

**IT'S YOUR FAMILY, I ASSERT YOU: THE ROLE OF FAMILY
COMMUNICATION PATTERNS IN DETERMINING DIFFERENCES IN
ASSERTIVE COMMUNICATION**

by

Anthony J. Porreco

A thesis submitted to the Faculty of the University of Delaware in partial
fulfillment of the requirements for the degree of Master of Arts in Communication

Summer 2010

Copyright 2010 Anthony J. Porreco
All Rights Reserved

**IT'S YOUR FAMILY, I ASSERT YOU: THE ROLE OF FAMILY
COMMUNICATION PATTERNS IN DETERMINING DIFFERENCES IN
ASSERTIVE COMMUNICATION**

by

Anthony J. Porreco

Approved: _____
Charles Q. Pavitt, Ph.D.
Professor in charge of thesis on behalf of the Advisory Committee

Approved: _____
Elizabeth M. Perse, Ph.D.
Chair of the Department of Communication

Approved: _____
George H. Watson, Ph.D.
Dean of the College of Arts and Sciences

Approved: _____
Debra Hess Norris, M.S.
Vice Provost for Graduate and Professional Education

ACKNOWLEDGMENTS

First and most chiefly, I want to express my sincerest gratitude to Dr. Charlie Pavitt, my primary academic advisor on this project. Without his unwavering guidance, direction, and patience, this thesis would not have been possible: Charlie, you've been anything and everything I could hope for in an advisor, and I'm so immensely appreciative of all the time and energy you've devoted to the overseeing of my work.

Second, I would like to individually acknowledge the contributions made by the other committee members of my project, Drs. Scott Caplan and Steven Mortenson.

I want to thank Dr. Caplan for his contributions in "troubleshooting" the final development of this project with respects to his various critiques of my work, both theoretical and methodological: Scott, you consistently raised legitimate concerns that have helped me design a better study, and I'm very grateful for it.

I would also like to thank Dr. Mortenson for the moral support he provided during this project's development: Steve, I'm very grateful for the validating and supportive comments you offered during committee meetings. You really know how to make a grad student feel good about what he's doing, and your remarks helped me retain a genuine sense of purpose throughout the thesis writing process.

In addition to thanking my three committee members for their guidance during this project, I would also like to thank them collectively for their contributions to my education over the last five years: Your teaching has substantially informed the way I see the social world and how I comport myself in my relationships with others. Likewise,

you have all shown me so much about what it truly means to be an “educational professional”; these are lessons that will stay with me.

I’d also like to thank the members of my graduate cohort, Lindsey Oxley, Jenn Tyrawski, Jen Owlett, Erin Brummett, and Stephanie Clarke. We went through a lot during our two years together, and I’ll always our experiences together with the utmost fondness. Two of these individuals merit individual recognition.

Erin, thank you for being such a wonderful source of support: You’re a great listener I can always turn to for words that are simultaneously both honest and heartening, and being able to openly share our concerns with one another that I valued very, very much.

Jen, you’ve been a great friend, and I’ve loved all time we’ve spent together, both in class and out. You’ve got a remarkable wit and sense of humor that brings out the lightheartedness in those close to you, and I’ll miss having that around.

Last but not least, I also want to send an enormous “Thank You” to my father, Stephen Porreco for all of his love and support: Pop, you’ve been with me since Day 1, and I can speak with a high degree of certainty that I would not be the young adult I am today without your presence in my life. You’ve set a wonderful example about how to live with a sense of integrity, and I possess a deep admiration for your dedication to our family.

TABLE OF CONTENTS

LIST OF TABLES	vii
LIST OF FIGURES	viii
ABSTRACT	x
Chapter	
1 INTRODUCTION AND LITERATURE REVIEW	1
Introduction	2
Schematic Models of Interpersonal Communication	3
Family Communication Patterns (FCP) Theory.....	7
Basic premises and underlying assumptions.....	7
Family types	10
Cognitive Flexibility	12
Social Exchange Theory and Relational Power	14
Assertiveness.....	20
Argumentativeness.....	25
The Relationships Among FCPs, Cognitive Flexibility, Assertiveness, Argumentativeness, and Assertive Behavior.....	26
The impact of FCPs on traits.....	26
Cognitive flexibility.	27
Assertiveness.....	28
Argumentativeness.....	31
Assertiveness and argumentativeness.	33
Individual traits as predictors of assertive message behavior.	34
The Role of Relational Power in Determining Message Assertiveness.....	35
FCPs, relational power, and message assertiveness.....	36

2 METHOD.....	43
Scenarios and Message Assertiveness.....	43
Pilot Study.....	44
Main Study.....	51
Participants.....	51
Measures.....	51
Family communication patterns (FCPs).....	51
Cognitive flexibility.....	55
Extroversion.....	57
Locus of control.....	58
Argumentativeness.....	60
Trait assertiveness.....	62
Demographics.....	65
Statistical tests to be used.....	65
Categorization of message assertiveness.....	66
Statistical power.....	67
<i>Power estimates for regression analyses.</i>	67
<i>Power estimates for ANOVAs.</i>	68
<i>Power estimate for correlation coefficient.</i>	70
<i>Conclusions from power estimates.</i>	70
3 RESULTS.....	71
Preliminary Analyses.....	71
Trait Analyses.....	74
Predictors of cognitive flexibility.....	74
Predictors of trait assertiveness.....	76
Predictors of argumentativeness.....	77
Communicative Behavior Analyses.....	79
Likelihood of message use for family types, message types, scenarios, and power.....	79
Analyses for scenario, message type, and scenario X message type.....	79
Analyses relevant to power and scenario X power.....	80
Analyses relevant to family type.....	83
Additional analysis.....	87

Predictors of message use: H ₅ , H ₆ , RQ ₁ , and RQ ₂ .	91
4 DISCUSSION	97
Discussion of Trait Analyses	97
Predictors of cognitive flexibility	97
Predictors of trait assertiveness and argumentativeness.	99
Predictors of extroversion and locus of control.	100
Summary assessments of FCPs' impacts on trait development.	101
Expected Message Behavior	102
Discussion of respondents' message preferences and expected likelihood of use.	102
Impact of FCPs and traits in determining preferences for assertive messages.	108
Impact of power on message behavior.	110
Limitations and Future Research	114
Practical Applications and Interpretations	117
Theoretical Contributions	118
Conclusion	120
APPENDICES	122
A Scenario/Utterance Pilot Test	123
B Revised Family Communication Pattern Instrument	137
C Cognitive Flexibility Measure	140
D Extroversion Subscale from the Abbreviated Form of the Revised Eysenck Personality Questionnaire (EPQR-A)	142
E Personal Efficacy Subscale from the Spheres of Control Instrument	144
F Argumentativeness Scale	146
G Bakker Assertiveness Inventory	148
H Results from Factor Analyses of Measures Used	151
I Scenario Instructions for Main Study	156
6 REFERENCES	161

LIST OF TABLES

Table 2.1	Mean Realism and Power Ratings for Scenarios	46
Table 2.2	Mean Assertiveness and Forcefulness Ratings for Roommate Scenario Utterances.....	48
Table 2.3	Mean Assertiveness and Forcefulness Ratings for Car Scenario Utterances.....	50
Table 2.4	Eigenvalues & % Total Variance for Factor Loadings.....	63
Table 3.1	Means and Standard Deviations for Likelihood of Message Use X Family Type X Power Across Scenarios.....	85
Table 3.2	Means and Standard Deviations for Likelihood of Message Use X Family Type X Power for <i>Roommate</i> Scenario.....	89
Table 3.3	Means and Standard Deviations for Likelihood of Message Use X Family Type X Power for <i>Car</i> Scenario.....	90

LIST OF FIGURES

Figure 1.1	The Role of Family Communication Patterns in Determining Differences in Assertive Communication	6
------------	---	---

ABSTRACT

The underlying premise guiding the present study involved the general hypothesis that young adults acquire an understanding of power dynamics from the ways in which they have been socialized to interact with their parents. Respondents were hypothesized to report commonalities in the ways that subjects report interacting with their parents, and the extent to which subjects report being assertive in other relationships where power differentials play a contributing role in determining the outcomes of social interaction. Participants first completed several trait analyses relevant to family communication and the production of assertive communication. Respondents were then asked to read a short scenario describing an interpersonal exchange requiring them to offer an assertive response. After reading the scenario, participants were then presented with a series of corresponding utterances characterized by varying levels assertiveness, which respondents were asked rate their likelihood of using each utterance. The results found that while family communication promoted trait levels in the directions hypothesized, respondents' expected message behavior differed by scenario, suggesting that individuals' use of assertive communication is more influenced by social context than family background.

Chapter 1
INTRODUCTION AND LITERATURE REVIEW

“Tell everyone what you want to do, and someone will want to help you do it.”

– W. Clement Stone

“Change means movement, movement means friction, friction means heat, and heat means controversy.”

– Saul Alinsky

Introduction

Given that the human experience is intrinsically social in nature, the premise that communication represents the process for individuals to achieve many of their goals cannot be disputed. Said more plainly, individuals' experiences and whether they achieve their goals is the product of how they interact with one another. Assertiveness represents an aspect of interpersonal communication that describes the extent individuals make their goals and desires explicitly known to their interaction partners. The pair of above quotes speaks to the inherent tension associated with the act of communicating in an assertive manner. On the one hand, expressing one's intentions and thoughts are directly tied to whether individuals are able to realize their aspirations. On the other hand, directly conveying one's wishes to others can also have unfortunate social consequences (e.g. rejection, embarrassment), and speaks to the frequent difficulty of coordinating activity among individuals possessing disparate goals that may be incongruent with one another. Because assertiveness is tied to goal achievement, possessing the capability to communicate assertively represents a valued social competency. However, individuals' assertiveness represents a communication trait in the sense that there is a substantial amount of variation in individuals' willingness to communicate assertively.

This study attempts to provide an explanatory account for this described variation in individuals' abilities as assertive communicators. The underlying theoretical rationale for the present study is grounded in a merging of broad schematic approaches to interpersonal communication (Baldwin, 1992; Fletcher, 1993), and a more recent theoretical approach that conceptualizes all family communication as reflecting two

dimensions (Koerner & Fitzpatrick, 2002a). More specifically, schematic approaches such as Baldwin (1992) and Fletcher's (1993) maintain that social knowledge is the product of individuals' previous communicative experiences in relationships, while the family communication perspective posits that individuals' immediate family represents a source for these relational schemas (Koerner & Fitzpatrick, 2002a). Together, these respective view points suggest the possibility that the extent individuals are able to assert themselves when interacting with their own family will inform their ability to behave assertively in other relationships outside the family. This study represents an investigation of this hypothesis.

