

9-3-2014

Personality and Emotional Components in Parent-Adult Child and Adult Friendship Conflicts

Theresa MacNeil

University of Connecticut - Storrs, tmacneil42282@gmail.com

Follow this and additional works at: <https://opencommons.uconn.edu/dissertations>

Recommended Citation

MacNeil, Theresa, "Personality and Emotional Components in Parent-Adult Child and Adult Friendship Conflicts" (2014). *Doctoral Dissertations*. 586.

<https://opencommons.uconn.edu/dissertations/586>

Personality and Emotional Components in Parent-Adult Child and Adult Friendship Conflicts

Theresa MacNeil, Ph.D.

University of Connecticut, 2014

Conflict is pervasive in every part of life, specifically within interpersonal relationships. Moreover, the extent to which a person handles and manages conflict can directly affect relationship and conflict outcomes. In addition, emotion and personality traits can also impact how a conflict is managed. That is, emotion and personality traits may predict the use of certain conflict management strategies which then can affect the overall conflict outcome. Though these variables have been researched in other areas, conflict research on parent-adult child and adult friendship conflict contexts remains limited. Thus, the current research sought to understand the personality and emotional traits that drive conflict strategies, underlying the various conflict tactics in parent-adult child and adult friendship conflict situations. A convenience sample ($N = 569$) was collected. Half of the participants completed the adult parental online survey, and half completed the friendship online survey. These surveys included conflict management and emotion and personality scales. Results of structural equation modeling indicated that individuals in both contexts exhibited similar conflict management patterns, specifically with the role of avoidance. Avoidance, as evidenced in other studies, was used as a way to return to more constructive types of conflict. Additionally, in both contexts, depression, contentment and egocentrism increased the use of avoidance. Moreover, in both contexts contentment and verbal collaborativeness increased the use of constructive conflict management strategies, while grandiosity and verbal destructiveness increased the use of aggressive conflict management

Theresa MacNeil – University of Connecticut, 2014

strategies in both contexts. Implications for these results as well as differences in the two contexts are discussed, followed by limitations of the study.

Personality and Emotional Components in Parent-Adult Child and Adult Friendship Conflicts

Theresa MacNeil

B.A., Boston College, 2004

M.A., California State University, Los Angeles, 2008

A Dissertation

Submitted in Partial Fulfillment of the

Requirements of the Degree of

Doctor of Philosophy

at the

University of Connecticut

2014

Copyright by
Theresa MacNeil

2014

APPROVAL PAGE

Personality and Emotional Components in Parent-Adult Child and Adult Friendship Conflicts

Doctor of Philosophy Dissertation

Presented by

Theresa MacNeil, B.A., M.A.

Major Advisor_____

Mark Hamilton, Ph.D.

Associate Advisor_____

Ross Buck, Ph.D.

Associate Advisor_____

Shannon Weaver, Ph.D.

University of Connecticut

2014

Acknowledgements

There were many people who contributed to this study. First and foremost, I would like to thank my advisor, Dr. Mark Hamilton, for his guidance and mentorship throughout the research process. I would also like to thank the remaining committee members, Dr. Ross Buck, Dr. Shannon Weaver, as well as the readers, Dr. Mike Miller and Dr. Amanda Denes, for their guidance in the completion of this project. Last, but not least, I would like to thank my family and friends who have supported me throughout my entire graduate career. In particular, I would like to extend my gratitude to my wonderful fiancé, Joe Kelly, who has been my rock during some very strenuous times. I could not have finished without you all. Thank you from the bottom of my heart.

Table of Contents

Chapter 1: Introduction	1
Chapter 2: Literature Review	4
Conflict Management Strategies	4
Conflict Strategies and Personality	8
Verbal Aggressiveness	9
Anxiety	10
Empathy	10
Egocentrism	11
Self-Esteem	11
Conflict and Emotions	12
Parental Conflict and Conflict Management	13
Friendship and Conflict Management	16
Chapter 3: Methods	19
Sample & Procedure	19
Measures	20
Conflict Management Strategies	20
Verbal Aggressiveness	20
Anxiety	20
Empathy	21
Egocentrism	21

Self Esteem	21
Emotions	22
Demographics	22
Measurement Model	22
Chapter 4: Results	32
Traits and States	32
Traits Analysis	40
Parent Adult Child Context.....	43
Friendship Context.....	45
Chapter 5: Discussion	48
Limitations and Future Directions	53
References	54
Appendix A: Conflict Scales	67
Appendix B: SAFECOMM Scale.....	72
Appendix C: Empathy Scale.....	74
Appendix D: Egocentrism Scale.....	75
Appendix E: Self-Esteem Scale	76
Appendix F: State-Trait Anxiety Inventory Scale	77
Appendix G: Verbal Aggressiveness Scale	78

Tables

Table 1: Correlations of Second Order Confirmatory Factor Items of Conflict Management Tactics and Strategies in Adult Child Parental Conflict and Friendship Conflict Contexts	23
Table 2: Correlations of Second Order Confirmatory Factor Items of Conflict Management Tactics and Strategies in Dating Dyads	24
Table 3: Correlations of Second Order Confirmatory Factor Items of Conflict Management Tactics and Strategies in Sibling Dyads.....	25
Table 4: Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of SAFECOMM Items	26
Table 5: Correlations of Second Order Confirmatory Factors of Emotion State Items..	27
Table 6: Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of the Verbal Aggressiveness Scale.....	28
Table 7: Factor Loadings for Trait Anxiety Measure	29
Table 8: Confirmatory Factor Analysis of the Empathy Scale	30
Table 9: Confirmatory Factor Analysis of the Egocentrism Scale	30
Table 10: Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of the Self-Esteem Scale	31
Table 11: Correlations of Traits and States of Conflict Management Items in Parental Context.....	35
Table 12: Correlations of Traits and States of Personality Items in Parental Context	36

Table 13: Correlations of Traits and States of Conflict Management Items in Friendship Context.....	37
Table 14: Correlations of Traits and States of Personality Items in Friendship Context ..	38

Figures

Figure 1: Hypothesized Model	8
Figure 2: Relationship between Emotional States and Personality Traits	33
Figure 3: Test of State Model for Parental Context.....	39
Figure 4: Test of State Model for Friendship Context	40
Figure 5: Trait Model for Parental Context.....	41
Figure 6: Trait Model for Friendship Context	42

Chapter 1

Introduction

Understanding how to effectively manage conflict using more constructive types of conflict strategies and tactics can greatly enhance relationships and communication. Additionally, studying conflict is essential to mitigating damaging conflict management patterns, because it helps individuals recognize destructive conflict patterns, and learn how to turn them into more constructive patterns (Wilmot & Hocker, 2007). Along with conflict management factors, personality and emotional variables may predict what conflict strategies will be used during conflict. Though some researchers claim that personality has little to do with conflict management choice (Wilmot & Hocker, 2007), others maintain that personality impacts the use of conflict strategy choice despite different situations (Hamilton & Tafoya, 2012). Additionally, emotions can influence and/or predict strategy use in conflict, which is a main goal of the current paper. For instance, if people begin to feel angry or threatened, they may use more destructive forms of conflict management, than if they did not feel threatened or defensive (Guerrero & La Valley, 2006).

Researchers disagree about the exact definition of conflict. Indeed, there are several types of definitions and typologies found in the conflict literature (Canary, Cupach, & Messma, 1995). One popular definition describes conflict as “the interaction of interdependent people who perceive opposition of goals, aims, and values, and who see the other party as potentially interfering with the realization of these goals” (Putnam & Poole, 1987, p. 552). Whether it is seen or experienced in neighborhoods, with loved ones, or going to work (Oetzel & Ting-Toomey, 2006; Wilmot & Hocker, 2007), people cannot escape conflict in their lives. Because conflict is

ubiquitous, individuals need to understand and learn effective conflict management as an essential component to their interpersonal skills (Wilmot & Hocker, 2007). Indeed, conflict management affects all types of interpersonal connections -- romantic, familial and workplace relationships (Wilmot & Hocker, 2007). Interpersonal disputes can have both positive and negative consequences. They can lead to trauma, dissatisfaction, violence, death, divorce or economic losses; yet they can also produce positive effects including personal growth, understanding issues and problems, relational development and better decision making (Oetzel & Ting-Toomey, 2006). Thus, the outcome of conflict is heavily influenced by how a conflict is managed. That is, adopting a constructive conflict tactic or strategy should yield positive outcomes whereas adopting a destructive conflict tactic or strategy should yield negative outcomes (Oetzel & Ting-Toomey, 2006). Though tactics and strategies are widely used interchangeably in the literature, they are distinct entities. A strategy, (also referred to as a style), is an overarching, consistent orientation used during conflict. If an individual uses the same orientation repeatedly, they exhibit a particular conflict management strategy (Cahn & Abigail, 2007). In addition, all conflict strategies are associated with conflict tactics. A conflict tactic is “a specific observable behavior that moves a conflict in a particular direction in line with the strategy” (Cahn & Abigail, 2007, p. 78). That is, every strategy is related to a group of similar behaviors (Cahn & Abigail, 2007).

Thus, given the possible salience of personality and emotional components in conflict, the current study specifically focuses on personality and emotional factors that drive the conflict strategies in parent-adult child conflict and adult friendship conflict scenarios. According to scholars, the need for more research on parent-adult conflict and adult friendship conflict is great because there is a paucity of research in these populations (Canary, et. al, 1995; Sherman, De

Vries, & Lansford, 2000). A background about conflict management, personality, and emotional factors is first necessary to place the proposed hypothesized model (Figure 1) in a research framework.

Chapter 2

Literature Review

Conflict Management Strategies

There are many ways to define and organize approaches to conflict management. A primitive way of looking at conflict management is to describe constructive conflict management as one that entails cooperation whereas destructive conflict management employs competitive maneuvers. However, this simple dichotomy does not sufficiently describe the intricate processes involved in conflict management (Oetzel & Ting-Toomey, 2006). As stated earlier, strategies are overall sets of behaviors that are consistent across situations, whereas tactics are situation-specific applications of a strategy (Cahn & Abigail, 2007) that can be influenced by personality and context. Most scholars agree that conflict management tactics vary along two dimensions: cooperation and directness. However, they disagree about how such tactics are organized by strategy (Guerrero, Anderson & Affifi, 2007; Wilmot & Hocker, 2007). For instance, scholars have grouped tactics under three (i.e., integrative, avoidance and distributive), four (i.e., problem solving, yielding, avoidance, contending) or five (i.e., collaborating, compromising, avoidance, competing, accommodating) strategies (Wilmot & Hocker, 2007). Many researchers have used the five-strategy approach above other approaches (Blake & Mouton, 1964; Kilman & Thomas, 1975; Wilmot & Hocker, 2007).

The two popular conflict theoretical frameworks behind the different conflict approaches are the integrative-distributive negotiation model (Putnam & Poole, 1987) and the dual concern model (Putnam, 2006). The integrative-distributive negotiation model corresponds to sub-processes in conflict interaction and is based on the idea that partners view outcomes as either win or lose scenarios. When an individual uses an integrative strategy, they are seeing a conflict

as a win-win situation, and will exhibit such tactics as engaging in problem solving, generating alternative solutions, understanding the other party, and making compromises (Putnam & Poole, 1987). On the other hand, when an individual uses a distributive negotiation strategy, they exhibit tactics such as withholding information or trying to get the most of the “fixed-pie” that is possible (Putnam & Poole, 1987; Putnam, 2006). This particular framework formed the foundation for communication research to study tactics and strategies in interpersonal contexts (Sillars, Coletti, Parry, & Rogers, 1982; Sillars, 1980).

Though the integrative-distributive negotiation model paved the way for research on conflict strategies and tactics, the dual-concern framework is the most widely used framework that researchers employ to measure conflict management behaviors (Guerrero, et. al., 2007). Dual-concern researchers propose that conflict choices are determined by the cooperation and directness dimensions (Canary, et. al., 1995). The cooperation dimension focuses on individuals’ concern with either mutual (cooperative) or personal (uncooperative) conflict outcomes, and the directness dimension focuses on individuals’ desire to either discuss the actual conflict (directness), or evade the conflict topic (indirectness) (Guerrero, et. al., 2007; Putnam, 2006;).

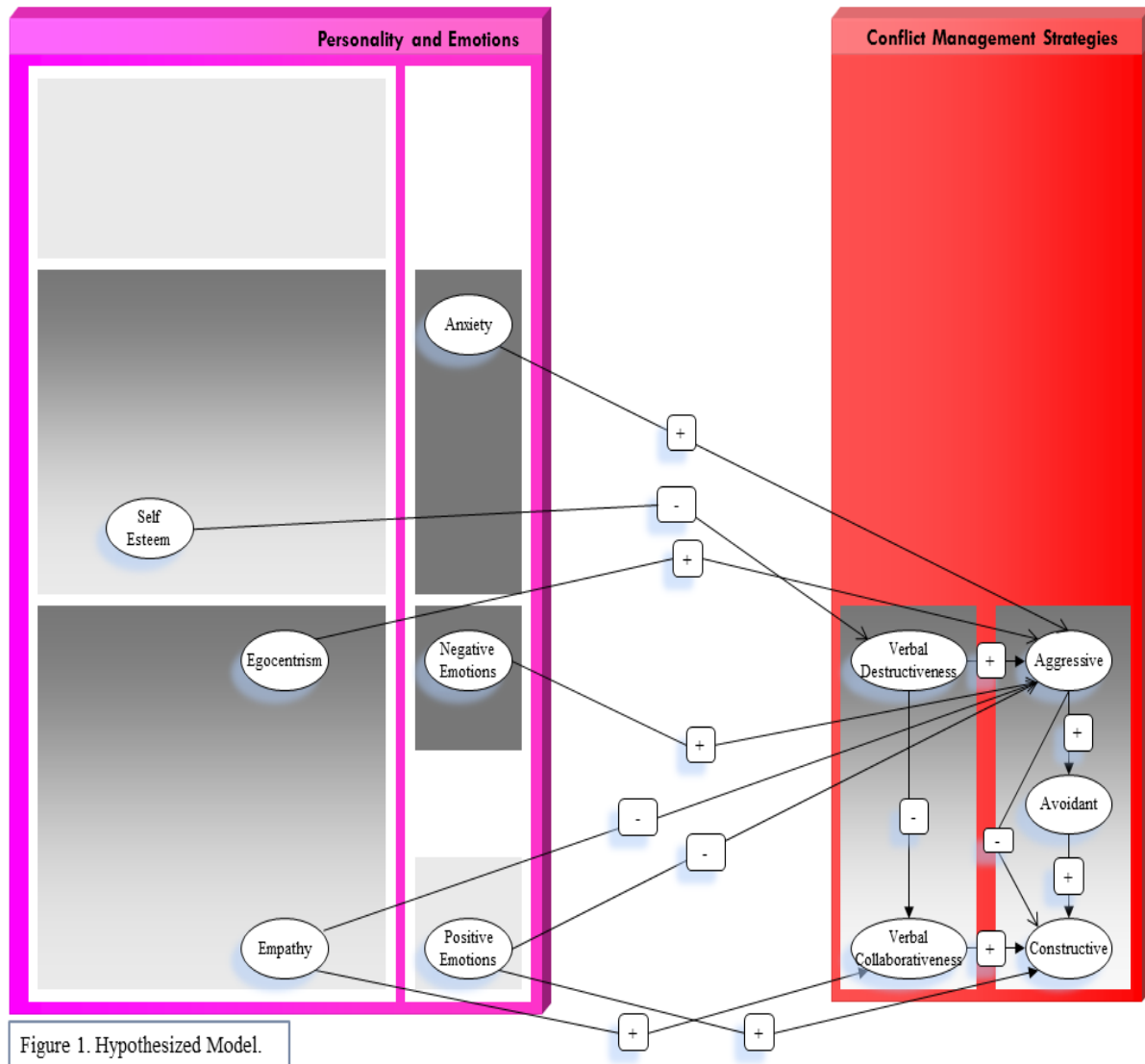
The dual-concern model has been defined in a myriad of ways and associated with three to five conflict strategies (Putnam & Wilson, 1982; Ross & DeWine, 1988; Sillars, et. al, 1982), made up of different clusters of tactics. Advocates of the 3-strategy framework (Putnam & Wilson, 1982; Ross and DeWine, 1988; Sillars, et. al, 1982) propose the following strategies: integrative (tactics related to positive/constructive behaviors), avoidance (tactics related to withdrawing from conflict), and distributive (tactics related to negative behaviors). Advocates of the 4-strategy framework (Pruitt, 1983; Sandy & Boardman, 1996) include a problem solving

strategy (i.e., tactics related to efforts to find an acceptable solution for both individuals in conflict), a yielding strategy (i.e., tactics related to reductions in underlining goals and values), an avoidance strategy (i.e., tactics related to inaction, or withdrawing from conflict) and a contending strategy (i.e., tactics related to destructive, contentious behavior). Advocates of the 5-strategy framework (Kilmann & Thomas, 1977; Rahim, 1983) group collaborating/integrating, compromising, avoidance, competing/dominating, and accommodating/obliging as main conflict strategies.

