of two assertion-related factors (i.e., direct communication and relationship orientation) and two aggression-related factors (i.e., verbal aggression and physical aggression). A non-orthogonal rotation method (i.e., Promax rotation) method was utilized in the EFAs as the factors were expected to correlate. CFAs were utilized to further examine model fit. Results indicated utility in assessing aggression and assertion concurrently. The four factors and the final 23-item AACI had acceptable internal consistency reliability and related to concepts as expected. Although external variables often related to the two aggression-related or the two assertion-related factors in tandem, several dispositional traits were uniquely related to only one of the AACI's four factors. These results further justify the need for a multidimensional measure that assesses both aggression and assertion with multiple factors.

INDEX WORDS: Aggression; Aggressiveness; Assertion; Assertiveness; Conflict; Interpersonal Communication; Measure Development

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DEDICATION

This dissertation is dedicated to my grandfather, Francis Edgar Coles III. My grandfather encouraged my love of learning and impressed upon me from a young age the importance of dedicating oneself to education and family. He taught and inspired me by words and, more importantly, by example. Although my grandfather is not here to celebrate this accomplishment, I know he would have been proud to see me complete my dissertation and receive my PhD. I love and miss you, Grandpa – I aim to always remember and emulate your dedication to family and your pursuit of lifelong learning.

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CHAPTER 1: INTRODUCTION AND RATIONALE

When difficult or conflictual conversations inevitably arise in interpersonal relationships, individuals have many options in how to communicatively respond. For individuals who choose to actively engage in the conversation, two response options are to act aggressively or assertively. Both aggressive and assertive behaviors involve directly addressing an issue; although they differ in the level of respect shown to the partner, their respective verbal and nonverbal behaviors, and the relational outcomes of enacting these behaviors. Often polarized, assertive behaviors are commonly identified as desirable and constructive whereas aggressive behaviors are detrimental and destructive (Infante & Wigley, 1986; Rancer & Avtgis, 2006).

Although aggressive and assertive communication behaviors are both commonly studied concepts in many disciplines, including communication (e.g., Aloia & Solomon, 2016; Canary, Canary, & Cupach, 2010; Infante, 1987; Mercer Kollar et al., 2016; Rathus, 1973), the empirical relationship between the two concepts remains unclear. Some scholars contend aggressiveness is a type of assertiveness with different response types (e.g., Bakker, Bakker-Rabdau, & Breit, 1978). Others posit assertiveness or subtypes of assertiveness such as argumentativeness are inherently aggressive (e.g., Avtgis & Rancer, 2010; Buss & Perry, 1992; Hample & Anagondahalli, 2015; Rancer & Avtgis, 2006). With few exceptions (e.g., Bakker et al., 1978), more research explores the detrimental consequences of aggression (e.g., Aloia & Solomon, 2016) than the impacts of assertiveness (Canary et al., 2010), and even less research explores both aggressive and assertive behaviors concurrently.

This project aims to explore the relationship between aggressive and assertive behaviors that does not assume an innate polarized relationship between the two concepts. Additionally, this dissertation will explore the relationships between aggressive and assertiveness behaviors with (a) dispositional traits often explored in conjunction with conflict (e.g., agreeableness, extraversion, locus of control, and taking conflict personally), (b) established aggressiveness and assertiveness measures, and (c) related concepts (e.g., argumentativeness and conflict tactics). Three studies are presented to examine a new measure designed to capture and assess both aggressive and assertive behaviors: The Aggressive Assertive Communication Instrument (AACI). To begin, it is important to conceptualize aggressive and assertive communication behaviors and differentiate them from related concepts. A review of several seminal and popular measures of aggression and assertion follows.

Aggressive Communication Behaviors

Like many concepts, scholars do not agree on one universal definition of aggression. For example, Bandura (1973) operationalized aggression as the delivery of harm to another person. Other scholars contend that aggression is defined by intent to harm and that aggressive acts do not have to be behaviorally actualized (e.g., Baron & Richardson, 1994). Aggressive communicative behavior, regardless of the standpoint of a trait or state perspective, is largely characterized as socially undesirable and as both personally and relationally destructive. For this project, aggression will refer to behavioral actions in which an individual intends (and may succeed) to cause harm to another individual. Often, aggression has been conflated with anger and hostility (e.g., Aloia & Solomon, 2016), abuse and violence (e.g., Marshall, 1994), and

argumentativeness (e.g., Infante, 1987). The following paragraphs differentiate aggression based on these three comparison groupings to inform a comprehensive definition of aggression to guide this project.

Aggression, Anger, and Hostility

Aggression is often associated with feelings of anger and hostility. So much so that the concepts are often used interchangeably (Eckhardt, Norlander, & Deffenbacher, 2004; Spielberger, Jacobs, Russell, & Crane, 1983). Others contend that while the concepts are linked, they have subtle yet distinct differences from one another (Aloia & Solomon, 2016). In short, anger is an emotion, whereas aggression is a behavior. Aloia and Solomon (2016) asserted that anger is the foundation of aggression. *Anger* emerges when one's goals or plans are interrupted (e.g., Guerrero & La Valley, 2006; Lazarus, 1991; Lemerise & Dodge, 2008; Shaver, Schwartz, Kirson, & O'Connor, 1987) and the associated action tendency is to attack (Lazaruz, 1991). For relationships, whether anger is beneficial (Guerrero, 1994; Kubany & Richard, 1992; Lemerise & Dodge, 2008; Sereno, Welch, & Braaten, 1987) or harmful (Kubany & Richard, 1992; Leonard & Roberts, 1998; Sanford, 2007; Sereno et al., 1987) is largely dependent on whether the anger is expressed constructively or aggressively. Constructive expressions of anger include being communicatively open about one's felt emotions of anger in an attempt to open communication lines, resolve conflict, or repair a relationship without lashing out at the other individual or taking steps to "even the score" (Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996). Expressing one's anger in a way that intends to or results in harm to the other person is characterized as destructive.

Mauger and Adkinson (1987) contended that unlike assertive behavior where a positive attitude toward the other is necessary, aggressive behavior "originates from attitudes and feelings of hostility towards others" (p. 164). Similar to Aloia and Solomon's (2016) argument that anger is part of the foundation of aggression, Infante (1987) explained that aggression emerges, in part, from feelings of hostility. Buss and Perry (1992) posited that anger represents the emotional component often associated with aggression, while *hostility* represents an individual's feelings of opposition and injustice.

Buss and Durkee (1957) proposed hostility was theoretically divided into seven dimensions: assault (violence against others), indirect hostility (indirect and undirected aggression; gossip), irritability (readiness to react very negatively at slightest provocation), negativism (animosity towards others, especially authority), resentment (jealousy and hatred of others), suspicion (negative projection towards others), and verbal hostility (negative speech toward another). These seven dimensions formed the foundation for Buss and Durkee's Hostility Inventory (BDHI), a no longer widely-used hostility instrument. Subsequent analysis on the BDHI revealed the seven hostility dimensions were not all distinct and loaded on two factors labeled overt and covert aggression (Bushman, Cooper, & Lemke, 1991). This measurement and conceptualization demonstrate how aggression and hostility are often problematically conflated. However, some currently popular measures differentiate these concepts.

Buss and Perry created an aggression questionnaire, the BPAQ, that assesses four factors, two of which are anger and hostility. A sample item for anger is "When frustrated, I let my irritation show" and a sample of hostility is "When people are especially nice, I wonder what they want." The anger and hostility items reflect

emotional and cognitive experiences respectively that drive aggressive thoughts or behavior. In contrast, the BPAQ's other two factors, physical and verbal aggression, contain items that depict aggressive actions, not the experiences or motivations that lead to the aggressive actions. The BPAQ supports the perspective that anger represents a psychological, emotional experience, whereas hostility is a cognitive experience. In sum, hostility can be conceptualized as a cognitive process in which an individual's feelings of opposition and injustice are accented. Furthermore, when hostility is experienced, aggressive acts may occur.

Aggression, Abuse, and Violence

Definitions of aggression include the intent, perceived intent, or actual action of harming another person. Aggression may (a) be distinguished between expressive aggression and instrumental aggression, (b) occur at the individual- or group-level, and (c) be interpersonal (i.e., occur between individuals), self-directed (i.e., the perpetrator and victim as the same), or collective (i.e., there is a group of aggressors; Fesbach, 1964). This project focuses individual level-aggression that is interpersonal.

Instrumental aggression occurs when the intent to harm another is not the end in itself but only the means to some other end (e.g., remove an obstacle prohibiting someone from reaching her/his goal). Thus, an instrumental aggressor may not intend to cause harm or inflict pain on another individual. Expressive aggression (also known as impulsive, irritable, or angry aggression) is characterized by a strong emotional experience (e.g., anger) that is aimed at another individual with the intent of causing that individual harm (Marshall, 1994). The victim is the target of the aggressive behavior with expressive aggression. It is possible that a behavior embodies both instrumental and

expressive aggression. For example, an individual might grab the arm of her/his relational partner who is attempting to walk away during a conflict to stop the relational partner from leaving (instrumental aggression); however, the arm grabbing may also express the individual's anger and/or fear that occurred in response to the relational partner's behavior (expressive aggression). Conceptualizations of *violence* typically include motivations of hostility, intent to harm another individual, and deviant behavior.

Interpersonal violence may be further divided into family and intimate partner violence or community violence. Each of these categories, as well as their subcategories (e.g., child maltreatment, intimate partner violence, stranger assaults, workplace violence), can vary in scope and intensity. For example, intimate partner violence (IPV) includes physical, sexual, and/or psychological forms of harm between past or present relational partners. Criminal profilers and investigative psychologists often use the instrumental/expressive differentiation to identify offender typologies as the categorization explores the motivation for committed crimes, and how the crime progressed (e.g., Adjorlolo & Chan, 2015). Violent acts may stem from instrumental aggression or expressive aggression. However, much research on violence explores behaviors that were emotionally motivated and harm focused (i.e., expressive aggression; Stets, 1992).

Abuse is distinguished by the motivation to control another person. Manipulation tactics, or patterns of behavior directed towards another that elicit a sense of fear, obligation, or guilt, are common among abusers. For example, an abuser may use intimidation (e.g., "You know what will happen to the kids if you walk about on me"), dependency ("I won't be able to survive without you"), or emotional blackmail (e.g., "If

you make a big deal about this then we won't be able to visit your mother this weekend"). Other examples of abusive tactics include alienation, belittling, blaming, gaslighting, harassment, imposed isolation, objectification, physical violence, projection, scapegoating, shaming, and threatening.

In comparison, not all violent acts involve manipulation. Example typologies of abuse include physical, psychological, and emotional abuse. In a review of physical and physiological abuse, Marshall (1994) noted that because the term abuse is subjective and laden with negative connotations many researchers have turned to asking participants to identify or report specific (abusive) acts. Furthermore, researchers examining different types of physical abuse often categorize male batterers (i.e., males who physically abuse others, commonly their romantic partner(s) and family) as (1) generally violent, (2) dysphoric/borderline, or (3) family only (Holtzworth-Munroe & Stewart, 1994). These typologies are divided based on (a) severity/frequency of the batterer's violence, (b) generality of violence (i.e., in the relationship or outside of the relationship), and (c) psychopathology/ personality disorder characteristics. Each typology uniquely varies in the extent to which distal and proximal factors influence the development of violent behavior(s). Another unique characteristic of abusers is that the abusers commonly do not take responsibility for their own behavior (i.e., internal locus of control). Instead, someone or something else "made" them act violently (i.e., external locus of control).

In summary, aggression, abuse, and violence may (1) represent communicative behaviors that result in physical harm, (2) be one-time events or they may repeatedly occur over a period of time, and (3) happen across all types of people and relationships. However, by definition, all violent and abusive behaviors are aggressive whereas all

aggressive behaviors are not violent or abusive. Berkowitz (1993) posited that aggression and violence exist on a continuum in which violence represents the most extreme form of aggression. For example, murdering someone is both violent and aggressive, whereas insulting someone's intelligence is verbally aggressive but not violent.

Typologies of Aggression

Although disparities exist amongst conceptualizations and definitions of aggression, there are some common elements and typologies. For review, aggressive behaviors exist on a continuum of severity and frequency. These acts, if severe enough, may be categorized as violent and/or abusive. Furthermore, aggressive behaviors may also be rooted in negative emotions such as anger or negative feelings such as harm. Although there are many constructs that relate to aggressiveness, the particular focus of this project is to focus on typologies that distinguish aggressive behaviors regarding verbal aggression and physical aggression. Given that the goal of this project is to develop a measure that assesses individuals' behavioral aggressive and assertive acts, this distinction is of interest. In addition, many aggressive measures differentiate verbal and physical aggression (see below for review). Specific behaviors related to either verbal aggression or physical aggression will be reviewed.

Verbal Aggression

Aggressive behaviors are often dichotomized into verbal and physical aggressiveness. *Verbal aggression* is commonly defined as communication behavior in which an individual purposefully uses language to attack the self-concept of another (Infante, 1987; Straus, 1979). Verbal aggression often manifests in insults, put-downs, blaming statements, or threats (Infante, Chandler, Rudd, & Shannon, 1990; Malik &

Lindahl, 2004). “You”-directed messages during conflict are commonly associated with aggressive behaviors as they denote blame, insults, or personal attacks (e.g., “You are the one at fault here!”; “You never think about how your actions will impact others”; “You are such an idiot”; Hewes, 1975; Hollandsworth, 1977). Furthermore, the “you” does not have to be directly stated for it to be present in a verbally aggressive message. For example, “I just cannot put up with this anymore!” implies that someone else is at fault (i.e., “you”). Verbally aggressive messages vary in their intensity and scope.

Infante (1987) differentiated ten types of verbal aggressive messages: (a) character attacks, (b) competence attacks, (c) background attacks , (d) physical appearance attacks, (e) maledictions, (f) teasing, (g) ridicule, (h) threats, (i) swearing, and (j) nonverbal emblems. Character attacks are verbally aggressive attacks directed against an individual rather than her/his arguments (e.g., “You are a terrible person”). Competence attacks are directed at an individual’s ability (or inability) to do something (e.g., “You cannot do anything right!”). Background attacks are directed at some component of an individual's history (e.g., racial, ethnic, cultural, educational, relational background). Physical appearance attacks are directed at an individual's physical appearance. Maledictions is the verbal action of cursing or speaking evil of an individual (e.g., “I hope you die.”). Teasing is the verbal action of harassing an individual in either a playful or a malicious manner, often aimed to provoke someone with persistent annoyances (e.g., “Oh…here we go again…what emergency is happening this time?”). Ridicule is the action of subjecting an individual to contemptuous and dismissive language (e.g., “Did you really think you were smart enough to trick me? Nice try.”). Threats are verbal declarations of intentions to inflict a manner of harm on an individual

(e.g., “Don’t push me. You know what happens when I get angry.”). Swearing is the use of profane or obscene language directed towards another individual. Nonverbal emblems are nonverbal communicative messages that have a verbal counterpart (e.g., insulting someone by showing her/him the back of one's fist with the middle finger extended). This typology well represents the severity and intent of verbally aggressive behaviors.

Evidence regarding the impact that verbally aggressive communication has on the aggressor is inconsistent. While some theory and research implies that the expression of verbally aggressive messages can have a positive, cathartic effect on the aggressor (Aloia & Solomon, 2016; Bushman, 2002), others contend the same messages can evoke feelings of guilt and anxiety post verbal aggression expression (e.g., Eagly & Steffen, 1986). While the result of verbal aggression for the aggressor may be inconsistent, the negative effects experienced by the recipient are consistent. The recipient is often harmed because the verbally aggressive communication reactions of aggression, anger, anxiety, depression, and distress are common (Aloia & Solomon, 2016; Block, Block, & Morrison, 1981; Cummings, Davies, & Simpson, Kinney, 1994).

Although verbal aggression is considered a destructive form of communication, most men and women have disclosed they have engaged in verbal aggression against their intimate partners (Malik, Sorenson, & Aneshensel, 1997). Problematically, a history of verbal aggression is positively associated with perceived acceptability of verbal aggression against a romantic partner (Aloia & Solomon, 2013). Verbal aggression often begets verbal aggression. Verbal aggression may also serve as a stepping stone to physical aggression. Infante et al. (1990), posited that verbal aggression “is a necessary but not a sufficient condition for interspousal violence” (p.369).

Physical Aggression

While aggressive behavior is not synonymous with violence or abuse, the concepts are often interrelated. *Physical aggression* comprises behaviors which may result in physical harm; however, a broad range of behaviors have been categorized, and critiqued, as being aggressive (e.g., pushing, shoving, throwing objects, punching, kicking, use of a weapon; Marshall, 1994; Straus, 1974). Violence and abuse research often distinguishes the terms "violence" and "abuse" from aggression, citing distinctions related to intent, purpose, effects, or victimization. Regardless, acts of "common" violence (e.g., slapping, shoving, pushing) to "severe" violence (e.g., stabbing, choking, beating) are all foundationally aggressive in nature. These behaviors are grounded in negative attitudes toward the other individual(s). A perspective that is contrasted amongst assertive communication behaviors (Mauger & Adkinson, 1987).

Assertive Communication Behaviors

Although assertiveness is often acknowledged in conflict textbooks, it remains an under researched phenomena or one that is conflated with aggressiveness (Canary, Canary, & Cupach, 2009). Assertive individuals directly and openly communicate in a manner that is neither threatening nor competitive—one that encourages conversation in a positive affective environment (Dickson, Hester, Alexander, Anderson, & Ritter, 1984; Infante, 1987; Infante, Rancer, & Womack, 2003; Jouriles, Simpson-Rowe, McDonald, Platt, & Gomez, 2011). Thus, *assertive communication* involves the tactful, straightforward expression of one's feelings and desires while maintaining respect for the other person's frame of reference.

Conflict scholars such as Sillars, Pike, Jones, and Murphy (1984) and Straus (1979) identify three characteristics of assertive conflict resolution: directness, activity, and a focus on the relationship. *Directness* refers to an individual's ability to take charge of the social situation communicating one's feelings openly without threatening the other person, being proactive in expressing one's expectations (see e.g., Lange & Jakubowski, 1976; Lorr & More, 1980). Assertive individuals engage in *active* behaviors by exhibiting their confidence via verbal and nonverbal cues such as holding eye contact, acting confident, giving polite but firm refusals, elaborating as to why one feels the way s/he does and effective gestures (e.g., Hummert, Garstka, Ryan, & Bonnesen, 2004; Malik & Lindahl, 2004; Rakos, 1991). Last, assertive individuals also acknowledge the importance of the well-being of the other person and the *relationship* and thus can balance their own needs with the needs of a partner. The person skilled at relationship language can assert her or his own needs while also validating the other person's desires (e.g., I hear that you are upset at this idea).

These characteristics share some similarities to the approach that assertiveness covers three major principles of human expression: behavior, cognition, and emotion (Townend, 2007). As a *behavior*, assertiveness is a trait or skill in which an individual can directly and openly communicate her/his feelings, wishes, objective, and goals. Assertiveness also enables an individual to experience success in interpersonal relationships. From an *emotional* or affective perspective, assertive individuals are able to express and respond to both their positive and negative emotions without excessive anxiety or unnecessary anger. From a *cognitive* approach, training skills on problem-solving, stress management, assertiveness, anger management, and emotional self-

awareness are causally related to higher levels of happiness (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009). In sum, assertiveness can be broadly conceptualized as standing up for one's personal rights and communicating thoughts, feelings, and beliefs in a sincere, straightforward, and appropriate manner without experiencing excessive anxiety or disregarding and/or violating the rights of others (Alberti & Emmons, 1970; Lange & Jakubowski, 1976).

Another classification of assertive behaviors is that they may be broadly identified as either positive or negative, both of which are categorized as constructive by Hargie and Dickson (2004). *Negative conflict assertion* has six main components: (1) making reasonable requests, (2) refusing unwanted or unreasonable requests, (3) asking others to change their behavior, (4) giving personal opinions even if unpopular, (5) expressing disagreement or negative feelings, and (6) responding to criticism from others. *Positive conflict assertion* also involves six main components: (1) expressing positive feelings, (2) responding to positive feelings expressed by others, (3) giving compliments, (4) accepting compliments gracefully, (5) admitting mistakes or personal shortcomings, and (6) initiating and sustaining interactions. Hargie and Dickson note that most assertive research within the context of conflict focuses on negative assertion as this is the aspect individuals find most difficult. Regardless of message valence, these methods of assertive expression reflect behaviors that are communicated directly, are communicated with confidence (i.e., activity), and a positive attitude towards the other, even when negative thoughts, feelings, or emotions are being expressed (e.g., focus on the relationship).

Rather than distinguishing different characteristics of all assertive behaviors, other researchers such as Lorr and More (1980) and Hargie and Dickson (2004) have

characterized different types of assertiveness. Lorr and More (1980) identified four kinds of assertive behavior: Directiveness, Asocial Assertiveness, Defense of One's Interests, and Independence. In their research, Lorr and More (1980) observed the four factors were correlated and were relatively independent of hostility (which is commonly associated with aggression). However, other research that examined the same four types of assertive behavior has revealed inconsistent results for this typology. For example, Lorr, More, and Mansueto (1981) confirmed the four hypothesized dimensions. However, Heaven (1984) examined Lorr and More's Assertiveness Inventory and results revealed only three types of assertiveness. Heaven's research concluded that the Directiveness type was subsumed by the other three classifications and was not a distinct type. This trend of inconsistency is reflective of much assertiveness dimension research as attempts to differentiate typologies have been widely contested. As such, much assertiveness research does not specify or distinguish different types or dimensions of assertiveness but investigates the concept as a whole.

One last common distinction of assertiveness is whether assertiveness is a skill or a trait. Rakos (1997) contended that assertiveness is a learned skill and not a trait inherently part of an individual. If assertiveness is a skill as Rakos posits, then individuals are free to develop and improve their assertive communication during conflict. For example, assertiveness training assumes assertive skills may be developed to improve individuals' communication patterns (Alberti & Emmons, 1970, 1986; Bandura, 1969; Salter, 1949). This technique, designed to work in behavior therapy, encourages individuals to provide frank and spontaneous expression of their feelings and emotions, both positive and negative, to their relational partners. Assertiveness training proposes

that when individuals act assertively, they experience positive feelings that reinforce self-confidence and positively influences the likelihood of honest and open relationships. In contrast, some scholars have studied the construct of trait assertiveness. Such research observes that trait assertiveness positively correlates with behavioral dominance, a common construct of assertiveness (e.g., Kimble, Marsh, & Kiska, 1984). However, most research on assertiveness adopts a skilled-based approach. Even most trait approaches of assertiveness view the concept as a modifiable trait, an interesting divergence of much aggression research. Regardless, more research needs to investigate the impact of assertiveness (without confounding it with aggression) in conflict contexts.

Counter to much of the theory and research reviewed in this project, Rancer and Avtgis (2006) argued assertive behavior may exhibit the same cues and behaviors as aggressive behavior, but that the distinction stems from the extent to which the delivery is judged as socially acceptable. While this approach deviates from this project's general premise, it is an important notion to recognize as it appears to serve, at least in part, as the foundational structure of the only measure of aggressive and assertive behavior the author could discover. Although assertiveness is not as commonly distinguished into separate components as aggressiveness (e.g., verbal aggression, physical aggression, violence), these are other related concepts it is often compared and even conflated with (e.g., nonassertion, argumentativeness).

Aside from aggression, assertion is commonly contrasted with *nonassertion*, sometimes called *passive behavior* (e.g., Alden & Cappe, 1981; Bakker et al., 1978; Guilar, 2001; Hargie & Dickson, 2004; Spitzberg, Canary, & Cupach, 2009). Nonassertive/passive behavior is considered a less competent behavior than assertive

behavior (Spitzberg et al., 2009). Nonassertive behaviors are typified by conflict accommodation, conflict avoidance, hesitation, low vocal volume, avoidant eye contact, taking conflict personally, and failure to express one's own interests. Such behaviors are often witnessed in the accommodating and avoiding conflict management styles. Individuals who employ accommodation sacrifice their needs/desires for those of the other person, whereas avoiding is characterized by mentally, physically, or emotionally withdrawing from conflict and denying its existence these individuals demonstrate a low concern for both self and others (Rahim, 1986; Rahim & Magner, 1995; Van de Vilert & Kabanoff, 1990). These behaviors are oppositional to the tactful, straightforward expressions of feelings and desires that are embodied in assertive communication behaviors. While nonassertive behaviors are often contrasted with assertive behaviors, they are not commonly discussed in relation to aggressive behaviors. Similarly, violence and abuse are more commonly liked to aggression than assertion. There is one concept that is so commonly conflated with both aggressiveness and assertiveness that the relationship it shares with the two concepts is vastly unclear and inconsistent: argumentativeness.

Argumentativeness is neither Aggressiveness nor Assertiveness

Argumentativeness is the tendency to present and defend one's own positions while attacking counter positions (Infante, 1987; Infante & Rancer, 1982, 1996). Unlike many of the other concepts reviewed above (e.g., anger, hostility, passiveness), argumentativeness is inconsistently confounded with both aggressiveness and assertiveness. Some contend that arguing is inherently aggressive and is a component of verbal aggressiveness (Buss & Perry 1992; Hample, Han, & Payne, 2010). However,

argumentativeness is often viewed as constructive, whereas aggressiveness is commonly viewed as destructive. Argumentativeness is constructive due to the inclination to engage the other individual's evidence and reason instead of acting on a motivation to attack her/his character or identity (i.e., an aggressive behavior).

The perspective that argumentativeness is a constructive concept partially justifies those who contend argumentative communication is a subset of assertive communication (e.g., Infante, 1987). Although argumentative, aggressive, and assertive individuals all directly pursue their own position and may all utilize counter-arguments against the other individual, assertive and argumentative behaviors do so without interfering with or infringing on the rights of the other person. Furthermore, argumentativeness and verbal aggressiveness are often negatively correlated with one another as the two concepts have opposite motivations (Avtgis & Rancer, 2010; Infante & Rancer, 1982; Infante & Wigley, 1986; Rancer & Avtgis, 2006). For this project argumentativeness, will be measured as a related, but distinct, concept from both aggressiveness and assertiveness. The following paragraphs further examine the often conflated relationships between argumentative, aggressive, and assertive behaviors with the goal of differentiating these three concepts.

Infante and Rancer (1982) posited that aggressive acts and argumentative behaviors could be distinguished via the locus of attack. Individuals exhibiting argumentativeness are willing to engage in disagreements and conflicts but refute their opponent's argument(s) with reasoning and respect instead of succumbing to personal attacks and/or threats towards their opponent like those utilizing aggressive patterns. Infante and Wigley (1986) defined verbally aggressive acts like those in which an

individual attacks the self-concept of another, with the goal of causing psychological harm or pain. Aggressive behavior involves less skill than argumentative behavior (Boster, Levine, & Kazoleas, 1993). Based on this foundational differentiation, Martin and Andersen (1997) categorized verbal aggressiveness as destructive and argumentativeness as constructive.

Further research revealed individuals employ different communication styles and tactics depending on whether they score as trait argumentative or verbally aggressive (e.g., Ifert & Bearden, 1998). Ifert and Bearden (1998) observed verbally aggressive individuals utilized more non-evidentiary appeals than evidentiary appeals, whereas argumentative individuals were more likely to make statements or claims in which they had some evidence or support to further their point. Argumentative behaviors also often include more diversity in compliance-gaining tactics and are associated with more persistence in the attempt to persuade the other compared to aggressive behaviors.

Infante, Riddle, Horvath, and Tumlin (1992) observed individuals with high verbal aggressive tendencies were more likely to attack, tease, and swear as part of their communication tactics. Additional research contends that trait aggressive individuals have an argumentative skill deficiency (e.g., Rill, Baiocchi, Hooper, Denker, & Olson, 2009; Tremblay, Mihic, Graham, & Jelley, 2007; Weger, 2006). In fact, these communication behaviors are so different that Infante and Rancer's (1982) Argumentativeness Scale (ARG), one of the most widely used measures of argumentativeness, shows virtually no relationships to Infante and Wigley's (1986) Verbal Aggressiveness Scale (VAS; Infante, 1987). In sum, while the two

communication styles are oppositional to one another in many ways, they are not inversely related.

Guerrero and Gross (2014) identified argumentativeness, verbal aggressiveness, avoidance, and vocal benevolence as traits that would help differentiate the five common conflict styles (i.e., avoidance, accommodation, competition, cooperation, and collaboration) in more nuanced ways. Ruble and Thomas (1976) identified five distinct styles of conflict management. These conflict management styles are classified along dimensions of concern for self, often referred to as assertiveness, and concern for others, or cooperation. Individuals who employ the accommodative style give in to the other person, exhibiting high concern for others and low concern for self. Conflict avoidance is characterized by mentally, physically, or emotionally withdrawing from the conflict and denying its existence, and this style is low in both concern for self and others. Individuals who collaborate are highly concerned about achieving their own wants, goals, and desires as well as those of others. Those who score high on competitiveness are highly concerned about themselves but not highly concerned about others. Finally, individuals who compromise are moderately concerned with their own needs and the needs of others, reflecting moderate levels of both assertiveness and cooperativeness. Guerrero and Gross (2014) noted the traits of argumentativeness are conceptually like the dimensions of assertiveness whereas the traits of verbal aggressiveness are conceptually like the dimension of cooperativeness. Once again differentiating these two concepts and supporting the argument that argumentativeness and aggressiveness have different communication patterns associated with each trait. Furthermore, while argumentative and assertive behaviors conceptually share the same conflict style dimensions and are both

commonly linked with constructive outcomes and effective life functioning (e.g., Bakker et al., 1978; Infante & Rancer, 1982), the concepts are also distinct.

Although argumentativeness is often categorized as constructive, there are instances when it is considered destructive. Previous research has observed that in East Asian cultures like China, social harmony is so highly valued that argumentation is viewed as a threat to harmony and, as such, is highly discouraged (e.g., Lin, Zhao, & Zhao, 2010; Oetzel & Ting-Toomey, 2003; Triandis, 1995). However, in a comparison study between Chinese and US respondents, researchers observed that Chinese individuals did engage in sophisticated forms of argumentation that also kept in mind the cultural value of harmony and coherence (Xie, Hample, Wang, 2015). This research suggests that the cultural categorization of argumentativeness as either constructive or destructive is more complex. Regardless, argumentativeness and aggression are conceptually distinct concepts, and argumentativeness is more synonymous with assertion than aggression.

Within the United States, assertiveness and argumentativeness are consistently related to positive relationship outcomes, due in part to the ability to attack counter positions and not use personal attacks (e.g., Infante, 1987; Infante & Rancer, 1996). For example, Infante (1987) posited that because argumentative communication is content focused and not person focused, like assertive communication, that it is a constructive communication process and therefore more likely to be associated with positive relational outcomes. Per this perspective, all argumentative communication is assertive, whereas not all assertive communication is argumentative. Hample and Anagondahalli (2015)

note that the extent to which the US-centric understanding of argumentativeness is applicable in other cultures in very much so bound in cultural history and norms.

In summary, argumentativeness conceptually and empirically shares similarities with both aggressiveness and assertiveness. Although, the relationship between argumentativeness and assertiveness is arguably closer than that of argumentativeness and aggressiveness. Regardless, all three concepts are distinct. To this point, this project has reviewed varied conceptualizations of aggressiveness, assertiveness, and several related concepts, including argumentativeness. For this dissertation, the largest noted distinction between aggressive and assertive behaviors is in the intent one has towards other individuals. Both aggressive and assertive communicators directly pursue their own agenda but have different approaches. Aggressive behaviors include the pursuit of one's goals coupled with the intention(s) to harm the other individual. Assertiveness behaviors are characterized by communicating in a manner that is direct and open but is neither threatening nor competitive. To further inform our understanding of aggressiveness and assertiveness this project now turns to a review of seminal and existing measures of aggression and assertion. The following paragraphs identify and summarize relevant measures, including assessments of the measures' dimensions and observed empirical trends related to aggressiveness, assertiveness, and related concepts.

Measurement of Aggression and Assertion

In reviewing existing measures of aggression (both verbal and physical), I observed three common trends: (1) Scenarios in which the respondent was asked to evaluate the appropriateness or level of aggression of a fictitious character (e.g., "Suppose a boy says something bad to another boy, John. Do you think it's OK for John

to scream at him?"; Huesmann, Guerra, Miller, & Zelli, 1992); (2) Scenarios in which individuals were asked to evaluate their own likely action (e.g., "When people do things which are mean or cruel, I attack their character in order to help correct their behavior."; Infante & Wigley, 1986); and (3) Respondents' reports of aggressive tendencies without a scenario (e.g., "You scream a lot."; Loeber, Farrington, Stouthamer-Loeber, & Van Kammen, 1998). Additionally, aggression measures were often linked to adolescent bullying (e.g., The Aggression Scale; Orpinas & Frankowski, 2001) or adult violence and/or abuse (e.g., Conflict Tactics Scale (CTS); Straus, 1979; 1990).