Schematic Models of Interpersonal Communication

Schematic models of interpersonal communication maintain that individuals' understanding of the social world is the product of three schemas, or cognitive structures embodying declarative and procedural knowledge about a given concept (Baldwin, 1992). These schemas include (1) a self-schema comprised of self-knowledge (biographical information, attitudes, beliefs, goals, social perceptions, etc.), (2) an other-schema containing knowledge of others (general understanding of different individuals' attitudes, beliefs, goals, etc.), and (3) a schema made up of interpersonal scripts that outline typical interactions between the self and others. Together, these schemas function to provide a coherent understanding of previous social encounters, while also serving as a guide for new social experiences.

Of the three schemas Baldwin (1992) describes, scholars of interpersonal communication are most interested in the formation and development of the third schema (individuals' understanding of social interaction), and its implications for the ways individuals interact with others following its formation. Scholars beyond Baldwin

describe this schematic relational knowledge as pertaining to various levels of relationship specificity, with some knowledge applying to all relationships (referred to as a “general social schema”), some applying only to certain types of relationships (termed “relationship type schemas”), and some referring to relationships with specific individuals (or, “relationship-specific schemas”) (Fletcher, 1993). Additionally, because there are comparatively fewer items of relational knowledge that hold true for all interpersonal relationships, both relationship type and general social schemas are more stable than relationship-specific schemas (Koerner & Fitzpatrick, 2002a).

In general, relational schemas derive from both (a) individuals’ personal experiences in relationships and (b) discussion about relationships. Because families represent the most primary source of socialization for all individuals, families undoubtedly contribute substantially to the overall shape and form of individuals’ emergent schematic representations of the social world. Said otherwise, because one’s family represents the first accessible source of knowledge regarding human relationships, the ways in which family members regularly communicate and interact with one another should influence the contents of children’s relational schemas, which in turn affect how children learn to behave as social actors. One important conclusion able to be drawn from this set of theoretical assumptions is that there should be some degree of observable commonality between the communication occurring within families, and communication directed toward individuals in other extra-familial instances of social interaction.

What follows is a detailed explication of a theoretical model (see Figure 1.1 below) outlining how family communication patterns (FCPs) are expected to affect individuals’ communication tendencies by shaping the contents of their relational schemas as they relate to the original family unit. This process occurs via individuals’ long term internalization of a set of social norms learned from one’s family that inform

their understanding of the ways in which individuals should typically behave in relationships with others. We begin with an overview of Family Communication Patterns Theory (FCP Theory), which describes the perspective's (a.) underlying theoretical assumptions, (b.) general predictions for interaction beyond the family, as well as (c.) a discussion of the four family typologies delineated by the theory (Koerner & Fitzpatrick, 2002a). Following the introductory synopsis of FCP Theory is a discussion of "cognitive flexibility", which is a psychological construct whose operationalization represents an empirical measurement of FCP theory's central claim that individuals' understanding of the ways in which they perceive themselves as able to behave within various interpersonal contexts is in part dependent upon the quality of the communication occurring within one's family (Koesten, Schrodtt, & Ford, 2009; Koerner & Fitzpatrick, 2002a). After describing the relationship between cognitive flexibility and FCPS, we proceed with consideration of social exchange theory (Thibaut & Kelley, 1959) and a discussion of power in interpersonal relationships as it pertains to family communication within FCP Theory's four family typologies. Then, we present discussion of the traits of assertiveness and argumentativeness and their relationship to interpersonal communication and individual goal achievement. Finally, we offer a set of predictions regarding each of these variables as they theoretically relate and interact with one another to determine message assertiveness within interpersonal encounters requiring assertive responses.

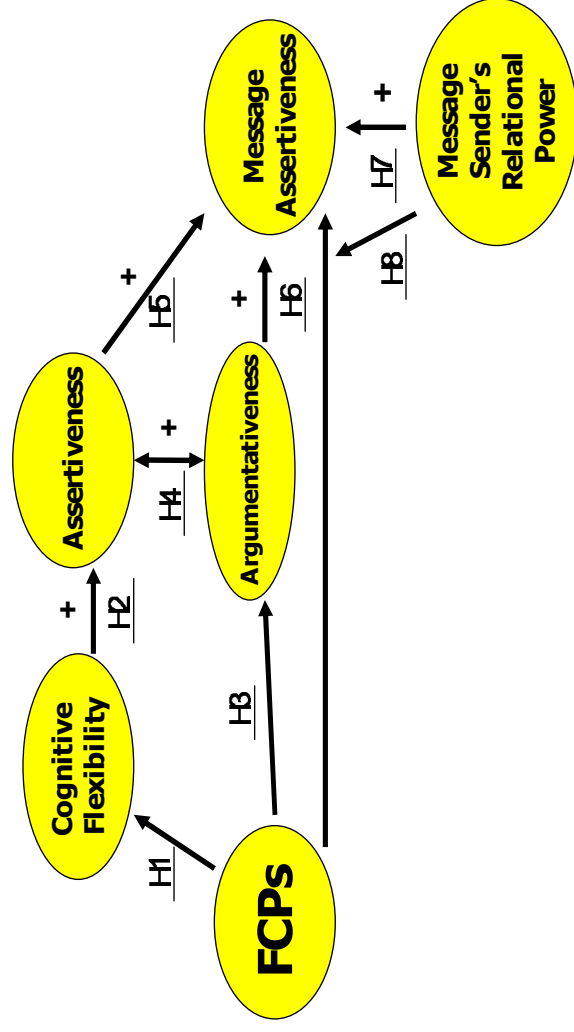


Figure 1.1

The Role of Family Communication Patterns in Determining Differences in Assertive Communication

Family Communication Patterns (FCP) Theory

Basic Premises and Underlying Assumptions

Building off relational schema theory (Baldwin, 1992), Family Communication Patterns (FCP) Theory maintains that the nature of communication occurring within the family unit is the product of family members' mental representations (or schemas) of relational knowledge (Koerner & Fitzpatrick, 2002a). More specifically, the theory posits that in the absence of relationship-specific knowledge pertaining to an interaction partner, individuals will instead access the contents of a relationship schema that provides more general cues for how to proceed with the interaction.

Because FCP theory concerns itself with the social interaction occurring within the family unit, Koerner and Fitzpatrick (2002a) focus chiefly on the contents of individuals' schemas that describe the typifying characteristics of family communication. Information located within the family-relationship schema includes (a.) beliefs about the ways in which intimacy and affection should be conveyed, (b.) the extent to which individual family members' acknowledge and appreciate one another's individuality, (c.) the range of conversational topics that may be openly discussed by all family members (referred to as a family's "conversation-orientation"), and (d.) the extent to which the family emphasizes a homogeneity of attitudes, values, beliefs, and behaviors through its communication (referred to as a family's "conformity-orientation"). The relational-knowledge present within the family-relationship schema derives from (a) individuals' direct experience in family relationships and (b) family members' discussion about relationships. Further consideration of the source of families' FCPs suggests that the coordination of parents' psychological traits within the context of a marital relationship is also undoubtedly responsible for the ways in which family members interact with one

another, as parents ultimately represent the primary agents of socialization within the family unit from whom children derive knowledge about relationships (Koerner & Fitzpatrick, 1997).

As the family unit consists of a discrete number of individuals who possess a generally enduring set of psychological characteristics, the family-relationship schema appears relatively stable over time. Though some differences may emerge from family members' individual perspectives on the subject of family communication (for example, in assessments of family members' perceptions of family communication environments, mothers tend to report their families as having somewhat higher orientations toward conversation than other members, while sons frequently describe their families as featuring a higher conformity-orientation), FCP measures typically generate sufficient levels of similarity between family members of how they tend to relate to one another (Koerner & Fitzpatrick, 2002a).

The types of relational information Koerner and Fitzpatrick (2002a) most exclusively concern themselves with include the previously described orientations toward the concepts of conversation and conformity, while also proposing that families may be characterized as either "high" or "low" on each of the two dimensions. Families high in conversation-orientation operate under the intrinsic belief that substantial amounts of communication are necessary for optimal family functioning. Accordingly, all family members perceive themselves as free to discuss a wide range of issues and conversational topics. Likewise, conversation in this type of families occurs frequently and spontaneously. As a result, families ranking high in conversation-orientation are generally well informed of one another's inner psychological states (cognitive and

affective) and activities. On the other hand, families low in conversation-orientation do not operate under the assumption that communication represents an activity related to the family's well being as a social unit. These families have fewer and less frequent instances of conversational exchange, and perceive themselves as able to discuss a comparatively narrower range of conversational topics. On the whole, families with lower orientations toward conversation are less informed about each other's activities and psychological states.

Families high in conformity-orientation feature interactions that emphasize a uniformity of beliefs and attitudes amongst all family members (Koerner & Fitzpatrick, 2002a). Members strive to maintain harmony in family interaction, and avoid conflict. Families of this sort are "traditional" in the sense that parents understand themselves as responsible for making family decisions, and they expect their children to follow their wishes with due obedience. High-conformity families also stress familial relationships as possessing greater importance than the relationships that family members have with individuals external to the family. Also, interdependence, cohesiveness, and coordination of activity among family members represent qualities of high-conformity family discourse. Finally, families high in conformity understand that the personal interests and desires of individual family members rank second to those of the family unit, which are determined by parents and/or other individuals possessing familial authority. By contrast, families featuring lower conformity-orientations place less importance on family members' possessing similar beliefs and attitudes. Likewise, individuals from families placing less emphasis on the conformity dimension also exhibit a comparative independence from one another, and the relationships family members develop with

individuals outside the family are recognized as occupying a higher level of importance. Conversely, families with higher conformity orientations view relationships with non-family members as being less central to the lives of family members than families with low orientations towards conformity. Individuals from low-conformity families also receive encouragement to pursue their own goals, even if they deviate somewhat from the interests and preferences of one's own family.