Many of these conflict strategy typologies are similar renditions of the dual-concern model because though they disagree in the number of actual conflict strategies, (and grouping of tactics), they all assert that conflict management can be assessed using the cooperativeness/directness dimensions. Therefore, the reason why scholars organize tactics and strategies in different ways may be due, in part, to how they define, measure, and analyze conflict. There may also be simple semantic or contextual disparities. That is, conflict behaviors and responses may vary across situations (Sandy & Boardman, 2006; Wilmot & Hocker, 2007)). For example, conflict maneuvers employed at home may be different than what are used at work (Wilmot & Hocker, 2007). Moreover, conflict behaviors may differ depending on the type of relationship researchers are interested in isolating. However, the above typologies have been used to measure and explain all types of relationships from romantic dyads, to friendships to work relationships (Canary, et. al., 1995; Guerrero, et. al, 2007), and some researchers claim that conflict behaviors are stable across situations (Barbuto, et. al, 2010; MacNeil, et. al, 2011).

The current study will focus on conflict strategies, which are more stable across contexts (Cahn & Abigail, 2007). Previous research has already shown support for a three conflict strategy typology (see MacNeil, et. al; 2011 Tafoya, et. al) based on the dual-concern model. This

model has also been found in previous studies (Sillars, et. al., 1982). The conflict strategies in this typology include constructive (i.e., use of positive forms of communication), avoidant (i.e., evading the conflict topic), and aggressive (i.e., negative forms of communication) conflict management strategies and are consistent across different relational contexts (MacNeil, et. al, 2011; Tafoya, et. al, 2010). Interestingly, the three conflict strategy typology suggests that avoidant strategies are used as a way to return to more constructive strategies (MacNeil, et. al, 2011; Tafoya, et. al, 2010), a finding which hasn't always occurred in previous research (see Cupach & Messman, 1995; Roloff & Ifert, 2000). That is, in previous studies on different types of relationships, avoidance has been used as "time out" for people to calm down, which then allows them to use more constructive management strategies (MacNeil, et. al, 2011; Tafoya, et. al, 2010). Therefore, avoidance will be considered a more positive form of conflict management, rather than a negative form in the current study. In addition, past research suggests that aggressive strategies inhibit constructive strategies (MacNeil, Hamilton & Tafoya, 2011; Tafoya, et. al, 2010;). The current study hypothesizes these paths as well (see Figure 1). Since conflict management is considered atheoretical (Canary, et. al, 1995), these paths are important to the possible development of conflict management theory. In addition to conflict management strategies, the current study also looks at emotional and personality variables as predictors for the use of different conflict management strategies.



Conflict Strategies and Personality

The extent to which personality traits influence and/or predict conflict strategy selection has been a point of contention. Some researchers argue that strategy choice is determined by the combination of two people's interrelated behaviors, regardless of individual personality (Knapp, Putnam, & Davis 1988; Wilmot & Hocker, 2007). This view has been contested by research that shows personality traits having considerable impact on strategy choice (Sandy & Boardman, 2006; Tafoya & Hamilton, 2012). Personality effects have been studied using single and multiple predictor models. The single trait approach examines the impact of a single personality

trait on strategy preference (Sandy & Boardman, 2006) and is used in the current study. Some personality variables that may be particularly important to conflict include verbal aggressiveness (see Tafoya, Hamilton & MacNeil, 2010), anxiety, empathy (see Hamilton & Tafoya, 2012), egocentrism (see Thompson & Loewenstein, 1992), and self-esteem (see Shi, 2003; Hamilton & Tafoya, 2012), all of which are also included in the current study.

Verbal Aggressiveness. Verbal aggressiveness is often described as a form of communicative violence (Wilmot & Hocker, 2007). Moreover, according to Infante and Wigley (1986), “Verbal aggressiveness is conceptualized as a personality trait that predisposes persons to attack the self-concepts of other people, instead of, or in addition to, their positions on topics of communication” (p. 61). When people use verbal aggression they attack the person rather than attacking their ideas (Infante & Wigley, 1986; Wilmot & Hocker, 2007). Some examples of verbal aggressiveness include character attacks, insults, rough teasing, ridicule and profanity (Wilmot & Hocker, 2007). Verbal aggressiveness tends to escalate conflict and damage resolution promises and parties involved in the relationship (Wilmot & Hocker, 2001). Thus, because verbal aggressiveness is generally negative, it may often lead to destructive conflict outcomes (Rogan & La France, 2003; Wilmot & Hocker, 2007). People who are verbally aggressive tend to lack appropriate skills to resolve conflict, and cannot grasp constructive conflict management behaviors (Infante, Sabourin & Rudd, 1993). Previous studies suggest that verbally aggressive individuals exhibit aggressive behaviors (Hamilton, 2012). Additionally, verbally aggressive individuals also tend to use more destructive conflict management strategies (MacNeil, Hamilton & Tafoya, 2012; Tafoya, Hamilton, & MacNeil, 2010). Conversely, research posits that people who are verbally collaborative tend to use constructive conflict strategies (Hamilton & Tafoya, 2012). Verbal collaborativeness is concerned with prosocial

behaviors and suggests the inhibition of selfish actions (Hamilton & Tafoya, 2012). Thus the current study also hypothesizes a similar pattern (see Figure 1).

Anxiety. Anxiety involves any type of fear, nervousness, tension or apprehension; feelings people try to reduce as much as possible (Spielberger, 1972). Researchers have distinguished between trait and state anxiety, with state anxiety being more temporary and trait anxiety being more stable (Gaudry, Vagg, & Spielberger, 1975). The current study will focus on trait anxiety. Though no known studies specifically examine the role of anxiety with conflict strategy use, one can postulate that because anxiety is negative in nature (Spielberger, 1972), it may also lead to negative forms of management strategy use. That is, if a person suffers from anxiety, it could impede the use of positive conflict management strategy use. Moreover, studies suggest that people who are highly trait anxious tend to have less cognitive control and rely more on their emotional processing (Hanoch & Vitouch, 2004), especially if there is threat-related stimuli in the environment (Eastwood, Smilek, & Merikle, 2003). Other research suggests that when individuals feel safe in their surroundings they are more likely to utilize constructive forms of conflict management (Wilmot & Hocker, 2013). Given these findings, the current study hypothesizes a positive association with anxiety and destructive conflict strategies (see Figure 1).

Empathy. Empathy is considered a multi-faceted process, which is comprised of helping or consoling others, as well as empathic states and traits (Davis, 1996). Empathy may help to diffuse conflict during conflict interactions because empathy allows for individuals to understand others' views, thus lessening destructive responses (Davis, 1996). Additionally, empathy may evoke sympathy and a desire to help, which would also mitigate destructive construct management (Wied, Branje, & Meeus, 2007). There is indeed some support for this. Wied et al. (2007) found that empathy is positively associated with problem solving in conflict and

negatively related to negative conflict engagement. Thus, people who are more empathic may have skills that allow them to use more verbal collaborativeness which, in turn, allows them to use positive conflict management strategies, a finding that has been found in previous studies (see Hamilton & Tafoya, 2012), and therefore is expected in the current study (see Figure 1).

Egocentrism. Unlike empathy, egocentrism may impede constructive conflict management. When people believe that their outcomes in a conflict are less than the other individual's outcome, they are less likely to constructively deal with conflict or come to resolution (Thompson & Loewenstein, 1992), though this can be affected by culture. Overall, research suggests that egocentrism hinders conflict resolution because people perceive conflict outcomes inequitable and unfair (Thompson & Loewenstein, 1992). This subsequently results in negative conflict management (Hamilton & Tafoya, 2012; MacNeil, Tafoya & Hamilton, 2011). Therefore, the current study will hypothesize a positive association with destructive conflict management strategy.

Self-Esteem. Self-esteem is also important to conflict. According to Arlsan, Hamarta, and Uslu (2010) self-esteem can be defined as “a state of appreciation which emerges from the approval of the self-concept that the individual reaches after self-evaluation” (p. 32). However, more commonly, self-esteem is simply known as a “favorable or unfavorable attitude of the self” (Rosenberg, 1965, p. 15). With regard to conflict management and self-esteem, some research suggests that if people have positive perceptions about themselves and others they are more likely to use more constructive conflict management strategies (Shi, 2003). Additionally, individuals who have nurturing parents often end up with more positive self-esteem and exhibit lower levels of conflict than individuals who do not (Pawlak & Klein, 1997). Moreover, recent

research indicates that self-esteem can reduce verbally aggressive outcomes (Hamilton & Tafoya, 2012). Therefore, the current study also hypothesizes this outcome (see figure 1).

Conflict and Emotions

As with personality traits, emotions can influence and/or predict conflict strategy choices. Though little research exists on the role of emotions as predictors for conflict strategy choices (Montes, Rodriguez, & Serrano, 2012), the studies that exist suggest that positive affect (i.e., a broad range of feelings people experience) (Watson & Clark, 1984), can influence how people negotiate in conflict situations. That is, individuals who experience positive emotions prior to conflict, tend to increase cooperation among their parties, often enjoy the conflict process and have positive outcomes (Carnevale & Isen, 1986). In addition, positive affect can also minimize destructive tactics (Carnevale & Isen, 1986). Moreover, other studies indicate that positive emotions promote cooperative negotiation (Forgas, 1998), and problem solving (Isen, et. al, 1987), while negative emotions encourage the use of destructive negotiation (Forgas, 1998).

Few studies examine the role of emotions on conflict strategies. Available research indicates that people who have positive emotional states tend to use more cooperative conflict strategies (Desivilya & Yagil, 2005), while people with negative emotional states tend to use avoidance conflict strategies. Interestingly, dominating and/or destructive types of conflict management have been linked to both positive and negative emotional states (Desivilya & Yagil, 2005). These findings are replicated in other studies looking at the effects of emotions on conflict strategies. The studies suggest that positive emotions promote more problem-solving (Rhoades et. al, 2001) and cooperative conflict management strategies (Montes, et. al., 2012) during conflict, while negative emotions promote more competitive conflict management

strategies and other selfish behaviors (Rhoades et. al, 2001). Still, other research suggests that positive affect alone elicits conflict behavior and promotes the use of constructive conflict management strategies (Bell & Song, 2005). Overall, research posits that emotions can and will impact conflict management (Montes et. al, 2012). Based on past research, the current study hypothesizes that positive emotions will predict the use of constructive conflict management strategies, while negative emotions will predict the use of destructive conflict management strategies (see Figure 1).

The above review research highlights the importance of personality and emotions on conflict strategy choice, and uncovers the need for more research in this area. The objective of the present study is to examine personality and emotional factors that drive and predict the use of different conflict strategies. The current paper will look at these variables in parent-adult child and adult friendship conflict contexts.

Parental Conflict and Conflict Management

Research on parent-child conflict is expansive, though research on the use of conflict strategies in this relationship is not (Beck & Ledbetter, 2013; Canary, et. al, 1995). Researchers believe that many conflict management strategies are first developed within the family, and conflict may be higher in this context than in other contexts due to the interdependency of the family unit (Canary et. al, 1995; Segrin & Flora, 2005). Moreover, researchers note that the way a conflict is managed between a parent and child could shed insight into whether their relationship is dysfunctional or functional. In a functional family, supportive communication is often reciprocated more than defensive communication, which can be found in more dysfunctional family settings (Alexander, 1973). More specifically, some studies have found

mothers' use of lower levels of constructive conflict resolution with their adolescents, led to more destructive behavior in their early adulthood (Klein, Forehand, Armistead, & Long, 1997). Overall, research suggests parents' use of destructive conflict behaviors leads to immediate (Conger, et. al, 1992) and long term issues (Ge, Best, Conger, & Simmons, 1996) for adolescents. Lastly, parents' negative conflict styles combined with adolescent's styles also seem to create hostile family environments (Van Doorn, Branje, & Meeus, 2008).

There are only a handful of known studies that specifically look at the use of conflict strategies in parent adult-child interactions. Most of these studies have used family communication patterns (FCP) theory to explain the use of conflict strategies during conflict (Dumlao & Botta, 2000). Family communication pattern theory indicates two possible orientations that occur in families: Conversation and conformity (Ritchie, 1991). Conformity orientation occurs when a family uses parental control and power to try and develop a consistent form of attitudes and beliefs within the family. Conversely, conversation orientation occurs when a family is concerned with openness, supportiveness and communication, where each member of the family is encouraged to develop their own conclusions and look at all parts of an issue (Ritchie, 1991). Additionally, family communication pattern theory suggests that there are four types of families: pluralistic, protective, consensual, and laissez-faire family types (Fitzpatrick & Ritchie, 1994). Pluralistic families are typically low in conformity and higher in conversation, while protective families are usually low in conversation and high in conformity. Moreover, consensual families score high on both orientations, and laissez-faire families score low on both orientations (Fitzpatrick & Ritchie, 1994).

Using family communication patterns and Rahim's (1983) conflict strategies classifications, Beck and Ledbetter (2013) found that parents that are conversation orientated

typically also use collaborative, accommodating and compromising conflict strategies with their children. Conversely, they also use competing and avoiding strategies less often. In addition, they found that conformity oriented parents typically use all conflict strategies except compromising. The authors note that conforming families may be more interdependent and thus conflict may occur more often in these types of families (Beck & Ledbetter, 2013).