Although several measures of assertiveness exist, recent research has assessed assertiveness as unidimensional. Furthermore, when a comparison concept is explored, current research has trended towards argumentativeness (e.g., Hample & Anagondahalli, 2015; Xie et al., 2015). The most common trend is that assertive measures ask participants to evaluate their own likely actions in a variety of social situations (e.g., interactions with romantic partners, close friends, strangers, salespeople, roommates) to assess one's assertiveness (e.g., Galassi, DeLo, Galassi, & Bastien, 1974; Gambrill & Richey, 1975).

To better examine characteristics related to aggressive and assertive behaviors a systematic review of existing measures of aggressiveness and assertiveness was conducted. Given the inconsistent theoretical and empirical results currently observed in existing scholarship, my goal of this analysis is to review the dimensions and items to identify ones that should be present in the AACI. Several popular measures of aggressiveness and assertiveness are reviewed below. See Table 1.1.

The Bakker Assertiveness-Aggressiveness Inventory (BAAI; Bakker et al., 1978)

Created by Bakker et al., the BAAI is a 36-item self-report instrument designed to assess an individual's aggressiveness and assertiveness in two 18-item subscales. Each item is highly situation-dependent (e.g., "A friend or relative asks to borrow your car or other valuable property but you would prefer not to lend it to them. You lend it to them anyway."; "Your sexual partner has done something that you do not like. You act as if nothing bothersome has happened."; "A salesperson has spent a great deal of time showing you merchandise but none of it is exactly what you want. You buy something anyway."). A wide range of situations is included in the measure to better address an individual's general aggressive and assertive trait behavior. Most of the items in the survey relate to verbally aggressive or assertive behaviors (e.g., "You tell…"). Participants are asked to report the likelihood they would behave in the manner described in each item on a 5-point Likert-type scale from 1 (almost never) to 5 (almost always). Both subscales had acceptable reliability: Aggressiveness, $\alpha = .88$; Assertiveness, $\alpha = .75$.

The BAAI contends that both aggressive and assertive behaviors exist under the umbrella of assertiveness but are separate response types. Bakker et al. designed the aggressive subscale to assess behaviors related to acquiring territory, prerogatives, or status that was not formerly one's own. Sample items include: "Someone has done or said something that arouses your curiosity. You refrain from asking questions" and "During a social visit with a group of friends everyone participates actively in the conversation. You dominate the conversation most of the time." The assertiveness subscale assesses behaviors that occur in response to another individual's aggressive behavior and in which an individual seeks to maintain or regain control of territory,

prerogatives, or status s/he previously had. Sample items include: “You are asked to carry out a task that you do not feel like doing. You tell the other that you don’t want to do it” and “Someone has, in your opinion, treated you unfairly or incorrectly. You confront the person directly concerning this.”

Although the BAAI is the only measure to the author’s knowledge that attempts to assess both aggressiveness and assertiveness, Bakker et al.’s conceptualizations of aggressive and assertive behavior are not wholly synonymous with the conceptualizations utilized in this project or in other instruments that assess aggressiveness or assertiveness. Specifically, the conceptualizations regarding territoriality and the labeling of an individual’s behavior differ from many other aggressive and assertive conceptualizations and research. For example, the item “You see an opportunity to get ahead but know it will take a great deal of energy. You take the opportunity and forge ahead” is labeled as an aggressive item. This item describes a behavior that is arguably socially acceptable; aggression is often not viewed in this same manner (Rancer & Avtgis, 2006; Infante & Wigley, 1986). In addition, the core concept usually present in aggressive scale items is absent from this item (i.e., the intent, perceived intent, or actual action of harming another person; e.g., Buss & Perry, 1992; Infante & Wigley, 1986; Straus & Douglas, 2004; Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Yudofsky, Silver, Jackson, Endicott, & Williams, 1986). Bakker et al. identify any behavior that seeks to destroy or damage an individual in some way as hostility. This conceptualization of hostility is more compatible with other existing measures of aggression. There are no items that capture hostility as defined from Bakker et al. in the BAAI.

While different, the conceptualizations posited by Bakker et al. are important to consider. The distinction between acquiring or maintaining control of territory, prerogatives, or status that discerns aggressiveness from assertiveness respectively is an interesting foundational structure to be considered as the new measure is developed in this dissertation. However, it is Bakker et al.'s interpretation of hostility that will most closely align with this project's characterization of aggression.

The Buss and Perry Aggression Questionnaire (BPAQ; Buss & Perry, 1992)

This instrument is a popular measure of aggression in adults and was created to assess four subscales: physical aggression (9 items; e.g., "Once in a while I can't control the urge to strike another person."), verbal aggression (5 items; e.g., "I can't help getting into arguments when people disagree with me."), anger (7 items; e.g., "I sometimes feel like a powder keg ready to explode.", and hostility (8 items; e.g., "When people are especially nice, I wonder what they want."; Buss & Perry, 1992). Buss and Perry designed the physical aggression and verbal aggression items to represent the instrumental components of the measure. The anger subscale represents an emotional component, while the hostility items represent the cognitive component. Here, anger is conceptualized to serve as a bridge between the instrumental and cognitive components. Participants respond to each item by indicating how much each statement is characteristic of them using scales ranging from 1 (extremely uncharacteristic of me) to 5 (extremely characteristic of me). Higher scores indicate a greater endorsement of aggressive statements.

The BPAQ was developed to address some criticisms and limitations of the Buss-Durkee Hostility Inventory (BDHI; Buss & Durkee, 1957). The 29-item measure

achieved acceptable reliability (α = .89) as did the four subscales: Physical Aggression, α = .85; Verbal Aggression, α = .72; Anger, α = .83 and Hostility, α = .77. Test-retest reliability for the subscales and total measure score ranged from α = .72 to α = .80 (Buss & Perry, 1992). A shortened version, The Buss–Perry Aggression Questionnaire-Short Form (BPAQ-SF; Bryant & Smith, 2001), also exists and is comprised of 12 items. The BPAQ-SF is still organized with the original four subscales. The original 5-point scale was changed to a 6-point scale to eliminate the scale's midpoint and force respondents to decide whether each statement was characteristic of them or not. The in addition to its popularity in the United States, the questionnaire has been validated in several countries and has been translated into several languages (e.g., Spanish, Italian, Dutch, Japanese, German, French, Slovak, and Greek; Reyna, Lello Ivacevich, Sanchez, & Brussino, 2011).

Like many of the measures reviewed here, the strength of the BPAQ's factor structure and model fit are often challenged (Archer, Kilpatrick, & Bramwell, 1995; Bryant & Smith, 2001; Harris, 1995; Williams et al., 1996). A critique observed upon close review of the items is the conflation of aggressive and assertive behaviors. For example, Buss and Perry considered argumentativeness to be an aggressive concept, usually conceptualized as an assertive behavior. One of the verbal aggression items is "My friends say I am somewhat argumentative". Other items may also be more strongly linked to assertiveness than aggressiveness, as conceptualized in this dissertation. For instance, the item "I tell my friends openly when I disagree with them" is absent of intent to harm one's friends, a core foundation element of aggressive behavior. Furthermore, the focus of the interaction is of disclosing disagreement rather than engaging a personal

attack on the friends for holding a differing opinion. To the author's knowledge, no study has explored whether some of the BPAQ items are more closely empirically aligned to assertiveness than aggressiveness. Buss and Perry do not conceptualize aggression, anger, or hostility in the BPAQ development article.

The Verbal Aggressiveness Scale (VAS; Infante & Wigley, 1986)

This 20-item measure assesses an individual's trait verbal aggressiveness. Infante and Wigley define verbal assertiveness as the attacking of another's self-concept, and, potentially, the individual's position. Participants are instructed that they are going to answer a series of questions that address how they get people to comply with their wishes on a 5-point Likert-type scale ranging from 1 (almost never true) to 5 (almost always true). Sample items include "When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable," "When I attack a person's ideas, I try not to damage their self-concept" (reverse coded), and "When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behavior." The measure was designed to be unidimensional. However, some research has contended a 2-factor model provides a better fit (e.g., Guerrero & Gross, 2014; Levine, Beatty, Limon, Buck, & Chory-Assad, 2004). The two factors identified are: Verbal Aggressiveness (comprised of all aggressively worded and nonreflected items; e.g., "I would tell the manager that I thought they were incompetent and that their service sucked") and Other-Esteem Confirmation and Supportiveness (comprised of items intended to be reverse coded that reflect prosocial/benevolent behaviors; e.g., "Even though I would be mad, I'd try to not lose my temper and would remain reasonable and

pleasant"). Scale reliability in the original two studies was α = .81 (Infante & Wigley, 1986).

The Overt Aggression Scale (OAS; Yudofsky et al., 1986)

The OAS assess four types of aggressive behavior: verbal aggression (e.g., makes loud noises, yells, curses, verbal threats), physical aggression against objects (e.g., slam doors, break objects, set fires), physical aggression against self (e.g., bang head, pulls hair, mutilates self), and physical aggression against other people (e.g., strikes or attack other, causing mild-moderate or severe physical injury; Yudofsky et al., 1986). The OAS was not created as a self-report measure. Instead, this instrument was designed to be used in clinician settings in which the patient's behavior is observed over a period and tallied. Each category is rated according to severity and duration. For example, in the verbal aggression category, if an individual exhibits no verbal aggression the observer records a 0; angry shouts, mild curses, and personal insults are notated with a 1; vicious curses, severe insults, and temper outburst are recorded as a 2; impulsive threats of violence towards oneself or others receive a score a 3; repeated and/or deliberate threats of violence towards oneself or others is noted as a 4. Observers are instructed to select as many items as are appropriate to accurately reflect the individual's behavior over a period of time. While there is no standardized response recommendation, high scores are indicative of more exhibited aggressive behaviors.

The Wolpe-Lazarus Assertiveness Schedule (WLAS; Wolpe & Lazarus, 1966)

This 30-item questionnaire was devised for clinical assessment and assesses two assertive behavioral domains: hostile assertiveness and commendatory assertiveness. *Hostile assertiveness*, otherwise known as negative assertion in other literature and

research, describes behaviors related to standing up for oneself, refusing unreasonable requests, and expressing disagreement in a non-threatening manner. A sample hostile assertiveness item is “Do you protest out loud when someone pushes in front of you in line?” *Commendatory assertiveness,* also known as positive assertion, refers to relationship management and enhancing behaviors such as expressions of affection, approval, and agreement. A sample commendatory assertive item is “Are you able openly to express love and affection?” However, while the WLAS was designed to capture both hostile and commendatory assertiveness, no formal subscales were ever formed. In addition, 25 out of the 30 items address hostile assertion behaviors. There was also no standardized response recommendation made as the authors intended the items to be a guide in clinical interviewing.

Rathus Assertiveness Schedule (RAS; Rathus, 1973)

This 30-item instrument was developed to address criticisms of The Wolpe-Lazarus Assertiveness Schedule (WLAS; Wolpe & Lazarus, 1966). Since the WLAS was created with no reporting method for quantifying the measure, criticism arose given the inability to assess the reliability or validity of the measure. Rathus’ response was to design a quantifiable assessment of assertiveness, also referred to as social skills and outgoing behavior by the measure’s creator (Rathus, 1973). Respondents are asked to indicate how characteristic or descriptive each statement is from +3 “Very characteristic of me, extremely descriptive” to -3 “Very uncharacteristic of me, extremely non-descriptive”, without including 0. After reverse coded a sum scores indicates assertiveness. A high positive score indicates high assertiveness/social skill, whereas a low score is indicative of low assertiveness/social skill. Sample items include “When I

am asked to do something, I insist upon knowing why," "I am careful to avoid hurting other people's feelings, even when I feel that I have been injured" (Reverse coded), "There are times when I look for a good, vigorous argument." The test-retest reliability found was between $\alpha = .76$ and $\alpha = .83$, split-half reliability was $\alpha = .77$, and internal consistency ranged between $\alpha = .73$ and $\alpha = .86$ (Beck & Heimberg, 1983; Rathus, 1973; Vaal, 1975). Galassi and Galassi (1975), creators of The College Self-Expression Scale (CSES), criticized the RAS for not distinguishing between assertiveness and aggressiveness. Galassi and Galassi's (1975) criticism is founded, at least to an extent, considering some items include both assertive and aggressive concepts (e.g., "Most people seem to be more aggressive and assertive than I am").

The Assertion Inventory (AI; Gambrill & Richey, 1975)

This 40-item self-report measure assesses two types of information about assertive behavior: degree of discomfort felt in specific situations and judged probability of engaging in a behavior (labeled as assertion). Items contain both positive (e.g., "Accept a date," "Receive compliments.") and negative (e.g., "Turn down a request for a meeting or a date," "Admit ignorance in some area.") social situations. Participants are asked to read each item and rate it on a 5-point Likert-type scale for degree of discomfort ranging from 1 (none) to 5 (very much) and a 5-point Liker-type scale for response probability ranging from 1 (always do it) to 5 (never do it) one dimension at a time. Each item receives two scores. Participants are asked to cover or disregard their discomfort ratings when providing their response probability to lower response bias. By using the average discomfort and response probability scores as cut-off points, four interpersonal assertion classification categories are created: Assertive (low discomfort and high

assertion), Unassertive (high discomfort and low assertion), Doesn't Care (low discomfort and high assertion), and Anxious Performer (high discomfort and high assertion).

The test-retest reliability based was satisfactory: Discomfort, α = .87; Response Probability/Assertion, α = .81. A study by Pitcher and Meikle (1980) provided support for the concurrent validity of the AI as individuals high, moderate, and low in assertion were differentiated in role plays. The AI has also been used to track changes in assertiveness over time in therapy settings (Cotton, 1990). The AI has seen received recent application in a variety of disciplines and contexts (e.g., Allahyari & Jenaabadi, 2015; Caballo, Salazar, Irurtia, Olivares, & Olivares, 2014; McCartan & Hargie, 2004; Rus-Calafell, Gutiérrez-Maldonado, & Ribas-Sabaté, 2014).

The College Self-Expression Scale (CSES; Galassi et al.,1974)

This 50-items self-report inventory is designed to measure assertiveness in college students. The scale assesses three dimensions of assertiveness: positive assertiveness, negative assertiveness, and self-denial. *Positive assertion* is characterized by the expression of admiration, affection, approval, and agreement. *Negative assertions* include controlled but direct expressions of justified anger, disagreement, dissatisfaction, or annoyance. *Self-denial* includes over apologizing, excessive interpersonal anxiety, and exaggerated concern for the feelings of others.

The items are constructed to cover a wide variety of interpersonal contexts and relationships (e.g., family, peers, strangers, business relationships, authority figures) to best assess trait assertiveness. Participants respond to each item by indicating how much each statement is characteristic of them using a 5-point scale ranging from 0 (almost

always or always) to 4 (never or rarely). Twenty-nine items are worded so that they require reverse scoring. A total score is obtained by reverse scoring all negatively worded items and summing all items. Higher scores indicate greater assertiveness response patterns. The test-retest reliability based on a 2-week interval with two samples ranged between .89 and .90 (Galassi et al., 1974). The test-retest reliability found with a Spanish university sample was .87, and the internal consistency was $\alpha = .89$ (Caballo & Buela, 1988). Although the CSES is not the most popular assertiveness measure, maybe in part due to the constructed target population, the measure is still used in some current research (e.g., Caballo et al., 2014).

Other Aggressiveness Measures

In addition to the measures designed to assess aggressiveness across a variety of contexts, several measures have been designed with a particular context in mind. For example, the revised Conflict Tactics Scale (CTS2) measures intimate partner violence (IPV; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). This widely used measure has several versions. The original CTS1 was originally developed for use as an interview schedule rather than a self-report questionnaire. The CTS1 contained fewer subscales than the revised measures and contained slightly different items (Straus, 1979).

The CTS2 contains 39 items and five subscales: physical assault, psychological aggression, negotiation– cognitive and emotional, injury from assault, sexual coercion. Each item is answered twice; once in response to what the participant has done and then repeated for what the participant's partner has done. In the CTS2, a change in scale name was made from verbal aggression (from the CTS1) to psychological aggression as the subscales items reflect both verbal and nonverbal aggressive acts. For example,

"Stomped out of the room" is an aggressive nonverbal act, whereas "Insulted or swore at partner" is reflective of a verbal aggressive act. The physical assault subscale contains items describing various degrees of physical aggression severity, including violent actions (e.g., "Slapped partner," "Threw something at partner that could hurt," "Used a knife or gun on partner."). The negotiation subscale describes actions taken to settle a disagreement in both cognitive and emotional formats. The cognitive questions are linked to the action of engaging in discussions aimed at settling the disagreement (e.g., "Explained side of argument," "Agreed to try partner's solution."). The emotional questions assess the extent to which positive affect and respect were used in the discussion (e.g., "Showed partner cared," "Respected partner's feelings."). While the negotiation subscale does not align with aggressiveness, it is of interest as it appears to conceptually align with assertiveness. Each item in the CTS2 describes concrete acts or events.

A shortened version of the CTS2 was created by reducing the number of items to 20; all subscales were preserved (Straus & Douglas, 2004). Although the CTS2 does not assess one's general trait aggressiveness, this measure and other like it (e.g., The Peer Victimization Scale; Mynard & Joseph, 2000) are useful to review as their items and factors capture core aspects of aggressive behaviors, even in specific contexts like IPV.

Other Assertiveness Measures

Like aggression, some measures assess trait assertiveness across a variety of contexts in addition to a particular context. For assertiveness, measures with a specific focus are currently more commonly used. For example, The Sexual Assertiveness Scale (SAS; Morokoff et al., 1997) is one of the most commonly used measures of sexual

assertiveness. The 18-item instrument assess three factors: the initiation of sex (6 items; e.g., “I begin sex with my partner if I want to.”), the refusal of unwanted sex (6 items; e.g., “I refuse to have sex if I don’t want to, even if my partner insists.”), and condom insistencies (6 items; e.g., “I insist on using a condom or latex barrier if I want to, even if my partner doesn’t like them.”). The SAS adopts the core components of voicing and advocating one’s opinion in an open, direct, and appropriate manner without disregarding and/or violating the rights of the other to sexual communication context(s). Following the same principles, Loshek and Terrell (2014) used items from the SAS in addition to developing some new items to create a comprehensive measure of sexual assertiveness that relates to other sexual communication domains (e.g., sexual satisfaction and sexual history; Sexual Assertiveness Questionnaire; SAQ). A critique of the SAS, SAQ, and other typical measures (e.g., HISA; Hurlbert, 1991; ASCS; Quina et al., 2000) is they are designed to capture assertive behavior but are unable to distinguish assertive from aggressive behavior. While not necessary, it would be beneficial for a measure to assess both assertive and aggressive behavior in general or specific contexts given the two concepts are so frequently compared.

Also, as mentioned previously, the negotiation subscale of the revised Conflict Tactics Scale (CTS2; Straus et al., 1996), contains items that contain concepts of assertive behaviors even though assertiveness does not appear in the measure development. Specifically, the negotiation subscale items describe items in which positive effort to understand the other person and affective acts during a disagreement are described (e.g., “Said could work out problem,” “Explained side of argument,”

"Respected partner's feelings"). It is these items that are of particular interest when reflecting upon which characteristic of assertiveness to include in the new measure.

Table 1.1

Representative List of Measures Examined

Measure Name	**Authors**	**Dimensions/Factors/Subscales**	**Number of Items**	**Relationship to AG, AS, and/or Related Concepts**
The Bakker Assertiveness-Aggressiveness Inventory (BAAI)	Bakker, Bakker-Rabdau, & Breit (1978)	(1) Aggressiveness, (2) Assertiveness	36	Aggressiveness and assertiveness (mostly verbal)
The Buss and Perry Aggression Questionnaire (BPAQ)	Buss & Perry (1992)	(1) Physical aggression, (2) Verbal aggression, (3) Anger, (4) Hostility	29	Physical aggression, verbal aggression, and hostility
The Verbal Aggressiveness Scale (VAS)	Infante & Wigley (1986)	Verbal aggressiveness (Although some research argues there are 2 dimensions: (1) Verbal aggression and (2) Prosocial cooperation)	20	Verbal aggressiveness
The Overt Aggression Scale	Yudofsky, Silver, Jackson, Endicott, & Williams (1986)	(1) Verbal aggression, (2) Physical aggression against objects, (3) Physical aggression against self, (4) Physical aggression against others	16	Physical aggression and verbal aggression
The Revised Conflict Tactics Scales (CTS2; short form - CTS2S)	Straus. Hamby, Boney-McCoy, & Sugarman (1996); Straus & Douglas (2004)	(1) Physical assault, (2) Psychological aggression, (3) Negotiation– cognitive and emotional, (4) Injury from assault, (5) Sexual coercion	78(CTS2) 20(CTS2S)	Aggression (physical and psychological), violence
The Wolpe-Lazarus Assertiveness Schedule (WLAS)	Wolpe & Lazarus (1966)	Informally (1) Hostile assertiveness, (2) Commendatory assertiveness	30	Assertiveness
The Rathus Assertiveness Schedule (RAS)	Rathus (1973)	Assertiveness (also referred to as social skill)	30	Assertiveness
The Assertion Inventory (AI)	Gambrill & Richey (1975)	(1) Assertive (low discomfort and high assertion), (2) Unassertive (high discomfort and low assertion), (3) Doesn't Care (low discomfort and high assertion), (4) Anxious Performer (high discomfort and high assertion).	40	Assertiveness
The College Self-Expression Scale (CSES)	Galassi, DeLo, Galassi, & Bastien (1974)	(1) Positive assertiveness, (2) Negative assertiveness, (3) Self-denial	50	Assertiveness

The Need for the AACI: Project Overview

To review, aggressive and assertive communication behaviors do not represent single types of actions. Individuals widely vary in the types of aggression they inflict and sustain towards others. Aggressive behaviors can be exhibited in all individuals, not just in those who have trait aggression. Aggressive communication behaviors can either be a conflict tactic or be the result of a conflict. For instance, an individual may employ aggressive behaviors at the onset of a conflict with the goals to dominate the interaction and to "win" the conflict. Or, after failing to resolve a conflict, an individual may become aggressive due to her/his frustration. Assertive behaviors can be viewed as trait or state concepts that reflect an individual's direct expression while maintaining respect for the other or the defense of one's territory in the face of aggression, for example.

Problematically, many measurement studies do not define assertiveness (e.g., AI, Gambrill & Richey, 1975; RAS, Rathus, 1973); however, researchers' conceptualizations of assertiveness may be derived from the measurement items. Thus, the main objective of this dissertation project is to develop a measure that assesses both aggressive and assertive communication behaviors: The Aggressive and Assertive Communication Instrument (AACI). By simultaneous studying how assertive and aggressive behaviors are related to a single measure, this project aims to contribute to the interpersonal communication literature and expand understanding of aggressive and assertive behavior(s).

In particular, this project posits the largest distinction between aggressive and assertive communication is the *intent* toward the other individual. Assertive communication denotes a level of respect toward the other's viewpoint and self-concept.

Aggressive communication includes intent (or perhaps perceived intent) to harm at some level. It is from this distinction that differences may emerge (e.g., differences in verbal and nonverbal communication behaviors and patterns, relational outcomes, conflict constructiveness, the presence/absence of violence/abuse, etc). For example, compared to assertive behaviors, both verbal and nonverbal cues related to aggressive behaviors are more likely to evoke, anger, aggression, and/or antagonistic responses (e.g., Bandura, 1973; Berkowitz, 1982; 1988; 1993). These foundational conceptualizations will serve as the base for the AACI.

There is a need for the AACI as there are presently very few published scales that measure both assertive and aggressive conflict communication behaviors even though these concepts are often compared and contrasted. As previously reviewed, aside from the Bakker Assertiveness-Aggressiveness Inventory (Bakker et al., 1978), an extensive search did not reveal another measure that explores both aggression and assertion. Moreover, the Bakker Assertiveness-Aggressiveness Inventory's differentiation of aggressive and assertive behaviors are not consistent with other conceptualizations, nor are they consistent with the distinctions posited in the AACI. These factors justify the development of this new measure.

To examine and refine the AACI, three studies are conducted within this dissertation. Study 1 is the pilot study that establishes the proposed measure through exploratory means and provides initial validation data for the AACI. To assess the validity of the newly designed measure, the proposed items will be correlated with measures of individual difference variables commonly examined and/or associated with interpersonal conflict (i.e., agreeableness, extraversion, locus of control, taking conflict

personally). Based on the results of Study 1, Studies 2 and 3 aim to cross-validate the factor structure of the measure observed in the pilot study using data collected from new samples. Study 2 aims to assess further individual dispositional traits often linked to aggressive and/or assertive communication behaviors. The objective of Study 3 aims to assess and refine the factor structure of the new measure in addition to testing convergent and divergent validity data by assessing established measures of aggressive and assertive communication behaviors and related concepts (i.e., argumentativeness and conflict management styles).

CHAPTER 2: PILOT STUDY

In the previous chapter, aggressiveness and assertiveness were conceptualized and differentiated from commonly confounded concepts. Several seminal and popular instruments of aggressive and assertive communication behaviors were also reviewed. For this project, the largest distinction between aggressive and assertive behaviors appears to be the intent one has towards another. Aggressive communicators pursue their own agenda with the *intent* to harm the other at some level (Baron & Richardson, 1994; Infante, 1987; Straus, 1979). Assertive communicators pursue their own agenda while also maintaining a level of respect for the other's stance and self (Dickson et al., 1984; Infante, 1987; Infante et al., 2003; Jouriles et al., 2011).

In communication-focused studies, theory and methodological work on aggressiveness have been more pervasive than assertiveness (Canary et al., 2009). This inclination has resulted in more consistent and prominent investigations into the dimensional factor structure of aggression. For example, verbal aggression and physical aggression have been distinguished as prevailing factors of aggression (Straus, 1979). Additionally, both conceptualizations and measures of aggression commonly reference behaviors in which an individual pursues her/his goals while disregarding the other individual. Of the small number of assertive measurement studies that exist, few clearly define assertiveness (e.g., AI, Gambrill & Richey, 1975; RAS, Rathus, 1973). While many measurement studies of assertiveness do not explicitly define assertiveness, behavioral tendencies related to directly pursuing one's goals in a manner that is not threatening nor competitive are consistently present in assertiveness assessments. This

information, coupled with the more expansive research on aggressiveness, provides a conceptual foundation and rationale for the continued study of assertive behaviors and their relationships with other communication concepts. This foundational structure served as the basis for the next stage of development for the Aggressive and Assertive Communication Instrument (AACI). The goals of this chapter are to (a) establish factor identification and item development for the AACI and (b) provide pilot data to serve as the first steps towards measure development.

Factor Identification and Item Development

The initial development of the AACI was informed by reviewing the dimensions of aggressiveness and assertiveness in established measures. To review, verbal aggressiveness and physical aggressiveness are two common dimensions, factors, or subscales for aggressive instruments; verbal and physical aggression are also two prominently studied types of aggression (Infante, 1987; Marshall, 1994; Straus, 1979). Measures that include verbal aggression dimensions include the Buss and Perry Aggression Questionnaire (BPAQ; Buss & Perry, 1992), the Verbal Aggressiveness Scale (VAS; Infante & Wigley, 1986), and the Overt Aggression Scale (OAS; Yudofsky et al., 1986). The BPAQ (Buss & Perry, 1992) and the OAS (Yudofsky et al., 1986) both include physical aggression dimensions. The OAS has three physical aggression categories: (a) physical aggression against objects, (b) physical aggression against self, and (c) physical aggression against others. However, since the OAS was not created as a standardized self-report instrument, there is no existing empirical measurement assessment, including no factor analysis to support whether these categories are distinct.

Moreover, this dissertation is focused on aggressive interpersonal behaviors, not intrapersonal.

Assertiveness instruments are often unidimensional (e.g., The Wolpe-Lazarus Assertiveness Schedule; WLAS; Wolpe & Lazarus, 1966; The Rathus Assertiveness Schedule; RAS; Rathus, 1973). Even when other dimensions were proposed during measure development, most assertiveness measures are still considered unidimensional. For example, the Wolpe-Lazarus Assertiveness Schedules (WLAS; Wolpe & Lazarus, 1966) is a unidimensional measure, but informally, there are two dimensions (hostile assertiveness and commendatory assertiveness) even though no formal subscales were ever formed. The College Self-Expression Scale (CSES; Galassi et al.,1974) assesses three types of assertiveness (i.e., positive assertiveness, negative assertiveness, and self-denial) but all three are collapsed to assess trait assertiveness. Positive assertion is characterized by the expression of admiration, affection, approval, and agreement. Negative assertions include controlled but direct expressions of justified anger, disagreement, dissatisfaction, or annoyance. Self-denial includes over apologizing, excessive interpersonal anxiety, and exaggerated concern for the feelings of others. The Assertion Inventory (AI; Gambrill & Richey, 1975) assesses assertive communication along with three other communication classifications (i.e., unassertive, doesn't care, and anxious performer).

As the factor structures for both aggressiveness and assertiveness measures do vary and are at times inconsistent, there are no concrete guidelines as to which factors are consistently present. This is particularly true for a multidimensional approach for assertive communication. These observations further legitimize the need for clarity of

these two complex concepts. After considering the dimensions commonly used in existing measures, I systematically reviewed characteristics related to aggressive and assertive behaviors via an item analysis within existing measures. Specifically, I reviewed every item within the measures listed above and categorized them via a face validity analysis. This was especially important for the assertiveness items as there was less consistency in factor structures, resulting in the absence of a strong foundational structure.

Although existing measures of assertiveness do not differentiate between the directness, activity, and relationship characteristics posited by Sillars et al. (1984) and Straus (1979), the inductive item analysis revealed that these underlying characteristics were present. For example, the item "If you were studying and if your roommate was making too much noise, would you ask him to stop?" in the College Self-Expression Scale (Galassi et al., 1974) reflects the directness characteristic. Similarly, in Infante and Wigley's (1986) Verbal Aggressiveness Scale the item "I am extremely careful to avoid attacking individuals' intelligence when I attack their ideas" reflects the relationship characteristic. Using this technique, these characteristics were identified as ones that should be present in the items developed for the AACI. For aggressiveness, face validity analysis revealed consistency with common factors (e.g., physical aggressiveness, verbal aggressiveness). A common theme across most aggressiveness items was the general pursuit of one's goals without consideration of the other.

Throughout item composition, the *communicator's intent towards the other* was at the forefront of the item development strategy. I wrote aggressive items to reflect communicative interactions in which the individual intends to or succeeded in causing

harm to the other. For example, “I have hit someone with the idea of hurting her/him” and “I make sure I dominate conversations when I am right” are aggressive items that emulate a disregard for the other person. Assertive items were written so that the communicator’s degree of respect towards the other was assessed: e.g., “I ask others to express their emotions to me” and “When I feel myself get angry, I try to calm myself down to have a constructive conversation). The item analysis also revealed that many measures consisted of items that ranged in the intensity of behaviors, especially for aggressive behaviors (e.g., raising one’s voice to shout obscenities, pushing someone, pulling out a knife). Thus, AACI items were crafted to include a range in the intensity of behaviors.

I developed a total of 100 items based on the established characteristics and key concepts observed in the reviewed measures. Aggression items were developed to represent communication behaviors related to verbal aggression, physical aggression, and general aggression. The ***verbal aggression*** items were written to capture communication behaviors in which the individual purposefully used language to attack the another individual (n = 15; e.g., “Sometimes I hit people to get them to do what I want” and “I have broken things in anger before.”). ***Physical aggression*** items captured an array of behaviors which may result in physical harm (n = 26; e.g., “I have threatened people I know.” and “Sometimes I insult people to get them to do what I want.”). This dimension could be further divided into “general” physical aggression items and violence items. Eight violence items were written (e.g., “I have used a knife on someone.”). The ***general aggression*** items assessed behaviors that reflect the sole pursuit of one’s goals with

disregard to another's (n = 10; e.g., "If someone tries to hurt me, I make sure I get even." and "When others make me angry, I sometimes lash out.").

Assertion items captured directness, activity, and relationship-orientation. The ***direct communication*** (or directness) items were designed to capture an individual's ability to take charge of the social situation communicating by one's feelings openly without threatening the other person and being proactive in expressing one's expectations (n = 19; e.g., "I am direct in expressing my opinion" and "If someone wants me to do something I am not fond of, I attempt to discuss or negotiate with them."). It is important to note here that "direct" communication may also be present in aggressive communication. However, the difference here is that directness consists of explicit, straightforward communication that does not include intent to harm the other individual, a foundational element of aggression. ***Activity*** items reflect an individual's verbal and nonverbal confidence in asserting her/his point of view while still remaining respectful (n = 18; "People have told me that I am straightforward but respectful." and "When I feel myself get angry, I try to calm myself down to have a constructive conversation."). The ***relationship-orientation*** items reflect an individual's acknowledgement and awareness of the other person and her/his well-being (k = 12; e.g., "I believe it is important to understand other's points of view/opinions during conflict" and "I am careful to avoid attacking another's intelligence when I attack her/his ideas."). See Appendix A for a review of items categorized by dimensions and Appendix B for a review of all 100 items.