Family Types

According to FCP theory, families' orientations toward the concepts of both conversation and conformity interact to yield four different family types: consensual, pluralistic, protective, and laissez-faire (Koerner & Fitzpatrick, 2002a). Families high in both conversation and conformity-orientation are referred to as "consensual". Parents from this family type convey that they both value discussion about a wide range of issues, but also reinforce their position as heading the family hierarchy. This family type encourages all members to actively participate in family discussion, though parents ultimately make all decisions pertaining to family regulation. Consensual families address conflict in a manner that validates the thoughts and opinions of family members regardless of their status within the family's power hierarchy. Due to consensual families' high conversation-orientations, parents' decisions are generally accompanied by larger amounts of explanation for the rationales behind their decisions.

Families high in conversation-orientation, but low in conformity are designated as being "pluralistic" in nature (Koerner & Fitzpatrick, 2002a). Discourse in pluralistic families covers a wide array of topics, and parents do not experience a

perceived need to shape or reinforce their children's opinions and attitudes to reflect their own. Pluralistic families deal with conflict openly, and resolve disagreements based on the quality of arguments offered by family members, rather than whether the family member occupies a position of parental authority within the family.

Families low in conversation-orientation and high in conformity are characterized under the label of "protective" (Koerner & Fitzpatrick, 2002a). Protective families represent "traditional" families in the sense that parents regard themselves as the individuals responsible for directing the activity of the family, and they expect children to comply with their directives. Moreover, protective families stress power as a defining feature of human relationships: Children learn that individuals possessing power expect to be obeyed, and disobeying power-holding individuals results in the powerful individual imposing undesired sanctions over the powerless. Accordingly, conflict is a discouraged activity for the reason that parents' authority is considered to be the final word on most disagreements. Likewise, protective families view frequent communication as largely unnecessary, as family members understand (both implicitly and explicitly) the rules and norms that guide family interaction.

Families low in both orientations are referred to by the label of "laissez-faire" (Koerner & Fitzpatrick, 2002a). Families of this type usually lack the cohesion and intimacy typically understood as characterizing the typical family unit. Koerner and Fitzpatrick (1997) posit that laissez-faire families are often the product of families with parents holding different sets of relational values. Because parents of this typology are unable to reconcile their basic beliefs concerning intimate relationships, one way in which they are able to maintain relational harmony involves avoiding discussion of many family

issues. Generally, laissez-faire families do not regard communication as a valued activity, and children from this type of families frequently receive a greater portion of their socialization from sources outside the family unit.

The above exposition of FCP Theory has functioned to explain both (a) how individuals come to conceptualize the nature of their relationship with their families, and (b) the ways in which they perceive themselves as able to best communicate within them so as to maintain relational harmony. By itself, FCP theory (as iterated by Koerner and Fitzpatrick, 2002a) makes no specific claims regarding how the nature of family communication may impact individuals' behavior in instances of social interaction outside the family. However, more recent research has demonstrated FCPs as being related to the development of individuals' more general relationship schemas (Koesten, Schrod, and Ford, 2009), thus suggesting that FCPs likely affect the nature of communication occurring between non-family members.

Cognitive Flexibility

The concept of "cognitive flexibility" refers to an individual's awareness that he/she is able to select from a range of behavioral alternatives when responding to a given situation. Accompanying awareness of one's perceived behavioral repertoire, cognitive flexibility also entails both (a) a willingness to choose a behavior from a range of alternatives and (b) perceptions of self-efficacy that reflect the individual's belief that they are able to enact whichever behavior they choose (Martin and Rubin, 1995).

Cognitive flexibility is of interest to scholars of family communication in that the construct has been demonstrated as an outcome of FCPs. More specifically, a study conducted by Koesten, Schrod, and Ford (2009) found high conversation orientation to

be a substantial positive predictor of young adults' levels of cognitive flexibility, and avoidance of conflict (operationalization of FCP theory's conformity dimension) in families to be a substantial negative predictor of the same construct. Interestingly, homogeneity of attitudes and the prevalence of extant power structures emphasizing parental authority (the remaining component of conformity orientation, which the authors refer to as "structural traditionalism") did not emerge as a significant predictor of cognitive flexibility. This finding may be interpreted as suggesting that family values do not influence cognitive flexibility by themselves, but that family values either predict or accompany communicative behaviors, which in turn impact emergent levels of cognitive flexibility.

The results of this study strongly suggest the following two conclusions. First, being able to regularly discuss a wide array of topics within one's family appears to promote a broader communicative repertoire. Given cognitive flexibility's conceptual definition as referring to the perception of a wide range of potential behaviors in the face of a situation, when cognitively flexible individuals find themselves in a social situation, they should likewise understand themselves as capable of acting in a wider variety of ways than individuals with lower levels of flexibility. More specifically, empirical assessments of cognitive flexibility may also be understood in terms of FCP theory's underlying concern with relational schemas, which are composed of (a) knowledge about the self (or self-concept), (b) knowledge of others, and most importantly, (c) interpersonal scripts, which refer to the individual's understanding of how the individual may interact with others of a certain relationship type (Koerner & Fitzpatrick, 2002a). Interpreting the results of Koesten et al.'s study (2009) in terms of FCP theory suggests that family

conversation orientation may later impact individuals' relationships through their affecting individuals' understanding of the range of ways they are able to communicate with others.

Second, Koesten et al. (2009) also suggest that conflict avoidant family behaviors appear to discourage the development of cognitive flexibility and interpersonal scripts, and accordingly, individuals from conflict avoiding families generate fewer perceived behavioral responses than individuals from families who address conflict more openly. Though conflict avoidant behaviors (e.g. intentional omissions, equivocation, etc.) and level of conversation orientation should not be conceptually understood in terms of one another, an inverse relationship is expected to exist between conflict avoidance and conversation orientation. Once again, while structural traditionalism and conflict avoidance within families frequently co-occur in the form of the protective family type, the results of Koesten et al. (2009) suggest that the lower levels of conversation orientation and higher levels of conflict avoidance are responsible for rendering decreased amounts of cognitive flexibility, rather than a direct relationship between structural traditionalism and said construct.

Social Exchange Theory and Relational Power

Social exchange theory is a perspective maintaining that human relationships are formed and sustained primarily along economic guidelines (Thibaut & Kelley, 1959). Individuals are assumed to enter relationships to maximize the rewards able to be accrued from participation in the relationship, while simultaneously seeking to minimize the costs accompanying repeated interaction. Thibaut and Kelley conceptualize costs and rewards in terms of a matrix depicting all possible (numeric) combinations resulting from each

individual assuming a given course of action, with actors attempting to obtain the most desirable outcome possible (which receives representation in the form of a higher number). If an individual perceives the costs of a relationship to outweigh the rewards, he/she will be expected to terminate the relationship. Exchange (or communication) between individual actors is the method through which costs and rewards are yielded for respective participants, and interaction is predicated upon the mutually held belief that the outcomes resulting from interaction are superior than those able to be obtained in other relationships.

Another feature of human relationships addressed by social exchange theory is that of “power”. Broadly speaking, Thibaut and Kelley (1959) define power as one individual’s “ability to affect the quality of outcomes attained by [another individual]” (p. 101). Differences in power between individuals arise from each interaction partner’s ability to behave in ways that result in varying amounts of costs and rewards for one another. Power differentials and the role they play in delineating the outcomes of social interaction may vary for any number of reasons, including (but not limited to): (a) relationship type, (b) prevailing social norms, (c) individuals’ psychological attributes, or (d) individuals’ aptitudes toward different tasks or behaviors.

In their discussion of power and dependence in relationships, Thibaut and Kelley (1959) differentiate between two different types of power, those of “fate control” and “behavior control”. Fate control refers to a scenario in which one individual (A) has power over another (B), irrespective of B’s response. During instances of fate control, B’s decisions play no role in determining the outcome of interaction, and the extent to which B is either rewarded or punished is decided exclusively by A. Behavior control, on

the other hand, refers to instances in which A induces certain behavioral responses from B by bestowing greater rewards to B for exhibiting some behaviors, while offering fewer rewards (or punishments) following the enactment of others. Following instances of repeated interaction, individuals with lesser power (such as B) tend to develop the ability to predict A's response to the course of action assumed by B, thus resulting in outcomes more favorable to B. In this regard, B is able to convert initial fate control to the more advantageous behavior control.

Consideration of social exchange theory in conjunction with FCPs is warranted in that power is a defining feature of parent-child relationships that determines the methods by which family members are able to avoid costs and generate rewards through repeated interaction with one another. Power differentials between parents and children are the product of (a) the parent-child relationship (which is one inherently characterized by some degree of power inequality) and (b) the psychological characteristics of parents. As previously addressed by FCP Theory (Koerner & Fitzpatrick, 2002a), these elements combine to determine family typology and the communicative environment in which family interaction occurs. Within the context of parent-child relationships, power represents an important aspect of relationships that must be managed effectively in order to ensure the relational satisfaction of individual family members. More specifically, power must be managed as such for the reason that social exchange theory's assumption that rational actors are expected to dissolve dissatisfying relationships holds less true for parent-child relationships than it does for other types of relationships. In other words, because parent-child relationships are difficult (or impossible) to voluntarily terminate, the family must establish a coherent working

consensus regarding the ways in which power differentials affect interaction between family members in order to facilitate the development of stable, long-term relationships.

Regardless of the typology characterizing a family's communication patterns, children begin their lives under relationship conditions with their parents that largely resemble fate control in that their cost/reward outcomes are entirely dependent on the actions taken by their parents. As children age and continue to interact with their parents, they generally acquire greater understanding of the ways in which their parents are likely to behave in response to their own actions, thus allowing them to predict with some degree of certainty the costs and benefits accompanying the enactment of certain behaviors. In sum, as they mature, children are able to improve their cost/benefit ratio by converting their relationship with their parents from one of fate control, to one that more closely resembles behavior control.

Reassessment of FCP Theory (Koerner & Fitzpatrick, 2002a) from the perspective of social exchange theory suggests that children are generally expected to be able to maximize their rewards (e.g. family cohesiveness, intimacy, in addition to the achievement of more instrumental goals) by exhibiting communication tendencies that are congruent with the values of one's family typology. Conversely, when children exhibit communicative behaviors dissimilar to the values espoused by one's family, they typically incur costs or sanctions from parents, such as: (a) punishments, (b) the instigation of conflict between family members, or (c) the elicitation of regulative responses requesting the child to behave differently (O'Keefe & McCornack, 1987). Said differently, family typology may be conceptualized as determining the matrix of expected outcomes (as described by social exchange theory) following from the enactment of

different behaviors within instances of family interaction. While children from families of different typologies each stand to acquire the most rewards (relational and instrumental) by comporting themselves in a manner compatible with their family type, consideration of the various typologies suggests that the costs and rewards of communicating in ways that either affirm or contradict established FCPs most likely differ by family type.