With respect to how young adults use strategies in conflict with their parents, some studies have looked at either one strategy (Koerner & Fitzpatrick, 1997), or have used Rahim's (1983) five strategy approach (Beck & Ledbetter, 2013; Dumlao, 1997; Dumlao & Botta, 2000) to understand conflict approaches with young adults and their parents. Some results of these studies reveal that young adults who come from a conformity orientated family tend to use avoidance conflict strategies, while those young adults who come from a conversation orientated family do not use avoidance as a conflict strategy (Koerner & Fitzpatrick, 1997). Other research indicates that young adults who come from pluralistic families use more collaborative or confronting types of conflict strategies with their father (Dumlao, 1997), while young adults who come from a consensual type of family use compromising as their main conflict strategy. Individuals who come from laissez-faire families may use more confronting conflict strategies, and those individuals from protective familial types tend to use more accommodating or avoidant type of strategies while in conflict with their fathers (Dumlao, 1997). Moreover, Dumlao and Botta (2000) found that individuals with protective fathers tend to use more accommodation and avoidance strategies while in conflict with their father. Also, individuals with laissez-faire fathers often showed the most inconsistent conflict strategies, while individuals with pluralistic fathers were more likely to use the collaborative strategy in conflict with their fathers, emphasizing that

young adults emulate their father's conflict strategies when in conflict with their father (Dumlao & Botta, 2000).

Though there is a variety of research on general parent-child conflict, much of the research still focuses largely on adolescent or toddler conflict, and neglects an important subset of conflict: parent-adult child (Canary, et. al, 1995). Because of this, the current paper addresses parent-adult child conflict in order to add to the research in this area, emphasizing personality and emotional components involved in conflict as well as the conflict strategies themselves.

Friendship and Conflict Management

Similar to the literature on parent-adult child, literature on adult friendship conflict management is sparse (Canary, et. al., 1995; Sherman, De Vries, & Lansford, 2000). Hence, adult friendship is the second contextual focus of the current study. One reason why research on friendship conflict may be sparse is because some scholars believe that friendships are less important in adulthood than family or romantic relationships (Canary, et. al., 1995). Additionally, conflict may not be as pertinent in this context as in other contexts (such as familial or romantic relationships) (Canary, et. al., 1995). Weiss (1986) and Fiebert and Wright (1989) contend that the focus of young adults is primarily to find a life partner and begin a new life with them, trumping romance over friendships. Arguably, friendships are also important in adulthood and may serve many different functions. For instance, friends are instrumental in individuals' choices in careers, mates or other important life decisions (Rawlins, 1992). As people mature, they may have fewer friends or less time to spend with them, but friendship relationships themselves remain important types of relationships for adults (Rawlins, 1992).

Despite contrary findings suggesting that conflict rarely happens in friendships (Canary, et. al., 1995), the amount of conflict that occurs in friendships may be similar to other types of relationships (such as romantic relationships) (Dykstra, 1990). However, when enjoyment and conflict levels are measured together, friends usually report higher enjoyment and less conflict levels than romantic or sibling dyads (Dykstra, 1990). Individuals who experience conflict in their friendships, and work through it, may also feel that they have a closer bond with their friend as a result of the conflict (Braiker & Kelly, 1979). Those who do not work through the conflict, may simply just end the friendship due to conflict (Rawlins, 1994), which can be a confound in research.

Limited research on friendship and conflict strategy use suggests that individuals with secure attachment styles tend to use more integrating and compromising conflict styles than insecure individuals (Bippus & Rollin, 2003). Other studies posit that the use of conflict strategies in friendships is directly related to the use of strategies within the familial context (VanDoorn, Branje, VanderValk, DeGoede & Meeus, 2011). Other research on conflict in friendships and conflict strategy use suggests that the importance of the conflict predicts destructive and neglectful (avoidance) responses during conflict (Healey & Bell, 1990). Avoidance may be used as an overall strategy simply because some individuals would rather leave their friendships than discuss problems in the relationship. This is one reason why friendships seem to be a unique type of relationship. More than in other types of relationships, in friendships, individuals have more liberty, and it may be easier to end a friendship than in other types of relationships (Rawlins, 1994). Avoidance may also be a reason people report overall lower frequency of conflict in friendships (Rawlins, 1994). Some individuals may view friendship conflict from a social exchange perspective. That is, when individuals are faced with

conflict in a friendship, they may choose to do a cost/reward analysis and evaluate whether they are satisfied or dissatisfied with the relationship (Hays, 1985). If dissatisfied, individuals may choose to leave or avoid problems in the relationship.

Research on conflict strategy use in adult friendship and parent adult-child relationships is limited and has yet to develop a comprehensive model of strategy use and its emotional and personality antecedents. Therefore, the focus of the present paper is to measure important antecedent variables, such as personality and emotions to see if they predict certain conflict management strategies in parent adult-child conflict and adult friendship conflict contexts.

Chapter 3

Methodology

Sample and Procedure

A convenience sample was used to complete one of two different self-administered cross-sectional surveys online on QuestionPro ($N = 569$). The two surveys were the same except for a relational context manipulation. In the parent condition, participants were asked to think of their last significant conflict with their parent ($n = 253$) and in the friend condition participants were asked to think of their last significant conflict with their friend ($n = 316$). The sample came primarily through introductory and upper division Communication courses at a large northeastern university. However, snowball sampling and internet-based survey recruitment websites were also used to recruit participants. Additionally, participants were recruited with flyers and electronic announcements that were distributed to faculty, instructors, and listservs to share with students. Extra credit was offered to students in these courses (upon instructor consent). Participants' ages ranged from 18-66 ($M = 28.33$; $SD = 10.33$), and overall more female participants ($M = 1.55$; $SD = .55$). Additionally, participants consisted of a range of ethnicities including Black (3.3%), Caucasian (36.1%), Latino (10.7%), Native American (.5%), Asian (28.6%), Pacific Islander (.5%), Indian (17.5%) and other (2.7%).

Participants responded to a series of questions in an online survey that assessed their emotional responses before, during, and after the conflict, their personality states, and conflict management strategies. They were also asked demographic questions at the end of the survey (See Appendices A-G).

Measures

Conflict Management Strategies. Conflict management was assessed using the Conflict Management Strategies Scale (CMSS) (Tafoya & MacNeil, 2010) ($\alpha = .83$). Items on the CMSS are rated by respondents using a 7 point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Sample items include: “I accepted responsibility, in part or whole, for the conflict,” “I evaded the problem,” and “I put down my partner.”

Personality. Personality was measured using a series of single-trait scales which included verbal aggressiveness, attachment style, anxiety, empathy, egocentrism, and self-esteem.

Verbal Aggressiveness. Verbal aggressiveness was measured using the Verbal Aggressiveness Scale ($\alpha = .81$) (Infante & Wigley, 1986). Participants answered a series of items using a Likert scale ranging from almost never true to almost always true. The scale asked participants to answer a series of 20 statements, such as, “When individuals insult me, I get a lot of pleasure of telling them off,” and “If individuals I am trying to influence really deserve it, I attack their character.” The scale includes 10 items, within the total 20, that are reverse coded such as, “I refuse to participate in arguments when they involve personal attacks.”

Anxiety. Anxiety was measured with the State-Trait Anxiety Inventory (STAI) (Spielberger, 1983). Responses to the items include the following: Not at all, somewhat, moderately so, and very much so. There are two parts to the measure: the A-Trait and the A-State. The A-Trait part of the measure focuses on stable predispositions ($\alpha = .93$), while the A-State portion focuses on fluctuating emotional states and situational differences ($\alpha = .90$) (Spielberger, 1983). For the purposes of the current study, only the trait version of the scale was

used. Some sample items of the 15 total items include: “I feel inadequate,” and “I worry too much over something that really doesn’t matter.”

Empathy. The items used in the empathy scale were taken from a combination of items in the Toronto Empathy Questionnaire (Spreng, McKinnon, Mar & Levine, 2009) and the Balanced Emotional Empathy Scale (Mehrabian, 2000). These are a series of 31 items which are positively and negatively worded statements that are intermixed throughout the survey. Participants were asked to respond via a 5-point Likert scale ranging from Strongly Agree to Strongly Disagree. Some sample items include: “Seeing people cry upsets me,” and “I enjoy making other people feel better.”

Egocentrism. Egocentrism was measured with the 15 item self-narrative subscale of the Enright Egocentrism Scale ($\alpha = .83$) (Enright, Shukla, & Lapsley, 1980). Participants responded to a 5-point Likert scale from Not important to Very important. Some sample items include, “Thinking about myself,” and “thinking about my own feelings.”

Self-Esteem. Self-esteem was measured using the Self-Esteem Scale (Rosenberg, 1989). The 10 item questionnaire is fairly reliable ($\alpha = .85$) and is measured using a 4-point Likert scale of the following responses: Strongly agree, agree, disagree, strongly disagree, with higher scores indicating higher self-esteem. Some of the negative items are reverse coded (such as the item “At times, I think I am no good at all”), and include such items as, “On the whole, I am satisfied with myself,” and “I take a positive attitude toward myself” (Rosenberg, 1989).

Emotions. Emotions during conflict episodes were measured using the Safe Sex Communication Scale (SAFE COMM) (Buck & Ferrer, 2006), which has been used to measure emotional states in previous studies (Buck & Ferrer, 2006). The SAFE COMM scale consists of 6 emotional factors (Buck, 1999). From previous studies, alpha reliabilities for each emotional

composite include: happy ($\alpha = .84$), hostile ($\alpha = .95$), loving ($\alpha = .93$), guilty ($\alpha = .88$), disgusted ($\alpha = .94$), and erotic ($\alpha = .87$) (Buck & Ferrer, 2006). Each emotion is rated on a Likert-type scale of 1-7, 1 being “not at all” and 7 being “very much.” The 25 item scale assesses emotional states with items such as “I felt happy,” “I felt nervous,” “I felt guilty,” etc. Participants were asked to recall their recent conflict and remember their emotions at the beginning of the conflict, the middle of the conflict and the end of the conflict. The 25 item scale was repeated for these three periods of time.

Demographics. Demographics were assessed at the end of the survey. Specific demographic questions included ethnicity, age, sex, household income and sexual orientation, with sexual orientation and sex being the only demographic variables that were statistically significant.

Measurement Model

In order to determine the reliability and validity of the scales used in the study, their reliability and validity were examined. Exploratory and confirmatory factor analyses were conducted in order to assess item quality.

Conflict Management. The first scale analyzed was the CMSS scale, which measured conflict management strategies. A confirmatory factor analysis revealed similar factor structures that have previously been replicated in earlier studies (e.g. Tafoya, MacNeil, & Hamilton, 2010; MacNeil, Hamilton & Tafoya, 2012) (see Table 1). Three factor structures emerged in the conflict data: Avoidance ($\alpha = .87$), constructive ($\alpha = .91$) and aggressive ($\alpha = .87$) strategies. Avoidance strategies were comprised of denial ($\alpha = .69$), ignore ($\alpha = .69$) and topic change ($\alpha = .88$) tactics. Constructive strategies were comprised of responsiveness ($\alpha = .77$), positive affect

($\alpha = .67$), listening ($\alpha = .66$), and collaboration ($\alpha = .80$). Aggressive strategies were made up of criticize ($\alpha = .90$), judge ($\alpha = .78$), anger ($\alpha = .81$), dismissive ($\alpha = .57$), and bullying ($\alpha = .73$) tactics (See Table 1). These three factors, and corresponding tactics, are similar to other studies looking at dating dyad conflict (e.g. Tafoya, et. al., 2010) (see Table 2) and sibling dyad conflict (MacNeil, et. al., 2012) (see Table 3), suggesting more support for this structure.

Table 1

Correlations of Second Order Confirmatory Factor Items of Conflict Management Tactics and Strategies in Adult Child Parental Conflict and Friendship Conflict Contexts

	Avoidance	Constructive	Destructive
Topic Change	.92	.32	.50
Ignore	.87	.28	.44
Denial	.88	.44	.43
Responsive	.39	.90	.03
Collaboration	.30	.89	-.02
Positive Affect	.40	.89	.06
Listening	.28	.87	.11
Critical	.45	-.00	.89
Anger	.34	-.00	.84
Judgment	.30	-.06	.83
Bullying	.62	.25	.81
Dismissive	.40	.05	.71

Notes: All findings significant at $p < .87$ and in bold.

Table 2

Correlations of Second Order Confirmatory Factor Items of Conflict Management Tactics and Strategies in Dating Dyads

	Avoidance	Constructive	Destructive
Topic Change	.89	-.07	.47
Ignore	.84	-.19	.37
Denial	.74	.15	.10
Responsive	-.05	.82	-.26
Collaboration	-.16	.81	-.40
Positive Affect	-.08	.78	-.16
Listening	.16	.74	-.04
Critical	.40	-.30	.87
Anger	.25	-.28	.81
Judgment	.23	-.22	.81
Bullying	.20	-.15	.74
Dismissive	.47	-.11	.64

Notes: All findings significant at $p < .89$ and in bold.

Table 3

Correlations of second order confirmatory factor items of conflict management tactics and strategies in sibling dyads

	Avoidance	Constructive	Destructive
Topic Change	.87	.07	.30
Ignore	.82	-.18	.32
Denial	.79	.25	.18
Responsive	-.00	.86	-.38
Collaboration	-.00	.88	-.42
Positive Affect	.20	.84	-.22
Listening	.08	.83	-.20
Critical	.30	-.38	.88
Anger	.08	-.27	.78
Judgment	.22	-.40	.80
Bullying	.29	-.15	.74
Dismissive	.34	-.18	.73

Notes: All findings significant at $p < .88$ and in bold.

Emotions. Exploratory and confirmatory analyses were used on the SAFECOMM scale as well, which measured emotions felt before, during and after a conflict. Initial results of the exploratory factor analysis showed that items were organized in a five, not a six factor structure, which was found in previous research (Buck & Ferrer, 2006). The five factors were labeled: happiness, excitement, sadness, fear, and anger (see Table 4). Later, confirmatory analyses confirmed this structure with good reliability (happiness $\alpha = .90$; excitement $\alpha = .90$; sadness $\alpha = .90$; fear $\alpha = .89$; anger $\alpha = .69$), using emotions exerted at different stages of conflict (see Table 5). These same labels were used to define emotional states in later analyses (see Figures 2-4). Moreover, subsequent analyses revealed that these factors were actually measuring emergent

emotional traits, and thus were eventually renamed contentment, grandiosity, depression, anxiety, and hostility (see Figures 2; 5 and 6).

Table 4

Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of SAFECOMM Items

Items	Factors				
	Excitement	Happiness	Sadness	Fear	Anger
I felt energetic	.83				
I felt powerful	.81				
I felt confident	.77				
I felt secure	.75				
I felt satisfied		.68			
I felt loved		.64			
I felt intimate		.60			
I felt caring		.56			
I felt vigorous		.55			
I felt ashamed			.77		
I felt embarrassed			.74		
I felt guilty.			.72		
I felt humiliated			.64		
I felt selfish			.61		
I felt nervous				.77	
I felt anxious				.75	
I felt afraid				.70	
I felt lonely				.67	
I felt isolated				.54	
I felt insulted					.77
I felt angry					.74

Table 5

Correlations of Second Order Confirmatory Factor Emotion State Items

	Happiness	Energetic	Sadness	Fear	Anger
HappinessT1	.90				
HappinessT2	.65				
HappinessT3	.90				
EnergeticT1		.90			
EnergeticT2		.94			
EnergeticT3		.90			
SadnessT1			.90		
SadnessT2			.94		
SadnessT3			.90		
FearT1				.89	
Fear T2				.93	
FearT3				.90	
AngerT1					.78
AngerT2					.80
AngerT3					.80

Notes: All findings significant at $p < .9$ and in bold. T1 = Time 1, T2 = Time 2, T3= Time 3.