Validation

One way this project will explore the relationship between aggressive and assertive communication is by examining these behaviors with dispositional traits often

examined and associated with interpersonal conflict for convergent and divergent validity. The dispositional traits examined in this pilot study include agreeableness, extraversion, locus of control, and taking conflict personally. Three variables are expected to produce both convergent and divergent results with the AACI factors: (a) agreeableness, (b) positive relational effects from taking conflict personally, and (c) negative relational effects from taking conflict personally. All other variables will only examine convergent validity expectations with the AACI.

Agreeableness is a personality trait that reflects individual differences in trust, straightforwardness, altruism, compliance, modesty, and tendermindedness (John, Donahue, & Kentle, 1991; John & Srivastava, 1991, 1999). Agreeableness is a stable, enduring personality trait that is marked by being pleasant, friendly and getting along with others (McCrae & John, 1992). Individuals high in agreeableness are concerned with others' well-being and have more empathy than those with low agreeableness. Given that aggressiveness is conceptually opposite of agreeableness, I expect agreeableness to be negatively related to all proposed dimensions of aggressiveness. Agreeableness has been linked to cooperation and concern for others whereas aggression is not. Few studies have explored these two concepts in conjunction, potential due to their conflicting nature. One study that did explore both concepts unsurprisingly observed men higher in physical aggression were associated with lower agreeableness (Burton, Hafetz, & Henninger, 2007).

While the assumed relationship between agreeableness and aggressiveness is seemingly clear even without substantial empirical evidence, the relationships between agreeableness and assertiveness are more opaque. Research is inconsistent related to the

relationship between assertiveness and agreeableness (e.g., Bouchard, Lalonde, & Gagnon, 1988; Ramaniah & Deniston, 1993). Conceptually, the two concepts share a foundational similarity of concern for the other. However, as the proposed dimensions of directness and activity demonstrate, one may be respectful of the other while still disagreeing with her/him. This behavior may be viewed as unagreeable. It is possible the existence of inconsistent results may be attributed to the current unidimensional approach to assertiveness. If assertiveness is multi-dimensional (e.g., directness, activity, and relationship-orientation), relationship-orientation may be more strongly positively associated with agreeableness than directness or activity as it is the dimension that is most heavily focused on the relationship. This focus on the relationship may lead to a greater tendency to be agreeable in order to balance one's own needs with the needs of the other. Since this study is empirically exploring whether assertiveness is comprised of different dimensions, agreeableness is an appropriate trait to assess. I anticipate a positive relationship between agreeableness and the relationship-orientation dimension. However, I believe that agreeableness may not be significantly related to the other assertion-related factors. Thus, agreeableness will examine the AACI's convergent validity by examining the relationships between agreeableness with the aggression-related factors and the assertion-related relationship orientation factor. As agreeableness and the other proposed assertion-related factors (i.e., direct communication and activity) are not expected to relate, divergent validity will be examined here.

Extraversion is characterized by sociability, assertiveness, impulsivity, and activity (John et al., 1991). Theoretically, extraversion shares some similarities with aggressive behaviors as both concepts are characterized by active and sometimes

impulsive behaviors (John et al., 1991). Heisel, La France, and Beatty (2003) provided empirical support for this theoretical relationship with an observed direct effect between verbal aggression and extraversion. However, a different study exploring physical aggression observed men higher in physical aggression scores had lower extraversion traits (Burton, Hafetz, & Henninger, 2007). Furthermore, extraversion is commonly associated with assertiveness, compassion, and politeness (Hirsh & Peterson, 2009). Thus, I expect extraversion to be significantly negatively related to all proposed aggression-related factors. As previous studies have observed positive relationships between assertiveness and extraversion (e.g., Bouchard et al., 1988; Ramaniah & Deniston, 1993) and the fact that extraversion is characterized by assertiveness, I anticipate a positive relationship between the two concepts. While extraversion is posited to significantly associate with characteristics of both assertiveness and aggressiveness, the conceptual link between characteristics related to assertive behaviors should be stronger for assertive characteristics compared to aggressive characteristics. Thus, all variables should be related, although in different directions.

Conflict Locus of Control encompasses the extent to which an individual perceives s/he is in control over the environment (Rotter, 1966) and the degree to which one feels in control of life events or feels that others are in control of her/his life events (Weiner, 1985). Internal conflict locus of control refers to self-perceived ability and effort, whereas external conflict locus of control refers to a greater orientation towards chance, powerlessness, and situational contingencies (Canary, Cunningham, & Cody, 1988). Individuals with an internal locus of control are more assertive and confident in their ability to change their social situation than those with an external locus of control

(Canary, Cody, & Marston, 1986). With regard to influence tactics and behaviors, internals are more likely to use personalized power strategies (e.g. encouragement) and less likely to use coercion (e.g. threats) than externals (Goodstadt & Hjelle, 1973). In conflict interactions, conflict locus of control affects the use of integrative tactics, sarcasm, perceptions of powerlessness, semantic focus, denial, and perceptions of chance (Canary et al., 1988). For instance, internals are more likely to use integrative tactics while externals are more likely to use sarcasm during conflict. Thus, I anticipate external locus of control to be (a) positively related to the proposed assertion-related factors and (b) negatively related to the proposed aggression-related factors. Conversely, I anticipate internal locus of control to be (a) positively related to the proposed aggression-related factors and (b) negatively related to the proposed assertion-related factors. In sum, all variables are expected to relate, examining the AACI's convergent validity.

Taking Conflict Personally (TCP) is a negative emotional personalization to participating in interpersonal conflict. TCP is characterized by "a feeling of being personally engaged in a punishing life event while involved in a conflict" (Dallinger & Hample, 1995, p. 273). When taking conflict personally, individuals perceive they are being attacked on a personal level and feel threatened as a result (Hample, 1999). TCP has several core dimensions: direct personalization (i.e., perceptions that the conflict is emotional, face-threatening, and damaging to one's self), stress reactions (i.e., feelings of emotional and physical tension), persecution feelings (i.e., perceptions of maltreatment and that others are "out to get me"; Dallinger & Hample, 1995). Additionally, TCP is negatively associated with positive relational effects (i.e., beliefs that conflict leads to

constructive outcomes) and negative relational effects (beliefs that conflict leads to destructive outcomes; Hample, Dallinger, & Fofana, 1995).

The final relationships I posit for this pilot study are that (a) direct personalization, stress reactions, persecution feelings, and negative relational effects will be negatively related to the proposed assertion-related factors, (b) there will be positive relationships with positive relational effects and the assertion-related factors, (c) direct personalization and persecution feelings will be positively related to the aggression-related factors, and (d) stress reaction will be negatively related to the aggression-related factors. Furthermore, I do not believe there is enough evidence to expect any significant relationship with neither positive relational effects nor negative relational effects and the aggression-factors. Thus, I anticipate that there will be (e) no significant relationships between relational effects or negative relational effects with any of the proposed aggression-related factors. Trait anger will explore the convergent validity and divergent validity of the AACI.

Method

Participants

Two hundred and seventy-three undergraduate participants were solicited from undergraduate students enrolled in Communication Studies courses at the University of Georgia for an online study via Qualtrics. To be eligible for the study, participants had to be 18 years of age or older and had to be currently involved in a romantic relationship. A romantic relationship was broadly defined to include individuals who are in the “talking” stage of a relationship, casually dating, exclusively involved, living together, or married. Exclusive involvement included dating, engagement, marriage, and serious partnerships.

Interested students signed up online through the department website. Students were then sent a link to the study. The mean age of participants was 19.97 (*SD* = 1.56) and age ranged from 18 to 30 years old. One hundred and fifty-three participants (56%) were female and 120 (44%) were male. The majority of participants identified as White/Caucasian, Non-Hispanic (*n* = 198; 72.5%), followed by African American/Black (*n* = 25; 9.2%), Asian or Asian American (*n* = 24; 8.8%), Hispanic/Latino (*n* = 14; 5.1%), and 12 participants identified as bi- or multiracial (4.4%).

Relationship Reports. Participants were asked several identifying questions about their relationship and their relational partner. Most participants reported being in heterosexual relationships (*n* = 273; 95.6%), with partners who were of similar age and ethnicity as them (see Tables 2.1 and 2.2).

Table 2.1

Participant Age and Partner Age Crosstabulation

		Partner Age														
		17	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**Total**
Participant Age	**18**	-	22	6	4	4	-	-	-	-	-	-	-	-	-	36
	19	2	13	36	22	3	2	3	-	1	2	-	-	-	-	84
	20	-	5	14	23	15	5	-	1	-	-	-	-	-	-	63
	21	-	-	1	11	17	6	3	3	2	1	-	-	-	-	44
	22	-	-	2	5	10	8	-	1	2	1	1	-	-	-	30
	23	-	-	-	-	1	1	-	2	-	1	1	-	-	-	6
	24	-	-	-	-	-	-	1	1	-	-	-	-	-	-	2
	25	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
	28	-	-	-	-	-	-	-	-	-	1	-	-	-	-	0
	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	30	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
	Total	2	40	59	65	50	22	7	9	5	6	2	0	0	1	268

Note: Age reported in years. *n* = 268; five participants did not report age demographics.

Table 2.2

Participant Ethnicity and Partner Ethnicity Crosstabulation

		Partner Ethnicity					
		African American /Black	Asian/ Asian American	Hispanic/ Latino	White/ Caucasian, Non-Hispanic	Multi-racial	Total
Participant Ethnicity	African American/Black	17	-	3	3	2	25
	Asian/ Asian American	2	13	-	6	1	22
	Hispanic/ Latino	-	-	1	10	3	14
	White/Caucasian, Non-Hispanic	3	4	4	178	5	194
	Multiracial	1	1	2	8	-	12
	Total	23	18	10	205	11	267

Note: n = 267; six participants did not report ethnicity demographics.

One hundred and seventy-eight White/Caucasian, Non-Hispanic (91.75%) participants were in relationships with other White/Caucasian, Non-Hispanic individuals; 17 of the 25 African American/Black participants (68%) identified their partners as African American/Black; and 13 of 22 (59%) Asian/Asian American participants reported being involved with individuals of the same ethnic background (n = 13; 59%). Unlike other ethnicities, only one participant who identified as Hispanic/Latino identified the romantic partner as sharing the same ethnicity (7.14%). Most Hispanic/Latino participants indicated their partners were White/Caucasian, Non-Hispanic (n = 10; 71.43%), followed by three reports of multiracial partners (21.43%).

Four females and five males reported being in same-sex romantic relationships. Whereas two females and one male did not disclose their partner's gender. When asked to classify their relationship type, 120 participants reported being in serious dating

relationships with their partners (44%), 30 reported a casual dating status (30%), 62 categorized their relationship in the "talking" stage (22.7%), five participants were engaged (1.8%), one participant was married (0.4%), and three did not report their relationship type (1.1%). The average relationship length was 13.96 months (*SD* = 18.12; range:1–141 months).

Most participants reported their relationships as exclusive (*n* = 201; 73.6%). Chi-square analyses including all relationship type categories indicated the majority of respondents were engaged in exclusive relationships, χ^2 (5) = 124.20, $p < .001$. All married (*n* = 1) and engaged (*n* = 5) couples indicated they were exclusive, 117 serious dating couples were exclusive (3 were not exclusive), 63 casual dating couples were exclusive (19 were not exclusive), and 15 talking couples were exclusive (47 were not).

When asked whether participants cohabitated with their partners 261 (95.6%) identified they resided separately from their partners. Thus, largely respondents did not live with the partners referenced in this study, χ^2 (5) = 19.85, $p = .001$. Of the 12 participants who reported cohabitating, two were engaged, eight were seriously dating, one was casually dating, and one was "talking" with her partner. Cohabitation status was not significantly related to whether a couple was exclusive or not, χ^2 (1) = 2.10, *ns*.

Conflict frequency. Participants were asked to report the number of days per week they experienced conflict with their partner (0-7 days). On average participants reported experiencing conflict with their partner 2.20 (*SD* = 1.27) days per week; this pattern is consistent with previous research (Canary et al., 2001). A One-Way ANOVA comparing the conflict frequency and relationship status indicated there was a significant difference between relationship types F (5, 267) = 3.46, $p < .01$. These results suggest

that the couples experienced different frequencies of conflict depending on their relationship status. Additional information about conflict frequency and relationship status may be found in Table 2.3.

A comparison of conflict frequency and cohabitation status indicated participants who did not cohabitate (n = 261; M = 2.16; SD = 1.27) reported experiencing conflict zero to seven days per week. Participants who cohabitated (n = 12; M = 2.92; SD = 1.08) reported experiencing conflict one to five days per week. A One-Way ANOVA comparing the conflict frequency and cohabitation status indicated there was a significant difference between groups $F(1, 271) = 4.06$, $p < .05$. An independent samples t-test indicated that couples who did cohabitate were more likely to experience conflict more often than couples who did not cohabitate, $t(271) = -2.02$, $p < .05$.

Table 2.3

Conflict Frequency and Relationship Status

Relationship Status	*n*	*M*	*SD*	Range (0-7 days per week)
Talking	62	1.97	1.48	0-7
Casual	82	1.90	0.90	0-4
Serious	120	2.49	1.27	0-6
Engaged	5	3.20	2.17	1-6
Married	1	2.00	0.00	1

Note: n = 270.

Conflict resolution. In response to the question: "Typically, are the conflicts that you have with your partner resolved?," a vast majority of participants indicated conflicts were typically resolved (*n* = 249, 91.2%). Twenty-four (8.8%) participants reported conflicts were not typically resolved. There were no significant differences between relationship status and a couple's likelihood to resolve conflicts, χ^2 (5) = 4.08, *ns.* Cohabitation status was also not associated with conflict resolution, χ^2 (1) = 0.97, *ns*.

Conflict topicality. When asked if participants' conflicts generally revolved around the same topic or a similar set of topics, participants reported engaging in serial disputes. One hundred and seventy-eight (65.2%) participants indicated that their conflicts usually revolved around the same topic or a similar set of topics, while 95 (34.8%) reported their conflicts did not tend to revolved around the same topic or a similar set of topics. This result appears to be inconsistent with conflict resolution as most participants indicated their conflicts were generally resolved. This inconsistency is interesting and may be a type of coping with the potential serial argument. Indeed, since serial arguments are conceptualized as ongoing conflict events that re-emerge without resolution (Johnson and Roloff, 1998), participants' expectations of future conflict events are indicative of serial arguments. Furthermore, Johnson and Roloff contend that given the continuous nature of serial arguments individuals must find some way to coping. While this study did not assess coping strategies, it seems like individuals may state the conflict issue was resolved as a mean by which to temporarily deal with the situation. Moreover, a particular conflict issue or episode may be resolved while the larger conflict topic is not. Individuals may resolve an issue while the larger problem remains. In a comparison of frequencies, results indicated there was not a significant difference

between relationship status and serial conflict topicality, $\chi^2(5) = 10.31$, *ns*, nor was there a significant relationship between cohabitation status and conflict topicality, $\chi^2(1) = 0.91$, *ns.*

Conflict initiation. One hundred and forty-six (53.7%) participants reported they usually initiate conflict with their partner, whereas 126 (46.2%) identified their partner as the most frequent conflict initiator. Whether the participant or partner usually initiates conflict was not significantly associated with relationship, $\chi^2(5) = 6.07$, or cohabitation status, $\chi^2(1) = 0.11$, *ns.*

Procedure

Data collection was administered through Qualtrics. A separate web page provided the consent form and the questionnaire would not start until the participants clicked on the "consent" button. After verifying eligibility and completing informed consent, participants completed the survey in approximately 30 minutes. The survey items included questions about demographics about themselves, their romantic partner, and their relationship, agreeableness, extraversion, locus of control, taking conflict personally, aggressive communication behaviors, and assertive communication behaviors. After completing these measures, participants then read an online informational debriefing and were thanked for their participation. Participants received research credit for their participation.

Measures

Aggressive Assertive Communication Instrument (AACI). The initial item pool for the AACI consisted of 100 items measured on a 1 (strongly disagree/extremely uncharacteristic of me) to 5 (strongly agree/extremely characteristic of me) scale. The

AACI was designed to examine characteristics associated with both aggressive and assertive communication behaviors (see Appendix 1). There were 50 items per behavioral type (i.e., aggressive and assertive) in the initial item pool. All 100 items were included in exploratory factor analyses.

The Big Five Inventory (BFI; John & Srivastava, 1991). From the BFI, the *extraversion* (8-items; α = .86; *M* = 2.89; *SD* = 0.33) and *agreeableness* (9-items; α = .77; *M* = 3.28; *SD* = 0.33) domains were assessed. Participants were asked to respond on a 5-point Likert-type scale from 1 (disagree strongly) to 5 (agree strongly). Sample items from extraversion include "I see myself as someone who has an assertive personality" and "I see myself as someone who is outgoing, sociable." Sample items from agreeableness include "I see myself as someone who is considerate and kind to almost everyone" and "I see myself as someone who likes to cooperate with others." Higher scores indicated higher extraversion and agreeableness.

Conflict Locus of Control Scale (CLOC). Perceptions of conflict were measured using Canary, Cunningham, and Cody's (1988) Conflict Locus of Control Scale (CLOC). This scale assesses participants' internal and external control orientations toward their interpersonal conflicts (Canary et al., 1988). The CLOC contains five dimensions: effort, ability, chance, powerlessness, and situational contingencies. Participants were asked to assess the extent to which they agreed or disagreed with each item on a five-point Likert-type scale of 1 (Strong disagree) to 5 (Strongly agree). After reverse coding, factors were creating by averaging the items: internal locus of control (effort and ability; α = .70; *M* = 3.48; *SD* = 0.47) and external locus of control (chance, powerlessness, and situational contingencies; α = .77; *M* = 4.31; *SD* = 0.46).

Taking Conflict Personally (TCP). TCP was measured using the Revised Taking Conflict Personally Scale (Hample & Dallinger, 1995). This 37-item instrument has six subscales that measure direct personalization (α = .82; *M* = 3.12; *SD* = 0.76), persecution feelings (α = .81, *M* = 2.56, *SD* = 0.80), stress reactions (α = .67; *M* = 3.09; *SD* = 0.79), positive relational effects (α = .81; *M* = 3.45; *SD* = 0.66), negative relational effects (α = .78; *M* = 3.35; *SD* = 0.70), and like/dislike valence. The like/dislike subscale was not assessed in this study as an individual's like or dislike of conflict was not an area of interest. Participants responded on a 5-point Likert-type scale (1 = Disagree strongly; 5 = Agree strongly).

Results

Preliminary Analyses

Exploratory Factor Analyses. Common factor analysis (principal axis factoring) was selected as the estimation method as it accounts for measurement error in the solution (Gorsuch, 1983). A maximum likelihood exploratory factor analysis (EFA) with a Promax rotation (a non-orthogonal rotation method) within SPSS was conducted. This was an appropriate selection as the factors were expected to correlate.[i] Items with poor factor loadings (cross-loadings > .35 or items that did not load > .40 on any one factor) were deleted until an acceptable factor structure was obtained. From the original 100-items, 75 were removed due to substantial cross-loadings (> .35 on more than one factor) or did not load highly (> .40) on any factor. The decision regarding the number of factors to retain was based on the Kaiser Criteria (eigenvalues > 1) and inspection of the scree plot.

Factorability of the data was evaluated with two indices: The Kaiser-Meyer-Olkin (KMO; Kaiser, 1974) measure of sampling adequacy and Bartlett's (1950) test of sphericity. The obtained KMO value of .84 is considered "meritorious" and Bartlett's (1950) test of sphericity was significant, $X^2 = 2215.08$, $p < .001$, indicating that the variance-covariance matrix was suitable for this technique.

After eliminating items with poor factor loadings, 25 items remained and a consistent four-factor structure emerged: direct communication, relationship orientation, verbal aggression, and physical aggression. Standardized factor loadings ranged from .44 to .77. While more factors were anticipated (i.e., activity and general aggression), items for these factors had poor loadings, cross-loaded on multiple dimensions, or loaded on one of the four final factors. For example, items 60 ("When I feel myself get angry, I try to calm myself down to have a constructive conversation") and 92 ("I am able to control my anger in order to have constructive conversations") were constructed for the activity dimension but loaded on the relationship orientation dimension. Similarly, item 24 ("Sometimes I avoid asking questions because I feel self-conscious" – reverse code) was intended for the activity dimensions but loaded on the direct communication factor. All the physical aggression items that depicted violent behaviors loaded below .35. A confirmatory factor analysis was conducted to further examine the 25 items, four-factor scale. See Table 2.4 for factor loadings.

Confirmatory Factor Analyses. The purpose of the next phase was to conduct confirmatory factor analyses (CFA) to evaluate further the structure obtained in the exploratory factor analysis. A CFA within MPlus (Maximum Likelihood) was used to assess the measure's dimensionality based on the dimensions/item loadings provided

from the EFA. Model fit indices include the root-mean-square error of approximation (RMSEA), standardized root-mean-square residual (SRMR), comparative fit index (CFI), Tucker-Lewis Index (TLI), and chi-square test of model fit.

Based on the EFA, four factors were constructed: direct communication (7 items), relationship orientation (6 items), physical aggression (8 items), and verbal aggression (4 items). The four factors were loaded onto a single aggressive assertive communication factor, resulting in 79 free parameters. Overall, model fit was acceptable. The RMSEA (0.06) was acceptable (<0.06), and the SRMR (0.07) confirmed good fit (<0.08). The CFI and TLI indicated adequate fit (CFI=0.87 and TLI=0.86; for CFI or TLI > 0.90). When compared to the Tau equivalence model, the CFA was preferred (χ^2 = 2314.80, df = 300, $p < .001$).

Given the high correlations between factors, especially between aggression-related and assertion-related factors, the credibility of ruling out an alternative two- or one- factor structure where all items load onto two factors (one aggression and one assertion) or one single aggression/assertion factor were examined. Results revealed the two-factor model yielded poor fit indices, RMSEA = 0.10, SRMR = 0.13, CFI = 0.64, TLI = 0.61, χ^2 = 2314.80, *df* = 300, $p < .0001$. Results revealed the one-factor model also yielded poor fit indices, RMSEA = 0.11, SRMR = 0.12, CFI = 0.54, TLI = 0.50, χ^2 = 2314.80, *df* = 300, $p < .0001$. Based on these analyses, it was determined that the four-factor model that loads onto a single aggressive assertive communication factor evidenced the superior fit.

Final factors were computed averaging items for the factors: direct communication (α = .73, *M* = 3.27; *SD* = 0.72), relationship orientation (α = .74; *M* =

3.96; *SD* = 0.61), physical aggression (α = .86; *M* = 1.60; *SD* = 0.67), verbal aggression (α = .75; *M* = 2.60; SD = 0.91). Physical aggression significantly negatively correlated with relationship orientation (*r*(266) = -.31; *p* < .001), significantly positively correlated with verbal aggression (*r*(268) = .50; *p* < .001), and did not significantly correlate with direct communication (*r*(266) =.10; *ns*). Verbal aggression and relationship orientation were significantly negatively correlated, *r*(278) = -.19, *p* < .01. Direct communication did not significantly correlate with any of the other factors, including relationship orientation, *r*(266) =.07; *ns*. However, interestingly, direct communication and verbal aggression did approach significance, *r*(267) = .12, *p* = .06. Internal consistency for the 25-item scale was acceptable (α = .75; *M* = 2.86; *SD* = .40) with corrected item-total correlations at or above .50. See Table 2.5 for factor loadings and the final 25-item AACI.

Table 2.4

Standardized Factor Loadings for 25-item Aggressive and Assertive Communication Instrument (AACI) Derived by EFA for Study 1: Pilot Study

	Physical Aggression	**Direct Communication**	**Relationship Orientation**	**Verbal Aggression**
45. I have taken my anger out on others by using physical force.	**.77**	-.01	.10	-.01
78. I have hit someone with the idea of hurting her/him.	**.75**	.05	.05	-.02
37. I get into physical fights more than the average person.	**.68**	.03	-.08	-.19
29. I assert my opinions or point-of-view by my physical prowess.	**.66**	-.02	.05	-.03
65. I have threatened people I know.	**.65**	-.02	.06	.10
43. Sometimes I push or shove others when I am mad.	**.65**	-.02	-.02	.13
85. I feel good when I win fights by putting someone else down.	**.57**	-.07	-.07	-.02
30. I believe that if you back down from a fight, you are a coward.	**.56**	.06	-.01	.01
34. I find it difficult to stand up for myself.	.02	**.67**	.13	.03
63. I avoid asking questions for fear of feeling stupid.	-.15	**.65**	-.12	-.08
28. When I decide I have an issue with someone, I have difficulty telling the other person.	.04	**.62**	.01	.03
24. Sometimes I avoid asking questions because I feel self-conscious.	.16	**.56**	-.08	-.21
6. When problems arise, I avoid discussing the problem.	-.02	**.55**	.06	-.02
25. I am overly careful to avoid hurting others' feelings.	-.10	**.54**	-.30	.14
1. If someone treats me unfairly I address her/him directly.	.09	**.47**	.25	.16

93. I work to respect others' feelings, thoughts, and desires.	-.19	-.02	**.71**	.04
92. I am able to control my anger in order to have constructive conversations.	.10	.11	**.66**	-.02
84. It is important to affirm others' point of view, even if I disagree.	.21	-.10	**.60**	.04
94. I am comfortable having relationships with others who are different from me.	-.12	.06	**.56**	-.04
90. I believe that compromises are important.	-.24	-.02	**.48**	-.02
60. When I feel myself get angry, I try to calm myself down to have a constructive conversation.	.03	-.06	**.44**	-.04
51. I sometimes get into yelling fights.	-.07	-.05	.01	**.74**
42. I believe that yelling is sometimes necessary.	-.07	-.05	-.03	**.70**
66. I curse at others when I am angry.	.09	.07	.06	**.60**
79. I yell at others when they annoy me.	.22	-.01	-.16	**.51**

Note: Extraction Method: Maximum Likelihood. Rotation Method: Promax with Kaiser Normalization.

Table 2.5

Standardized Factor Loadings for 25-item Aggressive and Assertive Communication Instrument (AACI) Derived by CFA for Study 1: Pilot Study

	Physical Aggression	**Direct Communication**	**Relationship Orientation**	**Verbal Aggression**
45. I have taken my anger out on others by using physical force.	**.73**	---	---	---
78. I have hit someone with the idea of hurting her/him.	**.71**	---	---	---
37. I get into physical fights more than the average person.	**.60**	---	---	---
29. I assert my opinions or point-of-view by my physical prowess.	**.61**	---	---	---
65. I have threatened people I know.	**.69**	---	---	---
43. Sometimes I push or shove others when I am mad.	**.74**	---	---	---
85. I feel good when I win fights by putting someone else down.	**.57**	---	---	---
30. I believe that if you back down from a fight, you are a coward.	**.58**	---	---	---
34. I find it difficult to stand up for myself.	---	**.68**	---	---
63. I avoid asking questions for fear of feeling stupid.	---	**.59**	---	---
28. When I decide I have an issue with someone, I have difficulty telling the other person.	---	**.65**	---	---
24. Sometimes I avoid asking questions because I feel self-conscious.	---	**.51**	---	---
6. When problems arise, I avoid discussing the problem.	---	**.56**	---	---
25. I am overly careful to avoid hurting others' feelings.	---	**.49**	---	---
1. If someone treats me unfairly I address her/him directly.	---	**.53**	---	---

93. I work to respect others' feelings, thoughts, and desires.	---	---	**.84**	.04
92. I am able to control my anger in order to have constructive conversations.	---	---	**.57**	-.02
84. It is important to affirm others' point of view, even if I disagree.	---	---	**.39**	.04
94. I am comfortable having relationships with others who are different from me.	---	---	**.62**	-.04
90. I believe that compromises are important.	---	---	**.63**	-.02
60. When I feel myself get angry, I try to calm myself down to have a constructive conversation.	---	---	**.40**	-.04
51. I sometimes get into yelling fights.	---	---	---	**.65**
42. I believe that yelling is sometimes necessary.	---	---	---	**.60**
66. I curse at others when I am angry.	---	---	---	**.63**
79. I yell at others when they annoy me.	---	---	---	**.74**

Descriptives

Analyses were conducted for each of the four factors to see if any covariates were present. Independent samples t-test indicated a gender difference observed with the physical aggression communication factor, such that males reported higher physical aggression scores (M = 1.90, SD = .73) than did females (M = 1.38, SD = .52), $t(268)$=-6.70, $p < .001$. No other consistent differences were observed.

Validity Analyses

A series of bivariate regression analyses revealed the factors were often differentially related to the validity measures, as was expected. However, as reviewed above, not all relationships were expected to be counter to one another. Before the regression analyses, the variables were initially compared to one another using correlation analyses (See Table 2.6). Of the four factors that emerged in the factor analyses, two conceptually relate to assertiveness (i.e., direct communication and relationship orientation) and two with aggressiveness (i.e., verbal aggression and physical aggression). The results were mostly as expected.

The direct communication factor was significantly positively correlated with internal locus of control and significantly negatively related with extraversion, external locus of control, direct personalization, stress reactions, and persecution feelings. Since the directness dimension was designed to capture an individual's ability to take charge of the social situation communicating by one's feelings openly without threatening the other person and being proactive in expressing one's expectations, these results are both expect and encouraging. The relationship orientation factor was significantly positively associated with agreeableness, internal locus of control, and positive relational effects

while significantly negatively associated with persecution feelings. These results make sense given the conceptual foundation for this factor is that an individual has acknowledgment and awareness of the other person and her/his well-being.

With regard to the two factors that are linked to aggressiveness, verbal aggression, and physical aggression, several significant associations emerged. Verbal aggression significantly positively correlated with an external locus of control and persecution feelings. Significant negative associated were observed with verbal aggression and agreeableness and stress reactions. Physical aggression significantly positively correlated with an external locus of control and persecution feelings, whereas negative associated were observed with agreeableness and internal locus of control.

In summary, the two factors that conceptually align with assertiveness (i.e., direct communication and relationship orientation) shared some of the same results: (a) both factors were positively related to internal locus of control, meaning the individual believes s/he can influence events and their outcomes and (b) both factors were negatively related to feelings of persecution during conflict, meaning individuals do not instinctively feel attacked when conflict arises. Similarly, the two aggression factors shared three of the same relationships: (a) negative associations with agreeableness, (b) positive associations with external locus of control, and (c) positive associations with feelings of persecution during conflict. These results provide the first empirical evidence that the resulting factors align with their conceptual backgrounds. The results of the more stringent regression analyses are below.

Agreeableness. All results were in the expected directions. Agreeableness was anticipated to negatively relate to both verbal aggression and physical aggression as these

aggression factors are not conceptually marked by high concern for others well-being. For the verbal aggression factor, the model was significant (adjusted R^2 = 0.02, F(1, 265) = 6.01, p = .01) and agreeableness significantly negatively predicted verbal aggression (β = -.15, p = .01). Similarly, the model for physical aggression was significant (adjusted R^2 = 0.04, F(1, 264) = 10.25, p < .0) and, as expected, the coefficient was negative (β = -.19, p < .01).

For the assertiveness factors, I hypothesized that (a) relationship orientation would be strongly positively associated with agreeableness but (b) that direct communication would be positively but not necessarily significantly associated with agreeableness, as the direct pursuit of one's agenda may be seen as oppositional even though there is still an underlying concern for the other. For the relationship orientation factor, the model was significant, adjusted R^2 = 0.03, F(1, 264) = 8.86, p < .01. As anticipated, the coefficient was positive, β = .18, p < .01. The other factor related to assertiveness, direct communication, revealed nonsignificant results, adjusted R^2 = -0.00, F(1, 263) = 0.66, *ns*. Aligning with expectations, agreeableness did not significantly predict direct communication, but the coefficient was positive, β = .05, *ns*.

Extraversion. Expectations based on previous research anticipated extraversion would negatively relate to all aggression-related factor but positively with all assertion-related factors. I also anticipated there would be a stronger relationship with assertiveness-related factors than with aggressiveness-related factors. Results were not consistent with the anticipated relationships. Neither aggression-related factor revealed significant relationships (verbal aggression: adjusted R^2 = 0.00, F(1, 260) = 1.98, *ns*; β = .09, *ns*; physical aggression: adjusted R^2 = 0.00, F(1, 264) = 0.39, *ns*; β = .04, *ns*). The

relationship orientation factor also revealed non-significant results: $R^2 = 0.00$, $F(1, 264) = 0.01$, *ns*; $\beta = -.00$, *ns.* For the direct communication factor, the model was significant, adjusted $R^2 = 0.08$, $F(1, 263) = 25.58$, $p < .001$. However, the relationship was opposite of the expected direction, $\beta = -.29$, $p < .001$.