Children from pluralistic families face fewer perceived costs of self-expression than do those from consensual or protective families, as pluralistics value frequent discussion of a wide range of conversational topics (high conversation-orientation) in ways that place less emphasis on the traditional hierarchical interdependence between parent and child (low conformity-orientation). In other words, pluralistic parents reward (or at the very least, do not punish) expression that would likely elicit costs (synonymous with negative outcomes) for children from consensual or protective parents. The only instances in which pluralistic children might incur costs would be following the exhibition of atypical communicative behavior not in keeping with the pluralistic family typology (e.g. reticence, decreased frequency of contributions to family discussion, or noticeable increases in displays of compliance or obsequiousness).

Likewise, children from consensual families expect to face greater costs following instances of self-expression than children from pluralistic families, but fewer than those from protective families. These more moderate amounts of perceived costs are due in part to the consensual family's tendency to encourage frequent discussion of a broad range of conversational topics, but in ways that affirm consensual parents' belief

that they are ultimately responsible for family decisions and the behavior of individual family members.

Of the four family types specified by FCP theory, the protective family typology appears to promote the greatest amounts of perceived costs associated with unrestrained self-expression. In comparison to the remaining three family types, communication occurring within the protective family is much more narrowly circumscribed in terms of both conversational frequency and topical breadth, as children learn to express themselves in a more limited manner that does not challenge parental hierarchy. Thus, while children from pluralistic and consensual families are rewarded for expression, children from protective families are instead rewarded for avoiding conflict with parental figures and deferring to their judgment, even in instances in which they may personally disagree.

Given laissez-faire families' failure to emphasize either the conversation or conformity dimensions of family communication, children from this family type learn that rewards are accrued most often through (a) lower levels of family engagement (low conversation-orientation) and (b) the pursuit of relationships with individuals outside the family unit (low conformity-orientation).

Returning to the previous discussion of cognitive flexibility (Koesten et al., 2009; Martin & Rubin, 1995) as it applies to FCP theory (Koerner & Fitzpatrick, 2002a), re-consideration of Koesten et al.'s (2009) findings from the perspective of social exchange theory (Thibaut & Kelley, 1959) suggests that the learned communication tendencies that optimize individuals' cost-benefit ratio within the context of family interaction are also likely to inform their behavior in future relationships formed outside

the family, which likewise result in the generation of costs and rewards for individuals. In sum, while individuals from different family types are likely to prove adept at behaving in ways that allow them to maximize rewards and minimize costs within their respective families (due to years of repeated interaction with family members), their performance in other relationships formed outside the family is expected to be partially dependent upon the extent to which they have developed the ability to be cognitively flexible, which has been correlated with higher levels of conversation-orientation among families (Koesten et al., 2009). Said more simply, individuals are expected to communicate with other non-family members in ways that are observably reminiscent of the ways they have learned to best communicate with their own families, but whether individuals incur either costs or rewards for reproducing their family's communicative tendencies would appear to be largely dependent on the specific social context.

When assessing the longer term outcomes of the various family typologies on personal development, children from protective families appear (in comparison to those from consensual and pluralistic families) to be underdeveloped and lacking in an important social competence that likely influences the extent to which individuals find themselves able to achieve their personal goals. Further discussion of how levels of cognitive flexibility are more specifically expected to later impact communicative tendencies among individuals from differing family typologies follows below.

Assertiveness

Individuals regularly require assistance and cooperation from others outside their families to achieve their personal goals (e.g. instrumental, relational, or identity). Other individuals may be either more or less inclined to assist actors achieve their goals.

Whether others decide to assist others achieve their goals may depend on the qualities of actors' messages (e.g. requests, proposals, and other declarative statements). One quality of much goal-oriented communication (e.g. requests, solicitations, presenting arguments, etc.) is that of "assertiveness". Before proceeding to discussion of the relationship between FCPs and assertiveness, the quality of assertiveness requires some definition as it relates to the notions of personality traits, communication traits, communication behaviors, and communication skills.

In the broadest sense, assertiveness refers to the tendency for individuals to express their preferences, opinions, or needs to others in order to achieve goals, with individuals possessing more assertiveness being more likely to behave in an assertive manner (Rancer & Avtgis, 2006). In this regard, assertiveness represents a personality trait, or "any distinguishable, relatively enduring way in which one individual differs from others" (Guilford, 1959, p. 6). However, assertiveness embodies a more specific type of trait scholars of communication and personality structure locate within broader, more encompassing personality traits (Costa & McCrae, 1980; Rancer & Avtgis, 2006). In the case of assertiveness, scholars tend to regard assertiveness as a sub-trait of the larger personality characteristic of extroversion, as assertiveness likewise connotes both willingness and desire to interact with others. Scholars of communication consider assertiveness to be a communication trait, as it represents "an abstraction constructed to account for enduring consistencies and differences in message-sending and message-receiving behaviors among individuals" (Infante et al., 2003, p. 77), given that assertiveness is a trait that manifests itself exclusively within the context of social interaction.

Behavioral operationalizations of assertive communication frequently include (but are not limited to) standing up for one's rights, refusing unreasonable requests, initiating requests, voicing disagreement in an active manner, and directly expressing thoughts, feelings, and beliefs in "direct, honest, and appropriate ways which do not violate another person's rights" (Lange & Jakubowski, 1976, p. 7). This final distinction resolves the possible confounding between assertiveness and other constructs possessing some similarities, such as aggressiveness. Like assertive communication, aggressive communication is also symbolic behavior intended to influence others. However, unlike assertiveness, which scholars regard as a constructive trait (Rancer & Avtgis, 2006), aggressiveness is a destructive trait, as it refers to an individual's tendency to behave in ways "designed to deny, humiliate, and depreciate others" (Rich & Schroeder, 1976, p. 1083).

As the list presented above represents only a small sample of assertive behaviors, we require a sufficiently broader operational definition of assertive behavior. Rich and Schroeder (1976) offer an especially comprehensive behavioral encapsulation of the construct, as they define assertive behavior as behavior that "seek[s], maintain[s], or enhance[s] reinforcement in an interpersonal situation through an expression of feelings or wants when such expression risks loss of reinforcement or even punishment" (p. 1082).

Assertiveness represents a quality of communication indicative of other socially valued psychological characteristics, such as confidence, ambition, and competitiveness (Lashbrook & Lashbrook, 1979). Similarly, exhibitions of assertiveness tend to convey impressions of trust, extroversion, and power (Snively, 1981), while a

lack of assertiveness imparts impressions of submissiveness and introversion (Lashbrook & Lashbrook, 1979). Hearers also frequently regard speakers' assertiveness as a social heuristic, equating it with other desirable personal attributes such as "competence" or "deservedness". In this regard, the ability to convey assertiveness (even in the absence of either of the previously mentioned pair of qualities) represents an important social skill in that individuals possessing assertiveness are more likely to generate a larger number of more favorable outcomes for themselves than those lacking this ability.

Likewise, Rich and Schroeder (1976) also conceptualize assertiveness as a skill. While the distinction between "skills" (patterns of behavior individuals may learn to improve over time) and "traits" is frequently a muddy one (Spitzberg, 2003), the body of research concerned with "assertiveness training" suggests that regardless of baseline levels stemming from heredity and personality, assertiveness is a social competence that can be learned and improved upon over time (Alberti & Emmons, 1974; Hollandsworth, 1977; Rich & Schroeder, 1976). Understanding of assertiveness (e.g. when to be assertive, and how assertive to be) represents a communication skill meriting study in the sense that assertiveness may be readily understood as having immediate relevance to 5 of 7 of the criteria of competence outlined by scholars of communication skill (namely, [1.] clarity, [2.] understanding, [3.] efficiency, [4.] appropriateness, and [5.] effectiveness) (Spitzberg, 2003). Given their more direct and explicit nature, assertive messages tend to feature greater clarity, understanding, and efficiency, although perhaps at the expense of appropriateness. These features are of considerable importance in instances where goal achievement is dependent upon making one's thoughts (e.g. needs, intentions, desires, etc.) known to others. Similarly, less assertive messages are often more indirect and

implicit, and convey less clarity, understanding, and efficiency, but are advantageous to the extent that they allow a speaker to observe greater amounts of appropriateness (or tact) with one's speech. Skilled communicators must be able to assess social situations so as to determine how assertive their communication should be. This represents a complex task in that individuals must take each of these numerous features into account when designing messages.

Assertiveness represents a characteristic that is evaluated by hearers in relation to the social context in which it is exhibited, with context being dependent upon a number of factors, including power differentials (with more powerful individuals being allowed and encouraged to display greater amounts of assertiveness), the nature of the request being made, and the rationale given in support of the request (with stronger rationales meriting greater amounts of assertiveness on the part of the speaker). Actors may be over-assertive by either (a.) disregarding contextual elements (such as power differentials) or (b.) providing weaker rationales for requests. These individuals run the risk of being perceived by others as "foolhardy" or "full of themselves". Conveying these sorts of impressions tend to result in less regard (or liking) for the speaker, which hinders actors' efforts toward goal achievement, especially during instances in which where the hearer has considerable discretion in deciding whether or not to respond in a manner that furthers the speaker's goal achievement.

On the other hand, actors may also exhibit too little assertiveness. In this scenario, speakers risk adverse social consequences such as appearing overly uncertain about oneself and ideas, possessing self-doubt, and having low self-esteem. Most importantly, however, is the unfortunate possibility hearers reject speakers' proposals and

appeals, not necessarily due to deficiencies in either (a.) actual competence in a given area, or (b.) sufficient justification for a request, but instead due to hearers' erroneous assessments of the manner in which a request was made (e.g. overly vague, timid, etc.).

In sum, the ideal amount of assertiveness would appear to be that which satisfies the politeness constraints of a given social exchange, but also makes the speaker's intentions known in a clear, unambiguous manner that also contains well-defined indicators that plainly underscore an individual's rationale for a given course of action.

Argumentativeness

Argumentativeness is a trait that predisposes individuals to communicate in ways that advocate strong positions on controversial issues, and to verbally challenge the positions others take on these issues (Infante and Rancer, 1982). Argumentative individuals regard robust debate as an exciting and stimulating challenge.