Verbal Aggressiveness. As recommended in the literature (Levine et al., 2004), the Verbal Aggressiveness scale was separated into verbal destructiveness (negative communicative remarks) and verbal collaborativeness subscales (positive communicative remarks) (see Hamilton & Hample, 2011). Both scales showed adequate internal consistency: verbal destructiveness ($\alpha = .85$) and verbal constructiveness ($\alpha = .77$) (see Table 6).

Table 6

<i>Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Verbal Aggressiveness Scale</i>		
Items	Verbal Destructiveness	Verbal Constructiveness
When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behavior.	.841	
When individuals are very stubborn, I use insults to soften the stubbornness.	.839	
If individuals I am trying to influence really deserve it, I attack their character	.832	
When people simply will not budge on a matter of importance, I lose my temper and say rather strong things to them.	.755	
I like poking fun at people who do things which are very stupid in order to stimulate their intelligence.	.752	
When individuals insult me, I get a lot of pleasure out of telling them off.	.723	
When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable.	.597	
I get in a state of tension of turmoil as I think over my recent concerns and interests.	.503	
When I try to influence people, I make a great effort not to offend them.		.706
When I attack a person's ideas, I try not to damage their self-concepts.		.696
When I dislike individuals greatly, I try not to show it in what I say or how I say it.		.695
When others do things I regard as stupid, I try to be extremely gently with them.		.657
I try very hard to avoid having other people feel bad about themselves when I try to influence them.		.618
When people criticize my shortcomings, I take it in good humor and do not try to get back at them.		.602
I try to make people feel good about themselves even when their ideas are stupid.		.596
I am extremely careful to avoid attack individuals intelligence when I attack their ideas.		.493

Anxiety. The trait component of the State-Trait scale was initially going to be used for the overall anxiety composite. After items were recoded, the scale revealed a one composite score measuring trait anxiety ($\alpha = .88$) (see Table 7). However, upon further inspection of the items, this measure was omitted from the dataset because some of the items in the one factor did not accurately represent anxiety. Thus, the construct “anxiety” emerged from the SAFECOMM scale, instead of this single-trait measure.

Table 7

<i>Factor Loadings for Trait Anxiety Measure</i>	
Items	Anxiety
I feel inadequate	.841
I feel like a failure.	.839
I feel that difficulties are piling up so that I cannot overcome them.	.832
I take disappointments so keenly that I can't put them out of my mind.	.755
I have disturbing thoughts.	.752
Some unimportant thoughts runs through runs through my mind and bothers me.	.723
I lack self-confidence.	.672
I wish I could be as others seem to be.	.655
I worry too much over something that doesn't really matter.	.652
I feel nervous and restless.	.632

Empathy. After items on the empathy scale were appropriately recoded, three factors emerged from the exploratory factor analysis. However, a final empathy composite score was established, based off of one of the empathy factors (empathy factor 3), since only one factor accurately reflected the empathy construct ($\alpha = .78$). A confirmatory factor analysis was also conducted to verify this structure (see Table 8).

Table 8

<i>Confirmatory Factor Analysis of the Empathy Scale</i>	
Factors	
Empathy 1	-.807
Empathy 2	.454
Empathy 3	.821

Egocentrism. The Ego scale was comprised of three main factors, however, after further inspection of items, only one factor seemed to reflect the “ego” construct ($\alpha = .84$) and therefore that was the only factor that was used to complete the overall ego factor. A confirmatory factor analysis was also used to verify this structure (see Table 9).

Table 9

<i>Confirmatory Factor Analysis of the Ego Scale</i>	
Factors	
Ego 1	.957
Ego 2	.525
Ego 3	.47

Self-Esteem. Items in the self-esteem scale were recoded and then items were subjected to exploratory factor analyses. One factor emerged with good reliability ($\alpha = .84$) (see Table 10).

Table 10

<i>Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Self-Esteem Measure</i>	
Item	Anxiety
<hr/>	
At times I think I am no good at all (R)	.764
All in all, I am inclined to feel that I am a failure (R)	.723
I take a positive attitude toward myself.	.698
I feel that I have a number of good qualities.	.679
I feel that I am a person of worth, at least on an equal basis with others.	.661
I feel I have I do not have much to be proud of (R)	.634
On the whole, I am satisfied with myself.	.632
I certainly feel useless at times (R)	.630
I am able to do things as well as most other people.	.572
I wish I could have more respect for myself (R)	.398

Chapter 4

Results

Traits and States

A preliminary correlational analysis was conducted to model the influence of traits on states. As stated earlier, specific emotional states were measured in the study at three points in time: Emotions felt in the beginning of the conflict, the middle of the conflict, and the end of the conflict. If latent trait theory (Cattell, 1943) is correct, then state scores should be a function of trait scores. That is, the cognitive structure that develops as a result of elaboration on an emotional state should generate a trait that is stable across time. In particular, cognitive elaboration on sadness elicits depression, cognitive elaboration on excitement produces grandiosity, cognitive elaboration on fear produces anxiety, cognitive elaboration on anger produces hostility, and cognitive elaboration on happiness produces contentment (see Figure 2). Operationally, the sum of the three state scores should yield a trait factor score, where item-specific variance is due to states.

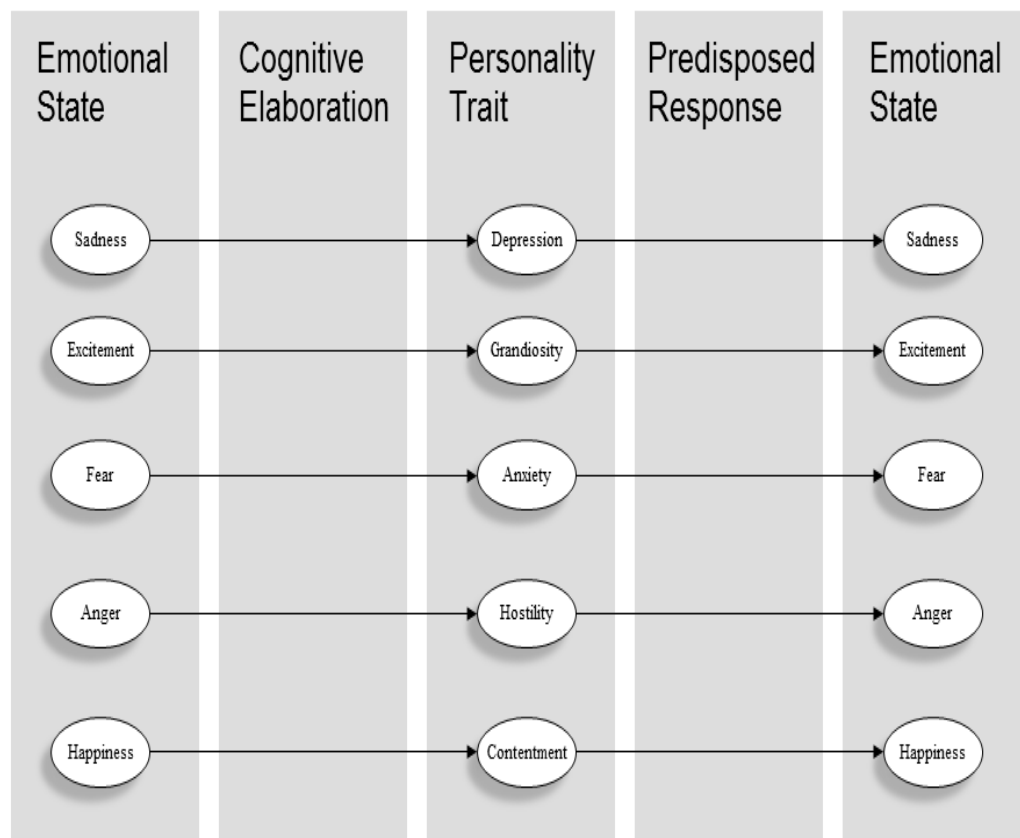


Figure 2. Relationship between Emotional States and Personality Traits

The first way to examine this was to inspect whether emotional states had more influence than emotional traits relative to the personality and conflict strategies. It was possible that the relationship between states and traits might differ by experimental condition so the state-trait correlations were examined separately for parent-adult child and adult friendship conflict contexts. These correlational analyses also bolstered external validity. For both the parent adult-child contexts, most of the traits had larger correlations than the states (see Tables 11-14; Figures

3 and 4). This suggested that the traits seemed to be driving the states, and that there was little variation in the states. This suggested that concentrating on a trait model would be more effective than concentrating on a state model. This was evident in the state structural equation models for both parent adult-child conflict ($RMSEA = .059$; $\chi^2 (84, 253) = 44.04$, $p = .9999$) and adult friendship conflict ($RMSEA = .061$ $\chi^2 (80, 253) = 41.05$ $p = .45$) scenarios (see Figures 3 and 4). Moreover, in both contexts of the emotional state structural equation models, there were some minor effects but there were larger effects in the trait model overall (see Figures 3 and 4). The three main feedback loops in the state models were from the anxiety trait to depression state, (parents, $\rho = .18$; friends, $\rho = .41$), contentment trait to excitement state at the end of the conflict, (parents, $\rho = .26$; friends, $\rho = .33$) and the excitement state during conflict to the happiness state at the end of conflict (parents, $\rho = -.16$; friends, $\rho = -.29$). The later finding was the only over time effect, which suggested that excitement in the middle of a conflict decreased happiness at the end of the conflict. Little variation in the different time points in the conflict (see Figures 3 and 4), also gave reason to use a trait model as the primary emphasis for the research.

Table 11

<i>Correlations of Trait and States of Conflict Management Items in Parental Conflict</i>			
	Avoidance	Constructive	Aggression
HappinessT1	.222	.590	-.179
HappinessT2	.174	.615	-.171
HappinessT3	.088	.586	-.218
EnergeticT1	.298	.365	.181
EnergeticT2	.207	.335	.216
EnergeticT3	.123	.398	.061
SadnessT1	.403	.146	.282
SadnessT2	.441	.133	.313
SadnessT3	.399	.027	.371
FearT1	.218	.146	.268
FearT2	.301	.048	.307
FearT3	.326	.003	.360
AngerT1	-.026	-.265	.415
AngerT2	.057	-.337	.427
AngerT3	.137	-.377	.370
Energetic Overall	.174	.655	-.209
Happiness Overall	.228	.400	.164
Sadness Overall	.456	.112	.355
Fear Overall	.313	.060	.340
Anger Overall	.067	-.380	.468

Note. All findings significant at $p < .02$.

Note. T1 = Time 1, T2 = Time 2, T3= Time 3.

Table 12

<i>Correlations of Traits and States of Personality Items in Parental Conflict</i>					
	Empathy	Verbal Destructive	Verbal Constructive	Ego	Self Esteem
HappinessT1	-.070	.083	.098	.188	.135
HappinessT2	-.151	.121	.067	.225	.063
HappinessT3	-.060	.039	.039	.134	.114
EnergeticT1	-.323	.287	.287	.281	.141
EnergeticT2	-.346	.315	.052	.270	.063
EnergeticT3	-.272	-.272	.036	.220	.131
SadnessT1	-.310	.314	.019	.188	-.250
SadnessT2	-.226	.298	.023	.227	-.243
SadnessT3	-.238	.339	.023	.244	-.265
FearT1	-.109	.157	.135	.151	-.282
FearT2	-.110	.239	.139	.193	-.301
FearT3	-.160	.097	.108	.227	-.265
AngerT1	.035	.157	.069	.039	-.127
AngerT2	.061	.198	.075	.039	-.301
AngerT3	-.045	.088	-.010	.064	-.167
Happiness Overall	-.102	.349	.084	.199	.111
Sadness Overall	-.283	.209	.242	.242	-.283
Fear Overall	-.146	.176	.214	.214	-.316
Anger Overall	.018	.299	.055	.055	-.178
Energetic Overall	-.345		.275	.275	.125

Note. All findings significant at $p < .3$.

Note. T1 = Time 1, T2 = Time 2, T3= Time 3.

Table 13

<i>Correlations of Trait and States of Conflict Management Items in Friendship Conflict</i>			
	Avoidance	Constructive	Aggression
HappinessT1	.222	.590	-.179
HappinessT2	.174	.615	-.171
HappinessT3	.088	.586	-.218
EnergeticT1	.298	.365	.181
EnergeticT2	.207	.335	.216
EnergeticT3	.123	.398	.061
SadnessT1	.403	.146	.282
SadnessT2	.441	.133	.313
SadnessT3	.399	.027	.371
FearT1	.218	.146	.268
FearT2	.301	.048	.307
FearT3	.326	.003	.360
AngerT1	-.026	-.265	.415
AngerT2	.057	-.337	.427
AngerT3	.137	-.377	.370
Happiness Overall	.174	.655	-.209
Energetic Overall	.228	.400	.164
Sadness Overall	.456	.112	.355
Fear Overall	.313	.060	.340
Anger Overall	.067	-.380	.468

Note. All findings significant at $p < .5$.

Note. T1 = Time 1, T2 = Time 2, T3= Time 3.

Table 14

<i>Correlations of Traits and States of Emotional and Personality Items in Friendship Conflict</i>					
	Empathy	Verbal Destructive	Verbal Constructive	Ego	Self Esteem
HappinessT1	-.070	.083	.098	.188	.135
HappinessT2	-.151	.121	.067	.225	.063
HappinessT3	-.060	.039	.039	.134	.114
EnergeticT1	-.323	.287	.287	.281	.141
EnergeticT2	-.346	.315	.052	.270	.063
EnergeticT3	-.272	-.272	.036	.220	.131
SadnessT1	-.310	.314	.019	.188	-.250
SadnessT2	-.226	.298	.023	.227	-.243
SadnessT3	-.238	.339	.023	.244	-.265
FearT1	-.109	.157	.135	.151	-.282
FearT2	-.110	.239	.139	.193	-.301
FearT3	-.160	.097	.108	.227	-.265
AngerT1	.035	.157	.069	.039	-.127
AngerT2	.061	.198	.075	.039	-.301
AngerT3	-.045	.088	-.010	.064	-.167
Happiness Overall	-.102	.349	.084	.199	.111
Sadness Overall	-.283	.209	.242	.242	-.283
Fear Overall	-.146	.176	.214	.214	-.316
Anger Overall	.018	.299	.055	.055	-.178
Energetic Overall	-.345		.275	.275	.125

Note. All findings significant at $p < .35$.

Note. T1 = Time 1, T2 = Time 2, T3= Time 3.