Conflict Locus of Control. Both internal and external conflict locus of control were examined. For internal conflict locus of control, the posited relationships were that assertion-related factors would be positively related and the aggression-related factors would be negatively related. Although results revealed the coefficients were all in the expected directions, only the direct communication, relationship orientation, and physical aggression factors' relationships were significant. Thus, the direct communication model was significant, adjusted $R^2 = 0.02$, $F(1, 257) = 4.06$, $p < .05$, and coefficient was positive, $\beta = .13$, $p < .05$. Similarly, the relationship orientation model was significant, adjusted $R^2 = 0.22$, $F(1, 258) = 70.69$, $p < .001$, and coefficient was positive, $\beta = .46$, $p < .001$. As anticipated, the physical aggression model was significant, adjusted $R^2 = 0.03$, $F(1, 257) = 8.07$, $p < .01$, and coefficient was negative, $\beta = -.17$, $p < .01$. The verbal aggression model was not significant, adjusted $R^2 = 0.00$, $F(1, 259) = 0.94$, *ns,* though the coefficient was negative, $\beta = -.06$, *ns*.

Oppositional relationships were anticipated for external locus of control. Three of these anticipated results were significant in the expected direction: direct communication, verbal aggression, and physical aggression. The direct communication model was significant, adjusted $R^2 = 0.02$, $F(1, 261) = 5.52$, $p < .05$, and coefficient was negative, $\beta = -.14$, $p < .05$.As expected, the verbal aggression model was significant, adjusted $R^2 = 0.05$, $F(1, 262) = 14.87$, $p < .001$, and coefficient was positive, $\beta = .23$, $p < .001$.

Similarly, the physical aggression model was significant, adjusted $R^2 = 0.06$, $F(1, 260) = 17.42$, $p < .001$, and coefficient was positive, $\beta = -.17$, $p < .01$. The relationship orientation model was not significant, adjusted $R^2 = 0.01$, $F(1, 261) = 2.52$, *ns*, though the coefficient was negative, $\beta = -.10$, *ns*.

Taking Conflict Personally. TCP was assessed on several core dimensions: direct personalization, stress reactions, persecution feelings, positive relational effects, and negative relational effects. The relationships I posit for TCP were assertion-related factors would (a) be negatively associated with direct personalization, stress reactions, persecution feelings, and negative relational effects and (b) be positively associated with positive relational effects. Additionally, I expected the aggression-related factors to (a) be positively related to direct personalization and persecution feelings and (b) be negatively related to stress reaction. I did not anticipate significant associations between aggression-related factors with either positive relational effects or negative relational effects. All significant results were in the expected direction. These results for each dimension are below.

Direct personalization. Only one of the anticipated relationships was significant for direct personalization. The direct communication model was significant, adjusted $R^2 = 0.16$, $F(1, 256) = 47.14$, $p < .001$, and coefficient was negative, $\beta = -.39$, $p < .001$. The remaining models were not significant (relationship orientation: adjusted $R^2 = 0.01$, $F(1, 257) = 1.24$, *ns*; $\beta = -.07$, *ns*; verbal aggression: adjusted $R^2 = 0.00$, $F(1, 258) = 0.69$, *ns*; $\beta = -.05$, *ns*; physical aggression: adjusted $R^2 = 0.00$, $F(1, 257) = 0.02$, *ns*; $\beta = -.01$, *ns*).

Stress reactions. Only two of the anticipated relationships was significant for direct personalization. The direct communication model was significant, adjusted $R^2 =$

0.15, $F(1, 258) = 47.80$, $p < .001$, and coefficient was negative, $\beta = -.40$, $p < .001$. The verbal aggression model was also significant, adjusted $R^2 = 0.02$, $F(1, 260) = 6.60$, $p = .01$, and coefficient was negative, $\beta = -.16$, $p < .01$. Neither the relationship orientation model (adjusted $R^2 = 0.00$, $F(1, 259) = 0.00$, *ns*; $\beta = -.00$, *ns*) nor the physical aggression model (adjusted $R^2 = 0.01$, $F(1, 259) = 2.42$, *ns*; $\beta = -.10$, *ns*) were significant.

Persecution feelings. All four expected relationships were significant and in the anticipated directions: direct communication (adjusted $R^2 = 0.09$, $F(1, 253) = 25.18$, $p < .001$; $\beta = -.30$, $p < .001$); relationship orientation (adjusted $R^2 = 0.03$, $F(1, 254) = 8.04$, $p < .01$; $\beta = -.18$, $p < .01$); verbal aggression (adjusted $R^2 = 0.04$, $F(1, 255) = 10.18$, $p < .01$; $\beta = .20$, $p < .01$); and physical aggression (adjusted $R^2 = 0.10$, $F(1, 254) = 28.02$, $p < .001$; $\beta = .32$, $p < .001$).

Positive relational effects. Only the assertion-related factors were expected to have significant associations for positive relational effects. Thus, the relationship orientation model was significant, adjusted $R^2 = 0.03$, $F(1, 254) = 8.50$, $p < .01$, and coefficient was positive, $\beta = .18$, $p < .01$. The direct communication model was not significant, adjusted $R^2 = -0.00$, $F(1, 252) = 0.56$, *ns*; $\beta = .05$, *ns.* As anticipated, neither the verbal aggression (adjusted $R^2 = 0.00$, $F(1, 249) = 0.57$, *ns*; $\beta = .05$, *ns*) nor physical aggression models were significant (adjusted $R^2 = -0.00$, $F(1, 253) = 0.12$, *ns*; $\beta = -.02$, *ns*).

Negative relational effects. As with positive relational effects, only the assertion-related factors were anticipated to have significant associations. However, no factors had significant relationships with negative relational effects: direct communication (adjusted $R^2 = 0.01$, $F(1, 257) = 2.94$, *ns*; $\beta = -.11$, *ns*), relationship orientation (adjusted $R^2 = 0.00$,

$F(1, 259) = 1.62$, *ns*; $\beta = .08$, *ns*), verbal aggression (adjusted $R^2 = -0.00$, $F(1, 259) = 0.01$, *ns*; $\beta = -.01$, *ns*), and physical aggression (adjusted $R^2 = -0.00$, $F(1, 258) = 0.25$, *ns*; $\beta = .03$, *ns*).

Table 2.6

Bivariate Correlations for Individual Difference Variables and Factors of the Aggressive and Assertive Communication Instrument for Study 1: Pilot Study

		M (SD)	Direct Communication	Relationship Orientation	Verbal Aggression	Physical Aggression
Agreeableness		3.28 (.33)	.05	**.18****	**-.15****	**-.19****
Extraversion		2.89 (.33)	**-.29*****	-.01	.10	.04
Conflict Locus of Control						
	External	2.95 (.46)	**-.14***	-.10	**.23*****	**.25*****
	Internal	3.48 (.47)	**.13***	**.46*****	-.06	**-.17****
Taking Conflict Personally						
	Direct Personalization	3.12 (.76)	**-.40*****	-.07	-.05	-.01
	Stress Reactions	3.09 (.79)	**-.40*****	-.01	**-.16****	-.10
	Persecution Feelings	2.56 (.80)	**-.30*****	**-.18****	**.20****	**.32*****
	Positive Relational Effects	3.45 (.66)	.05	**.18****	-.03	-.02
	Negative Relational Effects	3.35 (.70)	-.11	.08	-.01	.03

Note: *p < .05; **p < .01; ***p < .001

Discussion

AACI Item and Factor Composition

The goal of this initial study was to develop and provide an initial validation of a new measure of aggressive and assertive communication behaviors. The AACI was created based on established dimensions and characteristics of aggressive and assertive communication behaviors and of established for both aggressiveness and assertiveness. Results revealed a consistent four-factor structure: direct communication, relationship orientation, verbal aggression, and physical aggression. Based on this pilot data, the AACI is a four-factor instrument that assesses aggressive and assertive communication behaviors in four subscales. Two of these subscales are more conceptually related to aggression (i.e., verbal aggression and physical aggression) and two to assertion (i.e., direct communication and relationship orientation). One hundred potential items were reduced via EFA and CFA to create a 25-item measure. This 25-item measure had acceptable internal consistency reliability ($\alpha = .75$) and was correlated with validity assessments as expected.

Hunter and Gerbing (1982) contend that assessments of measurement instruments should focus on content validity and associations between the measure and external variables. While the approach of this study was not to simply dichotomize aggressive and assertive communication behaviors, and while the results did not always reveal this trend, a pattern emerged that often contrasted aggressive and assertive factors. The results observed in this preliminary study justify the need for multi-dimensional measurements because while the factors share some similar relationships and tendencies, factors were differentially also related to the validity measures. The aggression-related factors shared

similarities with agreeableness, external conflict locus of control, and persecution feelings. The assertion-related factors shared similarities with internal locus of control and persecution feelings. Persecution feelings, a dimension within taking conflict personally, was the only variable significantly related to all AACI factors.

Direct communication was uniquely negatively related to external locus of control, direct personalization during conflict, and stress reactions during conflict while relationship orientation had no significant relationships with these dispositions. Relationship orientation was exclusively positively related to agreeableness and positive relational effects during conflict whereas the direct communication factor was not significantly associated. The unique one-factor relationships for the aggression-related factors were (a) verbal aggression was negatively related to stress reactions during conflict and (b) physical aggression was negatively related to internal locus of control. None of these trends differentiating factors within aggressiveness or assertiveness would have been observed with an orthogonal approach.

Validity Results

All but one significant relationship was in the direction anticipated. The relationship between extraversion and direct communication was anticipated to be positive as extraversion is partially characterized by assertiveness (John et al., 1991). Furthermore, previous studies observed positive relationships between assertiveness and extraversion (e.g., Bouchard et al., 1988; Ramaniah & Deniston, 1993). However, results indicated a strong negative relationship.

Although I am cautious to interpret a result counter to consistent previous research results, one possible explanation for this result is extraverted individuals may be

more likely be strategic in their use of direct and indirect communication. A study conducted by Hirsh and Peterson (2009) explored how individual differences predicted communication behaviors in the game prisoner's dilemma. Extraverted individuals were more likely to cooperate. Hirsh and Peterson posited the likelihood to cooperate stemmed from a sensitivity to reward. Thus, individuals cooperated because they perceived that behavior as being the more rewarding option. Although speculative, it is possible the sample from the current study did not engage in direct communication behaviors as they did not deem them to be the most rewarding option. Future research should further explore this finding. Additionally, although the sample mean indicated more participants had extraverted than introverted tendencies (M = 2.89; SD = .33), a sample with higher extraverted tendencies may also be useful in further exploring this interesting result.

Limitations and Future Directions

Measurements were cross-sectional and it would be useful to examine aggressive and assertive communication behaviors of participants over time to establish how aggressive and assertive communication traits contribute to these dispositional measures more fully. The sample was fairly homogeneous and it would further our understanding if a more diverse sample would be assessed. The measurement was retrospective and thus susceptible to biases associated with retrospection. Additionally, future research may benefit from examining perspectives of participants and those they are close with (e.g., parent-child, romantic partner, etc). One useful study might be to have parents complete a validated measure of aggressive and assertive communication behaviors and correlate it with the adult child's AACI scores.

The AACI appears to be a useful measure as it captures multiple dimensions of communication behaviors not often considered, much less assessed, in relation to one another. The four factors of the AACI consistently comprehensively summarize key dimensions and characteristics of aggression and assertiveness. Future measurements should explore whether this factor system remains stable in additional studies and assess the AACI in different samples. The other studies included in this dissertation will aim to further illuminate the complex relationship between aggressive and assertive communication behaviors. Other dispositional traits will also be assessed. The AACI will also be compared with other aggressiveness and assertiveness measures. My hope is that the results of these studies will bring a better understanding of human interactions and close relationships.

In summary, aggressive and assertive communication behaviors are both commonly studied concepts. However, while these concepts are often polarized, they are rarely empirically studied simultaneously. The items of the AACI and the results of this study reflect the communicative presence that assertive and aggressive behaviors have. Additionally, these results substantiate the importance of studying aggressive and assertive communication patterns in tandem. This study extends our understanding of communication behaviors that impact many interpersonal communicative encounters, particularly interpersonal conflict. Furthermore, the results of this study provide evidence that aggressiveness and assertiveness do overlap in some areas while they differ, sometimes within their respective factors, from one another. This preliminary test found the AACI has potential, after further development and analyses, to be a valid measure of aggressive and assertive communication behaviors. Finally, these results further our

understanding of interpersonal interactions, which may be particularly useful in the realm of interpersonal conflict.

CHAPTER 3: A SECOND EXAMINATION OF THE AACI

The previous chapter was the pilot study for the Aggressive and Assertive Communication Instrument (AACI). Results revealed aggressive and assertive communication behaviors might be studied and assessed in tandem within one instrument. Analyses indicated a four-factor structure: direct communication, relationship orientation, verbal aggression, and physical aggression. Within this factor structure, two items were related to aggressive communication behaviors and two to assertive communication behaviors. Results demonstrated the two sets of factors did relate to some dispositional traits in the same way, whereas only one factor was uniquely related to other traits. These results of the preliminary study justify the need for multi-dimensional measurements because while the factors share some similar relationships and tendencies, factors were differentially related to the validity measures. Further, while the preliminary test found the AACI has potential to be a valid measure of aggressive and assertive communication behaviors, additional development and analyses are needed. The objective of this current study is to cross-validate the factor structure of the AACI using data collected from a unique sample from the previous study. A second objective is to provide further validity data via an assessment of dispositional traits.

The sample from the pilot study was comprised of college students. One limitation of that sample is that the results from the pilot study may not be generalizable to a larger population and a broader age range. Thus, the current study actively recruited older participants to examine the AACI with a new and different sample. Validation analyses were conducted with a few of the same dispositional traits from the pilot study

reported in Chapter 2 to further examine whether the same patterns held with a new sample. Additionally, several different traits were examined to further assess the AACI's validity.

Validation

The dispositional traits examined for convergent and divergent validity in this study included agreeableness, entitlement, exploitativeness, extraversion, family communication patterns, self-esteem, and trait anger. Agreeableness, extraversion, and conflict locus of control were examined in the pilot study and were examined here again to investigate whether consistent result patterns would occur in both studies. Of particular interest was the result for agreeableness as the directional relationship observed in the pilot study was counter to previous research and my expectations. Agreeableness, locus of control, and trait anger are expected to produce both convergent and divergent results with the AACI factors. All other variables will solely examine convergent validity expectations.

Agreeableness was assessed in the pilot study. Conceptualized as a stable, enduring personality trait that is marked by being pleasant, friendly, and getting along with others (McCrae & John, 1992). Individuals high in agreeableness are concerned with others' well-being and have more empathy than those with low agreeableness. As originally expected, agreeableness was significantly positively related to the relationship orientation factor, whereas it was significantly negatively related to both verbal aggression and physical aggression. These same relationships are anticipated for this study. Thus, agreeableness will examine convergent validity with relationship orientation, verbal aggression, and physical aggression. As agreeableness and the direct

communication factor are not expected to relate, divergent validity will be examined here.

Extraversion was also assessed in the pilot study. As extraversion is characterized by sociability, assertiveness, impulsivity, and activity (John et al., 1991), I anticipated significant positive relationships with both the assertion-related factors. However, analyses revealed a strong negative relationship with the direct communication factor. No significant associations were observed with the relationship orientation, verbal aggression, or physical aggression factors. However, past research shows a strong and consistent relationship between extraversion and assertiveness. Thus, I anticipate a positive relationship between extraversion and the assertion-related factors. Although past research reveals inconsistent patterns in the relationship between extraversion and aggression, these studies have investigated different types of aggression (e.g., Burton et al., 2007; Heisel et al., 2003; John et al., 1991). Burton et al. (2007) observed that higher physical aggression was associated with lower extraversion traits. Thus, I anticipate a negative relationship between extraversion and physical aggression. In sum, all variables should be related, although in different directions.

Conflict Locus of Control is divided into internal locus of control and external locus of control. Internal conflict locus of control reflects one's self-perceived ability and effort to control her/his own environment, whereas external conflict locus of control refers to a greater orientation towards chance, powerlessness, and situational contingencies (Canary, Cunningham, & Cody, 1988). For *internal locus of control*, I expected that the assertion-related factors would be positively related and the aggression-related factors would be negatively related. Both direct communication and relationship

orientation were significantly positively related to internal locus of control. Although results revealed the coefficients were both in the expected directions, only the physical aggression factors' relationship was significant with an internal locus of control. These same relationships are anticipated for this new sample. Thus, convergent and divergent results are expected here as all variables are expected to relate expect for the verbal aggression factor.

External locus of control was expected to be negatively related to the assertion-related factor and positively related to the aggression-related factors. Of the assertion-related factor, only the direct communication factor had a significant relationship. This result may be due to the direct communication factor's focus on an individual's ability to take charge of the social situation communicating by one's feelings openly without threatening the other person and being proactive in expressing one's expectations. To accomplish this, one must not believe that the results of any communicative outcome are up to chance or are controlled by some other outside force. In Study 1, both aggression-related factors were positively related to external locus of control. As aggression is the less skilled concept, if one believes s/he does not have control of outcomes then s/he may lash out with verbal and physical aggression. These same relationships are anticipated in this study. As with internal locus of control, convergent and divergent results are expected here as all variables are expected to relate except for with one factor (i.e., relationship orientation).

Psychological Entitlement is characterized by the extent to which an individual believes s/he deserves preferential rewards and treatments (Campbell, Bonaci, Shelton, Exline, & Bushman, 2004; Harvey & Martinko, 2009). This temperament often results in

comparatively low levels of empathy, perspective taking, and respect. Narcissism and high levels of entitlement often co-occur (Twenge & Campbell, 2009). When criticized, those with high levels of psychological entitlement react negatively and with aggressive behaviors (Baumeister, Bushman, & Campbell, 2000; Reidy, Zeichner, Foster, & Martinez, 2008). Thus, I anticipate high levels of entitlement will be positively related to both aggression-related factors.

As assertiveness is characterized as advancing one's own position while also respecting the other's position, this respect for others is counter to high psychological entitlement. Therefore, I anticipate a negative relationship between psychological entitlement and both assertion-related factors. Moreover, the relationship should be stronger for the relationship orientation factor as this is the factor more focused on the other individual. All variables are expected to relate, examining the AACI's convergent validity.

Exploitativeness focuses on an individual exploiting others to achieve her/his own desires, often by whatever means necessary. Exploitation may occur in the form of manipulation and lies. Individuals with high grandiosity tend to antagonize others when interacting (Miller et al., 2011; Raskin, Novacek, & Hogan, 1991). This characteristic may be observed in individuals who expect favors without assuming reciprocal responsibilities, have an overall grandiose sense of self-importance where everything is about him or her. Like psychological entitlement, exploitativeness is viewed as one of the more maladaptive dimensions of narcissism and consistently predicts aggression behaviors, both verbal and physical (e.g., Ang, Ong, Lim, & Lim, 2010; Fanti & Henrich, 2014; Reidy et al., 2008; Wink, 1991). These consistent and strong associations between

exploitativeness and aggression lead me to anticipate a strong positive relationship between exploitativeness and both aggression-related factors.

Watson, Morris, and Miller (1998) observed both partial and direct correlations between narcissism, of which exploitativeness is a component, and assertiveness. However, these results indicated assertiveness was more strongly related to "healthier" narcissism than maladjusted narcissism, of which exploitativeness is a dimension. Since assertiveness is being assessed with two factors in this study, I anticipate different relationships to emerge. Although Watson et al. (1998) observed a positive relationship between exploitativeness and assertiveness, assertiveness was conceptualized as directly communicating one's thoughts, a focus on or respect for the other was not included. Based on these results, I anticipate a positive relationship between exploitativeness and the direct communication factor may be observed. However, I anticipate a negative relationship between exploitativeness and the relationship orientation factor given the two are conceptually oppositional. Thus, exploitativeness is expected to relate to all AACI factors, although different directional relationships are anticipated.

Family Communication Patterns (FCP) are "a set of norms governing the tradeoff between informational and relational objectives of communication" (Ritchie & Fitzpatrick, 1990, p. 524). FCP is comprised of two dimensions: conformity-orientation and conversation-orientation. Family communication dynamics are theorized to be defined by both conformity orientation and conversation orientation (Koerner & Fitzpatrick, 2002). *Conversation* refers to the extent to which children are encouraged to develop and express autonomous opinions and ideas to their parent(s). Parents in high conversation oriented families discuss political and social issues with their children and

encourage children to communicate openly (Chaffee, McLeod, & Wackman, 1973; Mcleod & Chaffee, 1972). Each individual is independent and may equally share her/his opinions. *Conformity* refers to the extent to which children are expected to yield to their parental authority. Parents in high conformity oriented families stress homogeneous beliefs and encourage interdependent climates (Fitzpatrick, 2004).

Research has observed that families with high conversation orientation orientations will directly communicate during conflict (Sillars, Holman, Richards, Jacobs, Koerner & Reynolds-Dyk, 2014). Thus, I anticipate conversation orientation to be positively related to the direct communication factor. Additionally, I anticipate conversation orientation and the relationship orientation factor to be positively associated with families high in conversation orientation have greater experience in hearing a variety of opinions without necessarily experiences a deterioration of relationship quality (Sillars et al., 2014). Those in low conversation orientation families do not openly communicate nor constructively communicate during conflict to the same degree at high conversation orientation families. This lack of skilled, constructive communication modeling may result in individuals reacting in aggressive ways. Schrodt and Carr (2012) observed a negative relationship between conversation orientation and individuals' trait verbal aggressiveness. Thus, I anticipate negative relationships between conversation orientation and both aggression-related factors.

Schrodt and Carr (2012) contended that high conformity oriented families might strengthen an individual's predisposition to engage in verbal aggressive behaviors as the individual's ability to openly have or share an opinion different from that of the family is stifled. Koerner and Fitzpatrick's (2002) also theorized that high family conformity will

be more associated with negative, maladaptive behaviors, including aggressive acts, than low family conformity. Because individuals are not free to constructively express a counter-opinion they then consider alternative approaches (i.e., aggressive behaviors). As individuals in low family conformity families may not feel stifled, they may be more likely to communicate in more constructive manners. Thus, I anticipate conformity orientation to be positively associated with both aggression-related factors and negatively associated with both assertion-related factors. In sum, I expect FCP to confirm the AACI's convergent validity as both FCP dimensions should relate to the all AACI factors.

Self-Esteem is a stable and enduring trait that reflects the extent to which an individual perceives her/his personal self-worth, usefulness, and general degree of liking (Glauser, 1984). Individuals with high self-esteem tend to also have high self-confidence. Previous research has explored the relationship between self-esteem and assertiveness, observing positive self-esteem positively influence assertiveness whereas negative self-esteem negatively influences assertiveness (e.g., Alden & Cappe, 1981; Bijstra, Bosma, & Jackson, 1994; Sarkova et al., 2013). Thus, I anticipate a positive relationship will be observed between self-esteem and both-assertion factors.

Glauser (1984) contended that those with low self-esteem would not be very skilled in their communication behaviors, partially due to low confidence in their abilities. Thus, individuals with low self-esteem tend to react in situations in ways that are not as skilled and are more reactionary (i.e., aggressive behaviors). Rancer, Kosberg, and Silvestri (1992) provided further support for Glauser's conceptualization when they posited that low self-esteem would be associated with the use of verbal aggression

behaviors. This relationship was supported in their analyses. Rancer et al. theorized the aggressive actions served as a defense mechanism to preserve self-perception among those with low self-esteem. This approach has been empirically supported in other studies (e.g., Donnellan, Trzeniewski, Robins, Moffitt, & Caspi, 2004; Sprott & Doob, 2000). However, the link between global self-esteem and aggression is currently being debated. Other researchers contend there is not a relationship between the two concepts, citing evidence where no association has been observed between low self-esteem and aggression-related behaviors (e.g., Baumeister, Campbell, Krueger, & Vohs, 2003; Bushman & Baumeister, 1998; Twenge & Campbell, 2003). Despite the inconsistent results research has produced to date, I anticipate a negative relationship between self-esteem and both aggression-related factors. Thus, self-esteem will assess convergent validity for all four AACI factors.

Trait Anger refers to an individual's tendency to experience anger in a variety of situation (Spielberger, 1999). Trait anger has been theorized to be closely related to aggressive behaviors because individuals are ready to respond negatively to any perceived instigation. Norlander and Eckhardt (2005) observed that trait anger does not always lead to intimate partner aggression (IPA). However, while trait anger may not always lead to aggressive actions, there are clear associations between trait anger and aggression with a variety of relationships and contexts (e.g., Barbour, Eckhardt, Davison, & Kassinove, 1998; Eckhardt, Jamison, & Watts, 2002; Ginacola, 2002; Kolla, Meyer, Bagby, & Brijmohan, 2017; Mancke, Herpertz, Kleindienst, & Bertsch, 2016; Parrott & Zeichner, 2002; Shorey, Brasfield, Febres, & Stuart, 2011). As previous research has revealed a consistent pattern demonstrating the direct association between trait anger and

aggression, I anticipate strong positive relationships between trait anger and both aggression-related factors.

Most trait anger research that also includes aggressiveness and assertiveness tends to focus on aggression behaviors (e.g., verbal aggression, physical aggression, intimate partner violence, alcohol-aggression). Assertiveness, when mentioned, is discussed as a skill-related concept that trait angry individuals do not have or employ. Scholars contend that instead of articulating their position in assertive ways, trait angry individuals resort to more reactive, aggressive forms of behavior (e.g., Barbour et al., 1998). Like several of the concepts previously addressed, I anticipate a stronger relationship with the relationship orientation factor than I do with the direct communication factor. Individuals with trait anger may still directly communicate their anger to the offending other, and this overlap may lead to a positive relationship. However, I posit it is unlikely trait angry individuals will have a relationship focus. Thus, I anticipate trait anger will be negatively related to relationship orientation. In sum, like agreeableness and locus of control, all variables are expected to relate expect for one. Divergent validity will be examined via trait anger and the direct communication factor.

Method

Participants

Five hundred and twenty-one individuals were recruited in two stages. First, University of Georgia undergraduate students enrolled in several research methods courses in the Department of Communication Studies recruited five individuals each (n = 284). The criteria for eligibility were that individuals must (a) be 18 years of age or older and (b) have a living parent or parental figure willing to also participate in the study.

Second, these recruited participants then recruited one of their parents or a parental figure to also participate in the study (n = 237). Some of the student recruiters participated in the survey, as did their parents.

Of the 521 participants, 414 were female (79.50%) and 107 identified as male (20.50%). Participant age ranged from 18 to 80 years (*M* = 36.15; SD = 16.24; median = 26). The majority of participants (*n* = 416; 79.80%) identified as White/Caucasian, Non-Hispanic, 59 (11.30%) identified as African American/Black, 21 (4.00%) as Asian/Asian American, 11 (2.10%) as Hispanic, 12 as Other (e.g., multiracial, American Indian), and two participants did not disclose their ethnicity.

The majority (over 90%) of the participants recruited in the first stage were between 18 and 25 years of age (*M* = 22.36; SD = 5.62; median = 21); however, the age range was 18-54 years. Of these 284 participants, 205 (72.2%) were female and 79 (27.8%) were male. Two hundred and thirty-seven participants were recruited in the second stage. The age of these participants ranged from 40 to 80 years old (*M* = 52.68; SD = 52; median = 52). Two hundred and nine (88.2 %) of these participants were female and 28 (11.8%) were male. Unsurprisingly, the ethnicity demographics between the first and second stage of recruited participants were highly similar: White/Caucasian, Non-Hispanic, 79.9% and 79.7%; African American/Black, 10.6% and 12.2%; Asian/Asian American, 4.2% and 3.8%; Hispanic/Latino, 1.8% and 2.5%; “Other,” 3.2% and 1.3%.

Procedure

Data collection took place in the form of a web-based survey, administered through Qualtrics. A separate web page provided the consent form and the questionnaire would not start until the participants clicked on the “consent” button. After self-verifying

eligibility and completing informed consent, participants completed the survey in approximately 35 minutes. The survey items included questions about demographics, agreeableness, entitlement, exploitativeness, extraversion, family communication patterns, self-esteem, and trait anger, aggressive communication behaviors, and assertive communication behaviors. After completing these measures, participants then read an online informational debriefing and were thanked for their participation. Student participants received research credit for their participation.

Measures

Aggressive Assertive Communication Instrument (AACI). The 100-item pool for the AACI developed and detailed in the pilot study was used for this study. Responses were assessed on a 5-point Likert-type scale on a 1 (Strongly Disagree/Extremely Uncharacteristic of Me) to 5 (Strongly Agree/Extremely Characteristic of Me) scale.

Big Five Inventory (BFI; John & Srivastava, 1991). From the BFI, the *extraversion* (8-items; $\alpha = .85$; $M = 3.37$; $SD = 0.70$) and *agreeableness* (9-items; $\alpha = .80$; $M = 3.90$; $SD = 0.58$) domains were assessed. Participants were asked to respond on a 5-point Likert-type scale from 1 (disagree strongly) to 5 (agree strongly). Sample items from extraversion include "I see myself as someone who is talkative" and "I see myself as someone who is outgoing, sociable." Sample items from agreeableness include "I see myself as someone who is helpful and unselfish with others" and "I see myself as someone who likes to cooperate with others." Higher scores indicated higher extraversion and agreeableness.

Conflict Locus of Control Scale (CLOC; Canary, Cunningham, & Cody, 1988). Perceptions of conflict were asses via the CLOC. The measure assesses

participants' internal and external control orientations toward their interpersonal conflicts on a five-point Likert-type scale of 1 (strong disagree) to 5 (strongly agree). These control orientations are comprised of a total of five dimensions: effort (e.g., "Conflicts turn out well when I try to work with the other person" and "I have found that if I don't put forth much effort, I cannot resolve conflicts with others."), ability (e.g., "I am quite able to resolve conflicts to my satisfaction" and "I have found that without good communication skills, interpersonal problems get worse."), chance (e.g., If I am lucky, then conflicts turn out to my benefit" and "My problems with other people get really bad if I am unlucky."), powerlessness (e.g., "In order to negotiate successfully, my ideas must be consistent with other persons' ideas" and "Powerful others usually determine how poorly conflicts are handled."), and situational contingencies (e.g., "The nature of the issue often determines how well my conflicts turn out" and "In my experience, conflicts turn out badly in negative relationships."). The CLOC's five dimensions were created by averaging the relevant items for each dimension: internal locus of control (effort and ability; $\alpha = .79$; $M = 3.46$; $SD = 0.55$), and external locus of control (chance, powerlessness, and situational contingencies; $\alpha = .86$; $M = 2.88$; $SD = 0.56$).

Psychological Entitlement Scale (PES; Campbell et al., 2004). Entitlement was assessed using a 9-item self-report measure that asks participants to indicate the extent to which each item reflects her/him on a seven-point Likert-type scale of 1 (strong disagreement) to 7 (strong agreement). Higher responses indicated more psychological entitlement ($M = 3.46$; SD = .55). The measure had good reliability ($\alpha = .86$). Sample items include "I honestly feel I'm just more deserving than others" and "I do not necessarily deserve special treatment" (reverse code).

Exploitativeness (Interpersonal Exploitativeness Scale; IES; Brunell et al., 2013; Narcissistic Personality Inventory; NPI; Raskin & Terry, 1988). Two scales assessed exploitativeness: the IES and a subscale from the NPI. The IES is a 33-item measure that defines exploitativeness in terms of reciprocity and social exchange. Items convey exploitativeness via situations that violate the norms of reciprocity (i.e., benefiting at the expense of others). Sample items include "What some people call taking advantage of others, I call taking care of myself" and "I'm far more concerned about my needs than the needs of others." The IES had high reliability: $\alpha = .93$. Exploitativeness is a subscale of many narcissism measures including the NPI, a popular narcissism instrument. The exploitativeness subscale is a five-item self-report assessment. The NPI subscale has acceptable reliability: $\alpha = .73$. Sample items include "I find it easy to manipulate others" and "I can make anyone believe anything I want them to." Participants were asked to respond to both measures in the same way for consistency: a five-point Likert-type scale of 1 (almost never) to 5 (almost always; IES: $M = 1.80$; SD = .46; NPI: $M = 2.27$; SD = .61).

Revised Family Communication Patterns Instrument (RFCP; Ritchie & Fitzpatrick, 1990). The RFCP was used to assess participants' levels of family conversation (15 items; $\alpha = .91$) and conformity (11 items; $\alpha = .82$). Conversation refers to the extent to which children are encouraged to develop and express autonomous opinions and ideas to their parent(s). A conversation sample item is "In our family we often talk about topics like politics and religion where some persons disagree with others." Conformity refers to the extent to which children are expected to yield to their parental authority. A sample conformity item is "When anything really important is

involved, my parents expect me to obey without question." Responses were on a 5-point Likert-type scale ranging from 1 (disagree strongly) to 5 (agree strongly). To correctly assess the overall family, questions were adapted by changing nouns so that adult children and their parents were appropriately assessed. For example, the adult child version of the questionnaire read, "I can tell my parents almost anything," whereas, the parent version of the questionnaire read, "My child can tell me almost anything." Analyses examined participants' family communication patterns (FCP) by examining an average score for the conversation (*M* = 54.70; median = 56.00; SD = 10.35; range = 15-75) and conformity (*M* = 31.36; median = 31.00; SD = 6.83; range = 14-55) subscales.