Argumentativeness is a trait clearly related to that of assertiveness, given that the act of engaging in argument is assertive in nature, as it involves "seek[ing], maintain[ing], or enhance[ing]" one's position within an interpersonal context (Rich & Schroeder, 1976, p. 1082). Like assertiveness, scholars of communication traits and personality structure also tend to conceptualize argumentativeness as a sub-trait of extroversion, as the construct likewise reflects the extent to which individuals are at ease with the process of engaging others in social interaction (Costa & McCrae, 1980; Rancer & Avtgis, 2006).

Like assertiveness, argumentativeness also represents a skill to the extent that it is an enduring personal quality that assists individuals in achieving their personal goals by enhancing their likelihood of influencing others. As stated in the previous discussion

of assertiveness as a communication skill, goal achievement as a product of social interaction ultimately requires compliance from interaction partners. Before another party agrees to act in a way that furthers an actor's goals, he/she generally prefers a stated rationale describing why they should behave in such a manner (or more simply, an argument). Though persuasion as it results from the use of effective argumentation represents a well researched area of scholarship, the process by which argumentation facilitates persuasion is outside the scope of the present study (for a general overview on the subject, see D. O'Keefe, 2002). Regardless, a predisposition to argue embodies an advantageous communication trait for the reason that argumentative individuals are more likely to make persuasive arguments than those who are considerably less argumentative. Said more simply, argumentativeness renders individuals more likely to actively pursue their goals when they may be furthered as a result of engaging in social interaction with others.

The Relationships Among FCPs, Cognitive Flexibility, Assertiveness, Argumentativeness, and Assertive Behavior

The Impact of FCPs on Traits

FCPs directly predict the development of two traits: (a.) cognitive flexibility and (b.) argumentativeness, and indirectly predict the trait of assertiveness (which is an outcome of cognitive flexibility), and the assertiveness of messages used in instances of social interaction (which is likewise moderated by the situational feature of relational power). While the relationship between (a.) FCPs and cognitive flexibility has been previously observed (Koesten et al., 2009), the link between (b.) FCPs and argumentativeness, (c.) FCPs and assertiveness, and (d.) FCPs and assertive behavior

represent presently uninvestigated hypotheses. The relationship between FCPs and each dependent measure will be discussed in turn.

Cognitive Flexibility

The first trait FCPs directly predict is cognitive flexibility (Koesten et al., 2009), which (as previously stated) represents a measure of how individuals understand themselves as able to behave in social situations, and refers to the range of behavioral options an individual perceives as available to him/herself (Martin & Rubin, 1995).

The research of Koesten et al. (2009) suggests that the family communication dimension of conversation-orientation promotes the development of cognitive flexibility, while orientation towards conformity discourages the cultivation of the same trait. Accordingly, we predict a replication of these findings, but instead make our predictions by family type (the intersection of the family communication dimensions of conversation and conformity) rather than the more discrete analysis of individual family communication tendencies (as completed by Koesten et al.).

Because pluralistic families feature much emphasis on conversation and less importance on conformity, individuals from pluralistic families will report the highest levels of cognitive flexibility. Given that consensual families place a dual emphasis on both conversation and conformity, consensals will report levels of cognitive flexibility that are less than those reported by pluralistics, but higher than those of laissez-faire and protectives (as the consensual family's simultaneous concern with conformity will partially impede the development of this trait). As the laissez-faire family type features low orientations in the areas of both conversation and conformity, individuals from /laissez-faires will report levels of cognitive flexibility that are lower than consensals,

but higher than protectives, for the reason that while a low conversation-orientation does not encourage the development of cognitive flexibility, a low orientation towards conformity does not discourage it either. Finally, protectives will report levels of cognitive flexibility that are lower than all of the other family types, as the FCPs of the protective family feature low conversation-orientation and high conformity orientation.

H₁: FCPs promote the development of cognitive flexibility in such a way that the trait is reported in the following order from greatest to least:

- (1.) Pluralistic
- (2.) Consensual
- (3.) Laissez-faire
- (4.) Protective

Assertiveness

FCPs should indirectly predict assertiveness. As previously stated, the relationship between FCPs and assertiveness will be an indirect one, as levels of assertiveness appear to be mediated by the trait of cognitive flexibility. Consideration of each family type's characteristics, alongside cognitive flexibility's role in determining levels of assertiveness allows for an ordinal prediction of trait assertiveness as they exist free from the moderating influence of situational factors, such as relational power.

As the construct of cognitive flexibility describes the extent to which individuals understand themselves as capable of behaving in a variety of ways in interpersonal encounters (with higher levels of flexibility being synonymous with a broader, more expressive interpersonal repertoire, and lower levels indicating a narrower, more restrained communicative inventory) (Koesten et al., 2009; Martin & Rubin, 1995), individuals with higher levels of cognitive flexibility will also report higher levels of assertiveness for the reason that individuals with greater amounts of cognitive flexibility are accustomed to expressing themselves freely on a wide range of topics, without facing adverse consequences from senior family figures. Likewise, the same ordinal relationship between FCPs and cognitive flexibility is expected to exist between cognitive flexibility and assertiveness, with pluralistics being the most assertive, consensuals reporting moderate levels of assertiveness, and protectives as the least assertive.

Pluralistics will demonstrate the highest baseline levels of assertiveness, as they possess the broadest, most cognitively flexible interpersonal repertoire of the family types described by FCP theory. Unlike consensuals and protectives, pluralistics do not face the behavioral constrictions of conflict avoidance and structural traditionalism (Koesten et al., 2009). Accordingly, the pluralistic tendency to express oneself in a manner that lacks self-censoring and intentional equivocation should result in heightened baseline levels of assertiveness.

Consensuals will report moderately high levels of assertiveness (lower than pluralistics, but higher than laissez-faires or protectives) due to the consensual family's characteristics as they determine emergent levels of cognitive flexibility. Individuals from consensual families will report more moderate levels of assertiveness because while

consensuals' families stress the importance of verbal expressiveness in family communication, consensuals also face limits in the ways in which their communication may challenge or deviate from the expectations of their parents. Given the previously documented relationship between conversation orientation, familial conformity, and cognitive flexibility (Koesten et al., 2009), consensuals will report more moderate levels of assertiveness.

Laissez-faires will demonstrate report more moderate levels of assertiveness (lower than pluralistics and consensuals, but higher than protectives), also due in part to their FCPs as they affect the development of cognitive flexibility. Given the laissez-faire family type's low conversation orientation, individuals from laissez-faire families will prove less assertive than pluralistics and consensuals for the reason that they have not been encouraged over time to practice behaving in an assertive manner when discussing matters with their respective families. Said differently, laissez-faires perceive fewer behavioral options than pluralistics and consensuals, and are less predisposed to behave in ways that are definitively reflective of their personal goals. However, laissez-faires will be more assertive than protectives due to their low conformity orientation: while laissez-faires lack the broader behavioral repertoires that predispose pluralistics and consensuals to behave more assertively, their low conformity orientation results in development of assertiveness levels that are higher than protectives, as laissez-faire families' comparative de-emphasis with (a.) avoiding conflict and (b.) stressing power differentials between parents and children renders children from laissez-faire families more at ease with the prospect of asserting themselves over others.

Protectives will indicate the lowest levels of baseline assertiveness, given their decreased levels of cognitive flexibility, which results from the protective family's simultaneous (a.) de-emphasis of verbal expressiveness as a valued quality of family communication and (b.) increased importance placed on familial conformity. Rather than perceived a wide range of behavioral options, protectives generally find themselves behaving in a more singular, non-confrontational manner that reflects the protective family's concern with maintaining extant power differentials between parents and children. Protectives' concern with deferring to parental expectations results in a baseline predisposition to behave in a considerably less assertive manner.

H₂: Cognitive flexibility promotes the development of trait assertiveness in such a way that assertiveness is reported in the following order from greatest to least:

- (1.) Pluralistic
- (2.) Consensual
- (3.) Laissez-faire
- (4.) Protective

Argumentativeness

In addition to cognitive flexibility, the second trait FCPs should directly influence is that of argumentativeness. As previously stated, argumentativeness refers to

the predisposition to argue controversial positions with others (Infante & Rancer, 1982). Specific predictions emerge regarding the relationship between the various behavioral components of FCP theory (conflict avoidance, conversation orientation, and structural traditionalism) and levels of argumentativeness. Individuals will enjoy arguing more if they (a.) come from a family where conflict avoidance is low, (b.) are encouraged to speak their mind on a wide array of topics, and (c.) are not punished for challenging authority figures (structural traditionalism). These factors describe the communication occurring within pluralistic families and hence pluralistics should report the highest levels of argumentativeness. Consensuals occupy a family environment where they are able to discuss a wide range of topics (b.), but their family communication does contain elements of conflict avoidance (a.) and structural traditionalism (c.), so they will report lower levels of argumentativeness than pluralistics, but higher levels than laissez-faires and protectives. Laissez-faires come from family backgrounds featuring low conflict avoidance (a.) and are not punished for speaking in ways that challenge authority figures (c.), but do not receive encouragement to discuss a wide array of issues (b.). Given the projected relationships between high conversation orientation, cognitive flexibility, and assertiveness, and the expected positive correlation between assertiveness and argumentativeness, individuals from laissez-faire families will report levels of argumentativeness that are lower than those of pluralistics and consensuals, but higher than pluralistics. Protectives meet none of the three criteria proposed, and will likewise report the lowest levels of argumentativeness of these three family types.

H₃: FCPs promote the development of baseline levels of argumentativeness in such a way that argumentativeness is reported in the following order from greatest to least:

- (1.) Pluralistic
- (2.) Consensual
- (3.) Laissez-faire
- (4.) Protective

Assertiveness and Argumentativeness

As previously stated, assertiveness is “the skill to seek, maintain, or enhance reinforcement in an interpersonal situation through an expression of feelings or wants when such expression risks loss of reinforcement or even punishment” (Rich and Schroeder, 1976, p. 1082). In addition to their frequently being located within the broader personality characteristic of extroversion (Costa & McCrae, 1980), argumentativeness and assertiveness also share a fundamental concern with the extent to which individuals are predisposed to influence others. Likewise, given the degree of conceptual overlap between argumentativeness and assertiveness, individuals who derive enjoyment from arguing (which represents a form of assertive behavior) will report higher levels of assertiveness, as they will behave in ways that are hedonically satisfying.