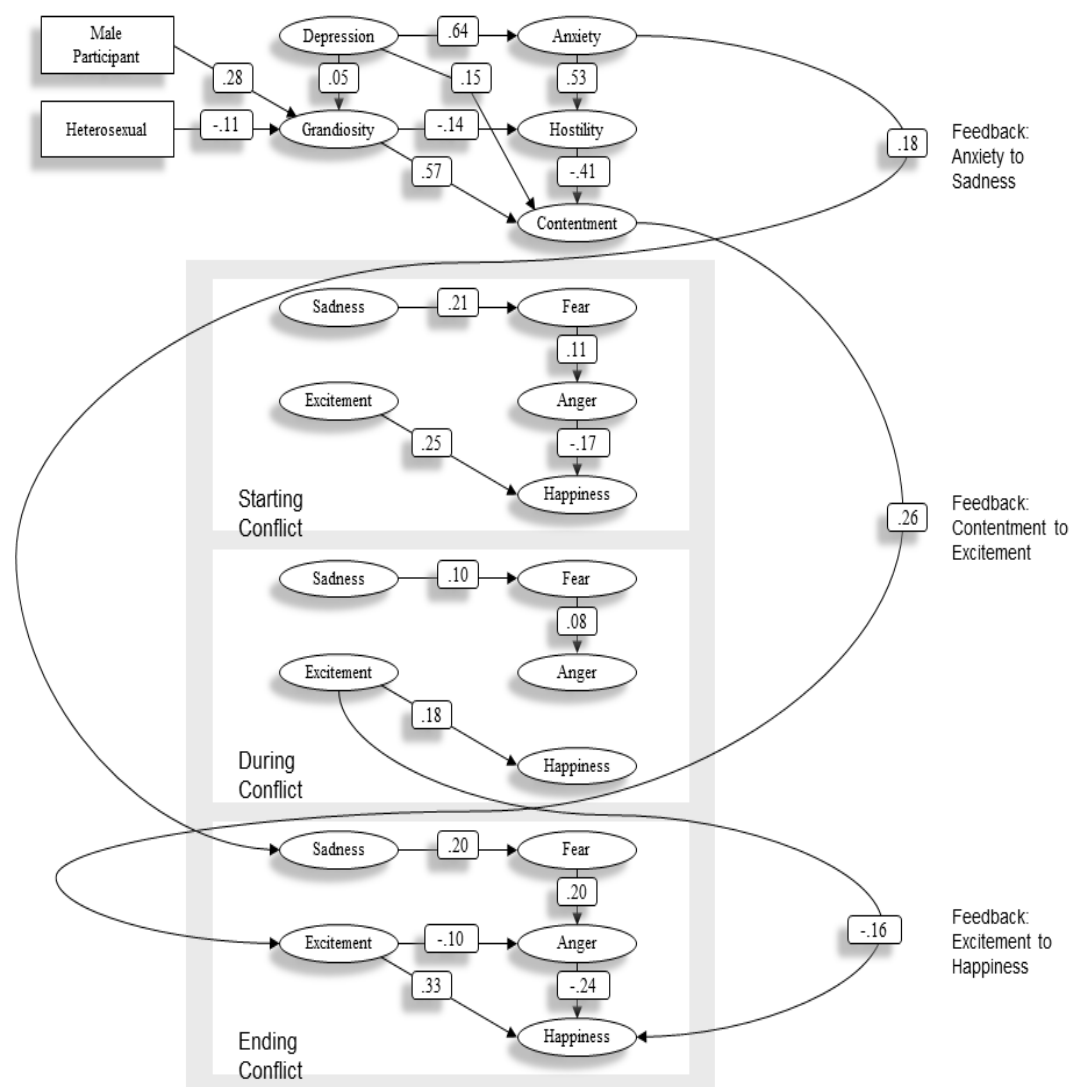


Figure 3. Test of Model for Parents.

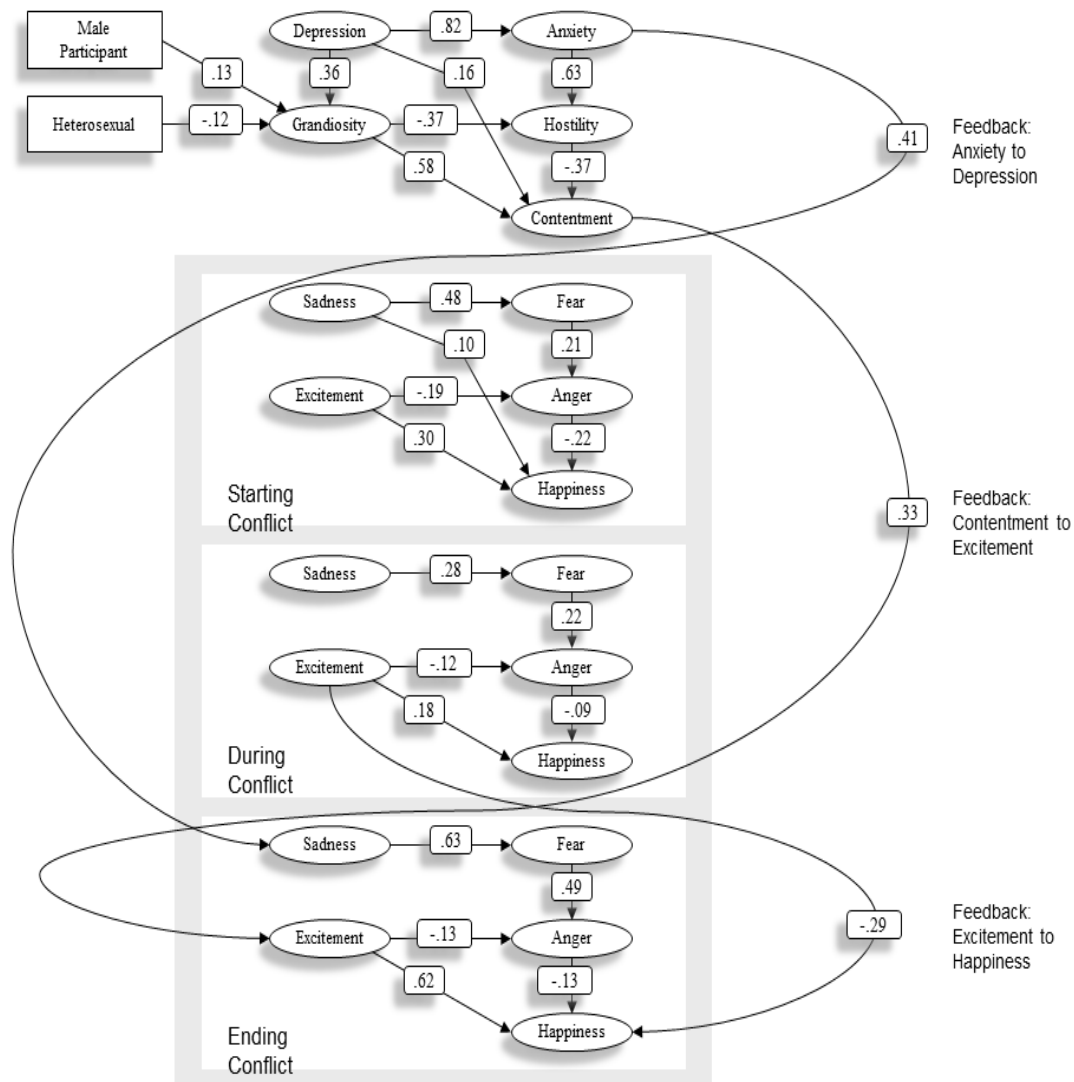


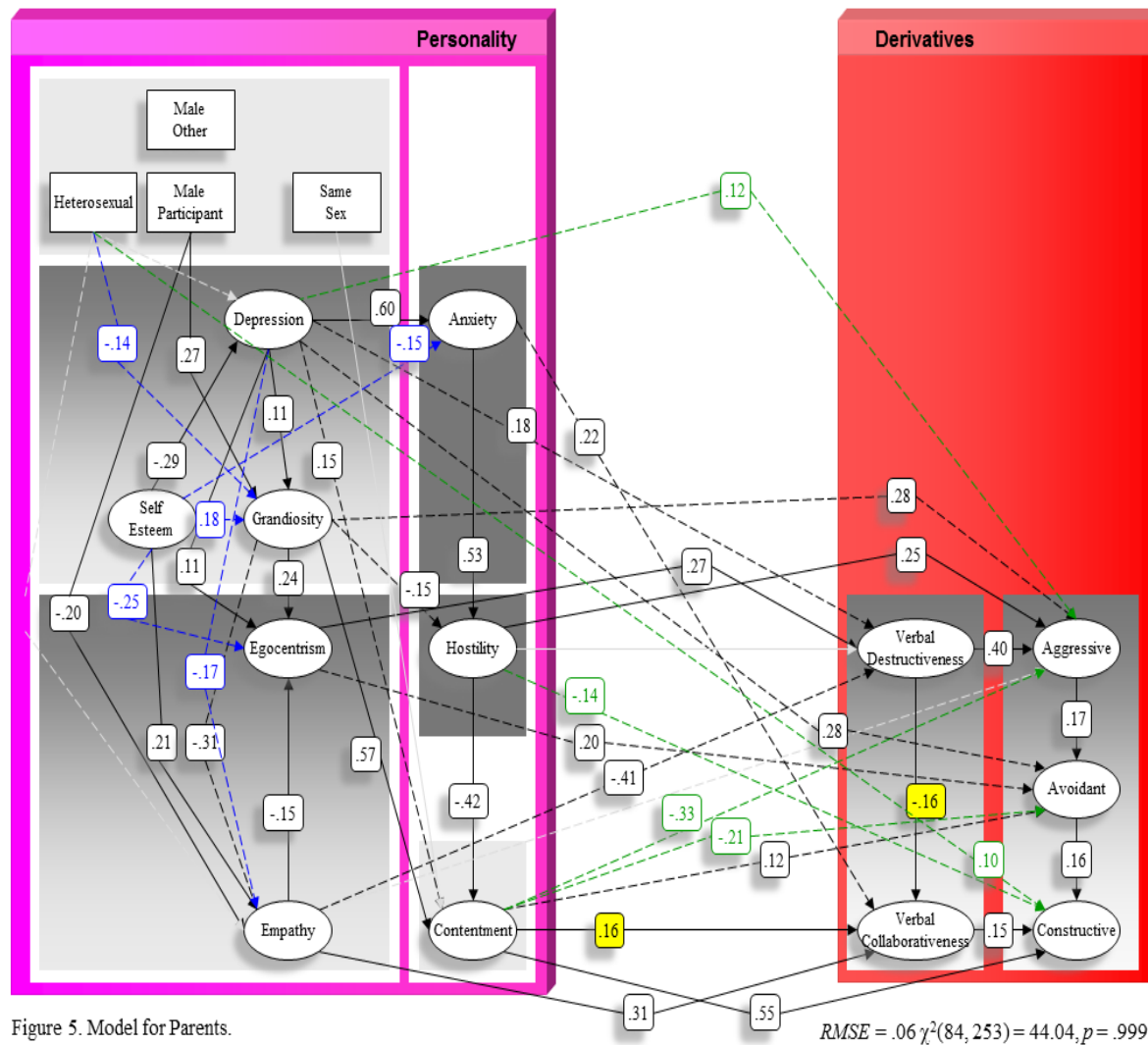
Figure 4. Test of Model for Friends.

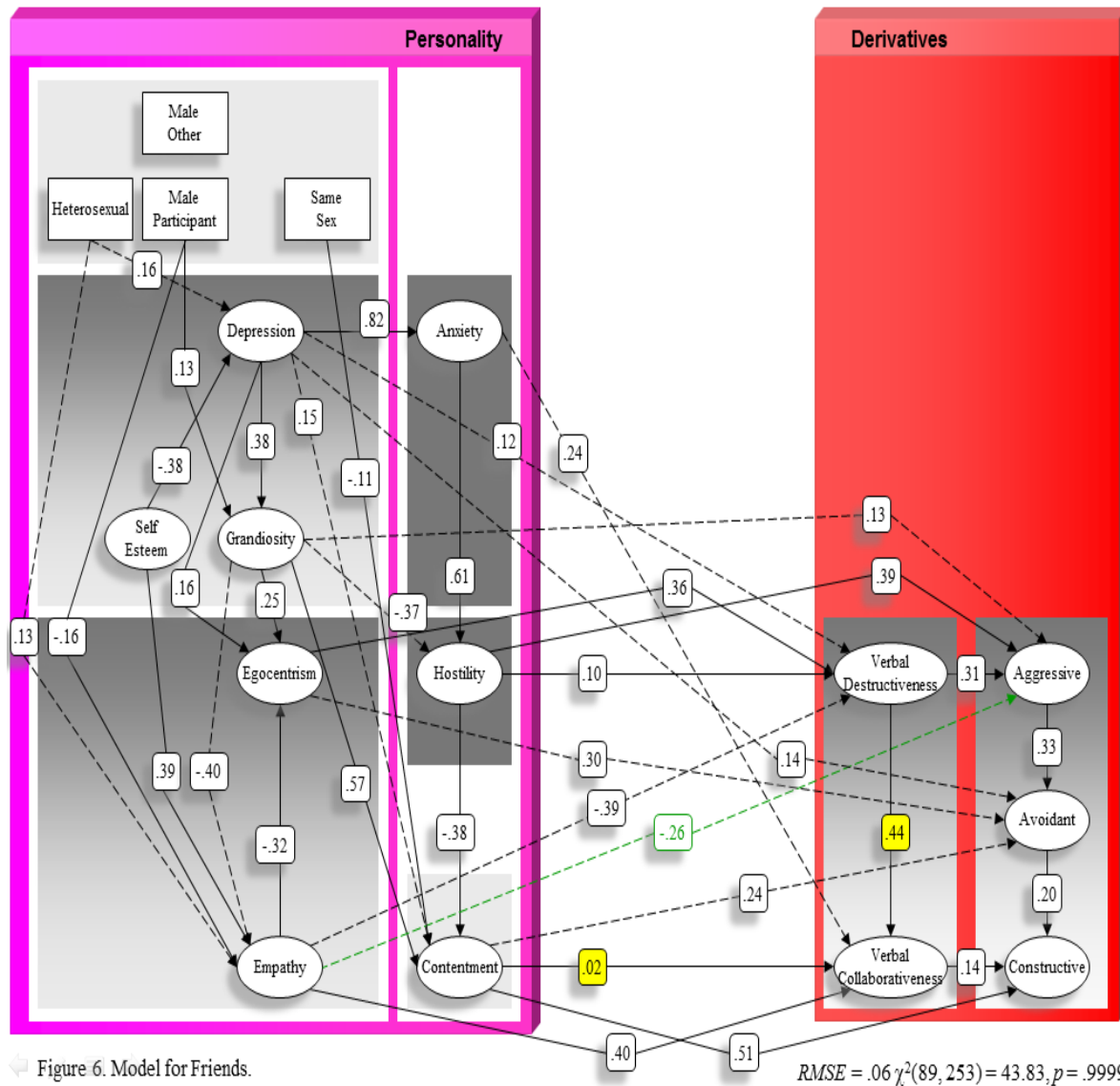
$$RMSE = .061 \chi^2(80, 253) = 41.05 p = .451$$

Trait Analysis

The relationship between verbal constructiveness and verbal destructiveness was moderated by type of relationship. The correlation between verbal constructiveness and verbal destructiveness was positive in the adult friendship ($\rho = .44$) context and negative in the parent adult-child conflict context ($\rho = -.16$). Because of this, it was important to examine the friendship and parent adult-child conflict data separately.

Overall, the effects in the trait models for both the parental ($\chi^2 (82) = 44.04$; $p=.72$; RMSEA = .06) and friendship conflict ($\chi^2 (89) = 43.83$; $p=.50$; RMSEA = .06) scenarios replicated nicely, with a few exceptions (see Figures 5 and 6). There were some interesting and significant common effects, which will be explained in the next section.





Conflict Management Strategies.