Rosenberg General Self-Esteem Scale (RGSE; Rosenberg, 1965). The RGSE assess global self-worth, self-esteem, by measuring both positive and negative feelings about the self *(M* = 3.24; SD = .54). The 10-item scale is believed to be unidimensional. Participants indicated the extent to which each item reflected her/him using a 4-point Likert-type scale of 1 (disagree strongly) to 4 (agree strongly). Sample items include "On the whole, I am satisfied with myself," "At times I think I am no good at all" (reverse code), and "I feel that I'm a person of worth, at least on an equal plane with others." The subscale had good reliability: α = .87.

State-Trait Anger Scale (STAS; Spielberger et al., 1983). Participants' trait anger was assessed using the 15-item STAS (*M* = 2.00; SD = .52). Responses are provided using a 5-point Likert-type scale where 1 (almost never) and 5 (almost always). Sample items include "I have a fiery temper," "I feel infuriated when I do a good job and get a poor evaluation," and "When I am mad, I say nasty things." The measure had good reliability: α = .89.

Results

Preliminary Analyses

Exploratory Factor Analyses. A maximum likelihood exploratory factor analysis with a Promax rotation was conducted to examine the factor structure observed in the pilot study. As in the pilot study, the factors were expected to correlate; thus, the non-orthogonal rotation method was appropriate. Once again items were removed due to substantial cross-loadings (> .35 on more than one factor) and due to low loadings (> .40) on any factor. As this study examined a partially different sample from the pilot study (i.e., an older sample was recruited), all 100-items were retained to investigate whether a different factor structure would appear.

A series of analyses revealed the same consistent four factor structure from the pilot study. The factor structure was comprised of the same 25 items (See Table 2.4) and was reliable: direct communication, $\alpha = .80$; relationship orientation, $\alpha = .75$; verbal aggression, $\alpha = .64$; physical aggression, $\alpha = .89$; total scale, $\alpha = .72$. When two items were added, reliabilities improved: item 72 to the relationship orientation factor and item 61 to the verbal aggression factor. The result was a 27-item four factor structure. The factors were computed averaging items for each respective factor: direct communication (7 items; $\alpha = .80$; $M = 3.21$; $SD = 0.74$), relationship orientation (7 items; $\alpha = .80$; $M = 3.98$; $SD = 0.60$), verbal aggression (5 items; $\alpha = .81$; $M = 2.36$; $SD = 0.88$), and physical aggression (8 items; $\alpha = .89$; $M = 1.49$; $SD = 0.66$). Internal consistency for the 27-item scale was acceptable ($\alpha = .72$; $M = 2.75$; $SD = 0.34$) with corrected item-total correlations at or above .50. See Table 3.1 for factor loadings for the 27-item AACI.

As with the pilot study, the factors were related in the same pattern. Physical aggression significantly negatively correlated with relationship orientation ($r(498) = -.45$, $p < .001$), significantly positively correlated with verbal aggression ($r(500) = .50$, $p < .001$), and did not significantly correlate with direct communication ($r(498) = -.02$; *ns*). Verbal aggression and relationship orientation were significantly negatively correlated ($r(503) = -.21$, $p < .001$). Direct communication did not significantly correlate with any of the other factors: relationship orientation, ($r(500) = .02$, *ns*) or verbal aggression, ($r(502) = .03$, *ns*).

Table 3.1

Standardized Factor Loadings for 27-item Aggressive and Assertive Communication Instrument (AACI) Derived by EFA for Study 2

	Physical Aggression	**Relationship Orientation**	**Direct Communication**	**Verbal Aggression**
78. I have hit someone with the idea of hurting her/him.	**.79**	.10	.01	.01
65. I have threatened people I know.	**.78**	.02	-.01	.06
45. I have taken my anger out on others by using physical force.	**.77**	.11	-.00	.07
43. Sometimes I push or shove others when I am mad.	**.77**	-.03	-.00	.05
37. I get into physical fights more than the average person.	**.77**	-.05	-.01	-.17
29. I assert my opinions or point-of-view by my physical prowess.	**.67**	.04	.01	-.04
85. I feel good when I win fights by putting someone else down.	**.65**	-.10	.08	.05
30. I believe that if you back down from a fight, you are a coward.	**.55**	-.03	-.05	.03
72. I believe that respecting different opinions is important. (reverse code)	-.09	**.75**	-.00	.01
93. I work to respect others' feelings, thoughts, and desires.	-.06	**.73**	.00	.00
90. I believe that compromises are important.	.00	**.70**	.01	.06
94. I am comfortable having relationships with others who are different from me.	-.16	**.66**	.03	.17
92. I am able to control my anger in order to have constructive conversations.	.18	**.55**	.04	-.22
60. When I feel myself get angry, I try to calm myself down to have a constructive conversation.	.05	**.53**	-.02	-.11
84 It is important to affirm others' point of view, even if I disagree.	.11	**.41**	-.03	.02

34. I find it difficult to stand up for myself. (reverse code)	-.05	.01	**.76**	.02
28. When I decide I have an issue with someone, I have difficulty telling the other person. (reverse code)	-.00	-.10	**.70**	.07
24. Sometimes I avoid asking questions because I feel self-conscious. (reverse code)	.05	.02	**.65**	-.11
63. I avoid asking questions for fear of feeling stupid. (reverse code)	-.04	-.01	**.60**	-.12
6. When problems arise, I avoid discussing the problem. (reverse code)	-.07	.12	**.53**	.03
25. I am overly careful to avoid hurting others' feelings. (reverse code)	.03	-.23	**.53**	.05
1. If someone treats me unfairly I address her/him directly.	.13	.16	**.52**	.10
51. I sometimes get into yelling fights.	-.13	-.06	.01	**.83**
66. I curse at others when I am angry.	.13	.08	.03	**.72**
42. I believe that yelling is sometimes necessary.	-.06	.00	.02	**.67**
79. I yell at others when they annoy me.	.18	-.09	.02	**.60**
61. When angry, I take it out on others.	.18	-.04	-.16	**.41**

Note: Extraction Method: Maximum Likelihood. Rotation Method: Promax with Kaiser Normalization.

Confirmatory Factor Analyses. As in the pilot study, confirmatory factor analyses (CFA) were conducted to further evaluate the factor structure obtained in the exploratory factor analysis. As the factor structure observed in the EFA was consistent with the factor structure observed in Study 1, the CFA results were expected to mirror those of the previous study. Model fit indices included the root-mean-square error of approximation (RMSEA), standardized root-mean-square residual (SRMR), comparative fit index (CFI), Tucker-Lewis Index (TLI), and chi-square test of model fit. Based on the EFA, four factors were constructed: direct communication (7 items), relationship orientation (6 items), physical aggression (8 items), and verbal aggression (4 items). Although the EFA results revealed the same pattern observed in the pilot study, the same results were not observed with the CFA.

The first CFA attempt to assess the 25-item, four-factor model produced failed results as there was no convergence as the number of iterations was exceeded. An analysis of item loadings revealed 6 muddled factors. (1) Items 29, 37, 45, 65, and 78 still loaded with physical aggression (See Table 3.1 for item wording). (2) Items 60, 84, 90, 92, and 94 remained with relationship orientation. (3) Items 1, 6, 24, 25, 28 remained with direct communication. (4) Items 42, 51, 66, and 79 still loaded with verbal aggression. Item 72 from relationship orientation loaded with the verbal aggression items. (5) Items from the EFA physical aggression factor (i.e., 30, 43, and 85) and items from the EFA direct communication factor (i.e., 34 and 63) merged together, creating the first new factor. (6) Items 61 from verbal aggression and 72 from relationship orientation also loaded onto one factor together. Interestingly, items 61 and 72 were the two items added in the EFA analyses that improved reliabilities for two different factors and the entire

measure. A series of analyses were conducted to find the best model fit. Four possible models emerged.

First, when the eight items that no longer loaded with their EFA-designated factor (i.e., items 30, 34, 43, 61, 63, 72, 85, 93) were removed from CFA analyses, results revealed an acceptable model fit with 61 free parameters. The RMSEA (0.06) was acceptable (<0.06), and the SRMR (0.06) confirmed good fit (<0.08). The CFI and TLI indicated adequate fit (CFI=0.90 and TLI=0.89; for CFI or TLI > 0.90). When compared to the Tau equivalence model, the CFA was preferred (χ^2 = 3134.84, df = 171, $p < .001$). With this model, most factors achieved acceptable reliability: direct communication (5 items; $\alpha = .72$), relationship orientation (5 items; $\alpha = .68$), verbal aggression (4 items; $\alpha = .81$), and physical aggression (5 items; $\alpha = .84$). The whole 19-item measure failed achieved good reliability, $\alpha = .66$.

A second model tested the same four factor and items as above but reintroduced item 34 to the direct communication factor. Results revealed a four-factor model with 64 free parameters with improved model fit: RMSEA = 0.05, SRMR = 0.06, CFI = 0.91, TLI = 0.90, χ^2 = 3433.03, *df* = 190, $p < .0001$. Individual factor reliability scores improved for the direct communication factor and total measure: direct communication (6 items; $\alpha = .78$), relationship orientation (5 items; $\alpha = .68$), verbal aggression (4 items; $\alpha = .81$), physical aggression (5 items; $\alpha = .84$); and the 20-item measure ($\alpha = .68$).

The third successful model had the same foundational items as above, including item 34, and reintroduced items 43 and 85 to the verbal aggression factor. Results revealed a four-factor model with 70 free parameters with acceptable model fit: RMSEA = 0.05, SRMR = 0.06, CFI = 0.92, TLI = 0.91, χ^2 = 4247.19, *df* = 231, $p < .0001$. Factor

and total-item reliabilities were further improved in this model: direct communication (6 items; α = .78), relationship orientation (5 items; α = .68), verbal aggression (4 items; α = .81), and physical aggression (7 items; α = .89); 22-item measure (α = .72).

A review of item standardized factor loadings revealed item 84 of the relationship orientation factor had dropped to .331. Thus, a forth model was assessed. Results revealed a four-factor model with 67 free parameters with acceptable model fit: RMSEA = 0.05, SRMR = 0.06, CFI = 0.92, TLI = 0.91, χ^2 = 4164.90, *df* = 210, $p < .0001$. Factor and total-item reliabilities were highest in this model: direct communication (6 items; α = .78), relationship orientation (4 items; α = .70), verbal aggression (4 items; α = .81), and physical aggression (7 items; α = .89); 21-item measure (α = .73). Based on these analyses, the fourth model had the most utility for this project. Although the final results of the CFA analyses still revealed the same four-factor model, each factor's item composition was altered. All other attempts to reintroduce items either failed or provided poorer model fit results.

Based on these CFA analyses, final factors were computed averaging items for the factors: direct communication (α = .78, *M* = 3.20; *SD* = 0.74), relationship orientation (α = .70; *M* = 3.99; *SD* = 0.64), verbal aggression (α = .81; *M* = 2.40; SD = 0.96), and physical aggression (α = .89; *M* = 1.47; *SD* = 0.67). Physical aggression significantly negatively correlated with relationship orientation ($r(498) = -.42$, $p < .001$), significantly positively correlated with verbal aggression ($r(502) = .44$, $p < .001$), and did not significantly correlate with direct communication ($r(498) = .01$, *ns*). Verbal aggression significantly negatively correlated with relationship orientation ($r(503) = -.18$, $p < .001$) and, interestingly, significantly positively correlated with direct communication ($r(502) =$

.10, $p < .05$). Direct communication and relationship orientation did not significantly correlate ($r(500) = .02$, *ns*). Internal consistency for the 21-item scale was acceptable ($\alpha = .73$; $M = 2.77$; $SD = .39$) with corrected item-total correlations at or above .50. See Table 3.2 for factor loadings and the 21-item AACI.

Table 3.2

Standardized Factor Loadings for 21-item Aggressive and Assertive Communication Instrument (AACI) Derived by CFA for Study 2

	Physical Aggression	**Relationship Orientation**	**Direct Communication**	**Verbal Aggression**
78. I have hit someone with the idea of hurting her/him.	**.74**	---	---	---
65. I have threatened people I know.	**.81**	---	---	---
45. I have taken my anger out on others by using physical force.	**.75**	---	---	---
43. Sometimes I push or shove others when I am mad.	**.81**	---	---	---
37. I get into physical fights more than the average person.	**.70**	---	---	---
29. I assert my opinions or point-of-view by my physical prowess.	**.61**	---	---	---
85. I feel good when I win fights by putting someone else down.	**.72**	---	---	---
90. I believe that compromises are important.	---	**.69**	---	---
94. I am comfortable having relationships with others who are different from me.	---	**.76**	---	---
92. I am able to control my anger in order to have constructive conversations.	---	**.48**	---	---
60. When I feel myself get angry, I try to calm myself down to have a constructive conversation.	---	**.47**	---	---
34. I find it difficult to stand up for myself. (reverse code)	---	---	**.75**	---
28. When I decide I have an issue with someone, I have difficulty telling the other person. (reverse code)	---	---	**.74**	---
24. Sometimes I avoid asking questions because I feel self-conscious. (reverse code)	---	---	**.57**	---
6. When problems arise, I avoid discussing the problem. (reverse code)	---	---	**.52**	---
25. I am overly careful to avoid hurting others' feelings. (reverse code)	---	---	**.53**	---
1. If someone treats me unfairly I address her/him directly.	---	---	**.55**	---
51. I sometimes get into yelling fights.	---	---	---	**.75**
66. I curse at others when I am angry.	---	---	---	**.77**
42. I believe that yelling is sometimes necessary.	---	---	---	**.63**
79. I yell at others when they annoy me.	---	---	---	**.73**

Descriptives

Analyses were conducted for each of the four factors to examine whether any covariates were present. Independent samples t-tests indicated an age difference on the direct communication factor, such that participants who were the sample mean age of 36.15 years or older achieved higher direct communication scores (M = 3.24, SD = .68) than did participants who were 36.14 years old or younger (M = 3.19, SD = .79), $t(506)=.875$, p = .01. An analysis completed with the median age of 26 years revealed the same results: participants who were the sample median age of 26 years or older reported more direct communication (M = 3.25, SD = .68) than did participants who were 25 years old or younger (M = 3.18, SD = .79), $t(496)=1.03$, p = .01. Thus, older individuals were more direct in their communication patterns than were those who were younger. There was also a gender difference observed with the physical aggression communication factor, such that males reported more higher physical aggression scores (M = 1.73, SD = .68) than did females (M = 1.43, SD = .64), $t(504)=-4.11$, p = .05. No other consistent differences were observed.

Validity Analyses

A series of bivariate regression analyses exploring the four factors revealed in both this study and in the pilot study: direct communication, relationship orientation, verbal aggression, and physical aggression. Before the regression analyses, the variables were initially compared to one another using correlation analyses (See Table 3.3).

Agreeableness. Results were expected to mirror those of the pilot study: a positive relationship with the relationship orientation factor and a negative relationship with both aggression-related factors. Aligning with expectations, agreeableness positively

significantly related to relationship orientation (adjusted R^2 = 0.31, F(1, 103) = 48.70, p < .001; β = .57, p < .001) and negatively significantly related to verbal aggression (adjusted R^2 = 0.19, F(1, 105) = 25.73, p < .001; β = -.44, p < .001) and physical aggression (adjusted R^2 = 0.39, F(1, 103) = 67.09, p < .001; β = -.63, p < .001). There was not a significant relationship with direct communication, adjusted R^2 = 0.01, F(1, 100) = 2.40, *ns*; β = -.15, *ns.*

Extraversion. A positive relationship between extraversion and both assertion factors was anticipated. Counter to the results observed in the pilot study, but in alignment with previous studies, extraversion positively significantly related to the direct communication factor, adjusted R^2 = 0.13, F(1, 104) = 16.36, p < .001; β = .37, p < .001. The model for the relationship orientation factor was significant, adjusted R^2 = 0.04, F(1, 107) = 5.46, p < .05. As expected, extraversion significantly positively predicted relationship orientation, β = .22, p < .001. I anticipated a negative relationship between extraversion and physical aggression. The model for the physical aggression factor was significant, adjusted R^2 = 0.04, F(1, 107) = 4.38, p < .05. As expected, extraversion significantly negatively predicted physical aggression, β = -.20, p < .001. The verbal aggression factor was not significant, adjusted R^2 = -0.00, F(1, 109) = .36, *ns*; β = -.06, *ns*.

Conflict Locus of Control. Both internal and external conflict locus of control were examined. For internal conflict locus of control, the posited relationships were that assertion-related factors would be positively related and the aggression-related factors would be negatively related. These posited relationships were the same relationships posited for the pilot study. As with the previous study, all coefficients were in the

expected direction, but not all relationships were significant. The model for the direct communication factor was nonsignificant, adjusted R^2 = 0.00, F(1, 457) = 1.95, *ns*; β = .07, *ns*. Relationship orientation was positively significantly related, adjusted R^2 = 0.15, F(1, 456) = 80.45, $p < .001$; β = .39, $p < .001$. Like with the assertion-related factors, only one aggression-related factor was significant. The model for the verbal aggression factor was nonsignificant, adjusted R^2 = -0.00, F(1, 457) = .49, *ns*; β = -.03, *ns*. Physical aggression was negatively significantly related, adjusted R^2 = 0.03, F(1, 453) = 17.17, $p <$ .001; β = -.19, $p < .001$.

Oppositional relationships were anticipated for external locus of control. Consistent with the results from the pilot study, three of these anticipated results were significant in the expected direction: direct communication, verbal aggression, and physical aggression. The direct communication model was significant, adjusted R^2 = 0.01, F(1, 430) = 6.29, p = .01, and coefficient was negative, β = -.12, p = .01. As expected, the verbal aggression model was significant, adjusted R^2 = 0.05, F(1, 430) = 22.85, $p < .001$, and coefficient was positive, β = .23, $p < .001$. Similarly, the physical aggression model was significant, adjusted R^2 = 0.05, F(1, 426) = 23.75, $p < .001$, and coefficient was positive, β = .23, $p < .01$. The relationship orientation model was not significant, adjusted R^2 = -0.00, F(1, 429) = .50, *ns*, though the coefficient was negative, β = -.03, *ns*.

Entitlement. I anticipated a negative relationship between psychological entitlement and both assertion-related factors, but the relationship should be stronger for the relationship orientation factor as this factor is more focused on the other individual. For the relationship orientation factor, the model was significant, adjusted R^2 = 0.01, F(1, 491) = 3.44, $p < .05$. As expected, the coefficient was negative, β = -.09, $p < .05$.

However, the direct communication factor did not have a significant association, adjusted $R^2 = 0.00$, $F(1, 492) = 2.05$, *ns*; $\beta = .06$, *ns*. For the aggression-related factors, I anticipated high levels of entitlement to be positively related to both verbal aggression and physical aggression. Results were consistent with these expectations: verbal aggression, adjusted $R^2 = 0.07$, $F(1, 492) = 35.17$, $p < .001$; $\beta = .26$, $p < .001$; physical aggression, adjusted $R^2 = 0.10$, $F(1, 487) = 55.21$, $p < .001$; $\beta = .32$, $p < .001$

Exploitativeness. Two measures assessed exploitativeness: The Interpersonal Exploitativeness Scale (IES; Brunell et al., 2013) and a subscale from the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). Expectations for exploitativeness were (a) a positive relationship between exploitativeness and both aggression-related factors, (b) a positive relationship between exploitativeness and the direct communication factor, and (c) a negative relationship between exploitativeness and the relationship orientation factor. The results for the aggression-related factors were consistent for both exploitativeness instruments; however, the results for the assertion-related were not consistent.

For both verbal aggression and physical aggression, there was a significant positive relationship with both the IES and the NPI: verbal aggression (IES; adjusted $R^2 = 0.10$, $F(1, 414) = 49.11$, $p < .001$; $\beta = .33$, $p < .001$; NPI; adjusted $R^2 = 0.05$, $F(1, 479) = 24.62$, $p < .001$; $\beta = .22$, $p < .001$); physical aggression (IES; adjusted $R^2 = 0.17$, $F(1, 409) = 83.27$, $p < .001$; $\beta = .41$, $p < .001$; NPI; adjusted $R^2 = 0.02$, $F(1, 473) = 12.60$, $p < .001$; $\beta = .16$, $p < .001$).

As for the assertion-related factors, exploitativeness was significantly related to both factors in the direction anticipated. As expected, the relationship between

exploitativeness was positive, using the NPI measure, and the direct communication factor, adjusted R^2 = 0.05, F(1, 479) = 26.02, p < .001; β = .23, p < .001. The same relationship was observed with the IES measure: adjusted R^2 = 0.01, F(1, 414) = 5.38, p < .05; β = .11, p < .05. The relationship orientation model was significant for the IES measure, adjusted R^2 = 0.06, F(1, 412) = 26.71, p < .001. As anticipated, the coefficient was negative, β = -.25, p < .001. Interestingly, the NPI measure did not reveal a significant association between exploitativeness and the relationship orientation factor, adjusted R^2 = -0.00, F(1, 476) = 0.62, *ns*; β = .04, *ns.*

Family Communication Patterns. Conversation orientation was expected to have (a) positive relations with both assertion-related factors and (b) negative relationships with both aggression-related factors. Conformity orientation was expected to have (a) negative relations with both assertion-related factors and (b) positive relationships with both aggression-related factors.

Conversation Orientation. The model for the direct communication focus was significant and the coefficient was positive (adjusted R^2 = 0.01, F(1, 493) = 4.25, p < .05; β = .10, p < .05), as was the model and coefficient for the relationship orientation factor (adjusted R^2 = 0.10, F(1, 491) = 52.57, p < .001; β = .31, p < .001). The model for the physical aggression factor was significant and negative, adjusted R^2 = 0.08, F(1, 487) = 43.48, p < .001; β = -.29, p < .001. The model for the verbal aggression factor was not significant, adjusted R^2 = 0.00, F(1, 493) = 1.33, *ns*; β = -.05, *ns.*

Conformity Orientation. Of the assertion-related factors, only the relationship orientation was significantly negatively associated with conformity orientation. This model was significant, adjusted R^2 = 0.02, F(1, 497) = 13.25, p < .001, and the coefficient

was negative and significant, β = -.16, p < .001. The model for direct communication was not significant, adjusted R^2 = 0.00, F(1, 498) = 1.39, *ns*; β = -.05, *ns*; β = -.05, *ns.* The models for the aggression-related factors were both significant and in the anticipated direction: verbal aggression (adjusted R^2 = 0.03, F(1, 499) = 15.98, p < .001; β = .18, p < .001) and physical aggression (adjusted R^2 = 0.04, F(1, 494) = 21.05, p < .001; β = .20, p < .001).

Self-Esteem. A positive relationship between self-esteem and both assertion factors was anticipated. The models for both the direct communication and the relationship orientation factors were significant and in directions expected: direct communication, adjusted R^2 = 0.11, F(1, 491) = 64.06, p < .001; β = .34, p < .001; relationship orientation, adjusted R^2 = 0.12, F(1, 490) = 64.72, p < .001; β = .34, p < .001. Opposite relationships were expected for aggression-related factors. Results were as expected for both verbal aggression (adjusted R^2 = 0.04, F(1, 491) = 19.57, p < .001; β = -.20, p < .001) and physical aggression (adjusted R^2 = 0.11, F(1, 486) = 63.54, p < .001; β = -.34, p < .001).

Trait Anger. I expected (a) negative relationships between trait anger and both assertion-related factors and (b) positive relationships between trait anger and both aggression-related factors. The relationship was expected to be stronger for the aggression factors than the assertion factors. Trait anger and direct communication were not significantly associated, adjusted R^2 = -0.00, F(1, 330) = .30, *ns*; β = .03, *ns*. The model for the relationship orientation factor was significant, adjusted R^2 = 0.02, F(1, 328) = 6.32, p = .01. Trait anger significantly negatively predicated relationship orientation, β = -.14, p = .01. Trait anger was negatively significantly related to verbal aggression

(adjusted R^2 = 0.17, $F(1, 330) = 67.89$, $p < .001$; $\beta = .41$, $p < .001$) and physical aggression (adjusted R^2 = 0.10, $F(1, 325) = 34.81$, $p < .001$; $\beta = .31$, $p < .001$).

Table 3.3

Bivariate Correlations for Individual Difference Variables and Factors of the Aggressive and Assertive Communication Instrument (AACI) for Study 2

		M (SD)	Direct Communication	Relationship Orientation	Verbal Aggression	Physical Aggression
Agreeableness		3.90 (.58)	-.15	**.57*** **	**-.45*** **	**-.63*** **
Entitlement		3.05 (1.18)	.06	**-.08***	**.26*** **	**.32*** **
Exploitativeness						
	IES	1.80 (.46)	**.11***	**-.25*** **	**.33*** **	**.41*** **
	NPI	2.27 (.61)	**.23*** **	.04	**.22*** **	**.16*** **
Extraversion		3.37 (.70)	**.37*** **	**.22***	-.06	**-.20***
Conflict Locus of Control						
	External	2.88 (.56)	**-.12****	-.03	**.23*** **	**.19*** **
	Internal	3.46 (.55)	.07	**.40*** **	-.03	**-.29*** **
Family Communication Patterns						
	Conversation	3.70 (.68)	**.10***	**.31*** **	-.05	**-.29*** **
	Conformity	2.85 (.62)	-.05	**-.16*** **	**.18*** **	**.20*** **
Self-Esteem		3.24 (.54)	**.34*** **	**.34*** **	**-.20*** **	**-.34*** **
Trait Anger		2.00 (.52)	.03	**-.13****	**.41*** **	**.31*** **

Note: *p < .05; **p < .01; ***p < .001

Discussion

AACI Item and Factor Composition

Based on the pilot data from Study 1, the AACI is a 25-item, four-factor scale that assesses assertive and aggressive communication behaviors in four subscales: direct communication, relationship orientation, verbal aggression, and physical aggression. Two of these factors are more theoretically linked to assertiveness (i.e., direct communication and relationship orientation) and two are linked to aggressiveness (i.e., verbal aggression and physical aggression). Based on the results of the current study, this factor structure is stable and reliable: direct communication ($\alpha = .78$; 6 items), relationship orientation ($\alpha = .70$; 4 items), verbal aggression ($\alpha = .81$; 4 items), physical aggression ($\alpha = .89$; 7 items). The item composition of the AACI changed from the pilot study after a series of EFA and CFA analyses were conducted to examine model fit with a new, more diverse sample. The final result was a 21-item measure that had acceptable internal consistency reliability ($\alpha = .73$). All 21 items were also present in the EFA and CFA analyses from Study 1.

Additionally, the convergent and divergent validity results of this study provide further support that the four-factor AACI assesses aggressive and assertive communication behaviors in the expected directions. As in the pilot study, some analyses revealed consistent results between the assertive-related factors (i.e., exploitativeness - IES, extraversion, conversation orientation, and self-esteem) and the aggressive-related factors (i.e., agreeableness, entitlement, exploitativeness – both IES and NPI, external locus of control, conformity orientation, self-esteem, and trait anger). However, other relationships were unique to one factor: (1) extraversion – NPI and external locus of control were significantly related to the direct communication factor but were not

significantly related to the relationship-orientation factor; (2) agreeableness, entitlement, internal locus of control, conformity orientation, and trait anger were all significantly related to the relationship orientation factor but not to the direct communication factor; (3) extraversion, internal locus of control, and conversation orientation were significantly related to the physical aggression factor but not with the verbal aggression factor. The verbal aggression factor had no unique relationships. These results further support a multidimensional measurement approach.

Validity Results

Aside from confirming the factor structure of the AACI, another goal of this study was to examine whether the same convergent validity relationships would be observed in this study as were observed in the pilot study. Agreeableness, extraversion, and conflict locus of control were the three variables examined in both studies. Agreeableness had the same significant directional relationships in both studies: a positive relationship with relationship orientation and negative relationships with both aggression-related factors. Except one relationship no longer showing significance (i.e., internal locus of control and direct communication), both internal locus of control and external locus of control revealed the same result patterns. In the pilot study, extraversion only significantly related to one factor (i.e., direct communication), and in the opposite direction than was expected. In this study, extraversion was significantly related to direct communication, relationship orientation, and physical aggression, all in the anticipated directions. Aligning with previous studies and my expectations, extraversion was (a) significantly positively related to both direct communication and relationship orientation and (b) significantly negatively related to physical aggression. A significant relationship was not

observed with verbal aggression. These results are encouraging as they are consistent with concept conceptualizations and previous study results (Bouchard et al., 1988; John et al., 1991; Ramanaiah & Deniston, 1993). All other significant validity results were also in the expected directions. Although the significant validity results were as anticipated, there were still a few interesting patterns that should be discussed.

Exploitativeness. Exploitativeness was assessed with two different measures for this study, the IES and the NPI exploitativeness subscale. Results were consistent amongst the two measures apart from one result. A significant relationship was observed between the IES and relationship orientation, as expected; however, with the NPI exploitativeness subscale, a significant relationship was not observed. Additionally, although both relationships were significant, the NPI exploitativeness subscale and the direct communication factor were more positively significantly related than was the IES to the same factor. These data trends lead me to reflect on why and how the exploitativeness measures are relating to assertiveness in a different manner than to aggressiveness.

Although little research has investigated the relationship between exploitativeness and assertiveness, Watson et al. (1998) observed significant relationships between narcissism and assertiveness. In their study, narcissism was measured using the NPI, a popular narcissism measure. This current study utilized the NPI exploitativeness subscale. Although Watson et al. observed stronger relationships between "healthier" narcissism than "maladjusted" narcissism, of which exploitativeness is a dimension, significant relationships were observed for both types of narcissism. Watson et al.'s study may help explain why when exploitativeness was assessed with the NPI a significant

positive relationship between exploitativeness and the direct communication factor were observed, whereas a nonsignificant was observed between exploitativeness and direct communication when exploitativeness was assessed via the IES.

To review, the IES assesses exploitativeness via situations that violate the norms of reciprocity. This approach has a narrower scope than does the exploitativeness subscale of the NPI. The exploitativeness subscale assesses the extent to which an individual will exploit others to achieve her/his own desires, including expecting favors and lying to manipulate others, including but not limited to violating the norms of reciprocity (Raskin & Terry, 1988). Future research should further explore the relationship between exploitativeness and assertiveness.

Self-Esteem. Self-esteem was the one trait in this study that significantly related to all four factors. In support of previous research and as anticipated, self-esteem was positively related to both direct communication and relationship orientation. In this study, I found a robust relationship between global self-esteem and aggression-related behaviors as both the verbal aggression and the physical aggression factors had strong significant associations. These results indicate support for those who contend self-esteem and aggression are related (e.g., Glauser, 1984; Rancer et al., 1992). These results may also contribute to the current debate on whether self-esteem and global self-esteem are related or not (e.g., Baumeister et al., 2003; Donnellan et al., 2004). It should be noted that participants in this study reported high self-esteem (M =3.24; SD = .54) and that future research should explore whether the results observed in this study are present amongst a sample with more self-esteem diversity. For this study, less than 2% of participants

reported low self-esteem with a score of two or less, whereas 66.2% of participants had a self-esteem score of three or higher.

Limitations and Future Directions

As with the pilot study, measurements were cross-sectional and retrospective. The sample was also still fairly homogeneous. However, this sample was more diverse from the pilot study sample in age. The first study sample was comprised only of college students (*M* = 19.97; SD = 1.56; range: 18-30), whereas this study was partially comprised of an older population (*M* = 36.15; SD = 16.24; median = 26; range: 18-80). The next study, Study 3 will attempt to further diversify the sample to better assess the AACI's generalizability.

Study 3 will also further cross-validate the item composition of the AACI. As the pilot study and the current study had the same 100-items assessed and revealed fairly consistent factor composition results, items that have repeatedly not loaded will be removed from the question pool. Additionally, several new items will be composed to further bolster the direct communication, relationship orientation, and verbal aggression factors. This attempt will aim at increasing the number of items that align with each respective factor and will hopefully further raise both factor and measure reliability scores. Another goal of the next study will be to examine whether the AACI differs depending on context. In Study 3, participants will be asked to complete the AACI reflecting on themselves and their relationship with an acquaintance, a close friend, or a romantic partner. Last, the AACI will be assessed via an empirical comparison with established measures of aggressiveness, assertiveness, and two related concepts (i.e.,

argumentativeness and conflict management styles). Study 3 will serve as the final cross-validation process for the AACI in this dissertation.