Accordingly, higher reported levels of argumentativeness are expected to co-occur with higher reported levels of assertiveness.

H₄: There will be a significant, positive correlation in assessments of assertiveness and argumentativeness.

Individual Traits as Predictors of Assertive Message Behavior

Trait perspectives of human behavior posit that individuals tend to behave in ways reminiscent of their respective personality characteristics (Rancer & Avtgis, 2006). Therefore, individuals indicating higher levels of assertiveness will be more inclined to prefer messages that are more assertive in nature, while less assertive individuals will be more at ease with messages that are comparatively less direct and confrontational in nature.

H₅: Baseline levels of assertiveness will be positively related with respondents' preferences for assertive messages.

Given the previously discussed interrelatedness of assertiveness and argumentativeness, levels of argumentativeness should also be predictive of message assertiveness, as highly argumentative individuals will exhibit greater preference for more assertive messages, and the trait of argumentativeness renders individuals more likely to take stronger, more definitive stances on issues (Rancer & Avtgis, 2006). Individuals

reporting higher levels of argumentativeness will demonstrate evidence of this trait by indicating greater preference for more assertive messages.

H₆: Baseline levels of argumentativeness will be positively related with respondents' preferences for assertive messages.

One presently unexplored question involves the matter of which trait (assertiveness or argumentativeness) better predicts message assertiveness. Intuitively, assertiveness should be more strongly predictive of message assertiveness than argumentativeness, as the independent variable of assertiveness shares a more direct conceptual relationship than that of argumentativeness. However, because the question remains currently uninvestigated, argumentativeness could plausibly predict message assertiveness equally well, or better than baseline levels of assertiveness.

RQ₁: Is there a difference between assertiveness and argumentativeness in predicting message assertiveness?

The Role of Relational Power in Determining Message Assertiveness

As previously stated within the discussion of social exchange theory and relational power (Thibaut & Kelley, 1959), one assumption to be tested in the present study involves the notion that differences in power affect the assertiveness of communication occurring between interaction partners. More specifically, individuals possessing relational power have the ability to determine the costs and rewards of their interaction partner, and face lesser risk of being actively challenged by the subservient

individuals. Thus, we predict that respondents will exhibit greater preference for more assertive messages when they are assigned to scenarios where they possess more power than a fictitious interaction partner. Conversely, individuals lacking relational power will opt for less assertive messages for the reason they intuitively understand that behaving in a more assertive manner is more likely to result in their interaction partner dictating greater costs and fewer rewards.

H₇: Respondents with high relational power will express greater preferences for more assertive messages than respondents with low power, whereas respondents with low relational power will report greater preferences for less assertive messages than those with high power.

FCPs, Relational Power, and Message Assertiveness.

When considering the role of FCPs in determining the use of assertive messages in social situations, a set of predictions also emerge when considering in conjunction with one another (a.) the various qualities of the family typologies outlined by FCP theory (Koerner & Fitzpatrick, 2002a) and (b.) social exchange theory's discussion of power as a defining feature of interpersonal relationships (Thibaut & Kelley, 1959). In short, we predict message assertiveness with non-family members to be strongly reminiscent of the extent individuals learn to assert themselves within their own families.

Interaction between the independent variables of FCPs and power (which is operationally defined as a dichotomous variable with the conditions of either "having power" or "not having power") suggests two orderings of message assertiveness, one

predicting message assertiveness when individuals possess relational power, and one where they lack it. What follows is a discussion of how the situational feature of relational power is expected to impact the assertiveness of messages used by individuals from the consensual, pluralistic, protective, and laissez-faire family types. We first describe message assertiveness when a message sender lacks possession of relational power before offering the same explication for conditions in which an interaction partner is the more powerful individual.

In social situations where individuals from the pluralistic, consensual, and protective lack relational power, pluralistics will gravitate toward the messages that are more assertive than those preferred by either consensuels or protectives due to their family type's high conversation-orientation, and low conformity-orientation. In comparison to the consensual and protective family types, the pluralistic family reinforces the importance of power differentials considerably less, and pluralistics are accustomed to addressing family heads in a fairly direct, egalitarian manner, regardless of the conversational topic.

Likewise, when interacting with a non-family individual possessing greater relational power, consensuels will indicate stronger preference for messages that are less assertive than those opted for by pluralistics, but more assertive than those favored by protectives. The rationale for this prediction lies in the consensual family's higher conversation-orientation, which encourages all family members to share their thoughts and opinions on a broad range of conversational topics. However, given the consensual family's dual emphasis on the dimensions of both conversation and conformity, consensuels learn that there are limits to the extent that behavior may deviate or differ

from the expectations of one's parents, and should likewise tend toward messages that are less assertive and confrontational than those selected by pluralistics.

In instances of interpersonal exchange where laissez-faires lack relational power, individuals from this family type will tend to employ messages that are less assertive than those used by pluralistics and consensuals, but more assertive than the messages preferred by protectives. With lower a conversation orientation than pluralistic and consensual families, this difference will produce lower levels of cognitive flexibility among laissez-faire, and hence, lesser amounts of assertiveness than pluralistics and consensual (with a weaker trait resulting in the use of less assertive messages). However, the laissez –faire family type's lower conformity orientation will lead individuals from this family type to select messages that are more assertive than those favored by protectives, as laissez-faires experience less apprehension to engage in conflict with parental figures.

Finally, protectives will demonstrate an attraction toward messages that are less assertive than those chosen by both pluralistics and consensuals when confronted with a non-family interaction partner, as the protective family places the most emphasis on maintaining existing power differentials of the three family types under consideration. The protective family's weaker conversation-orientation and higher conformity-orientation will draw individuals from this family type toward less assertive messages that ensure they are not perceived by power holders as behaving in a "defiant" or "insubordinate" manner.

Alternatively, individuals from the various family types may also find themselves in social situations where they themselves possess power over an interaction

partner. We also predict that the extent to which individuals communicate in an assertive manner will be reflective of the ways they would behave when interacting with members of their own family.

Protectives with relational power will favor the most assertive messages, due in part to the previously offered observation that the protective family represents the family type most concerned with perpetuating power differentials between family members. In a reversal of roles, protectives possessing power over an interaction partner will make efforts to highlight this disparity by employing communicative behavior that is both (a.) more assertive in nature and (b.) indicative of the individual's ability to determine the situation's outcome with regards to the message recipient's experience of costs and rewards (as described by social exchange theory, Thibaut & Kelley, 1959).

Pluralistics with relational power will employ messages that are less assertive than those opted for by protectives, but more assertive than those preferred by consensuals. This is the product of their (a) high conversation-orientation and (b.) low conformity-orientation. Because pluralistic families feature less concern with power differentials than either protectives or consensuals and encounter fewer restrictions regarding the ways in which they may converse with family members, pluralistics will tend toward messages that are still quite assertive.

In conditions where message senders possess relational power, consensuals will demonstrate a preference for messages that are less assertive than both protectives and pluralistics, but more assertive than those desired by laissez-faires. With a higher conformity-orientation than pluralistics, consensuals come from a communication environment that is somewhat more narrowly circumscribed than that of pluralistics.

Because individuals from consensual families are concerned with managing the tension existing between their family's dual emphasis on both conversation orientation and the power differentials present within the traditional parent-child relationship, consensuals will tend toward messages that are less assertive than those of pluralistics (who convey their thoughts in an undiluted manner irrespective of power differentials between parties) or protectives (who behave more assertively when they perceive their status as power wielding individuals as being challenged).

Finally, in circumstances where speakers are in possession of relational power laissez-faires will tend towards messages that are less assertive than all of the other family types. Due to the laissez-faire family's low conversation orientation, individuals from, this family type will have lower baseline levels of assertiveness than either pluralistics or consensuals. Likewise, the laissez-faire family's low conformity orientation will result in less concern for power differentials than consensual and protective families. With neither the heightened levels of cognitive flexibility responsible for determining higher levels of assertiveness (as possessed by individuals from pluralistic and consensual families), nor the greater concern placed upon maintaining power differentials between parental figures and children (as it occurs within both consensual and protective families), laissez-faires will select messages that are the most mild in terms of overall assertiveness.

Taken together, these predictions represent a specific application of FCP theory's central claim that barring the possession of specific relational knowledge, individuals will instead use relational information residing in their more generalized social schemas (which are the product of stable trends of social interaction within one's

family) to inform their communicative decisions, as the amount of assertiveness utilized is reflective of each family type's communicative tendencies.

H₈: FCPs and power interact such that the assertiveness messages preferred by members of each family type is reported in the following order from greatest to least:

- (1.) Protective with power
- (2.) Pluralistic with power
- (3.) Consensual with power
- (4.) Laissez-faire with power
- (5.) Pluralistic without power
- (6.) Consensual without power
- (7.) Laissez-faire without power
- (8.) Protective without power

The proposed model outlines two causal paths describing the processes by which FCPs determine message assertiveness. The first path regards message assertiveness as a product of the traits of assertiveness and argumentativeness. Given the role of the various mediating variables of cognitive flexibility and the traits of assertiveness and argumentativeness, the first path predicts an indirect relationship between FCPs and message assertiveness. Additionally, this pathway regards message assertiveness to be largely the product of the extent to which families possess a high conversation orientation, as this quality of family communication is responsible for

directly determining cognitive flexibility, and indirectly determining the traits of assertiveness and argumentativeness (which respectively inform overall message assertiveness).

Conversely, the second path depicted by the model instead predicts a direct relationship between FCPs and message assertiveness. While the first path regards message assertiveness as being determined generally by the amount and frequency of family communication, the second path predicts message assertiveness as mostly the product of families' conformity orientations, with a negative relationship existing between conformity and message assertiveness. More specifically, this second path predicts message assertiveness as being mostly the product of the extent that the more parents stress their role as individuals responsible for family decisions who discourage their children from behaving in ways that challenge their traditions or judgment.

A final question unable to be answered by the present theoretical model concerns the extent to which each pathway contributes to the determination of overall message assertiveness. While each path is projected to play a significant role in shaping individuals' message production tendencies, extant theory is unable to predict the exact contributory role of each causal path. This question will be explored in the study to be proposed.

RQ₂: How does each causal pathway contribute to overall message assertiveness?