For both contexts, individuals who began with aggressive strategies also then moved to avoidance strategies (parents, $\rho = .17$; friends, $\rho = .33$), which in turn, then led them to use more constructive strategies (parents, $\rho = .16$; friends, $\rho = .20$). This pattern was originally hypothesized in the model.

Depression. Self-esteem decreased depression (parents, $\rho = -.29$; friends, $\rho = -.38$) in both contexts, suggesting that across both scenarios, particularly in friendship conflict, people who have higher self-esteem may be less depressed. This is in line with other research findings (Roberts, Gotlib, & Kassel, 1996).

Anxiety. In addition, in both scenarios, depression increased anxiety which is an association that was stronger in the friendship conflict context ($\rho = .82$) than in the parental conflict ($\rho = .60$).

Hostility. Anxiety increased hostility (parents, $\rho = .53$; friends, $\rho = .61$) which was a strong common finding in the data as well.

Contentment. In addition, grandiosity increased contentment (parents, $\rho = .62$; friends, $\rho = .58$) as well and also proved to be a stronger effect in both scenarios.

Though there were a few common findings, there were also some unique differences between the parent adult-child and friendship contexts in personality, emotional and conflict management strategies in the trait model.

Parent-Adult Child Context

For the personality, emotional and conflict management components in the parent adult-child conflict scenario, there were significant findings in the personality and emotional variables, as well as conflict management variables (see Figure 5).

Depression. Self-esteem decreased depression ($\rho = -.29$), as expected.

Grandiosity. Male participants were more likely to self-identify as more grandiose than female participants ($\rho = .27$). Moreover, self-esteem increased grandiosity ($\rho = .18$). Interestingly, depressed individuals ($\rho = .11$) and bi-sexual or homosexual individuals ($\rho = .14$) also exhibited higher levels of grandiosity.

Empathy. Male participants were less likely to exhibit empathy than female participants ($\rho = -.20$). Empathy decreased depression ($\rho = -.17$), and grandiosity ($\rho = -.31$). Additionally, self-esteem increased empathy ($\rho = .21$).

Anxiety. Depression increased anxiety ($\rho = .60$), while self-esteem decreased anxiety ($\rho = -.15$).

Hostility. Anxiety increased hostility ($\rho = .60$), while hostility decreased grandiosity ($\rho = -.15$).

Contentment. Contentment decreased hostility ($\rho = -.42$), while grandiosity ($\rho = .57$), and depression ($\rho = .15$) increased contentment ($\rho = .57$), which was an unexpected finding.

Egocentrism. Self-esteem ($\rho = -.25$) and empathy ($\rho = -.15$) decreased egocentrism. Additionally, depression ($\rho = .11$) and grandiosity ($\rho = .24$) increased egocentrism.

Verbal Destructiveness. Empathy decreased verbal destruction ($\rho = -.41$). Further, depression ($\rho = .18$) and egocentrism ($\rho = .27$) both increased verbal destruction during conflict.

Verbal Collaborativeness. Empathy ($\rho = .31$), anxiety ($\rho = .22$), and contentment ($\rho = .16$), increased verbal constructiveness, which was partly hypothesized (i.e., empathy and

contentment). Verbal collaborativeness decreased verbal destructiveness ($\rho = -.16$), which was also supported by the hypothesized model.

Aggressive Conflict Strategy. Depression ($\rho = .12$), grandiosity ($\rho = .28$), hostility ($\rho = .25$), and verbal destructiveness ($\rho = .40$) increased aggressive types of conflict management, which was hypothesized (i.e., verbal destructiveness). Contentment decreased the use of aggressive conflict strategies ($\rho = -.33$).

Avoidance Conflict Strategy. Depression ($\rho = .28$), egocentrism ($\rho = .20$), and contentment ($\rho = .12$) increased the use of avoidance as a type of conflict strategy. Empathy decreased the use of this strategy ($\rho = -.21$). In addition, aggressive conflict strategy use also increased the use of avoidance conflict strategies ($\rho = .17$), as previously predicted.

Constructive Conflict Strategy. Bi-sexuality and/or homosexuality decreased constructive conflict strategy use ($\rho = -.10$). Hostility decreased the use of constructive conflict management strategies ($\rho = -.14$), while contentment ($\rho = .55$) and verbal collaborativeness ($\rho = .15$) increased the use of constructive types of conflict management strategies, as hypothesized (i.e., verbal collaborativeness). Additionally, the use of avoidance conflict strategies increased constructive conflict strategies ($\rho = .16$).

Friendship Context

As with the parent adult-child conflict scenario, there were significant findings in the personality and emotional variables, as well as in the conflict management variables in the friendship context (see Figure 6).

Depression. Bi-sexuality and/or homosexuality individuals increased depression ($\rho = .16$), while self-esteem decreased depression ($\rho = -.38$).

Grandiosity. Sex ($\rho = .13$), and depression increased grandiosity ($\rho = .38$).

Empathy. Sex ($\rho = -.16$), bi-sexuality and/or homosexuality ($\rho = -.13$), and grandiosity ($\rho = -.40$) decreased empathy. Self-esteem also increased empathy ($\rho = .39$).

Anxiety. Depression increased anxiety ($\rho = .82$).

Hostility. Hostility decreased grandiosity, ($\rho = -.37$), while anxiety increased hostility ($\rho = .61$).

Contentment. Depression ($\rho = .16$) and grandiosity ($\rho = .58$) increased contentment, while hostility decreased contentment ($\rho = -.38$).

Egocentrism. Empathy decreased egocentrism ($\rho = -.32$), while depression ($\rho = .16$), and grandiosity ($\rho = .25$) increased egocentrism.

Verbal Destructiveness. Empathy decreased verbally destructiveness ($\rho = -.37$), while egocentrism ($\rho = .35$) and depression ($\rho = .16$) increased verbal destructiveness.

Verbal Collaborativeness. Empathy ($\rho = .39$), anxiety, ($\rho = .24$) and surprisingly verbal destructiveness ($\rho = .45$) increased verbal constructiveness, which was partly hypothesized (i.e., empathy).

Aggressive Conflict Strategies. Empathy decreases aggressive conflict strategies ($\rho = -.26$), while grandiosity ($\rho = .13$), hostility, ($\rho = .39$) and verbal destructiveness ($\rho = .31$) increased the use of aggressive conflict strategies, as originally hypothesized.

Avoidance Conflict Strategies. Depression ($\rho = .14$), contentment ($\rho = .24$), egocentrism ($\rho = .30$), and the use of aggressive conflict management strategies ($\rho = .33$), increased the use of avoidance conflict strategies, as previously predicted.

Constructive Conflict Strategies. Contentment ($\rho = .51$), and verbal collaborativeness ($\rho = .14$), increased the use of constructive conflict strategies, as previously hypothesized (i.e., verbal collaborativeness). Additionally, the use of avoidance conflict strategies increased the use of constructive conflict management strategies, as hypothesized ($\rho = .20$).

Chapter 5

Discussion

The current research looked at personality and emotional traits that drive the conflict strategies in parent-adult child conflict and adult friendship conflict scenarios. These are contexts that need further research attention (Canary, et al, 1995; Sherman, De Vries, & Lansford, 2000). Overall, results indicated that individuals in both contexts exhibited similar conflict management patterns, and personality and emotional traits, with a few exceptions.

Conflict Management

The general pattern of conflict found in other studies (e.g. MacNeil, et al, 2012; Tafoya, et al, 2010) held true for both parent adult-child and adult friendship conflict contexts, lending more support for creating an overall relational model which encompasses many different types of relationships (e.g. dating dyads, siblings, parent/child, friendships). This is in line with other research which states that conflict strategies are stable across all situations (Barbuto, et. al., 2010). This may be pertinent since much of the conflict management research is atheroetical in nature and fails to provide a cohesive body of research (Canary, et al, 1995). This is one of several pieces of research that has attempted to build a theoretical model. The general pattern that is seen in other studies (e.g. MacNeil, et al, 2012; Tafoya, et al, 2010) is included in the current study. This general pattern suggests that individuals begin conflicts in an aggressive manner, which causes them to use avoidance strategies, which then gets them back to constructive conflict strategies. Thus, the use of avoidance as a strategy is one of the most important contributions of the current findings.

As previously discussed, avoidance has been debated throughout the conflict literature and different scholars have argued that it serves as either a positive or negative strategy (see Cupach & Messman, 1995; Roloff & Ifert, 2000). That is, some scholars have found that certain individuals may experience relational satisfaction by avoiding conflict, confrontation, and arguing (Alberts, 1990; Pike and Sillars, 1985), while other researchers have found that avoidance is damaging to a relationship (Cupach & Messman, 1995; Gottman, 1993; Noller, et al, 1994; Roloff & Ifert, 2000), and ultimately leads to less satisfaction in the relationship (Gottman & Krokoff, 1989). However, the present study, as well as previous studies (e.g. MacNeil, et al, 2012; Tafoya, et. al., 2010), clearly show that it can be used as a positive strategy to get back to constructive conflict. That is, people can use avoidance as a “time-out” when they find themselves in a destructive, negative pattern with another in conflict. This is in line with other research which has suggested that people need to step away from the conflict, or take a break when things become too destructive. For example, Gottman (1993) suggests that people can get emotionally flooded in conflict and when that happens, they need a time out or break to calm down before they get back to the same conversation with the individual.

Though the general avoidance strategy helped individuals get back to constructive strategies, it also appears that in both contexts, depressed, egocentric and content individuals were more likely to use avoidance as a strategy. Depressed individuals typically exert more “negative” conflict strategies (Styron & Janoff-Bulman, 1997). As noted above, avoidance can be considered a more negative type of strategy (Noller, et al, 1994; Roloff & Ifert, 2000). Moreover, egocentric individuals may view conflict outcomes as inequitable and unfair, and therefore are less likely to constructively deal with conflict (Thompson & Loewenstein, 1992). Conversely, content individuals have a pleasant disposition, but once conflict begins, they may

not actually engage in the conflict. This has been suggested in previous studies (see Moberg, 1998). Perhaps this is due to their uneasiness with conflict overall.

Unique to the parent adult-child context, individuals who were more empathic used less avoidance while in conflict. People who are empathic tend to have skills that allow for more constructive conflict management, which may include using more direct ways of trying to solve problems (Wied et al, 2007). Perhaps, empathic adults are more comfortable with their parents than their friends and thus prefer to directly engage their parents in conflict, or perhaps they come from conversation oriented families who typically do not use avoidance as a strategy but choose to deal with conflict in a more direct manner (Koerner & Fitzpatrick, 1997).

The findings for aggressive strategies suggested that individuals in both contexts who were more hostile, verbally aggressive, and grandiose, also used more aggressive conflict management strategies. This is in line with previous research, which found that hostility is closely related to verbal aggressiveness and viewed as destructive (Infante, & Wigley, 1986), and verbally aggressive individuals show aggressive behaviors (Hamilton, 2012) and use more destructive strategies (Hamilton & Tafoya, 2012). In addition, grandiosity as a trait in the current research was an amalgamation of positive and negative components which has been seen in previous studies, and typically viewed as negative (see Hamilton & Tafoya, 2012). This is in line with research that states that destructive conflict is associated with these negative outcomes (Sillars, et al, 1982).

Interestingly, in the parent adult-child context, depressed individuals used more aggressive conflict management strategies, a finding found in previous studies (see Styron & Janoff-Bulman, 1997). On the other hand, in the parent adult-child context, individuals who were content used less aggressive strategies. Perhaps people who have a content personality

overall, don't feel the need to communicate aggressively during conflict, especially with their parents, while those who are chronically depressed may be more susceptible to aggressive strategies (Styron & Janoff-Bulman, 1997). Conversely, people who have an overall depressed personality may be more easily prone to using aggressive strategies while they are in conflict with their parents. Additionally, in the friendship context, individuals who were more empathic also used less aggressive conflict strategies. Because empathy allows for individuals to understand others' views, it may act to diminish destructive responses (Davis, 1996).

In both contexts, it appears that people who were less hostile and had a more content personality overall, used more verbally constructive statements and constructive conflict management strategies during conflict. This makes sense given that constructive strategies typically exhibit a collaborative orientation rather than an individual orientation (Canary & Cupach, 1988), and therefore individuals may feel more at ease. Unique to the parental context, bi-sexual and homosexual individuals used less constructive strategies. These individuals may already have issues with parental figures concerning their sexual orientations, and thus their discords may not allow for constructive strategy use (Cramer & Roach, 1988; LaSalsa, 2000).

Personality and Emotions

In both contexts, there were similar patterns in personality and emotional variables, with a few disparities.

Parent Adult-Child Conflict. Individuals in the parent adult-child conflict context tended to be more grandiose, and less anxious, especially when their self-esteem was high. Conversely, individuals with low self-esteem tended to be more egotistical. This may be due to the nature of the relationship that these individuals had with their parents, or the parental style. Indeed some research states that people who have caring parents often end up with more positive self-esteem

and exhibit lower levels of conflict than individuals who do not (Pawlak & Klein, 1997), as well as exhibit more constructive conflict strategies (Shi, 2003).

Moreover, adults in parental conflicts also demonstrated more empathy if they were less depressed, and were more content if they were empathic people. As mentioned previously, empathy is about helping or consoling others (Davis, 1996), and therefore, this may make people feel better about themselves, because they are helping others. Additionally, the less verbal destructiveness that was used, the more verbal constructiveness individuals used in parent-adult child situations. Verbal destructiveness tends to escalate conflict, and is considered a negative communicative strategy in conflict (Wilmot & Hocker, 2001), which makes verbal constructiveness more productive and collaborative during conflict.

Friends. Like the parental conflict, there were also unique findings in the friendship conflict scenario. For example, bi-sexual and homosexual individuals tended to be less empathic in the friendship scenario. This may be because they may not have been shown empathy in return in their own relationships, and thus perhaps are not accustomed to using these skills. However, the most interesting finding was that verbal destructiveness tended to increase verbal constructiveness, which is contrary to other research (Wilmot & Hocker, 2001). As mentioned previously, friendships present a unique context. They are voluntary and can easily be broken (Rawlins, 1994), unlike other bonds such as parental relationships. Perhaps individuals in friendships feel that they have little to lose and thus start off verbally destructive, which then somehow gets them to become verbally constructive. Indeed, other research notes that the significance of a conflict will affect conflict responses, and the more significant, the more likely individuals are to use destructive responses (Healey & Bell, 1990). Thus, individuals may have

started off being verbally destructive, and realized it didn't work to solve issues, and thus moved to more verbally constructive responses.

Taken together, this study tested personality and emotional antecedent variables that drive the use of conflict management strategies in parent-adult child and adult friendship conflict scenarios. Overall, results suggested a similar conflict pattern observed in previous studies across both contexts. This general pattern suggests that individuals begin conflicts in an aggressive manner, which causes them to use avoidance strategies, which then gets them back to constructive conflict strategies. In addition, both contexts showed similar trait findings as well as some unique results for each scenario. Thus, the current research expanded knowledge and added to the paucity of research in the realm of parent-adult child and adult friendship conflict so that more can be known regarding these two types of relationships.

Limitations and Future Directions

This study had a few limitations. First, the data was collected retrospectively which could have influenced the states versus trait argument. That is, participants may have not recalled their conflict accurately. They may have forgotten how they felt/acted during parts of the conflict, which influences the data outcomes. In the future, researchers should study participants at three points of time during conflict to see if these same results hold true, or conduct longitudinal studies to see the impact of states and traits on conflict. Additionally, this study used a mix of snow-ball and convenience sampling. Subsequent studies should try and use a more randomized sample if possible. Future research should also try and research other types of relationships in which conflict may occur (i.e., step-families, employment relationships, etc.).