CHAPTER 4: CONDITIONS STUDY

EXAMINING THE AACI AND DIFFERENT RELATIONSHIP TYPES

Based on results observed in Study 1 and Study 2, the Aggressive and Assertive Communication Instrument (AACI) factor structure representing aggressive behaviors and assertive behaviors is consistent. Two factors relate to assertive behaviors: direct communication and relationship orientation. Two factors relate to aggressive behaviors: verbal aggression and physical aggression. Results from both studies have revealed the factors relate to dispositional tendencies as expected. The objective of Study 3 is to cross-validate the factor structure of the AACI from Study 2 using data collected from a new sample and to finalize the AACI. Although the factor structure has been consistent, the item composition of each factor is still in flux. As such, I will use the current study is to further examine the item composition of each factor, hopefully revealing stable and consistent item selections for each factor.

Another objective of Study 3 is to provide further validity data via established measures of aggressiveness and assertiveness. As reviewed in Chapters 1 and 2, existing measures of aggression and assertion served as a foundation basis for the development of the AACI. Thus, it is appropriate to examine these measures with the AACI factor structure for both convergent and divergent validity. My hope is these results will exemplify (a) that the AACI does assess aggressive and assertive behaviors and (b) that the AACI assesses aggressiveness and assertiveness in a manner that is not currently captured by any one existing measure. In addition to these validation analyses, two

concepts commonly related to both aggressive and assertive behaviors will be examined: conflict management styles and argumentativeness.

Validation

Convergent and divergent validity analyses were conducted with existing measures of aggressiveness and assertiveness and two dispositional traits (i.e., conflict management style and argumentativeness). The goal of these analyses is to confirm that the four AACI factors relate to like concepts as they should and that the relationships that should not be present are not. The Bakker Assertiveness-Aggressiveness Inventory (BAAI) and argumentativeness will examine the AACI factors for both convergent and divergent validity. All other variables will solely examine convergent validity expectations.

The Bakker Assertiveness-Aggressiveness Inventory (BAAI; Bakker et al., 1978) assess both aggressiveness and assertiveness in two subscales. The BAAI contends that both aggressive and assertive behaviors exist under the umbrella of assertiveness but are separate response types. The aggressive subscale assesses behaviors related to acquiring territory, prerogatives, or status that was not formerly one's own. The assertiveness subscale assesses behaviors that occur in response to another individual's aggressive behavior and in which an individual seeks to maintain or regain control of territory, prerogatives, or status s/he previously had. Bakker et al.'s conceptualizations of aggressive and assertive behavior are not wholly synonymous with the conceptualizations utilized in this project or in other instruments that assess aggressiveness or assertiveness. Both aggressive items (e.g., "Someone has done or said something that arouses your curiosity. You refrain from asking questions") and assertive items (e.g., "Someone has, in

your opinion, treated you unfairly or incorrectly. You confront the person directly concerning this.") all commonly relate to whether an individual decides to directly communicate her/his opinion to others.

Based on this commonality amongst the BAAI's aggressive and assertive items, I expect both the BAAI aggressive factor and the BAAI assertive factor to positively relate to direct communication. As neither the BAAI's aggressive or assertive items reflect any focus on the other person, I expect neither BAAI factor to not be significantly related to the relationship orientation factor. Additionally, as none of the BAAI items reflect verbally aggressive or physically aggressive items, instead of the focus on the acquisition or defense of territory, I expect neither BAAI factor to be significantly related to the verbal aggression or physical aggression factors. In sum, the BAAI aggressive factor and the BAAI assertive factor should confirm convergent validity by positively relating to the AACI direct communication factor. Both BAAI factors should not relate to the relationship orientation, verbal aggression, or physical aggression factors, confirming divergent validity.

The Buss and Perry Aggression Questionnaire (BPAQ; Buss & Perry, 1992) assess aggression in four subscales: physical aggression, verbal aggression, anger, and hostility. Positive relationships are expected between the verbal aggression and physical aggression factors in both measures. As aggression is often associated with feelings of anger and hostility, I also anticipate positive relationships between anger and hostility with both verbal aggression and physical aggression. Conversely, I anticipate a negative relationship between all BPAQ factors with the AACI assertion-related factors. Therefore, all variables should be related, although in different directions.

The Verbal Aggressiveness Scale (VAS; Infante & Wigley, 1986) is a measure that assesses an individual's trait verbal aggressiveness. Thus, I anticipate a positive relationship between VAS and the AACI verbal aggression factor. As verbal and physical aggression are commonly related, I also expected the VAS and the AACI factor to be positively related. Although verbally aggressive behaviors also involve directly communicating with the other individual, I anticipate a negative relationship as the direct items were composed to assess direct communication with the absence of an attack on the other. As verbally aggressive behaviors involve an attack on the other individual, the VAS should negatively relate to relationship orientation. Thus, VAS will serve as a convergent validity test as all variables should be related, although in different directions.

The Assertion Inventory (AI; Gambrill & Richey, 1975) assesses assertiveness with two dimensions. First, the degree of discomfort which assesses the extent to which an individual feels uncomfortable in specific situations. Second, response probability explores the likelihood an individual will engage in assertive behavior. I expect AI to confirm the AACI's convergent validity as both AI dimensions should (a) positively related to the assertion-related factors and (b) negatively related to the aggression-related factors.

Rahim's Organizational Conflict Inventory-II (ROCI-III; Rahim & Magner, 1995) assesses an individual's conflict management style. Five styles (i.e., avoidance, accommodation, competition, cooperation, and collaboration) are classified along dimensions of concern for self, often referred to as assertiveness, and concern for others, or cooperation. Assertiveness behaviors are associated with the assertiveness/concern for self dimension. Therefore, all variables should be related, although in different directions.

Accommodation is employed by individuals high in concern for others and low concern for self. Accommodation tactics include giving in to the other person in an attempt to avoid a conflict interaction. As accommodation is comprised of a high degree of concern for others, I anticipate a positive relationship with the relationship orientation factor. As accommodating individuals give in to the other person and do not seek to fulfill their needs, wants, goals, or desires, I anticipate negative relationships with the direct communication, verbal aggression, and physical aggression factors.

Avoidance is characterized by mentally, physically, or emotionally withdrawing from the conflict and denying its existence. This style is low in both concern for self and others. Thus, I expect avoidance to be negatively related to all four AACI factors.

Collaboration is a conflict style utilized by individuals highly concerned about achieving their own wants, goals, and desires as well as those of others. Collaborating individuals seek to have their own and the other individuals' desires satisfied for a "win, win" solution. Such individuals are high in assertiveness and high in cooperation. Thus, I expect collaboration to be (a) positively related to both assertion-related factors and (b) negatively related to both aggression-related factors.

Competitiveness occurs in individuals who are highly concerned about themselves but not highly concerned about others. Competitive individuals pursue their own needs, wants, goal, or desires without care for the other. I expect a positive relationship with both aggression-related factors and a negative relationship with both assertion-related factors.

Compromising is characterized by those moderately concerned with their own needs and the needs of others, reflecting moderate levels of both assertiveness and

cooperativeness. As compromising individuals have both assertive and cooperative tendencies, I anticipate (a) a positive relationship with the assertion-related factors and (b) a negative relationship with the aggression-related factors.

Argumentativeness is the tendency to present and defend one's own positions while attacking counter positions (Infante, 1987; Infante & Rancer, 1982, 1996) and is inconsistently confounded with both aggressiveness and assertiveness. As reviewed in Chapter 1, argumentative, assertive, and aggressive individuals directly pursue their own position(s) and may all utilize counter-arguments against the other individual. However, these individuals differ in the way in which they directly communicate. Assertive and argumentative behaviors involve directly communicating without interfering with or infringing on the rights of the other person. Aggressive behaviors include the intent, perceived intent, or actual action of harming of the other person.

Infante (1987) posited argumentativeness is a subset of assertiveness. Both concepts are often viewed as constructive due to the inclination to engage the other individual's evidence and reason instead of acting on a motivation to attack her/his character or identity (i.e., an aggressive behavior). Guerrero and Gross (2014) noted the traits of argumentativeness are conceptually like the dimensions of assertiveness whereas the traits of verbal aggressiveness are conceptually like the dimension of cooperativeness. Thus, a positive relationship is anticipated between argumentativeness and the direct communication factor. Although the conceptualization of argumentativeness includes counter-attacking another's position without attacking the individual her/himself, it is not grounded in the respect for another individual. Thus, I do not expect argumentativeness to be significantly related to the relationship orientation factor.

Although the relationship between argumentativeness and assertiveness is arguably closer than that of argumentativeness and aggressiveness, the latter two concepts are often conflated as well. Some consider argumentativeness a component of verbal aggressiveness (Buss & Perry 1992; Hample et al., 2010). However, other existing research contends argumentativeness and aggressiveness are oppositional in motivation; these same researchers have observed a negative relationship between the two concepts (Avtgis & Rancer, 2010; Ifert & Bearden, 1998; Infante & Rancer, 1982; Infante & Wigley, 1986; Rancer & Avtgis, 2006; Rill et al., 2009; Tremblay et al., 2007; Weger, 2006). Thus, based on the volume of existing research demonstrating the differences between argumentativeness and verbal aggressiveness, I anticipated a negative relationship between argumentativeness and verbal aggression. Last, as argumentativeness is a verbal communication behavior and is not linked to intent to harm another, I do not expect argumentativeness to be significantly related to the physical aggression factor. In sum, the argumentativeness should confirm convergent validity by relating to the AACI direct communication and verbal aggression factors. Argumentativeness is not expected to relate to the relationship orientation or physical aggression factors, examining divergent validity.

Method

Participants

Three hundred and eighty individuals participated in this study. Participants were recruited in two stages. First, undergraduate students enrolled in Communication Studies courses at the University of Georgia were recruited. Next, those students were asked to recruit one of their parents to participate in the study. The criteria for eligibility for the

undergraduate students were that individuals must (a) be 18 years of age or older and (b) have a living parent or parental figure willing to also participate in the study. Participants were randomized to one of three conditions. Based on a random number generator, participants were asked to complete a questionnaire reflecting on themselves and their relationship with (1) an acquaintance (*n* = 125; 32.9%), (2) a close friend (*n* = 156; 41.1%), or (3) a romantic partner (*n* = 99; 26.1%). A romantic relationship was broadly defined to include individuals who were in the "talking" stage of a relationship, casually dating, exclusively involved, living together, or married. Exclusive involvement included dating, engagement, marriage, and serious partnerships. Participants who were randomized into the romantic partner condition but were not currently involved in a romantic relationship were reassigned to one of the other conditions.

The mean age of participants was 33.59 (*SD* = 15.89; median = 21) and age ranged from 18 to 71 years old. Two hundred and eighty-eight participants (75.8%) were female and 92 (24.2%) were male. The majority of participants identified as White/Caucasian, Non-Hispanic (*n* = 270; 71.1%), followed by African American/Black (*n* = 45; 11.8%), Asian or Asian American (*n* = 32; 8.4%), Hispanic/Latino (*n* = 17; 4.5%), Native Americans/Alaskan Native (*n* = 1; 0.3%), and15 participants identified as bi- or multiracial (3.9%).

Final Sample. Two questions included in the survey asked participants to report their relationship closeness and importance. These were included as a condition check. Based on these two questions, several cases were removed from the final sample. In the acquaintance condition, 57 of the 125 individuals assigned to this condition reported their relationship with their identified acquaintance as "very close" or "extremely close."

Similarly, 70 of the 125 individuals identified their relationship with their acquaintance as "very important" or "extremely important." A crosstabs analysis revealed 55 individuals rated their relationship as one of both very or extreme importance and very or extreme closeness. Since acquaintance relationships are distal relationships, these 55 cases were removed from the final sample. The final sample for the acquaintance condition was 70.

In the close friend condition, one participant identified the relationship with the close friend as “slightly close” and “slightly important”. Another participant identified the relationship with the close friend as “extremely close” but “not at all important”. These two cases were removed. All other participants in the condition reported their relationships as moderate or higher ratings for both closeness and importance. This left the close friend sample size at 154. However, 54 cases were randomly removed to create some equivalence among the conditions. The final sample size for the close friend condition was 100.

In the romantic relationship condition, no cases were removed. All individuals reported their relationships with their significant others as moderate or higher closeness and importance ratings except for one participant who identified the relationship as “slightly close” and “moderately important”. The sample size for the romantic relationship condition was 99. Thus, the final sample size for the study was 269.

Relationship Reports. Participants were asked several identifying questions about the person they were asked to think about during the survey (i.e., an acquaintance, close friend, or relational partner), their relationship, and their conflict history.

Acquaintance Condition. Participants in this condition were instructed to think of an acquaintance, someone they know slightly but is not a close friend (e.g., a coworker or classmate). Most participants identified a same-gender acquaintance. Forty-five of the 53 female participants assigned to this condition thought of a female acquaintance (84.91%). Twelve of the 17 male participants assigned to this condition identified a male acquaintance (70.59%). When asked to report how long participants have known the acquaintance they identified the average response was 27.01 months (SD = 36.85; median = 8.00; range: 1-180). The majority of participants (*n* = 60; 85.7%) did not live with their acquaintance; 10 participants (14.3%) did live with their acquaintance.

Participants were asked to report the number of days per week they experienced conflict with their acquaintance (0-7days/week). The mean was 1.71 days per week (*SD* = 1.02; median = 1.00; range = 0-5). Ninety percent of participants (92.6%) reported that their conflicts with their acquaintance were not generally resolved. When asked if participants' conflicts generally revolved around the same topic or a similar set of topics, participants generally reported not engaging in serial disputes with their acquaintance (*n* = 42; 60%). Last, the majority of participants reported that their acquaintance was the one to initiate conflicts in their relationships (*n* = 40; 57.1%).

Close Friend Condition. Participants in this condition were instructed to think of a close friend (e.g., a best friend). As with the acquaintance condition, the majority of participants in this condition identified a same-gender individual. Seventy-seven of the 80 female participants assigned to this condition thought of a female acquaintance (96.25%). Seventeen of the 20 male participants assigned to this condition identified a male

acquaintance (85%). The average relationship length was 146.77 months (SD = 131.70; median = 120; range: 6-520). Most close friend did not live together (*n* = 88; 88%).

When asked how often participants experience conflict with their close friend (0-7days/week), the average response was 1.52 (*SD* = 1.01; median = 1.00; range = 0-7). Participants indicated the conflicts were not generally resolved (*n* = 92; 92%). Fifty-three participants (53%) indicated that conflicts generally revolved around the same topic or set of topics, while 42 participants (42%) reported that their conflicts tended to be serial in nature. Fifty participants (50%) reported that their close friend was the one to initiate conflicts in their relationships, 41 (41%) identified that they generally initiate conflict, nine participants declined to close who generally begins conflicts.

Romantic Relationship Condition. Participants in this condition were instructed to think of their current romantic partner. Except for three of the 99 relationships, all participants were involved in heterosexual relationships. When asked to categorize their relationship 46 (46.5%) reported being married, two (2.0%) engaged, 39 (39.4%) serious dating, eight (8.1%) casual dating, and four (4%) identified being in a "talking" stage. The majority of relationships identified their relationships as exclusive (*n* = 91; 91.9%). The average relationship length was 139 months (SD = 36; median = 150.68; range: 1-481). Cohabitation rates were fairly equally divided. Fifty-one participants (51.5%) indicated they did not live with their partner, whereas 48 (48.5%) reported living with their romantic partner.

Participants reported experiencing conflict with their romantic partner an average of 2.42 days a week (SD = 1.46; median = 2; range: 1-7). As with the acquaintance and close friend conditions, the majority of romantic relationship condition participants

indicated that their conflicts with their romantic partner were not generally resolved (*n* = 88; 88.9%). When asked about conflict topicality, most conflicts revolved around different topics and were not serial in nature (*n* = 69; 69.7%). Sixty-three participants (63%) disclosed that they are responsible for generally initiating conflict in their relationships.

Procedure

Data collection took place in the form of a web-based survey, administered through Qualtrics. A separate web page provided the consent form and the questionnaire would not start until the participants clicked on the "consent" button. After self-verifying eligibility and completing informed consent, participants completed the survey in approximately 35 minutes. The survey items included questions about demographics for themselves and an acquaintance, close friend, or romantic relationship partner, aggressive communication behaviors, assertive communication behaviors, and argumentativeness. Items were tailored to condition (i.e., acquaintance, close friend, romantic relationship). After completing these measures, participants then read an online informational debriefing and were thanked for their participation. Student participants received research credit for their participation.

Measures

Aggressive Assertive Communication Instrument (AACI). Thirty-one items were included for the AACI for this study: 21 from the Study 2 CFA and ten additional items. Nine new items were constructed to help bolster the factors: three direct items, four relationship orientation items, and two verbal aggression items. No new items were written for the physical aggression factor as the items were consistent and reliability

good. Additionally, one direct item from the original 100-item pool was kept: 5. “I am direct in expressing my opinion”. The three new direct communication items were (1) “I find it difficult to express myself” (reverse coded), (2) “It is up to me to clearly express my thoughts and feelings during conflict”, and (3) “Conflict makes me uncomfortable – so, I try to avoid it when possible” (reverse coded). The four new relationship orientation items were (1) “When upset with [insert relationship role], I try to keep how important our relationship is to me in mind”, (2) “It is important for me to tell others how important they are to me, even during conflict,” (3) “It is not worth risking my relationship in order to win an argument”, (4) “My relationships are more important than winning any argument.” The two new verbal aggression items were (1) I have called my [insert relationship role] names when upset with her/him and (2) Raising my voice at my [insert relationship role] helps her/him listen to me. Responses were assessed on a 5-point Likert-type scale on a 1 (Strongly Disagree/Extremely Uncharacteristic of Me) to 5 (Strongly Agree/Extremely Characteristic of Me) scale.

The Bakker Assertiveness-Aggressiveness Inventory (BAAI; Bakker et al., 1978). The BAAI is a 36-item self-report instrument designed to assess an individual’s aggressiveness and assertiveness in two 18-item subscales. The aggressive subscale assesses behaviors related to acquiring territory, prerogatives, or status that was not formerly one’s own. Sample items include: “Someone has done or said something that arouses your curiosity. You refrain from asking questions” and “During a social visit with a group of friends, everyone participates actively in the conversation. You dominate the conversation most of the time.” The assertiveness subscale assesses behaviors that occur in response to another individual’s aggressive behavior and in which an individual seeks

to maintain or regain control of territory, prerogatives, or status s/he previously had. Sample items include: “You are asked to carry out a task that you do not feel like doing. You tell the other that you don’t want to do it” and “Someone has, in your opinion, treated you unfairly or incorrectly. You confront the person directly concerning this.” Participants were asked to report the likelihood they would behave in the manner described in each item on a 5-point Likert-type scale from 1 (almost never) to 5 (almost always). The Assertiveness subscales had acceptable reliability ($\alpha = .74$; $M = 3.20$; $SD = 0.49$). The Aggressiveness subscale did not have acceptable reliability ($\alpha = .66$). An Exploratory Factors Analysis revealed that the removal of three items was warranted (You have parked your car but discover that you do not have the correct amount for the parking meter. – You ask a passerby for the change.; During a discussion, you believe that you have something worthwhile to contribute. – You don’t bother to state it unless the others ask you to give your opinions.; You see an opportunity to get ahead but know it will take a great deal of energy. – You take the opportunity to forge ahead.). With the three items removed, the Aggression subscale reliability increased into an acceptable range ($\alpha = .73$; $M = 3.04$; $SD = 0.53$).

A maximum likelihood exploratory factor analysis with Promax rotation was conducted to explore how all measure items would group together when the factors are allowed to correlate. Results revealed that the items did not consistently group as assertive and aggressive. Rather, factors emerged that were comprised of items from both subscales. For example, one factor was a blend of assertiveness items and aggressiveness items detailing situation related to directly communicating to others (e.g., AS. Someone has, in your opinion, treated you unfairly or incorrectly. – You confront the person

directly concerning this.; AS. In a restaurant, you receive food that is poorly prepared. – You ask the waiter or waitress to replace it.; AG. Someone has done or said something that arouses your curiosity. – You refrain from asking questions. (reverse code); AG.You want a favor done by a person you do not know too well. – You prefer to do without rather than ask that person.(reverse code)).

Additionally, a maximum likelihood exploratory factor analysis with Varimax rotation was conducted to explore how all measure items would group together when the factors were not allowed to correlate.The same cross items factor loading structure emerged. Several of the measure items also loaded in similar patterns as the EFA with the Promax rotation. Even when items were forced to load on two factors, the assertiveness items and aggressiveness items commingled. These observations suggest that the distinction between assertiveness and aggressiveness items, as originally written, may not be the best method for differentiating aggressive and assertive communication behaviors.

The Buss and Perry Aggression Questionnaire (BPAQ; Buss & Perry, 1992). The BPAQ assess aggression in four subscales: Physical Aggression (9 items; α = .71; *M* = 1.52; *SD* = 0.70; e.g., “Once in a while I can’t control the urge to strike another person.”), Verbal Aggression (5 items; α = .68; *M* = 3.35; *SD* = 1.13; e.g., “I can’t help getting into arguments when people disagree with me.”), Anger (7 items; α = .83; *M* = 2.20; *SD* = 1.04; e.g., “I sometimes feel like a powder keg ready to explode.”, and Hostility (8 items; α = .83; *M* = 2.14; *SD* = 1.07; e.g., “When people are especially nice, I wonder what they want.”). Removing the verbal aggression item “I tell my [insert another role] openly when I disagree with her/him” increased the subscale reliability to .68. The original measure fluctuates from situations that describe an individual’s responses to

people in general to close friends. Items were consistently modified to align with the study's three conditions (i.e., relationship partner, close friend, acquaintance). Participants responded to each item by indicating how much each statement was characteristic of them using scales ranging from 1 (extremely uncharacteristic of me) to 7 (extremely characteristic of me). Higher scores indicate a greater endorsement of aggressive statements.

The Verbal Aggressiveness Scale (VAS; Infante & Wigley, 1986). The VAS is a 20-item measure assesses an individual's trait verbal aggressiveness. Participants were instructed that they were going to answer a series of questions that address how they get people to comply with their wishes on a 5-point Likert-type scale ranging from 1 (almost never true) to 5 (almost always true). Items were consistently modified to align with the study's three conditions (i.e., relationship partner, close friend, acquaintance). After reverse coding, items were summed ($\alpha = .86$; $M = 39.99$; $SD = 61.00$; range 20–81). Scores could range from 20–100 with a score of 20–46 indicating low verbal aggressiveness (75.1%), a score of 47-73 signifying moderate verbal aggressiveness (24.6%), and a score of 74–100 denoting high verbal aggressiveness (one participant, 0.3%). Sample items include "When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable," "When I attack a person's ideas, I try not to damage their self-concept" (reverse coded), and "When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behavior."

The Assertion Inventory (AI; Gambrill & Richey, 1975). The AI is a 40-item self-report measure assesses two types of information about assertive behavior: (a) degree

of discomfort felt in specific situations (α = .94; *M* = 2.55; *SD* = 0.69) and (b) judged probability of engaging in a behavior (labeled as assertion; α = .92; *M* = 2.58; *SD* = 0.51). Items contain both positive (e.g., "Accept a date," "Receive compliments.") and negative (e.g., "Turn down a request for a meeting or a date," "Admit ignorance in some area.") social situations. Participants were asked to read each item identify their response on a 5-point Likert-type scale for degree of discomfort ranging from 1 (none) to 5 (very much) and a 5-point Liker-type scale for response probability ranging from 1 (always do it) to 5 (never do it) one dimension at a time. Each item received two scores. Higher scores indicated (a) greater discomfort and (b) less probability of engaging in assertive behaviors.

Rahim's Organizational Conflict Inventory-II (ROCI-III; Rahim & Magner, 1995). The ROCI-II is a 28-item questionnaire designed to measure five dimensions of interpersonal conflict style. Although the ROCI-II was originally designed to measure interpersonal conflict in organizational settings, research has successfully adapted it for use in romantic relationships as well as other interpersonal relationships (e.g., Lin, 2003). All questions were situated within the context of participants' randomized study condition: romantic relationship, close friend, or acquaintance. The five conflict styles measured are accommodative, avoidant, collaborative, competitive, and compromising. Participants used a five–point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree) to answer questions about the way they handled conflict. Construct validity has been established for each subscale with confirmatory factor analysis and by comparing two-, three-, and four-factor models with the five-factor model (Rahim & Magner, 1995). Convergent and discriminate validity was supported for each subscale

with test-retest reliability coefficients ranging from .60 to .83 and internal consistency coefficient α ranging from .72 to .80 was established (Rahim, 1983). Reliabilities in the present study were adequate: Accommodating α = .81 (6 items; *M* = 4.96*;* SD = 0.99); Avoiding α = .84 (6 items; *M* = 4.44*;* SD = 1.27); Collaborating α = .89 (7 items; *M* = 5.67*;* SD = 0.91); Competing α = .77 (5 items; *M* = 3.85*;* SD = 1.17); Compromising α = .77 (4 items; *M* = 5.32*;* SD = 1.06). The most common dominant conflict management style was collaborating (44.4%), followed by compromising (16.2%), avoiding (12.5%), accommodating (11.4%), and competing (4.3%). 42 participants (11.2%) had two or more conflict management style scores that were tied.

Argumentativeness Scale (ARG; Infante & Rancer, 1982). The ARG is a 20-item measure assesses an individual's argumentativeness. Participants were instructed that they were going to answer a series of questions regarding their behavior when arguing controversial issues. They were asked to indicate how often each statement was true for them on a 5-point Likert-type scale ranging from 1 (almost never true) to 5 (almost always true). To calculate participants' argumentativeness scores, four steps were completed. In Step 1, scores from ten of the items were summed (α = .87). Sixty was added to that sum in Step 2. Next, in Step 3, the remaining ten items were summed (α = .82). Last, the total obtained in Step 3 was subtracted from the total obtained in Step 2. Scores could range from 20–100. Participant scores ranged from 22–100. A score of 20–55 indicating low argumentativeness (52.6%), a score of 56-72 signifying moderate argumentativeness (38.0%), and a score of 73–100 denoting high argumentativeness (9.4%). Sample items include "I consider an argument an exciting intellectual challenge," "I find myself unable to think of effective points during an argument" (reverse coded),

and “I feel excitement when I expect that a conversation I am in is leading to an argument.”

Results

Preliminary Analyses

Exploratory Factor Analyses. As nine new items were introduced to the AACI measure for this study, a maximum likelihood exploratory factor analysis with a Promax rotation was conducted to examine how the new items loaded on the factor structure. Once again items were removed due to substantial cross-loadings (> .35 on more than one factor) and due to low loadings (> .40) on any factor. A series of analyses revealed the same consistent four-factor structure: direct communication, relationship orientation, verbal aggression, physical aggression. Eight of the nine newly introduced items loaded onto their intended factors and were included in the CFA. See Table 4.1 for factor loadings.

Table 4.1

Standardized Factor Loadings for 26-item Aggressive and Assertive Communication Instrument (AACI) Derived by EFA for Study 3

	Verbal Aggression	**Physical Aggression**	**Direct Communication**	**Relationship Orientation**
42. I believe that yelling is sometimes necessary.	**.84**	-.17	.02	-.05
66. I curse at others when I am angry.	**.77**	.03	-.03	.02
51. I sometimes get into yelling fights.	**.72**	-.01	.05	-.05
New9. Raising my voice at others helps them listen to me.	**.70**	-.01	-.05	.03
New8. I have called others names when upset with them.	**.68**	.09	-.03	.03
79. I yell at others when they annoy me.	**.59**	.14	.10	-.06
37. I get into physical fights more than the average person.	-.06	**.85**	-.09	.15
45. I have taken my anger out on others by using physical force.	-.09	**.83**	.13	.01
65. I have threatened people I know.	.25	**.61**	-.11	.10
85. I feel good when I win fights by putting someone else down.	.13	**.60**	-.05	-.08
78. I have hit someone with the idea of hurting them.	-.09	**.58**	.05	-.09
29. I assert my opinions or point-of-view by my physical prowess.	.12	**.49**	.04	-.14
43 Sometimes I push or shove others when I am mad.	.04	**.39**	.04	.01
28. When I decide I have an issue with someone, I have difficulty telling the other person.	-.01	-.05	**.73**	-.09
1. If someone treats me unfairly I address her/him directly.	.12	.09	**.68**	.14
6. When problems arise, I avoid discussing the problem.	-.09	.02	**.65**	-.02
5. I am direct in expressing my opinion.	.09	.06	**.63**	.13
34. I find it difficult to stand up for myself.	-.10	-.11	**.59**	.10
24. Sometimes I avoid asking questions because I feel self-conscious.	.00	-.08	**.58**	-.12
New3. Conflict makes me uncomfortable - so, I try to avoid it when possible.	.03	.13	**.53**	-.13

New7. My relationships are more important than winning any argument.	-.04	-.03	.04	**.73**
New5. It is important for me to tell others how important they are to me, even during conflict.	-.04	.08	-.03	**.67**
New4. When upset with others, I try to keep how important our relationship is to me in mind.	-.07	.15	.07	**.65**
94. I am comfortable having relationships with others who are different from me.	.08	-.24	.018	**.51**
New6. It is not worth risking my relationship in order to win an argument.	-.05	-.01	-.169	**.47**
90. I believe that compromises are important.	.15	-.30	.012	**.39**

Note: Extraction Method: Maximum Likelihood. Rotation Method: Promax with Kaiser Normalization.

Confirmatory Factor Analyses. A CFA was conducted to confirm the AACI's dimensionality and item composition. Based on Study 1, a 25-item, four-factor measure was tested in Study 2. In Study 2, EFA analyses suggested the addition of two items would bolster factor and measure reliability; however, CFA analyses rejected these models as viable. After reducing each factor's item composition, a 21-item measure emerged that had a good model fit and acceptable factor and measure reliability. A series of analyses were conducted to find the best model fit. Model fit indices include the root-mean-square error of approximation (RMSEA), standardized root-mean-square residual (SRMR), comparative fit index (CFI), Tucker-Lewis Index (TLI), and chi-square test of model fit.

The first analysis conducted assessed the 21-item measure that emerged in the CFA from Study 2. Like the first CFA attempt in Study 2 with the 25-item measure from Study 1, the 21-item four-factor model failed to produce results as there was no convergence because the number of iterations was exceeded. The second analyses included the 26 items from the most recent EFA. Results indicated adequate model fit with 82 free parameters. The RMSEA (0.06) was acceptable (<0.06), and the SRMR (0.08) also suggested acceptable fit (<0.08). However, the CFI and TLI indicated poor fit (CFI=0.87 and TLI=0.86; for CFI or TLI > 0.90). When compared to the Tau equivalence model, the CFA was preferred ($\chi^2 = 610.70$, df = 296, $p < .001$). Based on these results, further analyses were conducted to locate a better model fit.

The best model fit emerged when three items were removed: new item 3 from the direct communication factor, new item 6 from the relationship orientation factor, and item 43 from the physical aggression factor. The four factors had 73 free parameters.

Overall, model fit was acceptable. The RMSEA (0.06) was acceptable (<0.06), and the SRMR (0.07) confirmed good fit (<0.08). The CFI and TLI indicated adequate fit (CFI=0.89 and TLI=0.87; for CFI or TLI > 0.90). When compared to the Tau equivalence model, the CFA was preferred (χ^2 = 2495.02, df = 253, $p < .001$). Based on this analysis, final factors were computed averaging items for the factors: direct communication (6 items; α = .81, *M* = 3.72; *SD* = 0.85), relationship orientation (5 items; α = .73; *M* = 4.28; *SD* = 0.68), verbal aggression (6 items; α = .87; *M* = 1.75; SD = 0.87), and physical aggression (6 items; α = .83; *M* = 1.21; *SD* = 0.46). The 23-item measure had good reliability: α = .75; *M* = 2.75; *SD* = 0.38. See Table 4.2 for factor loadings.

A series of correlational analyses revealed each factor's relationships to the others. Correlation analyses revealed a significant positive relationship between (a) direct communication and relationship orientation, $r(259) = .27$; $p < .001$ and (b) verbal aggression and physical aggression, $r(260) = .48$; $p < .001$. Analyses also indicated significant negative relationships between (a) direct communication and physical aggression, $r(261) = -.17$; $p < .01$, (b) relationship orientation and physical aggression, $r(256) = -.38$; $p < .001$, and (c) relationship orientation and verbal aggression, $r(260) = -.19$; $p < .01$. Last, direct communication and verbal aggression were not significantly related, $r(263) = -.17$; *ns*.