Chapter 2

METHOD

Participants completed measures assessing family communication patterns, cognitive flexibility, extroversion, locus of control, and baseline levels of assertiveness and argumentativeness (respectively). Additionally, participants read one brief scenario describing common social situations in which individuals would be forced to generate verbal responses that are either more or less assertive. After reading a given scenario, participants were presented with a series of utterances that vary in terms of assertiveness, and were asked to indicate their likelihood of using each message.

Scenarios and Message Assertiveness

Participants read one scenario describing a social situation in which there is an opportunity for the reader to behave in an assertive manner towards a fictitious interaction partner. The described interaction partner possessed either more or less relational power than the reader. Respondents were instructed to imagine how they would respond if they found themselves in the depicted circumstances. After reading each scenario, respondents were presented with a series of utterances representing plausible verbal responses to the scenario described. Using seven-point scales, respondents were asked to assess their likelihood of using each message.

For this portion of the study, seven brief individual scenarios were generated describing interpersonal situations in which the reader was prompted to direct an assertive

message towards an interaction partner (see Appendix A). Two versions were composed for each scenario, one in which relational power is possessed by the reader, and one where power is held by the fictitious interaction partner. For each version of the seven scenarios, a series of corresponding utterances was developed to encompass a range of statements individuals in the described circumstances could plausibly say. Each series was composed of utterances varying in terms of assertiveness, with some utterances being more assertive than others.

Pilot Study

Twenty-six undergraduates enrolled in a midlevel communication course took part in a pilot study to assess the scenarios on the dimensions of (a) realism and (b) perceived power differential between the reader and the fictitious interaction partner;. Two questions were asked to evaluate each dimension on seven-point scales (see Appendix A). The means and standard deviations for participants' ratings are found in Table 2.1.

Additionally, participants read each scenario's corresponding series of utterances, and provided ratings on seven point scales indicating the extent to which they considered utterances to be more or less assertive and powerful. Two versions of the survey were created so that ratings could be obtained for both the high and low power version of each scenario. Respondents received extra credit for participating in the pilot study.

Following data collection, independent samples t-tests were performed to yield comparisons on respondents' ratings of the scenarios on the dimensions of power and dominance. Every power and dominance comparison was found to be significant.

The results from this pilot study resulted in two scenarios (Car and Roommate) being selected to be used in the main study. The criteria used to select these scenarios were (a.) respondents' realism ratings and (b.) participants' indications that they understood a clearly discernable difference in relational power between the reader and the fictitious interaction partner(s).

Table 2.1

Mean Realism and Power Ratings for Scenarios

Scenario/Power	Realism		Imagine		Power		Dominance	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Travel/High	5.00	1.28	5.17	1.26	4.83	.99	5.17	.99
Travel/Low	4.62	1.66	4.86	1.66	3.15	.80	3.00	.91
R.A./High	6.69	.48	6.31	.63	5.62	.55	5.62	.73
R.A./Low	5.25	1.49	4.58	1.70	3.50	.96	3.50	.96
Visit/High	4.83	1.34	4.50	1.61	4.58	1.05	4.42	.96
Visit/Low	5.23	.83	4.85	.99	3.62	.51	3.38	.77
Roommate/High	6.77	.44	6.31	1.11	5.38	.77	5.31	.85
Roommate/Low	6.42	.88	6.08	.95	3.50	.66	3.67	.75
Greek/High	5.58	.96	4.00	1.66	5.33	1.12	5.33	1.12
Greek/Low	5.31	1.49	3.92	2.25	4.15	.90	4.08	.76
Car/High	5.69	1.03	5.23	1.64	5.46	.88	5.31	.95
Car/Low	5.58	.87	5.08	1.32	4.50	1.04	4.00	.71
Restaurant/High	5.33	1.04	4.25	1.61	5.50	0.78	5.33	0.77
Restaurant/Low	5.69	0.63	5.31	0.95	3.23	1.30	3.38	1.45

Table 2.2 depicts the mean assertiveness and forcefulness ratings for the Roommate Scenario's set of corresponding utterances. Utterances were ordered by assertiveness rating, given the study's underlying concern with assessing this communicative trait. One observation concerning the results depicted above concerns respondents' assessing utterances in terms of "assertiveness" and "forcefulness". All utterances were rated as more assertive than forceful, suggesting that respondents understood assertiveness and forcefulness as similar, though distinct concepts. Finally, while forcefulness ratings generally increased from one item to the next, there were some instances in which this did not occur, which suggests that some utterances were understood as being more assertive than others, but simultaneously less forceful. This occurrence represents additional evidence that respondents possessed different implicit definitions for "assertiveness" and "forcefulness". In the Roommate scenario, all twelve utterances were selected to be used in the main study.

Table 2.2

Mean Assertiveness and Forcefulness Ratings for Roommate Scenario Utterances

Utterance	Assertiveness Rating	Forcefulness Rating
	<u>M</u>	<u>M</u>
"It's been sort of a while since we cleaned up around here."	3.50	3.12
"Do you think we should pick up a little bit?"	3.58	3.13
"When was the last time we cleaned around here?"	3.67	3.50
"Guys/Ray, the place is a little messy."	3.93	3.27
"Do you think we could pick up a little bit?"	4.31	3.96
"Ray/Do you guys have a few minutes to straighten things up a little bit?"	4.54	4.15
"When's a good time for you (guys) straighten up?"	4.58	4.21
"Could you guys/Ray try to pick up after yourselves a little more?"	4.77	4.12
"The place is a mess, let's do something about it."	4.93	4.49
"Sometimes I/Carson and I get a little frustrated with how you guys keep the apartment."	5.15	4.66
"I'd/We'd really appreciate it if you (two) pitched in sometimes."	5.43	4.89
"The place looks terrible, and it's not fair for me/us to have to deal with a mess I didn't make."	5.70	5.38

Table 2.3 also depicts the mean assertiveness and forcefulness ratings for the Car Scenario's set of corresponding utterances. Again, all utterances were rated as more assertive than forceful, suggesting that respondents evaluated utterances differently for each concept. As previously described, while forcefulness ratings generally increased from one item to the next, there were some instances in which this did not occur. In the Car scenario, eight of the original twenty utterances generated were not used in the main study (in Table 2.3, the unused statements are marked by an **X**). The rationale for this decision was to produce a scenario with the same number of corresponding utterances as the Roommate scenario. Utterances were eliminated using several criteria. First, items were eliminated if they had identical or similar assertiveness means as adjacent utterances. The purpose of this decision criterion was to preserve as much range as possible between adjacent utterances. For instance, the utterance ““There’s no way I can let you do this.” ($M = 5.93$) was eliminated on the grounds that the two adjacent utterances had either identical or very similar means. Second, items were eliminated if an adjacent utterance had a similar assertiveness means, and featured lengthy or problematic wording. This rationale resulted in the elimination of two items. Additionally, one item was eliminated for the reason that it featured a rhetorical question that functioned as a persuasive appeal, rather than an assertion (or lack thereof).

Table 2.3

Mean Assertiveness and Forcefulness Ratings for Car Scenario Utterances

Utterance	Assertiveness Rating \bar{M}	Forcefulness Rating \bar{M}
"I guess you could do it, but I don't think it's a good idea."	3.81	3.35
"If you <i>really</i> think you can pull it off, go ahead."	3.81	3.58
"In the end, you should do what you want, but I think this is just going to cause more problems for you."	4.12	3.89
"Maybe you should save a little more first."	4.19	3.81
"Have you thought about buying a used car instead?"	4.35	3.66
"Financially, I don't think now is the right time for you to do this. Obviously, I can't make the choice for you, but I just wanted to let you know my opinion." X	4.67	4.21
"Even though I know this is what you want, it's a better idea to wait." X	4.73	4.61
"If you're really going to do this, you should buy a used car instead of a new one." X	4.85	4.42
"You might want to think this one over a little more before you do anything."	4.93	4.35
"I know you want that new car, but wouldn't it feel better to get a new car a little later without so much debt on your shoulders?" X	5.02	4.23
"You should probably try to deal with some of your existing debt before you take on anymore."	5.16	4.69
"This is a big decision. You should wait a few more months before you even <i>think</i> about doing something like this." X	5.50	5.27
"Taking on any more unnecessary debt is just going to hurt you in the long run."	5.54	5.04
"You should listen to me seriously about this: You should really consider sticking with your old car a bit longer until you figure out your financial situation." X	5.73	5.70
"Let's be real, you just can't afford this right now."	5.77	5.54
"This is a terrible idea. I will not let you do this do yourself." X	5.85	5.77
"This is a bad idea, plain and simple."	5.93	5.74
"There's no way I can let you do this." X	5.93	5.92
"What you're talking about is financial suicide. I can't get behind this decision."	5.96	5.85
"You are <i>not</i> doing this. Are we clear?"	6.43	6.85

Main Study

Participants

254 undergraduates enrolled in a mid-level communication course at a mid-sized eastern university completed the study's survey instruments, and received extra credit for their participation.

Measures

Family Communication Patterns (FCPs)

Participants' FCPs were assessed by their completing the Revised Family Communication Pattern Instrument (RFCP) (see Appendix B). The RFCP consists of 25 statements describing communicative tendencies, and participants indicated the extent each statement describes his/her family's FCPs through the use of 7-point Likert scales (Koerner and Fitzpatrick, 2002b). 14 of the 25 statements assess participants' families' orientations toward the conversation dimension of FCP theory, while the remaining 11 items measure the conformity dimension.

Theoretically and empirically, the RFCP represents a measure that is both reliable and content valid (Koerner & Fitzpatrick, 2002b). Estimates from results based on five previously published studies utilizing the RFCP suggests that the RFCP is a sufficiently reliable measure, with the conversation-orientation scale exhibiting mean reliabilities of $\alpha = .89$, and the conformity-orientation having the mean of $\alpha = .79$ (Koerner & Fitzpatrick, 2002b). As each subscale of the RFCP asks respondents to indicate the frequency of family communication behavior related to the constructs of conversation and conformity-orientation, the RFCP appears to possess content validity (Koerner & Fitzpatrick, 2002b). Likewise, the RFCP has been demonstrated as

correlating positively with the original FCP measure developed by McLeod and Chaffee (1972), thus suggesting that the RFCP measures family communication in a manner that is comparable to measures previously used to assess FCPs (Koerner & Fitzpatrick, 2002b).