References

- Aguinis, H. (2004). *Regression analysis for categorical moderators*. New York: Guilford Press.
- Alexander, J. F. (1973). Defensive and supportive communications in normal and deviant families. *Journal of Consulting and Clinical Psychology*, 40, 223-231.
- Antonioni, D. (1990). Relationship between the big five personality factors and conflict management styles. *International Journal of Conflict Management*, 9, 336-355.
- Arslan, C., Hamarta, E., & Uslu, M. (2010). The relationship between conflict communication, self-esteem and life satisfaction in university students. *Educational Research and Reviews*, 5(1), 031-034.
- Barbuto, J. E., Phipps, K. A., & Xu, Y. (2010). Testing relationships between personality, conflict styles, and effectiveness. *The International Journal of Conflict Management*, 21, 434-447.
- Beck, S. J., & Ledbetter, A. M. (2013). The influence of parent conflict style on children. *Personal Relationships*, 20(3), 495-510.
- Bell, C., & Song, F. (2005). Emotions in the conflict process: An application of the cognitive appraisal model of emotions to conflict management. *International Journal of Conflict Management*, 16(1), 30-54.
- Bippus, A. M., & Rollin, E. (2003). Attachment style differences in relational maintenance and conflict behaviors: Friends' perceptions. *Communication Reports*, 16, 113-123.
- Blake, R. R., & Mouton, J. S. (1964). *The managerial grid*. Houston: Gulf Publishing .
- Braiker, H. B., & Kelly, H. H. (1979). Conflict in the development of close relationships. In R. L. Burgess & T. L. Huston (Eds.), *Social exchange in developing relationships* (pp. 135-168).

- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York: Guilford Press.
- Cahn, D.D., & Abigail, R. A. (2007). *Managing conflict through communication: Fifth edition*. Upper Saddle River, NJ: Pearson Education.
- Canary, D. J., Cupach, W. R., & Messman, S. J. (1995). *Relationship conflict*. Thousand Oaks: Sage Publications.
- Carnevale, P. J., & Isen, A. M. (1986). The influence of positive affect and visual access on the discovery of integrative solutions in bilateral negotiation. *Organizational behavior and human decision Processes*, 37(1), 1-13.
- Cattell, R. B. (1943). The description of personality: Basic traits resolved into clusters. *The journal of abnormal and social psychology*, 38(4), 476.
- Christensen, A., & Sullaway, M. (1984). *Communication Patterns Questionnaire*. University of California, Los Angeles: Unpublished manuscript.
- Chusmir, L. H., & Mills, J. (1989). Gender differences in conflict resolution styles of managers: At work and at home. *Sex Roles*, 20, 149-163.
- Costa, P. T., & McCrae, R. R. (1985). *The Neo personality inventory manual*. Odessa, FL: Psychological Assessment Resources .
- Conger, R. D., Conger, K. J., Elder, G. H., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child development*, 63(3), 526-541.

- Couch, D., & Liamputtong, P. (2008). Online dating and mating: The use of the internet to meet sexual partners. *Qualitative Health Research*, 18, 268-269.
- Cramer, D. W., & Roach, A. J. (1988). Coming out to mom and dad: A study of gay males and their relationships with their parents. *Journal of Homosexuality*, 15(3-4), 79-92.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- De Wied, M., Branje, S. J., & Meeus, W. H. (2007). Empathy and conflict resolution in friendship relations among adolescents. *Aggressive Behavior*, 33(1), 48-55.
- Desivilya, H. S., & Yagil, D. (2005). The role of emotions in conflict management: the case of work teams. *International Journal of Conflict Management*, 16(1), 55-69.
- Devellis, R. D. (2003). *Scale Development: Theory and Applications* (2nd ed.). Thousand Oaks: Sage.
- Dumlao, R. J. (1997). *Adolescents' cognitive processing and interpreting of father-teen conflicts on television*. University of Wisconsin--Madison.
- Dumlao, R., & Botta, R. A. (2000). Family communication patterns and the conflict styles young adults use with their fathers. *Communication Quarterly*, 48(2), 174-189.
- Dykstra, P. A. (1990). *Next of (non)kin*. The Netherlands: Swets and Zeitlinger.
- Eastwood, J. D., Smilek, D., & Merikle, P. M. (2003). Negative facial expression captures attention and disrupts performance. *Perception and Psychophysics*, 65, 352-358.
- Enright, R. D., Shukla, D. G., & Lapsley, D. K. (1980). Adolescent ego-centrism -sociocentrism and self consciousness. *Journal of Youth and Adolescence*, 9, 101-116.

- Fiebert, M. S., & Wright, K. S. (1989). Midlife friendships in an American faculty sample. *Psychological Reports*, 64(3c), 1127-1130.
- Field, A. (2005). *Discovering statistics using spss*. Thousand Oaks: Sage.
- Fitzpatrick, M. A., & Ritchie, L. D. (1994). Communication schemata within the family. *Human Communication Research*, 20(3), 275-301.
- Forgas, J. P. (1998). On feeling good and getting your way: mood effects on negotiator cognition and bargaining strategies. *Journal of personality and social psychology*, 74(3), 565.
- Gaudry, E., Vagg, P., & Spielberger, C. D. (1975). Validation of the state-trait distinction in anxiety research. *Multivariate Behavioral Research*, 10, 331-341.
- Ge, X., Best, K. M., Conger, R. D., & Simons, R. L. (1996). Parenting behaviors and the occurrence and co-occurrence of adolescent depressive symptoms and conduct problems. *Developmental Psychology*, 32(4), 717.
- Gottman, J. M., & Krokoff, L. J. (1989). Marital interaction and satisfaction: a longitudinal view. *Journal of consulting and clinical psychology*, 57(1), 47.
- Gottman, J. M. (1993). A theory of marital dissolution and stability. *Journal of Family Psychology*, 7(1), 57.
- Guerrero, L. K., & La Valley, A. G. (2006). Conflict, emotion and communication. In J. G. Oetzel, & S. Ting-Toomey, *The Sage handbook of conflict communication: Integrating theory, research, and practice* (pp. 69-96). Thousand Oaks, CA: Sage.
- Guerrero, L. K., Anderson, P. A., & Afifi, W. A. (2007). *Close Encounters: Communication in Relationships* (2nd ed.). Thousand Oaks: Sage Publications.

- Hamilton, M., & Hample, D. (2011). Testing hierarchical models of argumentativeness and verbal aggressiveness. *Communication Methods and Measures*, 5(3), 250-273.
- Hamilton, M.A. (2012). Verbal aggression: Understanding the psychological antecedents and social consequences. *Journal of Language and Social Psychology*, 31, 5-12.
- Hamilton, M.A., & Tafoya, M. A. (2012). Toward a collective framework on verbal aggression: Hierarchical and antagonistic processes. *Journal of Language and Social Psychology*, 31, 112-130.
- Hanoch, Y., & Vitouch, O. (2004). When less is more: Information, emotional arousal, and the ecological reframing of the yerkes-dodson law. *Theory and Psychology*, 14, 427-452.
- Hawlweg, K., Kaiser, A., Christensen, A., & Fehm-Wolfsdorf, G. (2000). Self report and observational assessment of couples' conflict: The concordance between the communication patterns questionnaire and the KPI Observation system. *Journal of Marriage and Family*, 62, 61-67.
- Hays, R. B. (1985). A longitudinal study of friendship development. *Journal of Personality and Social Psychology*, 48, 909-924.
- Healey, J. G., & Bell, R. A. (1990). "Assessing alternative responses to conflicts in friendships." In Cahn, D. D. (Ed.), *Intimates in conflict: A communication perspective* (pp. 25-48). Routledge.
- Heavey, C. L., Larson, B. M., Zumtobel, D. C., & Christensen, A. (1996). The communications pattern questionnaire: The reliability and validity of a constructive communication subscale. *Journal of Marriage and Family*, 58, 796-800.

- Holt, J. R., & DeVore, C. J. (2005). Culture, gender, organizational role, and styles of conflict resolution: A meta-analysis. *International Journal of Intercultural Relations*, 29, 165-196.
- Infante, D. A., & Wigley, C. J. (1986). Verbal aggressiveness: An interpersonal model and measure. *Communication Monographs*, 53, 61-69.
- Infante, D.A., Sabourin, T. C., & Rudd, J. E. (1993). Verbal aggression in violent and nonviolent marital disputes. *Communication Quarterly*, 38, 361-371.
- Jensen-Campbell, L. A., & Graziano, W. G. (2005). Methodologies for studying personality processes in interpersonal conflict. *International Negotiation*, 10, 165-182.
- Jones, R. E., & White, C. S. (1985). Relationships among personality, conflict resolution styles, and task effectiveness. *Group and Organization Management*, 10, 152-167.
- Kilmann, R.H., & Thomas, K.W. (1975). Interpersonal conflict-handling behavior reflection as reflections of Jungian personality dimensions. *Psychological Reports*, 37, 971-980.
- Kilmann, R. H., & Thomas, K. W. (1977). Developing a forced-choice measure of conflict handling behavior: The "MODE" instrument. *Educational and Psychological Measurement*, 37, 309-325.
- Klein, K., Forehand, R., Armistead, L., & Long, P. (1997). Delinquency during the transition to early adulthood: family and parenting predictors from early adolescence. *Adolescence*.
- Knapp, M. L., Putnam, L. L., & Davis, L. J. (1988). Measuring interpersonal conflict in organizations: Where do we go from here? *Management Communication Quarterly*, 414-429.

- Koerner, A. F., & Fitzpatrick, M. A. (2006). Family communication patterns theory: A social cognitive approach. *Engaging theories in family communication: Multiple perspectives*, 50-65.
- Laursen, B., Finkelstein, B., & Townsend Betts, N. (2001). A developmental meta-analysis of peer conflict resolution . *Developmental Review* , 21, 423-449.
- LaSala, M. C. (2000). Lesbians, Gay Men, and Their Parents: Family Therapy for the Coming-Out Crisis*. *Family Process*, 39(1), 67-81.
- Levine, T. A., Kotowski, M. R., Beatty, M. J., & Van Kelegom, M. J. (2011). A meta-analysis of trait-behavior correlations in argumentativeness and verbal aggressiveness. *Journal of Language and Social Psychology*, 1-17.
- Lindeman, M., Harakka, T., & Keltikangas-Jarvinen, L. (1997). Age and gender differences in adolescents' reactions to conflict situations: Aggression, prosociality, and withdrawal. *Journal of Youth and Adolescence*, 21, 339-351.
- MacNeil, T. A., Hamilton, M., & Tafoya, M. A. (2012, May). *Adult sibling conflict: A test of the conflict management strategies scale*. Presented to International Communication Association, Phoenix, AZ.
- Mehrabian, A. (2000). Beyond IQ: Broad-based measurement of individual success potential or "emotional intelligence." *Genetic, Social, and General Psychology*, 126, 133-239.
- McCrae, R. C. (1987). Validation of the five factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90.
- Moberg, P. J. (1998). Predicting conflict strategy with personality traits: Incremental validity and the five factor model. *International Journal of Conflict Management*, 9(3), 258-285.

- Moberg, P. J. (2001). Linking conflict strategy to the five factor model: Theoretical and empirical foundations. *International Journal of Conflict Management*, 12, 46-78.
- Montes, C., Rodríguez, D., & Serrano, G. (2012). Affective choice of conflict management styles. *International Journal of Conflict Management*, 23(1), 6-18.
- Noller, P., Feeney, J. A., Bonnell, D., & Callan, V. J. (1994). A longitudinal study of conflict in early marriage. *Journal of Social and Personal Relationships*, 11(2), 233-252.
- Oetzel, J. G., & Ting-Toomey, S. (2006). *The Sage Handbook of Conflict Communication*. (J. G. Oetzel, & S. Ting-Toomey, Eds.) Thousand Oaks: Sage.
- Papa, M. J., & Nattale, E. J. (1989). Gender, strategy selection, and discussion satisfaction in interpersonal conflict. *Western Journal of Speech Communication*, 53, 260-272.
- Pawlak, J. L., & Klein, H. A. (1997). Parental conflict and self-esteem: The rest of the story. *The Journal of genetic psychology*, 158(3), 303-313.
- Prinz, R. J., Foster, S. J., Kent, R. N., & O'Leary, K. (1979). Multivariate assessment of conflict in distressed and nondistressed mother-adolescent dyads. *Journal of Applied Behavior Analysis*, 12, 691-700.
- Pruitt, D. G. (1983). Strategic choice in negotiation. *American Behavioral Scientist*, 27, 167-194.
- Putnam, L. (2006). Definitions and approaches to conflict and communication. In J. G. Oetzel, & S. Ting-Toomey, *The Sage handbook of conflict communication: Integrating theory research and practice* (pp. 1-32). Thousand Oaks: Sage.

- Putnam, L., & Poole, M. S. (1987). Conflict and negotiation. In F. Jablin, L. Putnam, K. H. Roberts, & L. Porter, *Handbook of organizational communication* (pp. 549-599). Newbury Park: CA: Sage.
- Putnam, L., & Wilson, C. E. (1982). Communicative strategies in organizational conflicts: Reliability and validity of a measurement scale. *Communication Yearbook*, 629-652.
- Rahim, M. A. (1983). A measure of styles of handling interpersonal conflict . *Academy of Management* , 26, 368-376.
- Rawlins, W. K. (1992). *Friendship matters: Communication, dialectics, and the life course*. Transaction Publishers.
- Rawlins, W. K. (1994). Being there and growing apart: Sustaining friendships during adulthood. In D.J. Canary & L. Stafford (Eds.), *Communication and relational maintenance* (pp. 275-296). San Diego, CA: Academic Press.
- Rhoades, J. A., Arnold, J., & Jay, C. (2001). The role of affective traits and affective states in disputants' motivation and behavior during episodes of organizational conflict. *Journal of Organizational Behavior*, 22(3), 329-345.
- Ritchie, L. D. (1991). Family Communication Patterns An Epistemic Analysis and Conceptual Reinterpretation. *Communication Research*, 18(4), 548-565.
- Roberts, J. E., Gotlib, I. H., & Kassel, J. D. (1996). Adult attachment security and symptoms of depression: The mediating roles of dysfunctional attitudes and low self-esteem. *Journal of personality and social psychology*, 70(2), 310.

- Rogan, R. G., & LaFrance, B. H. (2003). An examination of the relationship between verbal aggressiveness, conflict management strategies, and conflict interaction goals. *Communication Quarterly*, 31, 458-469.
- Roloff, M.E., & Ifert, D. E. (2000). "Conflict management through avoidance: Withholding complaints, suppressing arguments, and declaring topics taboo." In S. Petronio (Ed.), *Balancing the secrets of private disclosures* (pp. 151-163). Mahwah, NJ: Lawrence Erlbaum Associations.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenberg, M. (1989). *Society and the adolescent self-image* (rev. Wesleyan University Press.
- Ross, R. G., & Dewine, S. (1988). Assessing the ross-dewine conflict management message style (CMSS). *Management Communication Quarterly*, 1, 389-413.
- Sandy, S. V., Boardman, S. K., and Deutsch, M. (2006). "Personality and Conflict." In M. Deutsch, P. T. Coleman, and Marcus, E. C. (Eds.), *The handbook of conflict resolution: Theory and practice. Second Edition* (pp.331-355). San Francisco, CA: Jossey-Bass.
- Sherman, A. M., De Vries, B., & Lansford, J. E. (2000). Friendship in childhood and adulthood: Lessons across the lifespan. *The International Journal of Aging and Human Development*, 51, 31-51.
- Segrin, C., & Flora, J. (2005). *Family communication*. Mahwah, NJ: Lawrence Erlbaum.
- Shi, L. (2003). The association between adult attachment styles and conflict resolution in romantic relationships. *The American Journal of Family Therapy*, 31, 143-157.