Table 4.2

Standardized Factor Loadings for 23-item Aggressive and Assertive Communication Instrument (AACI) Derived by CFA for Study 3

	Verbal Aggression	**Physical Aggression**	**Direct Communication**	**Relationship Orientation**
42. I believe that yelling is sometimes necessary.	**.73**	---	---	---
66. I curse at others when I am angry.	**.79**	---	---	---
51. I sometimes get into yelling fights.	**.73**	---	---	---
New9. Raising my voice at others helps them listen to me.	**.68**	---	---	---
New8. I have called others names when upset with them.	**.73**	---	---	---
79. I yell at others when they annoy me.	**.68**	---	---	---
37. I get into physical fights more than the average person.	---	**.74**	---	---
45. I have taken my anger out on others by using physical force.	---	**.71**	---	---
65. I have threatened people I know.	---	**.76**	---	---
85. I feel good when I win fights by putting someone else down.	---	**.73**	---	---
78. I have hit someone with the idea of hurting them.	---	**.53**	---	---
29. I assert my opinions or point-of-view by my physical prowess.	---	**.61**	---	---
28. When I decide I have an issue with someone, I have difficulty telling the other person.	---	---	**.72**	---
1. If someone treats me unfairly I address her/him directly.	---	---	**.69**	---
6. When problems arise, I avoid discussing the problem.	---	---	**.63**	---
5. I am direct in expressing my opinion.	---	---	**.66**	---
34. I find it difficult to stand up for myself.	---	---	**.66**	---
24. Sometimes I avoid asking questions because I feel self-conscious.	---	---	**.53**	---

New7. My relationships are more important than winning any argument.	---	---	---	**.77**
New5. It is important for me to tell others how important they are to me, even during conflict.	---	---	---	**.60**
New4. When upset with others I try to keep how important our relationship is to me in mind.	---	---	---	**.57**
94. I am comfortable having relationships with others who are different from me.	---	---	---	**.65**
90. I believe that compromises are important.	---	---	---	**.50**

Descriptives

Analyses were conducted to determine whether variables differed significantly with the AACI's four factors. A series of ANOVAs were conducted to examine the study condition (i.e., acquaintance, close friend, or significant other) and the AACI factor scores. Results revealed the romantic partners and close friend conditions differed significantly from the acquaintance condition in the direct communication, relationship orientation, and verbal aggression factors.

Direct communication differed significantly among the three groups, $F(2,264) = 7.59$, $p = .001$. Individuals in the romantic partner condition had the highest direct communication scores ($M = 3.91$; SD = .78), followed by individuals in the close friend condition ($M = 3.73$; SD = .79), and individuals in the acquaintance condition reported using the least amount of direct communication ($M = 3.41$; SD = .94). Tukey post hoc analyses revealed there was not a significant difference between the romantic partner and the close friend condition, but both the romantic partner and the close friend condition differed significantly from the acquaintance condition ($p < .05$).

Similarly, relationship orientation scores differed significantly among the three groups, $F(2,258) = 12.94$, $p = .001$. Individuals in the romantic partner condition had the highest relationship orientation scores ($M = 4.41$; SD = .65), followed by individuals in the close friend condition ($M = 4.40$; SD = .40), and individuals in the acquaintance conditions had the lowest relationship orientation scores ($M = 3.94$; SD = .94). Tukey post hoc analyses revealed there was not a significant difference between the romantic partner and the close friend condition, but both the romantic partner and the close friend condition differed significantly from the acquaintance condition ($p < .001$).

Verbal aggression scores also differed significantly among the three groups, $F(2,262) = 5.13$, $p < .01$. Individuals in the romantic partner condition had the highest verbal aggression scores ($M = 1.94$; SD = .89), followed by individuals in the close friend condition ($M = 1.73$; SD = ..86), and individuals in the acquaintance conditions had the lowest verbal aggression scores ($M = 1.52$; SD = .78). Tukey post hoc analyses revealed there was not a significant difference between the romantic partner and the close friend condition, but both the romantic partner and the close friend condition differed significantly from the acquaintance condition ($p < .01$).

Physical aggression scores did not differ significantly among the three groups, $F(2,260) = .84$, *ns*. See Table 4.3 for a review of mean and standard deviation scores by condition for all tested variables. Analyses to examine whether groups differed significantly were only conducted with the AACI factors.

Aside from condition, demographic variables were also examined. Independent samples t-test indicated an age difference on the relationship orientation factor, such that participants who were the sample mean age of 33.59 or older reported more relationship orientation ($M = 4.35$, $SD = .62$) than did participants who were younger ($M = 4.22$ $SD = .72$), $t(259)=1.40$, $p < .05$. The same analysis completed with the median age, 21, did not reveal significant results. Thus, individuals older than the mean age of 33.59 were more relationally focused in their communication patterns than were those who were younger. No other age differences were observed with the other factors.

Table 4.3

Mean and Standard Deviations by Condition for Study 3

	Acquaintance *M*(SD)	Close Friend *M*(SD)	Romantic Partner *M*(SD)	Combined Sample *M*(SD)
The Aggressive Assertive Communication Instrument (AACI)				
Direct Communication	3.41(.94)	3.74(.79)	3.91(.78)	3.72(.85)
Relationship Orientation	3.94(.73)	4.40(.58)	4.41(.65)	4.28(.68)
Verbal Aggression	1.52(.78)	1.73(.86)	1.94(.89)	1.75(.87)
Physical Aggression	1.15(.30)	1.23(.53)	1.24(.49)	1.21(.46)
The Bakker Assertiveness-Aggressiveness Inventory (BAAI)				
Aggressiveness	2.84(.52)	3.06(.58)	3.11(.55)	3.05(.56)
Assertiveness	3.13(.50)	3.19(.49)	3.26(.44)	3.20(.48)
The Buss and Perry Aggression Questionnaire (BPAQ)				
Verbal Aggression	2.94(1.38)	3.19(1.13)	3.56(1.11)	3.26(1.15)
Physical Aggression	1.48(.66)	1.46(.65)	1.47(.66)	1.47(.66)
Anger	1.84(.96))	2.05(.91)	2.54(1.17)	2.17(1.07)
Hostility	2.27(1.21)	2.08(.88)	2.05(1.08)	2.12(1.05)
The Verbal Aggressiveness Scale (VAS)	37.76(11.04)	38.76(10.71)	41.57(10.35)	39.48(10.75)
The Assertion Inventory (AI)				
Degree of Discomfort	2.63(.78)	2.54(.64)	2.46(.73)	2.54(.71)
Response Probability	2.65(.45)	2.53(.48)	2.52(.59)	2.56(.52)
Rahim's Organizational Conflict Inventory-II (ROCI-III)				
Accommodation	4.85(1.06)	5.03(.98)	4.10(1.07)	4.97(1.03)
Avoidance	5.04(1.23)	4.58(1.17)	3.94(1.31)	4.46(1.31)
Collaboration	5.52(.91)	5.65(.87)	5.80(.92)	5.67(.90)
Competition	3.87(1.22)	3.81(1.15)	3.76(1.22)	3.81(1.19)
Compromise	5.27(.95)	5.40(1.01)	5.29(1.27)	5.32(1.10)
Argumentativeness Scale (ARG)	53.86(14.26)	55.95(12.74)	56.53(11.61)	55.60(12.78)

There was a gender difference observed with the direct communication factor, such that females reported more direct communication (M = 3.72, SD = .90) than did males (M = 3.70, SD = .69), $t(265)$=-.19, p = .01. There was also a gender difference observed with the physical aggression factor, such that males reported more higher physical aggression (M = 1.42, SD = .64) than did females (M = 1.14, SD = .37), $t(261)$=-4.35, $p < .001$. Gender differences were not observed in the relationship orientation or verbal aggression factors. No other consistent differences were observed.

Validity Analyses

A series of bivariate regression analyses explored the four factors and their relationships to existing aggressive and assertive measures, as well as their relationships to both argumentativeness and conflict management styles. Before the regression analyses, the variables were initially compared via correlation analyses (See Table 4.4).

The Bakker Assertiveness-Aggressiveness Inventory (BAAI). A positive relationship was expected between both BAAI factors and the direct communication factor. Results were as anticipated for both the assertiveness factor (adjusted R^2 = 0.14, $F(1, 262) = 44.25$, $p < .001$; $\beta = .38$, $p < .001$) and the aggressiveness factor (adjusted R^2 = 0.15, $F(1, 107) = 19.68$, $p < .001$; $\beta = .39$, $p < .001$). Nonsignificant relationships were expected for the remaining AACI factors. Results were as expected for the relationship orientation factor (BAAI assertiveness factor: adjusted R^2 = -0.00, $F(1, 256) = .20$, *ns*; β = -.03, *ns*; BAAI aggressiveness factor: adjusted R^2 = -0.00, $F(1, 104) = .64$, *ns*; β = .08, *ns*), the physical aggression factor (BAAI assertiveness factor: adjusted R^2 = -0.00, $F(1, 258) = .21$, *ns*; β = -.03, *ns*; BAAI aggressiveness factor: adjusted R^2 = -0.01, $F(1, 103) = .47$, *ns*; β = -.07, *ns*), and the verbal aggression factor with the BAAI aggressiveness

factor (adjusted R^2 = -0.01, F(1, 105) = .17, *ns*; β = -.04, *ns*). However, the relationship between the BAAI assertiveness factor and the AACI verbal aggression factor was significant and positive, adjusted R^2 = 0.01, F(1, 260) = 4.03, $p < .05$; β = .12, $p < .05$.

The Buss and Perry Aggression Questionnaire (BPAQ). Positive relationships were expected between all BPAQ factors and the AACI aggression-related factors. Results were as expected. BPAQ verbal aggression was positively related to both AACI verbal aggression (adjusted R^2 = 0.32, F(1, 260) = 122.93, $p < .0001$; β = .57, $p < .001$) and AACI physical aggression (adjusted R^2 = 0.02, F(1, 258) = 7.05, $p < .01$; β = .16, $p < .01$). BPAQ physical aggression was positively related to both AACI verbal aggression (adjusted R^2 = 0.18, F(1, 260) = 57.63, $p < .001$; β = .43, $p < .001$) and AACI physical aggression (adjusted R^2 = 0.27, F(1, 258) = 97.26, $p < .001$; β = .52, $p < .001$). BPAQ anger was positively related to both AACI verbal aggression (adjusted R^2 = 0.40, F(1, 258) = 174.75, $p < .001$; β = .64, $p < .001$) and AACI physical aggression (adjusted R^2 = 0.16, F(1, 256) = 48.35, $p < .001$; β = .40, $p < .001$). BPAQ hostility was positively related to both AACI verbal aggression (adjusted R^2 = 0.10, F(1, 255) = 30.28, $p < .001$; β = .33, $p < .001$) and AACI physical aggression (adjusted R^2 = 0.11, F(1, 253) = 33.14, $p < .001$; β = .34, $p < .001$).

Negative relationships were expected between all BPAQ factors and the AACI assertion-related factors. Five significant relationships emerged, four in the anticipated direction. As anticipated physical aggression (adjusted R^2 = 0.09, F(1, 256) = 27.11, $p < .001$; β = -.31, $p < .001$), anger (adjusted R^2 = 0.01, F(1, 254) = 4.15, $p < .05$; β = -.13, $p < .05$), and hostility (adjusted R^2 = 0.07, F(1, 250) = 18.57, $p < .001$; β = -.26, $p < .001$) negatively related to relationship orientation. Hostility and direct communication were

also significantly negatively related, adjusted R^2 = 0.08, F(1, 255) = 24.10, p < .001; β = -.29, p < .001. Three relationships that were anticipated to be negative were nonsignificant: (a) verbal aggression and relationship orientation (adjusted R^2 = 0.00, F(1, 256) = 1.52, *ns*; β = .08, *ns*) , (b) physical aggression and direct communication (adjusted R^2 = 0.01, F(1, 261) = 2.20, *ns*; β = -.09, *ns*, (c) anger and direct communication (adjusted R^2 = -0.00, F(1, 261) = .06, *ns*; β = .02, *ns*). Verbal aggression was expected to be negatively related to direct communication, but results indicated a significant positive relationship, adjusted R^2 = 0.08, F(1, 262) = 24.02, p < .001; β = .29, p < .001.

The Verbal Aggressiveness Scale (VAS). Trait verbal aggressiveness as assessed in the VAS was expected to be positively related to the aggression-related factor and negatively related to the assertion-related factors. Results were as anticipated for the aggression-related factors: verbal aggression (adjusted R^2 = 0.42, F(1, 244) = 174.68, p < .001; β = .65, p < .001) and physical aggression (adjusted R^2 = 0.29, F(1, 243) = 98.76, p < .001; β = .54, p < .001). The relationship between the VAS and the relationship orientation factor was also negative, as expected (adjusted R^2 = 0.20, F(1, 241) = 60.26, p < .001; β = -.45, p < .001). The VAS and direct communication were not significantly related, adjusted R^2 = -0.00, F(1, 244) = .07, *ns*; β = .02, *ns*.

The Assertion Inventory (AI; Gambrill & Richey, 1975). The degree of discomfort dimension was expected to (a) positively relate to both direct communication and relationship orientation and (b) negatively relate to both verbal aggression and physical aggression. As higher scores were indicative of greater discomfort, a negative coefficient indicates a positive relationship. All results were as expected. The models for the degree of discomfort were significant and evidenced a positive relationship for both

(a) direct communication, adjusted R^2 = 0.20, F(1, 263) = 66.69, p < .001; β = -.45, p < .001 and (b) relationship orientation, adjusted R^2 = 0.03, F(1, 257) = 8.67, p < .01; β = -.18, p < .01. The models for the degree of discomfort were significant and evidence a negative relationship for both (a) verbal aggression, adjusted R^2 = 0.03, F(1, 261) = 8.45, p < .01; β = .18, p < .01and (b) physical aggression, adjusted R^2 = 0.05, F(1, 260) = 15.85, p < .001; β = .24, p < .001.

The response probability dimension was expected to (a) positively relate to both direct communication and relationship orientation and (b) negatively relate to both verbal aggression and physical aggression. As higher scores were indicative of less probability to engaging in assertive behaviors, a negative coefficient indicates a positive relationship. All results were as expected for the assertion-related factors. The models for the degree of discomfort were significant and evidenced a positive relationship for both (a) direct communication, adjusted R^2 = 0.07, F(1, 259) = 21.48, p < .001; β = -.28, p < .001 and (b) relationship orientation, adjusted R^2 = 0.07, F(1, 253) = 18.69, p < .01; β = -.26, p < .01. The models for the degree of discomfort and the aggressive-related factors revealed nonsignificant relationships: verbal aggression (adjusted R^2 = -0.00, F(1, 257) = 0.00, *ns*; β = .00, *ns*) and physical aggression (adjusted R^2 = -0.00, F(1, 256) = 0.04, *ns*; β = -.01, *ns*).

Rahim's Organizational Conflict Inventory-II (ROCI-III; Rahim & Magner, 1995). Five conflict styles were assessed: accommodation, avoidance, collaboration, competition, and cooperation, and collaboration. ***Accommodation*** was anticipated to have (a) a positive relationship with relationship orientation and (b) negative relationships with direct communication, verbal aggression, and physical aggression. All results were as

expected. The model for accommodation and relationship orientation revealed a significant positive relationship, adjusted $R^2 = 0.07$, $F(1, 258) = 20.63$, $p < .001$; $\beta = .27$, $p < .001$. Significant negative relationships were revealed in the models examining accommodation and (a) direct communication (adjusted $R^2 = 0.02$, $F(1, 264) = 5.99$, $p = .01$; $\beta = -.15$, $p = .01$), (b) verbal aggression (adjusted $R^2 = 0.01$, $F(1, 262) = 4.68$, $p < .05$; $\beta = -.13$, $p < .05$), and (c) physical aggression (adjusted $R^2 = 0.01$, $F(1, 260) = 4.23$, $p < .05$; $\beta = -.13$, $p < .05$).

Avoidance was expected to be negatively related to all four AACI factors. The model was significant for direct communication (adjusted $R^2 = 0.24$, $F(1, 264) = 86.46$, $p < .001$; $\beta = -.50$, $p < .001$) and verbal aggression (adjusted $R^2 = 0.05$, $F(1, 262) = 16.14$, $p < .001$; $\beta = -.24$, $p < .001$). Both coefficients revealed the relationships with avoidance were negative. Avoidance was not significantly related to relationship orientation (adjusted $R^2 = 0.00$, $F(1, 258) = 2.13$, *ns*; $\beta = -.09$, *ns*) and physical aggression (adjusted $R^2 = -0.00$, $F(1, 260) = .00$, *ns*; $\beta = -.00$, *ns*).

I anticipated ***collaboration*** to be positively related to both assertion-related factors and negatively related to both aggression-related factors. All results revealed significant results in the expected directions: direct communication (adjusted $R^2 = 0.09$, $F(1, 261) = 26.07$, $p < .001$; $\beta = .30$, $p < .001$), relationship orientation (adjusted $R^2 = 0.27$, $F(1, 255) = 93.42$, $p < .001$; $\beta = .52$, $p < .001$), verbal aggression (adjusted $R^2 = 0.04$, $F(1, 259) = 10.55$, $p = .001$; $\beta = -.20$, $p = .001$), and physical aggression (adjusted $R^2 = 0.11$, $F(1, 257) = 31.83$, $p < .001$; $\beta = -.33$, $p < .001$).

Competitiveness was expected to have positive relationships with both aggression-related factors and negative relationships with both assertion-related factors.

Results revealed competitiveness was significantly positively related to both aggression-related factors: verbal aggression (adjusted R^2 = 0.05, F(1, 262) = 13.91, p < .001; β = .23, p < .001) and physical aggression (adjusted R^2 = 0.03, F(1, 260) = 9.74, p < .01; β = .19, p < .01). Neither assertion-related factor models revealed significant results: direct communication (adjusted R^2 = -0.00, F(1, 264) = .24, *ns*; β = .03, *ns*) and relationship orientation (adjusted R^2 = 0.01, F(1, 258) = 2.46, *ns*; β = -.10, *ns*).

With ***compromising*** I anticipated (a) a positive relationship with the assertion-related factors and (b) a negative relationship with the aggression-related factors. Results were as expected. Significant negative relationships were observed for both aggression-related factors: verbal aggression (adjusted R^2 = 0.04, F(1, 262) = 10.81, p = .001; β = -.20, p = .001) and physical aggression (adjusted R^2 = 0.06, F(1, 260) = 17.24, p < .001; β = -.25, p < .001). The model assessing the assertion-related factor revealed significant positive relationships: direct communication (adjusted R^2 = 0.01, F(1, 264) = 4.00, p < .05; β = .12, p < .05) and relationship orientation (adjusted R^2 = 0.11, F(1, 258) = 32.26, p < .001; β = .33, p < .001).

Argumentativeness. I anticipated (a) a positive relationship between argumentativeness and the direct communication factor, (b) a negative relationship between argumentativeness and the verbal aggression factor, and (c) nonsignificant relationships between argumentativeness with relationship orientation and physical aggression. As expected, argumentativeness positively significantly related to direct communication (adjusted R^2 = 0.07, F(1, 243) = 19.90, p < .001; β = .28, p < .001). Also as expected, argumentativeness was not significantly related to relationship orientation (adjusted R^2 = -0.00, F(1, 240) = .73, *ns*; β = -.06, *ns*) or physical aggression (adjusted R^2

= 0.00, $F(1, 241) = 1.09$, *ns*; $\beta = .07$, *ns*). Counter to expectations, results revealed a significant positive relationship between argumentativeness and verbal aggression (adjusted $R^2 = 0.05$, $F(1, 242) = 14.52$, $p < .001$; $\beta = .24$, $p < .001$).

Table 4.4

Bivariate Correlations for Aggressiveness Instruments, Assertiveness Instruments, Individual Difference Variables, and Factors of the Aggressive and Assertive Communication Instrument (AACI) for Study 3

	M (SD)	Direct Communication	Relationship Orientation	Verbal Aggression	Physical Aggression
The Bakker Assertiveness-Aggressiveness Inventory (BAAI)					
Aggressiveness	3.05 (.56)	**.40*** **	.08	-.04	-.07
Assertiveness	3.20 (.48)	**.38*** **	-.03	**.12***	-.03
The Buss and Perry Aggression Questionnaire (BPAQ)					
Verbal Aggression	3.26 (1.15)	**.29*** **	.08	**.56*** **	**.16*** *
Physical Aggression	1.47 (.66)	-.09	**-.31*** **	**.43*** **	**.52*** **
Anger	2.17 (1.07)	.02	**-.13***	**.64*** **	**.40*** **
Hostility	2.12 (1.05)	**-.30*** **	**-.26*** **	**.33*** **	**.34*** **
The Verbal Aggressiveness Scale (VAS)	39.48 (10.75)	.02	**-.45*** **	**.65*** **	**.54*** **
The Assertion Inventory (AI)					
Degree of Discomfort	2.54 (.71)	**-.45*** **	**-.18*** *	**.18*** *	**.24*** **
Response Probability	2.56 (.52)	**-.28*** **	**-.26*** **	.01	-.01
Rahim's Organizational Conflict Inventory-II (ROCI-III)					
Accommodation	4.97 (1.03)	**-.15*** *	**.27*** **	**-.13***	**-.13***
Avoidance	4.46 (1.31)	**-.50*** **	-.09	**-.24*** **	-.01
Collaboration	5.67 (.90)	**.30*** **	**.52*** **	**-.20*** **	**-.33*** **
Competition	3.81 (1.19)	.03	-.10	**.23*** **	**.19*** *
Compromise	5.32 (1.10)	**.12***	**.33*** **	**-.20*** **	**-.25*** **
Argumentativeness Scale (ARG)	55.60 (12.78)	**.28*** **	-.06	**.23*** **	.07

Note: *p < .05; **p < .01; ***p < .001

Discussion

AACI Item and Factor Composition

Results from Studies 1 and 2 indicated the AACI assesses assertive and aggressive communication behaviors in four factors: direct communication, relationship orientation, verbal aggression, and physical aggression. Although the factor structure has been stable across the three studies conducted in this dissertation, the item composition of each factor has been in flux. However, some item consistency has been observed. Based on the results of this study, the factor structure was further confirmed to stable and reliable: direct communication ($\alpha = .81$); relationship orientation ($\alpha = .73$); verbal aggression ($\alpha = .87$); physical aggression ($\alpha = .83$).

As in Study 2, the item composition changed from that of the previous study following a series of EFA and CFA analyses. Studies 1 and 2 assessed the AACI with the same 100-item question pool. For Study 3, 31 items were assessed. Twenty-one of those items were the final items from Study 2. Nine new items were constructed to help bolster the factors: three direct communication items, four relation orientation items, and two verbal aggression items. No new items were written for the physical aggression factor as the items were consistent and reliability good. One direct item from the original 100-item pool was also kept. EFA results indicated the eight of nine new items were viable for the factor and entire measure structure. CFA results indicated 5 of the nine items should be kept in the final model. The final outcome of this study was a 23-item measure that had acceptable internal consistency reliability ($\alpha = .75$). Direct communication, verbal aggression, and physical aggression are each comprised of six items while relationship orientation consistent with five items.

The original intent behind the AACI was to assess individual's general aggressive and assertive tendencies. This study explored whether relational context would a make difference in assessing one's aggressive and assertive behaviors. Thus, the wording of the AACI items was modified to one of three conditions: romantic partner, close friend, or acquaintance. Results revealed significant differences between the acquaintance condition from the romantic partner and close friend conditions in the direct communication, relationship orientation, and verbal aggression factors. Individuals instructed to reflect on their communication behaviors when interacting with one of their acquaintances reported less direct communication, less relationship orientation, and less verbal aggression than did those who considered their behavior with a close friend or romantic partner. These results indicate that relational closeness does impact how one behaves. However, without controlling for condition, significant patterns were revealed in the validity analyses. These results also indicate that the AACI may be successfully modified for different contexts.

Validity Results

Overall, the AACI related to other measures of aggressiveness and assertiveness as expected. These results further support the validity of the measure as a whole and the four individual factors. Additionally, the results of this study further illuminate the complicated relationship between the two aggressiveness and assertiveness. For example, some assertion-related factors related to aggressive behaviors and vice versa. Both assertive and aggressive measures and factors shared positive relationships with direct communication. Thus, while both may directly communicate, the approach one has in delivering her/himself and her/his level of respect for the other person appears to be a

distinguishing element. The failure to produce universal oppositional relationships between aggressive and assertive measures, factors, and related concepts provides support for the notion that while often oppositional, aggressiveness and assertiveness are not always polarized. Aside from having some common results, some assertion- and aggression-related factors had no significant relationship to the "other" communication behavior. In sum, these results reflect the complex nature of both assertiveness and aggressiveness as individual concepts and as related concepts. In addition to these encouraging results, a few unexpected and/or interesting results emerged that are discussed below.

The Bakker Assertiveness-Aggressiveness Inventory. Although the BAAI is the only other measure that assesses both assertiveness and aggressiveness, the item conceptualization is different from that of the AACI. The results confirmed this inconsistency. EFAs examining the factor structure of the BAAI with both orthogonal and non-orthogonal rotations revealed that the items did not consistently group as assertive and aggressive. Rather, factors emerged that were comprised of items from both subscales. These observations suggest that the distinction of BAAI assertiveness and aggressiveness items, as originally written, may not be the best method for differentiating aggressive and assertive communication behaviors.

In a comparison of the BAAI factors with the AACI factors, both BAAI factors were significantly positively related to direct communication, as expected. The BAAI's aggressiveness factor did not significantly relate to either the verbal aggression or physical aggression AACI factors. The BAAI's assertiveness factor did not significantly relate to the AACI relationship orientation factor. An unexpected result was the positive

relationship between the BAAI assertiveness factor and the AACI's verbal aggression factor. While this result was not anticipated, it does offer further support that the BAAI and AACI assess assertiveness and aggressiveness differently.

The Buss and Perry Aggression Questionnaire. All but one significant result was as expected between the BPAQ and the AACI. An unexpected positive relationship was observed between BPAQ's verbal aggression factor and the AACI's direct communication factor. However, one critique of the BPAQ is the conflation of aggressive and assertive behaviors within the measure. For instance, the item "I tell my friends openly when I disagree with them" is absent of intent to harm one's friends, a core foundation element of aggressive behavior. This item also reflects direct communication, explaining the unexpected result.

Argumentativeness. Argumentativeness is inconsistently confounded with both aggressiveness and assertiveness, making it an appropriate concept to assess in this study. With all three concepts, individuals directly pursue their own position and may all utilize counter-arguments against the other individual. However, assertive and argumentative behaviors involve directly communicating without interfering with or infringing on the rights of the other person, as aggressive behaviors do. A positive relationship was anticipated between argumentativeness and the direct communication factor. Results were as expected: a significant positive relationship with direct communication and a nonsignificant relationship with relationship orientation. Thus, while argumentativeness and assertiveness do share foundational similarities in communication patterns, argumentativeness lacks the focus on the other individual.

Although some contend argumentativeness is a component of verbal aggressiveness (Buss & Perry 1992; Hample, Han, & Payne, 2010), others have observed a negative relationship between the two (Avtgis & Rancer, 2010; Ifert & Bearden, 1998; Infante & Rancer, 1982; Infante & Wigley, 1986; Rancer & Avtgis, 2006; Rill et al., 2009; Tremblay et al., 2007; Weger, 2006). Based on the volume of existing research demonstrating the differences between argumentativeness and verbal aggressiveness, I anticipated a negative relationship between argumentativeness and verbal aggression.

However, results revealed argumentativeness was significantly positively related to both direct communication and verbal aggression. As with the assertion-related factors, argumentativeness only significantly related to one aggression-related factor. I posit that argumentativeness was related to verbal aggression and not physical aggression as both argumentativeness and verbal aggression are communicated in the same manner via verbal communication. To further explore the unexpected result between argumentativeness and verbal aggression I examined whether Infante and Rancer's (1982) Argumentativeness Scale (ARG) with Infante and Wigley's (1986) Verbal Aggressiveness Scale (VAS; Infante, 1987). Although previous research has shown virtually no relationship between the two scales, a significant positive relationship was observed between the two measures with the data from Study 3, $r(228) = .38$, $p < .001$.

This posthoc analysis further validates the surprising positive result between argumentativeness and the verbal aggression factor. This result suggests the tendency to present and defend one's own positions while attacking counter positions is present in both assertive and aggressive communication behaviors. The distinction between the concepts may derive from assessing the other dimension components (i.e., relationship

orientation). Future research should further explore the relationship between argumentativeness, assertiveness, and aggressiveness.

Limitations and Future Directions

Consistent with the previous studies, measurements were cross-sectional and retrospective. However, given the nature of this study, self-report retrospective data was appropriate. This method allowed participants to assess their own authentic behaviors with a specific individual in mind. To help prime participants to think of this individual throughout the study, participants were asked to report their acquaintance, close friend, or relationship partner's initials. In addition, this study was able to assess behaviors occurred in natural and spontaneous conditions and were not manipulated through method. Nevertheless, future research may benefit from expanding this study to include conversational interaction analysis. Additionally, despite attempts to solicit a diverse sample, the sample was still homogeneous. A sample of participants with broader demographic variance would provide a useful comparison for the results in this study to substantiate the claims made here.

This study serves as the last empirical investigation on the AACI for this dissertation. The results observed in this study were encouraging and suggest the AACI has potential to serve as a useful method to assess individual's assertive and aggressive behaviors. The next and final chapter of this dissertation will further elaborate on the consensuses that may be derived from this study, both independently and in conjunction with the previous two studies. Future directions will also be further discussed.

CHAPTER 5: GENERAL DISCUSSION AND ASSESSMENT OF THE AACI

The goal of this dissertation was to develop and provide initial validation data for the Aggressive and Assertive Communication Instrument (AACI). The AACI presents researchers with a brief and logically sound measure for assessing both aggressive and assertive behaviors. As aggressiveness and assertiveness are commonly polarized yet have some common foundational aspects, the AACI is useful to illuminate the unique relationships aggressiveness and assertiveness have with one another and as individual multi-dimensional concepts. Developing the AACI occurred across three studies with multiple samples, multiple contexts, and ample validity variable assessments. When detailing how measurement assessments should be conducted, Hunter and Gerbing (1982) contended assessments of measurement instruments should focus on content validity, internal consistency, and associations between the measure and external variables. All three elements were prioritized and assessed in this dissertation. This final chapter will review each study's contribution to the development and validation assessment of the AACI as well as offer a comprehensive assessment and conclusion of the total project. Application uses, future research directions, and limitations will also be discussed.

Study 1 Summary

In Study 1, six potential dimensions were proposed: three assertion-related (i.e., direct communication, relationship orientation, and activity) and three aggression-related (i.e., verbal aggression, physical aggression, general aggression). These six dimensions emerged from reviewing how aggressiveness and assertiveness are conceptualized, the

dimensions of aggressiveness and assertiveness in established measures, and the characteristics related to aggressive and assertive behaviors identified in an item analysis within existing measures. Then, one hundred items were developed based on the six proposed dimensions.

Exploratory factor analyses yielded evidence supporting a four-factor structure: direct communication, relationship orientation, verbal aggression, and physical aggression. A non-orthogonal rotation method was utilized as I expected the factors to correlate. Results revealed that as expected (a) direct communication and relationship orientation were associated with assertive behaviors and (b) verbal aggression and physical aggression were associated with aggressive behaviors. An orthogonal rotation only segregated the aggressive items and assertive items into two factors, losing any multidimensionality for either concept.

Based on the EFA 25-items were assessed in a series of CFAs. The 25-item model with four factors achieved the best model fit. Final factors were computed averaging items for the factors: direct communication (α = .73, *M* = 3.27; *SD* = 0.72), relationship orientation (α = .74; *M* = 3.96; *SD* = 0.61), physical aggression (α = .86; *M* = 1.60; *SD* = 0.67), verbal aggression (α = .75; *M* = 2.60; SD = 0.91). Internal consistency for the 25-item scale was acceptable (α = .75; *M* = 2.86; *SD* = .40). As expected the aggression-related factors positively correlated with one another. Both aggression-related factors negatively correlated with relationship orientation. Interestingly, direct communication did not significantly correlate with any of the three factors.

The four factors were compared to several dispositional traits (i.e., agreeableness, extraversion, conflict locus of control, and taking conflict personally) to assess the

convergent and divergent validity of the AACI four-factor structure. Results were encouraging. As expected, analyses revealed a consistent four-factor structure that related to dispositional variables in aggressive- or assertion-patterns. Also, as expected, agreeableness, external conflict locus of control, and persecution feelings during conflict all had the same variable pattern with verbal aggression and physical aggression. Similarly, internal locus of control and persecution feelings during conflict were both related to direct communication and relationship orientation in the same ways.

Two variables related to all four factors as expected. Agreeableness was anticipated to have a nonsignificant relationship with direct communication, a significant positive relationship with relationship orientation, and negative relationships with both verbal aggression and physical aggression. Persecution of feeling during conflict was significantly negatively related to both assertion-related factor and significantly positively related to both aggression-related factors. These results indicate the factors were indeed assessing aggressive and assertive behaviors as the respective factors were significantly associated with the dispositional traits in the same manner conceptual or empirical research had previously contended they should.

Analyses also indicated that some dispositional traits were uniquely related to one factor, further justifying the need for a multidimensional measure. For the assertion-related factors, direct communication was uniquely negatively related to external locus of control, direct personalization during conflict, and stress reactions during conflict, whereas relationship orientation had no significant relationships with these variables. Relationship orientation was exclusively positively related to agreeableness and positive relational effects during conflict whereas the direct communication factor was not

significantly associated. For the aggression-related factors, verbal aggression was uniquely negatively related to stress reactions during conflict and physical aggression was uniquely negatively related to internal locus of control.

Of the significant relationship analyses revealed, only one was not in the anticipated direction. The relationship between extraversion and direct communication was anticipated to be positive as extraversion is partially characterized by assertiveness. However, results indicated a strong negative relationship. I cautiously speculated an explanation for this unexpected result. I also noted future research should explore this relationship further. Results from Study 2 revealed strong significant results in the originally expected directions: extraversion was positively associated with direct communication and relationship orientation yet was negatively associated physical aggression.

One considerable limitation in Study 1 was the sample. The sample comprised of mostly young, white, female participants from a large southern university were fairly homogeneous. Thus, I aimed to diversify the samples for studies 2 and 3. In sum, Study 1 served as the foundation for the development and initial assessment of the AACI. Based on the results observed in Study 1, Study 2 was developed.

Study 2 Summary

The goal of Study 2 was to provide a second examination of the AACI. I aimed to reexamine the factor structure and item composition of the AACI with a different and more diverse sample. I also aimed to further cross-validate the AACI with dispositional traits. In order to examine whether the results observed in Study 1 would also be observed in other studies, agreeableness and conflict locus of control will be included in

this study as well. Also, based on the unanticipated results observed with extraversion in the pilot study, extraversion was reassessed in Study 2. Entitlement, exploitativeness, family communication patterns, self-esteem, and trait anger were the dispositional traits unique to this study. The sample of this study was comprised of individuals over the age of 18 who were recruited by University of Georgia student enrolled in a Department of Communication Studies' research methods course. Once recruited, these participants then recruited one of their parental figures to participate. The mean age is Study 1 was 19.97 years and ages ranged from 18 to 30 years. In Study 2, the median age was 21 years (M = 22.36) and age ranged from 18 to 54 years.

EFA and CFA results revealed the four-factor structure was consistent with the factor structure observed in Study 1and appeared to be stable. The item composition of the AACI did change from the 25-item instrument observed the pilot study. However, the difference was only a four-item reduction resulting in a 21-item measure, of which all items were present in the 25-item AACI from Study 1. Once again, the four factors and the overall measure had acceptable reliability: direct communication (α = .78; 6 items), relationship orientation (α = .70; 4 items), verbal aggression (α = .81; 4 items), physical aggression (α = .89; 7 items), 21-item AACI (α = .73). Convergent and divergent analyses provided supplementary support for the four-factor structure with the validity of the aggression-related and assertion-related results in addition to the one-factor unique results lost with an orthogonal approach. All significant results were in the anticipated directions. Additionally, the four relationships I expected to confirm divergent validity were indeed nonsignificant.

In Study 1, agreeableness and persecution feelings during conflict both related to all four measures as expected. In Study 2, agreeableness, exploitativeness (when assesses with the IES), external conflict locus of control, self-esteem, and trait anger all related to all four AACI factors as expected. These results indicate these variables are good indicators for reviewing the overall relationship the AACI has to a variety of dispositions.

Based on these results, Study 3 was developed to further cross-validate the item composition of the AACI. Also, for both studies 1 and 2, the language reflected in the AACI items were not relationship specific, as they were developed to assess general aggressiveness and assertiveness. However, an examination exploring how the AACI may change depending on relational context is appropriate. Thus, Study 3 evolved. Another goal of the last study for this project was to further solicit responses from a more diverse population.

Study 3 Summary

In Study 3, convergent and divergent validity were assessed with four existing aggressive and/or assertive measures and two dispositional tendencies (i.e., conflict management style and argumentativeness). Three conditions were developed to assess how the AACI may change or differentially relate to other variables. Participants (age *M* = 33.59; range 18-71; median = 21) were asked to respond to each questionnaire while reflecting on how s/he generally behaved with a specific acquaintance, close friend, or current romantic partner in mind. The wording of the AACI and several of the other measures were revised to reflect the study condition. Two questions assessing relational closeness and relational importance were included as condition checks. After removing participant responses that were not condition appropriate (e.g., acquaintance condition

respondents who identified their relationship with their acquaintance to be very important and very close), conditions were evened out (i.e., this was done by randomly selecting and removing cases within a particular condition).

Instead of the 100-item pool originally developed for the pilot study, participants in Study 3 only responded to 31 AACI items, the 21 items identified in the Study 2 CFA and ten additional ones. Of the ten added items, nine were newly developed for this study and one was kept from the 100-item pool due to perceived strong face validity. Results confirmed the stability of the four-factor structure. Although the four-factor structure was consistent, when examining best model fit, the AACI item composition once again fluctuated to an extent. EFA results indicated eight of nine new items were viable for the four-factor and entire AACI measure structure. More stringent CFA analyses indicated only five of the nine items should be kept in the final model. The final outcome was a 23-item measure that had acceptable internal consistency reliability ($\alpha = .75$): direct communication (6 items; $\alpha = .81$, $M = 3.72$; $SD = 0.85$), relationship orientation (5 items; $\alpha = .73$; $M = 4.28$; $SD = 0.68$), verbal aggression (6 items; $\alpha = .87$; $M = 1.75$; SD = 0.87), and physical aggression (6 items; $\alpha = .83$; $M = 1.21$; $SD = 0.46$).

Correlation analyses revealed that (a) direct communication and relationship orientation and (b) verbal aggression and physical aggression were significantly positively correlated. This was an improved result as Study 1 did not observe a significant correlation between direct communication and relationship orientation. Now, both aggression- and assertion-related items correlate with the related concept factor. Additionally, (a) direct communication and physical aggression, (b) relationship orientation and physical aggression, and (c) relationship orientation and verbal aggression

were all significantly negatively correlated. Last, direct communication and verbal aggression were not significantly correlated.

Analyses also suggested that when the AACI is specified to a relational context, individual's assertiveness and aggressiveness behaviors do change. Of the four factors, three had significant differences when the three conditions were compared. Participants who reflecting on their communicative encounters with an acquaintance reported using less direct communication, less relationship orientation, and less verbally aggressive behaviors than did participants assigned to the close friend or current romantic partner conditions. As acquaintance relationships are not as interpersonally close or as relationally important compared to close friend or romantic partner relationships, individuals decreased investment may manifest in less assertive or aggressive communication behaviors. In sum, these results indicate that relationship type does impact how one behaves. Regardless of study condition, encouraging and significant results were observed between the measures and dispositional tendencies with the AACI factors.

Overall, the existing measures of aggressiveness and assertiveness related to the AACI factors as expected. The Buss and Perry Aggression Questionnaire (BPAQ; Buss & Perry, 1992) and Verbal Aggressiveness Scale (VAS; Infante & Wigley, 1986) had significant, positive relationships with both of the AACI aggression-related factors. The Assertion Inventory (AI; Gambrill & Richey, 1975) had significant positive relationships with both AACI assertion-related factors. Furthermore, aside from one relationship, all significant results between these three measures and the factors related to the other concept were negative. The verbal aggression subscale of the BPAQ evidenced a strong,

significant, and positive relationship with the AACI direct communication factor. However, this result may be explained by a critique of the BPAQ; such that, the BPAQ questions conflate aggressive and assertive behaviors. For example, the item "I tell my friends openly when I disagree with them" is reflective of direct communication and is absent of an intent to harm, a foundational element of aggression behavior.

The other existing measure assessed in Study 3 was the Bakker Assertiveness-Aggressiveness Inventory (BAAI; Bakker et al., 1978). To my knowledge, the BAAI is the only other measure that assesses both aggressiveness and assertiveness. However, as reviewed and as the results revealed, the BAAI and the AACI conceptualize and assess aggressive and assertive behaviors differently. The BAAI contends that both aggressive and assertive behaviors exist under the umbrella of assertiveness but are separate response types. Bakker et al. designed the aggressive subscale to assess behaviors related to acquiring territory, prerogatives, or status that was not formerly one's own. The assertiveness subscale assesses behaviors that occur in response to another individual's aggressive behavior and in which an individual seeks to maintain or regain control of territory, prerogatives, or status s/he previously had. In many of the aggressive items a core concept of intent to harm another is absent. Instead, the items seem to all reflect on whether an individual is communicating directly or not in the defense or acquisition of property. Interestingly, Bakker et al. contend behaviors in which an individual possesses the intent to harm another are hostile and not aggressive. It is this conceptualization of hostility that most closely aligns with the AACI's conceptualization of aggressiveness. Unfortunately, the BAAI does not assess hostile actions. This would be another useful comparison with the AACI.

I anticipated both BAAI subscales would be significantly positively related to the AACI direct communication factor and that all other factors would have nonsignificant relationships. As expected, both the BAAI aggressiveness and assertiveness subscales significantly positively related to the AACI's direct communication factor. Supporting my notion that the BAAI items assess directness but not the manner in which an individual directly communicates. Five of the six proposed nonsignificant relationships were as anticipated. Unexpectedly, the BAAI assertiveness subscale had a significant positive relationship with the AACI verbal aggression factor. This results, while surprising, further supports my belief that the BAAI and AACI conceptualize and measure aggressiveness and assertiveness in different ways.

Both of the dispositional tendencies examined in Study 3 also revealed encouraging results. Of the 20 relationships expected to be significant between the five conflict management styles and the AACI factors, 16 were significant and in the anticipated directions. Accommodation, collaborating, and compromising were significantly related to all four AACI factors. The other dispositional trait assessed, argumentativeness, was selected as it has been consistently confounded with both assertiveness and aggressiveness. Three of the four results were are expected: argumentativeness was significantly and positively related to direct communication while both relationship orientation and physical aggression were nonsignificantly related.

The unanticipated relationship was the significant positive relationship with verbal aggression. Many previous studies have observed a negative relationship between the two concepts (e.g., Avtgis & Rancer, 2010; Infante & Rancer, 1982; Infante & Wigley, 1986; Rancer & Avtgis, 2006; Rill et al., 2009; Tremblay et al., 2007; Weger,

2006). Others argue the two concepts are not significantly related. Infante and Rancer's (1982) Argumentativeness Scale (ARG), one of the most widely used measures of argumentativeness, has been shown to have virtually no relationship to Infante and Wigley's (1986) Verbal Aggressiveness Scale (VAS; Infante, 1987). As both measures were included in Study 3 I examined their relationship with one another. Instead of observing the expected nonsignificant relationship, results indicated a positive, significant, and strong relationship, $r(228) = .38$, $p < .001$. These results support those who content argumentativeness is a more closely related to aggressiveness (e.g., Buss & Perry 1992; Hample, Han, & Payne, 2010). As the relationship between argumentativeness and aggression is contested (e.g., both current and previous studies have observed inconsistent results), future research should further explore argumentativeness' conceptual and empirical relationship with both aggressiveness and assertiveness.

Finally, as with studies 1 and 2, several variables were related to all four AACI as expected. In Study 3, both BAAI subscales, the hostility subscale from the BPAQ, the degree of discomfort from the AI, and the accommodating, collaborating, and compromising conflict management styles each related to all four AACI factor as expected. These variables, in addition to those observed in the previous studies, identify several useful indicators for comparing and differentiating both between and within aggression- and assertion-related factors.

Another consistent result observed across all three studies was that males reported higher physical aggression scores than did females. This is consistent with previous research (e.g., Shorey, Cornelius, & Bell, 2008). In sum, although there were changes and

unique results in all three studies, several consistencies were present: (a) the four-factor structure of the AACI, (b) a core consensus of items present in all three studies even though some did fluctuate, and (c) the consistent encouraging results that variables did and did not relate to the AACI factors, both as pairs and individuality, as they were expected to.

Implications and Applications

The AACI is beneficial as it contributes to the research that explicitly and directly explores the relationship between aggressive and assertive behaviors. How an individual approaches a difficult or conflictual interaction with another person may have important implications for how the conversation will proceed and other outcomes variables (e.g., the relationship between those two individuals). If that individual chooses to actively engage in the conversation, two response options are to act aggressively or to act assertively. Although both aggressive and assertive behaviors involve directly addressing an issue, they differ in the level of respect shown to the partner, in their respective verbal and nonverbal behaviors, and in the relational outcomes of enacting these behaviors. Additionally, even though aggression and assertion are two response options commonly studied in many disciplines, the empirical relationship between these two concepts is still unclear. The AACI is useful as it illuminates the unique relationships aggressiveness and assertiveness have with one another and as unique multi-dimensional concepts.

Furthermore, the AACI also contributes a different perspective of how aggressiveness and assertiveness are conceptualized as individual concepts and as related concepts. The BAAI, the only other measure I found assessing both aggressive and assertive behavior, conceptualizes and assesses aggressiveness and assertiveness

differently. Instead of distinguishing between the defense or acquisition of territory, the AACI distinguishes aggressive and assertive behavior with the intent one has towards another. Aggressive communicators pursue their own agenda with the intent to harm the other at some level (Baron & Richardson, 1994; Infante, 1987; Straus, 1979). Assertive communicators pursue their own agenda while also maintaining a level of respect for the other's stance and self (Dickson et al., 1984; Infante, 1987; Infante et al., 2003; Jouriles et al., 2011). The utility of this approach was supported by the results observed in the three studies examining the construct validity of the AACI via convergent and divergent validity assessments.

The results reported in this dissertation indicate the AACI is a valid and reliable measure that assess aggressiveness and assertiveness as both individual concepts and as multi-dimensional concepts. Although several aggression instruments are multidimensional, assertion is commonly assessed unidimensionally. Another implication of the results observed in this dissertation is that the conceptualization of assertiveness as a single dimension is insufficient. All three studies revealed that two factors (i.e., direct communication and relationship orientation) developed to capture assertive behaviors do in fact relate to dispositional tendencies, existing measures, and related concepts as there should. However, more importantly, these two factors do not always relate to variables in the same way. Both direct communication and relationship orientation exhibited results exclusive to only one factor. Thus, assessing assertiveness multidimensionally is appropriate and has utility if we aim to more fully understand assertiveness and how assertiveness is related to other concepts.

I believe the greatest strength of the AACI is that the four-factor structure assesses a breadth of communication behaviors commonly confounded or underassessed. Furthermore, assessing all four factors in one measure illustrates how these behaviors are similarly and differentially related to one another. Additionally, as evidenced in this dissertation, the AACI can be utilized to assess general aggressive and assertive tendencies or it can be tailored to specific contexts. As the results from Study 3 modifying the AACI to assess individual's behaviors within acquaintance, close friend, or current romantic partner context were encouraging, there are many application possibilities for the AACI.

Researchers interested in using the AACI should assess all four factors together and not use this measure as a source for assessing direct communication, relationship orientation, verbal aggression, or physical aggression in any way other than as a four-factor instrument. Although aggressiveness and assertiveness are each assessed as multi-dimensional concepts in the AACI, the AACI should not currently be treated as a dual- or multi-measure product that assesses any concept individually. Furthermore, the AACI should not be treated as a source for assessing aggressiveness or assertiveness independently. The aim of this multi-study dissertation solely focused on the development of a measure that would capture and explore the relationship between both aggressiveness and assertiveness in tandem. Future research may explore whether there is psychometric validity to utilizing the AACI in any reduced format; however, as the aim, data, and results of this dissertation were only concerned with assessing the AACI as a full four-factor measure, I cannot deduce the appropriateness of such an approach.

Potential areas of application include, but are not limited to, interpersonal conflict communication, family communication, and health communication. The AACI is appropriate for assessing one's own behavior, but may be modified to assess others' behaviors. Future research would need to first examine the validity of such an approach though. Additionally, much research on aggression and assertion contends everyone has a trait disposition towards aggressiveness and/or assertiveness. The AACI may also be used to further examine the extent to which aggressiveness and/or assertiveness are states versus traits. As examined in Study 3, the AACI is useful for examining behavior changes based on relational differences, supporting the notion that individuals can and do modify their response types in different situations. A natural extension of this project would be to examine how other factors (e.g., environment, emotional state, power dynamics) further influence how individual modify their behaviors. This project serves as the foundation upon which much research may build and further explore the relational and application differences between aggressiveness and assertiveness.

To summarize, the AACI assesses two communication behaviors within four factors in an easily understood scale approach that may be tailored to specific contexts. The final 23-item version should pose minimal participant burden even when administered amongst a variety of populations and survey administration channels. The adoption of the AACI as a valid measure that assesses two commonly confounded yet polarized concepts should further illuminate the complex construction of each concept. It is my hope the AACI will be a useful tool in addressing how individuals communicate and how those communication behaviors influence and are influenced by their dispositions, interactions, relationships, and lives.

Limitations and Future Directions

Although there are a number of strengths, as with any research, there were limitations to the studies included in this dissertation. As the overarching purpose of this project was to develop and assess the construct validity of the AACI by establishing the convergent and divergent validity of the measure and its four factors. Ideally, when construct validity is established, more than one sample will be used to examine the measure, and the samples will have different characteristics. While three samples were assessed in this dissertation, and there was increased diversity with each study, the samples were still fairly homogeneous to one another. It would be advantageous to have individuals from other populations participate in these studies, such as different educational, ethnicity, and employment backgrounds. Future studies should further examine the convergent and divergent validity of the AACI with a more diversified population to substantiate the results revealed in this project.

Additionally, the evidence of validity for all three studies was based on cross-sectional retrospective data. As the measurement was retrospective it was susceptible to biases associated with retrospection. However, given the nature of this study, self-report retrospective data was appropriate. This method allowed participants to assess their own authentic behaviors with others that occurred in natural and spontaneous conditions and were not manipulated through method. Nevertheless, future studies are needed to examine aggressive and assertive tendencies over time to establish how general the AACI assessments are. Additionally, future research may benefit from examining others' perspectives of an individual's behavior(s) to gain a more thorough understanding of perceived versus actual aggressive and assertive tendencies.

Another direction future research should explore is continuing to examine the AACI relative to the context or situation to determine the effect they may have on the items and dimensions in the scale. Aside from assessing different relationship types and conversational contexts, future research may also investigate how culture affects perceptions and behavior related to aggressiveness and assertiveness. As reviewed in Chapter 1, some cultures (e.g., China) value social harmony to the extent that open and direct disagreement with others is viewed as a threat to harmony and is highly discouraged (e.g., Lin et al., 2010; Oetzel & Ting-Toomey, 2003; Triandis, 1995). This is in opposition to the United States where the ability to defend oneself without attack the other is associated with positive relational outcomes (e.g., Infante, 1987; Infante & Rancer, 1996). Such research would broaden our US-centric understanding of aggressiveness, assertiveness, and related concepts (e.g., argumentativeness). In sum, replicating the results observed in these three studies with different samples would provide a useful contrast to these results.

Conclusions

The overarching goal of this project was to explore the relationships between aggressive and assertive behavior via the development of the Aggressive and Assertive Communication Instrument (AACI). To examine the construct validity of this new measure, three studies explored the convergent and divergent validity of the AACI by exploring the AACI's factor structure to (a) dispositional traits often explored in conjunction with conflict, (b) established aggressiveness and assertiveness measures, and (c) related concepts. Results from three studies revealed a consistent and stable four-factor structure comprised of two assertion-related factors (i.e., direct communication and

relationship orientation) and two aggression-related factors (i.e., verbal aggression and physical aggression). The dispositional traits and existing measures examined in the three studies were mostly related to the factors as expected. Some results revealed consistent patterns in which a concept would relate to both aggression- or assertion- related concepts in the same way. Additionally, some relationships were unique to one factor alone, supporting the utility of a multi-dimensional approach. It is my hope this dissertation provides another foundational element for research examining both aggressive and assertive communication behaviors and that future research will continue such explorations.

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APPENDIX A: INITIAL DIMENSIONS AND ITEMS OF THE AGGRESSIVE AND ASSERTIVE COMMUNICATION INSTRUMENT (AACI)

AS – Directness (19)

1. If someone treats me unfairly I address her/him directly.
5. I am direct in expressing my opinion.
6. When problems arise, I avoid discussing the problem. (Reverse Code)
8. When problems arise, I try to discuss the problem.
11. It is important for me to express my feelings to others.
12. If someone interrupts me in the middle of a conversation, I request s/he waits until I am finished.
17. If I have a friend others dislike; I inform others that I disagree with them.
18. If I receive poor service, I complain to the management.
21. If I am angry at someone, I tell her/him.
26. I find it difficult to ask others for favors. (Reverse Code)
28. When I decide I have an issue with someone, I have difficulty telling the other person. (Reverse Code)
31. I insist others do their fair share.
32. I would be hesitant to ask someone why s/he treated me a certain way. (Reverse Code)
33. If another person interrupts me while I am speaking, I wait until s/he is finished speaking to continue with my story. (Reverse Code)
34. I find it difficult to stand up for myself. (Reverse Code)
38. If someone wants me to do something I am not fond of, I attempt to discuss or negotiate with her/him.
50. I make an effort to express my point of view, even when it is difficult.
77. If I am told to take charge, I become uncomfortable. (Reverse Coded)
97. I am responsible for my own choices.

AS – Activity (18)

4. People have told me that I am straightforward but respectful.
14. I express my feelings to others.
24. Sometimes I avoid asking questions because I feel self-conscious. (Reverse Code)
35. When arguing, I refrain from speaking when I worry that the person will form a negative impression of me. (Reverse Code)
36. I believe sharing thoughts and feelings creates more problems than it solves. (Reverse Code)
39. I ask others to express their emotions to me.
41. I am able to express affection to those I care about.
55. I tend to bottle up my opinions. (Reverse Code)
57. I enjoy having conversations with others, even when we disagree.
60. When I feel myself get angry, I try to calm myself down to have a constructive conversation.

63. I avoid asking questions for fear of feeling stupid. (Reverse Code)
64. When someone asks why I am angry, I sometimes just don't know what to say. (Reverse Code)
69. I refuse to participate in arguments when they include personal attacks.
76. I often come across as "shy". (Reverse Coded)
80. I believe it is possible to voice my opinion without being aggressive.
81. I do not have not to win every argument to be confident in myself.
89. I have positive self-esteem.
92. I am able to control my anger in order to have constructive conversations.

AS – Relationship Orientation (12)
2. I believe it is important to understand other's points of view/opinions during conflict.
15. I think about other's feelings before I do something they may not like.
25. I am overly careful to avoid hurting others' feelings. (Reverse Code)
51. I find discussing others' points of view, even when they disagree with mine, rewarding.
68. I am careful to avoid attacking another's intelligence when I attack her/his ideas.
75. When people say mean things to me, I attack their character. (Reverse Coded)
84. It is important to affirm others point of view, even if I disagree.
86. I believe conflicts need to be carefully handled to avoid unnecessary escalation.
90. I believe that compromises are important.
93. I work to respect others feelings, thoughts, and desires.
94. I am comfortable having relationships with others who are different from me.
96. I criticize the opinion of those who do not agree with my opinion.

AG – General Aggression (10)
16. If someone tries to hurt me, I make sure I get even.
19. No matter how bad things are, I do not let them upset me. (Reverse Code)
20. If I don't get even with people, I will not be respected.
55. I have forced someone to do something.
61. When angry, I take it out on others.
62. I am an even-tempered person. (Reverse Code)
71. I believe that understanding where another person is coming from is important. (Reverse Coded)
72. I believe that respecting different opinions is important. (Reverse Code)
73. When others make me angry, I sometimes lash out.
74. If something is bothering me, I do something to relax. (Reverse Code)

AG – Verbal Aggression (15)
3. I pick on people I do not like.
9. I get into verbal fights more than the average person.
10. I criticize others when they attempt to defend themselves.
42. I believe that yelling is sometimes necessary.
48. If I am mad at someone, I just ignore her/him. (Reverse Code)
51. I sometimes get into "yelling" fights.
56. I make sure I dominate conversations when I am right.

65. I have threatened people I know.
66. I curse at others when I am angry.
70. When I can't influence others, I yell and scream to get them to react.
79. I yell at others when they annoy me.
85. I feel good when I win fights by putting someone else down.
88. Sometimes I insult people to get them to do what I want.
91. I have bullied someone. **(may cross with AG – Physical Aggression)**
95. I do not insult people because there are other ways of getting my point across. (Reverse Code)

AG – Physical Aggression (26 – 8 marked for violence with *)
7. I have used force to get something from someone.
13. I believe violence in relationships can improve them.*
22. I have punched someone.
23. I have used a knife on someone.*
27. I have pulled a gun on someone.*
29. I assert my opinions or point-of-view by my physical prowess.
30. I believe that if you back down from a fight, you are a coward.
37. I get into physical fights more than the average person.
40. If I have to resort to violence to stand up for myself I will.*
43. Sometimes I push or shove others when I am mad.
44. I believe it is wrong to get into physical fights with others. (Reverse Code)
45. I have taken my anger out on others by using physical force.
46. I don't need to fight because there are other ways of dealing with things. (Reverse Code)
47. I attempt to talk someone down who is threatening violence towards me instead of fighting. (Reverse Code)*
49. I feel big and tough when I push someone down.
53. Sometimes I break things on purpose. (Reverse Code)
54. I do whatever I feel like doing, even if it is violent.
59. If someone hits me, I hit back.
67. I have broken things in anger before.
78. I have hit someone with the idea of hurting her/him.
82. I believe that carrying a weapon is an effective way to avoid a physical fight.*
83. I believe that carrying a weapon is an effective way to protect myself.*
87. Sometimes I hit people to get them to do what I want.
98. I have used a weapon to get something from someone.*
99. I have damaged or destroyed property on purpose.
100. There is never a good reason for me to hit another person. (Reverse Code)

APPENDIX B: INITIAL ITEMS OF THE AGGRESSIVE AND ASSERTIVE COMMUNICATION INSTRUMENT (AACI)

The following questions contain statements about *your perceptions, actions, and beliefs in general.* Indicate your level of agreement with each statement by selecting the appropriate number. Use the following scale:

Strongly Disagree/ Extremely Uncharacteristic of Me				Strongly Agree/ Extremely Characteristic of Me
1	2	3	4	5

1. If someone treats me unfairly I address her/him directly. (Assertive)
2. I believe it is important to understand other's points of view/opinions during conflict. (Assertive)
3. I pick on people I do not like. (Aggressive)
4. People have told me that I am straightforward but respectful. (Assertive)
5. I am direct in expressing my opinion. (Assertive)
6. When problems arise, I avoid discussing the problem. (reverse coded; Assertive)
7. I have used force to get something from someone. (Aggressive)
8. When problems arise, I try to discuss the problem. (Assertive)
9. I get into verbal fights more than the average person. (Aggressive)
10. I criticize others when they attempt to defend themselves. (Aggressive)
11. It is important for me to express my feeling to others. (Assertive)
12. If someone interrupts me in the middle of a conversation, I requests s/he waits until I am finished. (Assertive)
13. I believe violence in relationships can improve them. (Aggressive)
14. I express my feelings to others. (Assertive)
15. I think about others' feelings before I do something they may not like. (Assertive)
16. If someone tries to hurt me, I make sure I get even. (Aggressive)
17. If I have a friend others dislike, I inform others that I disagree with them. (Assertive)
18. If I receive poor service, I complain to the management. (Assertive)
19. No matter how bad things are, I do not let them upset me. (reverse coded; Aggressive)
20. If I don't get even with people, I will not be respected. (Aggressive)
21. If I am angry at my friends, I tell them. (Assertive)
22. I have punched someone. (Aggressive)
23. I have used a knife on someone. (Aggressive)
24. Sometimes I avoid asking questions because I feel self-conscious. (reverse coded; Assertive)
25. I am overly careful to avoid hurting others' feelings. (reverse coded; Assertive)
26. I find it difficult to ask others for favors. (reverse coded; Assertive)

27. I have pulled a gun on someone. (Aggressive)
28. When I decide I have an issue with someone, I have difficulty telling the other person. (reverse coded; Assertive)
29. I assert my opinions or point-of-view by my physical prowess. (Aggressive)
30. I believe that if you back down from a fight, you are a coward. (Aggressive)
31. I insist others do they fair share. (Assertive)
32. I would be hesitant to ask someone why s/he treated me a certain way. (reverse coded; Assertive)
33. If another person interrupts me while I am speaking, I wait until s/he is finished speaking to continue with my story. (reverse coded; Assertive)
34. I find it difficult to stand up for myself. (reverse coded; Assertive)
35. When arguing, I refrain from speaking when I worry that the person will form a negative impression of me. (reverse coded; Assertive)
36. I believe sharing thoughts and feelings creates more problems than it solves. (reverse coded; Assertive)
37. I get into physical fights more than the average person. (Aggressive)
38. If someone wants me to do something I am not fond of, I attempt to discuss or negotiate with her/him. (Assertive)
39. I ask others to express their emotions to me. (Assertive)
40. If I have to resort to violence to stand up for myself I will. (Aggressive)
41. I am able to express affection to those I care about. (Assertive)
42. I believe that yelling is sometimes necessary. (Aggressive)
43. Sometimes I push or shove others when I am mad. (Aggressive)
44. I believe it is wrong to get into physical fights with others. (reverse coded; Aggressive)
45. I have taken my anger out on others by using physical force. (Aggressive)
46. I don't need to fight because there are other ways of dealing with things. (reverse coded; Aggressive)
47. I attempt to talk someone down who is threatening violence towards me instead of fighting. (reverse coded; Aggressive)
48. If I am mad at someone, I just ignore her/him. (reverse coded; Aggressive)
49. I feel big and tough when I push someone down. (Aggressive)
50. I make an effort to express my point of view, even when it is difficult. (Assertive)
51. I sometimes get into "yelling" fights. (Aggressive)
52. I find discussing others' points of view, even when they disagree with mine, rewarding. (Assertive)
53. Sometimes I break things on purpose. (Aggressive)
54. I do whatever I feel like doing, even if it is violent. (Aggressive)
55. I have forced someone to do something. (Aggressive)
56. I make sure I dominate conversations when I am right. (Aggressive)
57. I enjoy having conversations with others, even when we disagree. (Assertive)
58. I tend to bottle up my opinions. (reverse coded; Assertive)
59. If someone hits me, I hit back. (Aggressive)
60. When I feel myself get angry, I try to calm myself down to have a constructive conversation. (Assertive)
61. When angry, I take it out on others. (Aggressive)

62. I am an even-tempered person. (reverse coded; Aggressive)
63. I avoid asking questions for fear of feeling stupid. (reverse coded; Assertive)
64. When someone ask why I am angry, I sometimes just don't know what to say. (reverse coded; Assertive)
65. I have threatened people I know. (Aggressive)
66. I curse at others when I am angry. (Aggressive)
67. I have broken things in anger before. (Aggressive)
68. I am careful to avoid attacking another's intelligence when I attack her/his ideas. (reverse coded; Assertive)
69. I refuse to participant in arguments when they include personal attacks. (Assertive)
70. When I can't influence others, I yell and scream to get them to react. (reverse coded; Assertive)
71. I believe that understanding where another person is coming from is important. (reverse coded; Aggressive)
72. I believe that respecting different opinions is important. (reverse coded; Aggressive)
73. When others make me angry, I sometimes lash out. (Aggressive)
74. If something is bothering me, I do something to relax. (reverse coded; Aggressive)
75. When people say mean things to me, I attack their character. (reverse coded; Assertive)
76. I often come across as "shy". (reverse coded; Assertive)
77. If I am told to take charge, I become uncomfortable. (reverse coded; Assertive)
78. I have hit someone with the idea of hurting her/him. (Aggressive)
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85. I feel good when I win fights by putting someone else down. (Aggressive)
86. I believe conflicts need to be carefully handled to avoid unnecessary escalation. (Assertive)
87. Sometimes I hit people to get them to do what I want. (Aggressive)
88. Sometimes I insult people to get them to do what I want. (Aggressive)
89. I have positive self-esteem. (Assertive)
90. I believe that compromises are important. (Assertive)
91. I have bullied someone. (Aggressive)
92. I am able to control my anger in order to have constructive conversations. (Assertive)
93. I work to respect others' feelings, thoughts, and desires. (Assertive)
94. I am comfortable having relationships with others who are different from me. (Assertive)
95. I do not insult people because there are other ways of getting my point across. (reverse coded; Aggressive)
96. I criticize the opinion of those who do not agree with my opinion. (Assertive)
97. I am responsible for my own choices. (Assertive)

98. I have used a weapon to get something from someone. (Aggressive)
99. I have damaged or destroyed property on purpose. (Aggressive)
100. There is never a good reason for me to hit another person. (reverse coded; Aggression)

ENDNOTES

[i] An investigative maximum likelihood exploratory factor analysis with a Varimax rotation (an orthogonal rotation method) was conducted to see how the items would load when not allowed to correlate. A series of analyses repeatedly revealed the items loaded on two factors: aggressive behaiors and assertive behaviors.