- Sillars, A. (1980). Attributions and communication in roommate conflicts . *Communication Monographs* , 47, 180-200.
- Sillars, A. L., Coletti, S. F., Parry, D., & Rogers, M. (1982). Coding verbal conflicts: Non-verbal and perceptual correlates of the "avoidance-distributive-integrative" distinction. *Human Communication Research* , 9, 83-95.
- Sillars, A., Koerner, A., & Fitzpatrick, M. (2005). Communication and understanding in parent–adolescent relationships. *Human Communication Research*, 31, 102-128.
- Singleton, R. L., & Straits, B. C. (2005). *Approaches to Social Research* (4th ed.). New York: Oxford University Press.
- Spielberger, C. D. (1972). *Anxiety: Current trends in theory and research*. Oxford, England: Academic Press.
- Spielberger, C. D. (1983). Manual for the State-Trait Anxiety Inventory STAI (form Y)(" self-evaluation questionnaire").
- Sprengh, N. R., McKinnon, M.C., Mar, R. A., & Levine, B. (2009). The toronto empathy questionnaire: Scale development and initial validation of a factor analytic solution and multiple empathy measures. *Journal of Personality Assessment*, 91, 62-71.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. *Journal of Marriage and Family*, 41, 75-88.
- Styron, T., & Janoff-Bulman, R. (1997). Childhood attachment and abuse: Long-term effects on adult attachment, depression, and conflict resolution. *Child abuse & neglect*, 21(10), 1015-1023.

- Tafoya, M. A., & MacNeil, T. A. (2010, November). *Sibling conflict: Developing a conflict management scale*. Presented to National Communication Association, San Francisco, CA. (Competitively selected).
- Tannen, D. (1994). *Gender and discourse*. New York: Oxford University Press.
- Thompson, L., & Loewenstein, G. (1992). Egocentric interpretations of fairness and interpersonal conflict. *Organizational Behavior and Decision Processes*, 51, 176-197.
- Van Doorn, M. D., Branje, S. J., & Meeus, W. H. (2008). Conflict resolution in parent-adolescent relationships and adolescent delinquency. *The Journal of Early Adolescence*, 28(4), 503-527.
- VanDoorn, M.D., Branje, S. J. T., VanderValk, I. E., De Goede, I. H., Meeus, A., & Wim., H. J. (2011). Longitudinal spillover effects of conflict resolution styles between adolescent-parent relationships and adolescent friendships. *Journal of Family Psychology*, 25, 157-161.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: the disposition to experience aversive emotional states. *Psychological bulletin*, 96(3), 465.
- Weiss, R. S. (1986). Continuities and transformations in social relationships from childhood to adulthood. In W.W. Hartup & Z. Rubin (Eds.), *Relationships and development* (pp. 95-110). Hillsdale, NJ: Lawrence Erlbaum.
- Williams, F., & Monge, P. (2001). *Reasoning with statistics: How to read quantitative research*. Belmont, CA: Thompson Wadsworth.
- Wilmot, W. W., & Hocker, J. L. (2007). *Interpersonal Conflict* (7th ed.). Boston: McGraw-Hill.
- Wilmot, W. W., & Hocker, J. L. (2013). *Interpersonal Conflict* (9th ed.). Boston: McGraw-Hill.

- Womack, D. F. (1988). A review of conflict instruments in organizational settings . *Management Communication Quarterly* , 1, 437-445.
- Yun, S. H. (2010). Factor Structure and Reliability of the Revised Conflict Tactics Scales' (CTS2) 10-Factor Model in a Community-Based Female Sample. *Journal of Interpersonal Violence*, 719-744.

Appendix A

Conflict Scales

Canary, Cunningham, Cody (1988) Specific Conflict Tactics Scale

Likert Scale 1 – 7 (Strongly Agree ----- Strongly Disagree)

Integrative Tactics

- I sought a mutually beneficial solution.
- I reasoned with him or her in a give-and-take manner.
- I tried to understand him or her.
- I was sympathetic to his or her position.
- I showed concern about his or her feelings and thoughts.
- I expressed my trust in him or her.
- I compromised with him or her.
- I explored solutions with him or her.
- I accepted my fair share of responsibility for the conflict.
- I ignored his or her thoughts and feelings.

Topic Shifting

- I avoided the issue.
- I ignored the issue.
- I changed the topic of discussion.
- I avoided him or her.
- I tried to postpone the issue as long as possible.
- I tried to change the subject.
- I talked about abstract things instead of the conflict issue.
- I kept the person guessing what was really on my mind.

Personal Criticism

- I criticized an aspect of his or her personality.
- I blamed him or her for causing the conflict.
- I criticized his or her behavior.
- I told him or her how to behave in the future.
- I blamed the conflict on an aspect of his or her personality.
- I tried to make him or her feel guilty.

Anger

- I shouted at him or her.

I showed that I lost my temper.
 I was hostile.
 I calmly discussed the issue.

Sarcasm

I tried to intimidate him or her.
 I used threats
 I was sarcastic in my use of humor
 I teased him or her

Semantic Focus

I focused on the meaning of the words more than the conflict issue.
 I avoided the issue by focusing on how we were arguing instead of what we were arguing about.

Denial

I explained why there was no problem at all.
 I denied that there was any problem or conflict.

DINN (Canary & Gustafson, 2000)

Likert Scale 1 – 7 (Strongly Agree ----- Strongly Disagree)

Direct/Nice

Acknowledges / Shows Willingness to Manage Problem

I accepted responsibility, in part or whole, for the conflict.
 I discussed ways to communicate more effectively with my sibling.
 The conflict was due to things outside of our control (i.e., external to the relationship).
 I expressed a willingness to change my behavior.
 I tried to find a compromising solution with my sibling.

Supportive Remarks

I responded favorably to my sibling.
 I excused my sibling's behavior (i.e. "I know you didn't mean to")
 When necessary, I paraphrased what my sibling said.
 I know my sibling had my best interests in mind.
 I responded supportively.
 I expressed affection.
 I gave affirmative statements while my sibling was talking (i.e. "absolutely")
 I used humor and laughter.

Seeks Disclosure

I asked my sibling how they felt.

I solicited constructive criticism from my sibling (i.e. “do you think I handled that correctly?”)

Offers Disclosure

I told my sibling how I felt.

I gently described my observations about my siblings’ behavior

I was open about my personal problems (i.e., “I’ve been having a problem figuring this out”)

I expressed my disapproval with my sibling in a caring way.

I disagreed in a kind manner with my sibling.

Indirect / Nice**Minimizes Personal Responsibility without hostility**

I didn’t think I was responsible for the conflict.

The conflict wasn’t a big problem.

I denied the extent of the conflict (i.e. “that only happened once”)

I asked my sibling general questions (i.e., “What do you think?”)

I made general comments. (i.e. “everyone gets upset at times).”

I offered excuses for my behavior (i.e. “I was at another meeting at that time.”)

I attempted to end or disengage from the conflict in a nice manner. (i.e. “could we talk about this at some other time?”)

Humor, Teasing, or Joking

I made friendly jokes, not related to my sibling (i.e. “no one expects the Spanish Inquisition.”)

I made lighthearted comments

Direct / Nasty**Makes Accusations**

I criticized my sibling’s negative attitude. (i.e. “like I care.”)

I do not think my sibling’s motives were in the right place (i.e., they were not trying to handle the conflict positively).

I criticized my sibling’s behaviors, thoughts, or attitudes (i.e. “that was a dumb thing to say”)

My sibling was only thinking of themselves
 I made negative attributions about my sibling
 I responded negatively to my siblings' negativity
 I made hostile comments about the way my sibling was communicating with me (i.e. "why did you have to say that in such an ugly tone of voice?")

Commands Behavioral Change

I demanded that my sibling's behavior change (, i.e. "stop whining.")
 The conflict was due to my sibling's negative behavior
 I used threats to stop my sibling's behavior. (i.e. "drop it or I'm leaving")
 I commanded immediate compliance.

Leading or Hostile Questions

I asked questions in a hostile tone (i.e., i.e. "who works the hardest around here anyway?!")

Put Down, Rejections

I rejected what my sibling was saying (, i.e. "you can't be serious!")
 I used nonverbal behavior to show disgust or disapproval. (i.e. shaking head in disgust).
 I said things to my sibling that were demeaning or mocking. (i.e. "this, from the village idiot!")
 I put down my sibling
 I didn't let my sibling finish what they were trying to say (i.e., interruption; "stealing speaking turn")

Indirect / Nasty

Minimizes Seriousness or Personal Responsibility

I evaded the problem (i.e., speaking tentatively; "how would I know?")
 I made vague remarks. (i.e., remark that does not confirm or deny problem aka "whatever")
 I sighed in an exaggerated way to express my emotion
 I withdrew from the conflict (i.e., use the silent treatment, clear withdrawal from topic or conversation)

Attempts to change path of discussion

I attempted to change the path of the discussion.
 I made comments about my sibling's behavior (i.e. "I can't talk to you when you act like that.")
 I avoided the conflict by demanding that the discussion stop

I attempted to shift topics.
I interrupted my sibling so I could change topics.

Implied Negativity

My attitude towards my sibling was negative (i.e., negative attitude, superiority or arrogance).

Appendix B

Emotional Scale SAFECOMM Likert scale “not at all” 1-----→ and 7 “very much.”

I felt satisfied

I felt confident

I felt secure

I felt happy

I felt insulted

I felt angry

I felt hostile

I felt hateful

I felt scornful

I felt arrogant

I felt loving/loved

I felt caring

I felt intimate

I felt nurturing

I felt compassionate

I felt sympathetic

I felt afraid

I felt nervous

I felt ashamed

I felt embarrassed

I felt guilty

I felt remorseful

I felt disgusted

I felt resentful

I felt humiliated

I felt isolated

I felt lonely

I felt detached

I felt sad

I felt powerful

I felt vigorous

I felt energetic

I felt pleasure

Appendix C

Personality Scales

Empathy Scale

Likert Scale (1-5) Agree----- Disagree

- I enjoy making other people feel better
- I get very angry when I see someone being ill-treated
- I get a strong urge to help when I see someone who is upset
- I have tender concerned feelings for people less fortunate than me
- Seeing people cry upsets me
- When I see someone being taken advantage of I feel kind of protective towards him/her
- Some songs make me happy
- I can tell when others are sad even when they do not say anything
- I find that I am in tune with other peoples moods
- When I see someone being treated unfairly I do not feel very much pity for them
- I like to watch people open presents
- Sometimes the words of a love song can move me deeply
- It upsets me to see someone being treated disrespectfully
- When someone else is feeling excited I tend to get excited too
- The people around me have a great influence on my moods
- I find it silly for people to cry out of happiness (R)
- I become more irritated than sympathetic when I see someone's tears (R)
- I remain unaffected when someone close to me is happy (R)
- I am not really interested in how other people feel (R)
- Another's laughter is not catching for me (R)
- When a friend starts to talk about his problems I try to steer the conversation to something else (R)
- Lonely people are probably unfriendly (R)
- Most foreigners I have met seemed cool and unemotional (R)

Appendix D

Egocentrism Scale

Not important --→Extremely important

Personal fable

Accepting the fact that others don't know what it's like being me.

Getting other people to better understand why I do things the way I do.

Explaining my unique feelings and viewpoints to others so they can get some idea about what I am like.

Trying to get other people to know what it is like being me.

Coming to accept that no one will ever really understand me.

Imaginary audience

When walking in late to a group meeting, trying not to distract everyone's attention.

Trying to figure out how other people will react to my accomplishments and failures.

Being able to daydream about great successes and thinking of other people's reactions.

Being able to think about having a lot of money someday and how people will admire that.

Trying and being able to figure out if two people are talking about me when they are looking my way.

Self-focus

Becoming real good at being able to think through my own thoughts.

Thinking about my own feelings.

Being real good at knowing what others are thinking of me.

Knowing my own thoughts and feelings.

Thinking about myself.

Appendix E

Self-Esteem Scale**Likert Scale – Strongly agree -→ Strongly disagree**

I feel that I am a person of worth, at least on an equal basis with others.

I feel that I have a number of good qualities.

All in all, I am inclined to feel that I am a failure (R)

I am able to do things as well as most other people.

I feel I do not have much to be proud of. (R)

I take a positive attitude toward myself

On the whole, I am satisfied with myself.

I wish I could have more respect for myself (R)

I certainly feel useless at times (R)

At times I think I am no good at all (R)

Appendix F

State-Trait Anxiety Inventory (STAI) Scale

Likert scale (almost never, sometimes, often, almost always)

I feel pleasant (R)

I feel nervous and restless

I feel satisfied (R)

I wish I could be as others seem to be

I feel like a failure

I feel rested (R)

I am “calm, cool, and collected” (R)

I feel that difficulties are piling up so that I cannot overcome them

I worry too much over something that really doesn't matter

I am happy (R)

I have disturbing thoughts

I lack self-confidence

I feel secure (R)

I make decisions easily (R)

I feel inadequate

I am content (R)

Some unimportant thoughts runs through my mind and bothers me

I take disappointments so keenly that I can't put them out of my mind

I am a steady person (R)

I get in a state of tension or turmoil as I think over my recent concerns and interests

Appendix G

Verbal Aggressiveness Scale

(Almost true, rarely true, occasionally true, often true, almost always true)

I get in a state of tension or turmoil as I think over my recent concerns and I am extremely careful to avoid attacking individuals' intelligence when I attack their ideas (R)

When individuals are very stubborn, I use insults to soften the stubbornness.

I try very hard to avoid having other people feel bad about themselves when I try to influence them. (R)

When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable.

When others do things I regard as stupid, I try to be extremely gentle with them. (R)

If individuals I am trying to influence really deserve it, I attack their character.

When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behavior.

I try to make people feel good about themselves even when their ideas are stupid. (R)

When people simply will not budge on a matter of importance I lose my temper and say rather strong things to them.

When people criticize my shortcomings, I take it in a good humor and do not try to get back at them. (R)

When individuals insult me, I get a lot of pleasure out of telling them off.

When I dislike individuals greatly, I try not to show it in in what I say or how I say it. (R)

I like poking fun at people who do things which are very stupid in order to stimulate their intelligence.

When I attack persons' ideas, I try not to damage their self-concepts. (R)

When I try to influence people, I make a great effort not to offend them. (R)

When people do things which are mean or cruel, I attack their character in order to help correct their behavior.

I refuse to participate in arguments when they involve personal attacks. (R)

When nothing seems to work in trying to influence others, I yell and scream in order to get some movement from them.

When I am not able to refute others' positions, I try to make them feel defensive in order to weaken their positions.

When an argument shifts to personal attacks, I try very hard to change the subject. (R)

Two-thousand and fourteen November