To explore the dimensionality of FCPS, both the Conversation and Conformity subscales of the RFCP were each submitted to a principal-axis factor analysis using a Direct Oblimin rotation. The procedure identified two factors within the Conversation subscale, and three factors within the Conformity subscale. The eigenvalues and percentages of total variance accounted for by each factor are presented in Table 2.4. With respects to reliability, the four subscales derived from the items loading on each factor demonstrated high internal consistency scores, with Cronbach's α coefficients ranging from 0.74 to 0.90. See Appendix H for the items of each subscale. The following two paragraphs describe each factor.

Factors 1 & 2 refer to factors identified within Conversation subscale of the RFCP, while Factors 3, 4, & 5 represent the factors emerging from analysis of the items comprising the Conformity subscale.

Factor 1, "Conversational Range", had a Cronbach's α of .90, and included items describing the breadth of conversational topics able to be discussed within respondents' families (e.g. "I can tell my parents almost anything," "I usually tell my parents what I am thinking about things," "We often talk as a family about things we have done during the day"). Factor 2, "Conversational Inclusion", featured a Cronbach's α of .74, consisted of items describing the extent to which participants perceive themselves as being included in family discussions and decisions (e.g. "Every member of the family

should have some say in family decisions,” ““My parents often ask my opinion when the family is talking about something”). At face value “Conversational Range” appeared more representative of the Conversation-orientation, given the value’s fundamental concern with the breadth of topics discussed by an individual family. Likewise, this factor was used in statistical analyses related to the role of Conversation-orientation.

Factor 3, “General Conformity” (Cronbach’s $\alpha = .82$), contained items pertaining to two aspects of familial conformity as described by FCP Theory, structural traditionalism, which refers to parents’ tendency to stress relational dominance in family matters (Koesten et al., 2009) and conflict avoidance (e.g. ““My parents often say things like ‘A child should not argue with adults,’” “My parents often say things like ‘You should give in on arguments rather than risk making people mad’”). Factor 4 (Cronbach’s $\alpha = .82$), “Structural Traditionalism” included items solely reflective of structural traditionalism (e.g. “When anything really important is involved, my parents expect me to obey without question,” “My parents feel that it’s important to be the boss”). Factor 5 (Cronbach’s α was -2.00 , most likely due the fact that the factor’s two items featured opposite wordings), “Opinion Conformity” consisted of two items related to parents’ willingness to accept that their children may hold view points that differ from their own.

Factor 3 consisted of items more holistically reflective of the Conversation-orientation as iterated by FCP Theory (Koerner & Fitzpatrick, 2002a), and was used as the primary means of testing hypotheses related to family-orientation towards Conformity. Given (a.) the previous findings of Koesten et al. (2009) concerning structural traditionalism’s failure to predict levels of cognitive flexibility and (b.)

structural traditionalism's noticeably higher mean ($M = 5.0$) than Conformity means reported in previous FCP research (e.g. Schrodtt et al., 2007, Keaton & Kelley, 2008, Ledbetter, 2009) Factor 4 was also used in relevant exploratory analyses.

With respects to the extent that the mean values of the Conversation ($M = 5.2$) and Conformity ($M = 2.5$) subscales are reminiscent of prior FCP research, they reflect the findings of previous studies in that mean Conversation values are routinely somewhat higher than Conformity (e.g. Schrodtt et al., 2007, Keaton & Kelley, 2008, Ledbetter, 2009). However, one noticeable difference between the present and previous studies lies in Conversation's having a higher mean than in past investigations, and Conformity's displaying a lower. One possible explanation for this discrepancy is that exploratory factor analyses identified more factors than in previous work; likewise, each factor was made up of fewer items than the original scale, thus possibly affecting measures of central tendency. More intuitively, another reason for these differences could simply be that respondents' families were more oriented towards conversation, and less conformity-oriented than previous samples.

After administering the RFCP, the sample means from the two subscales (Conversation: $M = 5.2$, General Conformity: $M = 2.5$) were used to categorize participants' responses into the various family typologies: Scores above the median were designated as being "high" on an orientation (either conversation or conformity), and scores below the mean were "low" (Dumlao & Botta, 2002). Respondents were then able to be placed into one of the four family types, which resulted in the classification of 45 consensuals (17%), 80 pluralistics (31%), 73 laissez-faire (22%), and 73 protectives (28%). Concerning the extent to which these frequencies appear to be representative of

regularly occurring distributions of these family types, the occurrences of the family types identified in this study are reminiscent of previous research. For example, Dumlao and Botta (2002) reported very similar proportions in a sample of 210 undergraduates: Consensuals comprised 21% of the sample, pluralistics 31%, laissez-faire 18%, and protectives 30%. Reuter and Koerner (2008) also reported somewhat similar distributions: In a sample of 592 families sampled, 6.7% identified themselves as consensual, 31.8% as pluralistic, 21.9% as protective, and 39.6% as laissez-faire. However, these frequencies may be less representative than those reported by Dumlao and Botta (2002) for the reason that this study intentionally sought out a sample composed exclusively of families with adopted children.

Cognitive Flexibility

Cognitive flexibility was assessed by having participants complete the Cognitive Flexibility Measure (see Appendix C). The Cognitive Flexibility Measure assesses the extent to which respondents perceive themselves as willing and able to respond to social situations in a number of alternative ways (Martin & Rubin, 1995). This measure consisted of twelve statements, and respondents were asked to indicate the extent to which they agree or disagree, using a seven-point Likert scale. Positive correlations between the cognitive flexibility measure and a preexisting measure of communication flexibility ($r = .53$) and negative correlations between the flexibility measure and assessments of attitudinal rigidity ($r = -.16$) suggest that the measure possesses content and criterion validity (Martin & Rubin, 1995). Likewise, the flexibility measure has been demonstrated as reliable, having yielded a test-retest correlation of $r = .83$.

Factor analysis was used to explore the dimensionality of the Cognitive Flexibility Measure. The instrument was submitted to a principal-axis factor analysis using a Direct Oblimin rotation. The eigenvalues and percentages of total variance accounted for by each factor are presented in Table 2.4. The procedure identified three factors within the Cognitive Flexibility. The two subscales derived from the items loading on each factor demonstrated moderate internal consistency scores. See Appendix H for the items of each subscale.

Factor 1, “Flexibility in Problem Solving,” yielding a Cronbach’s α coefficient of .73, contained items describing respondents’ perceptions of their willingness and ability to solve problems in various ways (e.g. “I can communicate an idea in many different ways”, “I am willing to work at creative solutions to problems”). Factor 2, “Behavioral Inflexibility,” resulting in a Cronbach’s α of .66, consisted of items describing respondents’ perceived inability and lack of willingness to solve problems in unique ways, and exert control over their environment (e.g. “I feel like I never get to make decisions,” “I avoid new and unusual situations”). Factor 3, “Behavioral Efficacy” assessed respondents’ perceived abilities to enact appropriate behaviors; this factor produced a Cronbach’s α of .74.

Factor 1 was selected to serve as the subscale used to test hypotheses related to cognitive flexibility for two reasons. First, the wordings of Factor 1’s items were in the same direction as the conceptual definition of cognitive flexibility. Second, Factor 1 demonstrated a slightly higher α level than Factor 2, which suggested improved reliability.

Extroversion

Extroversion was assessed as a covariate of assertiveness. As previously stated, scholars of personality structure tend to place assertiveness and argumentativeness within the broader trait of extroversion (Costa & McCrae, 1980; Rancer & Avtgis, 2006). Similarly, researchers have investigated assertiveness as a correlate of extroversion, and have found significant positive correlations between extroversion and assertiveness (Hernandez & Mauger, 1980; McCroskey, Heisel, & Richmond, 2001). Extroverted individuals experience a predisposition to behave more assertively than introverts, given that assertive behavior frequently requires larger amounts of active social interaction, which is a form of behavior extroverts enjoy.

Extroversion was measured using the Extroversion Subscale of the Abbreviated Form of the Revised Eysenck Personality Questionnaire (EPQR-A) (see Appendix F). The EPQR-A is a self-report measure assessing the extent to which respondents consider themselves to be extroverted, and consists of six statements taken from the EPQR, which is an expanded version of the same instrument. The EPQR-A appears to represent a sufficiently reliable measure, as it has demonstrated alpha levels ranging from 0.74 to .84. Likewise, this subscale appears to possess concurrent validity, as it consists of items taken from the EPQR, and has demonstrated Pearson's product-moment correlations ranging from $r = 0.93$ to 0.95 , $p < .05$ between the abbreviated and revised versions of the EPQ.

To explore the dimensionality of the EPQR-A, the instrument was submitted to a principal-axis factor analysis using a Direct Oblimin rotation. The procedure identified one factor within the measure. The eigenvalues and percentages of total variance accounted for by each factor are presented in Table 2.4. Likewise, the items of

the EPQR-A were found to be highly intercorrelated, yielding a Cronbach's α coefficient of .90.

Locus of Control

Locus of control is a psychological variable concerned with individuals' understanding of their perceived ability to determine the outcome of events affecting them (Applebaum, Tuma, & Johnson, 1975), and was assessed as another covariate of assertiveness. Operationalizations of the construct typically categorize respondents as having either an "internal" or "external" locus of control. Individuals possessing an internal locus of control consider themselves responsible for situations' outcomes, while those with an external locus of control believe situational outcomes are determined by factors they themselves are unable to influence (e.g. qualities of interaction partners, the nature of a given social situation, etc.).

Because the constructs of locus of control and assertiveness are both fundamentally concerned with the process of goal achievement, the relationship between the two variables has been explored by researchers. More specifically, numerous studies report positive correlations between an internal locus of control, and higher scores on the Rathus Assertiveness Inventory (RAI), a self-report measure of assertiveness (Applebaum, Tuma, & Johnson, 1975; Replogle et al., 1980; Cooley & Nowicki, 1984; Williams & Stout, 1984). The proposed explanation for these findings is that individuals who perceive themselves as possessing control over most situations are more likely to behave in ways that reflect this control by behaving more assertively.

The Personal Efficacy scale is a subscale of the larger Spheres of Control measurement (Paulhus, 1983), and was used to assess respondents' locus of control (see

Appendix G). This instrument consists of 10 statements assessing respondents' perceptions of control over their lives. Participants indicated the extent to which they agree with each statement using 7-point scales. With previously reported Cronbach's alpha coefficients of .75, the measure appears sufficiently reliable to assess the locus of control construct as a covariate.

To examine the dimensionality of the Personal Efficacy scale, the instrument was submitted to a principal-axis factor analysis using a Direct Oblimin rotation. The eigenvalues and percentages of total variance accounted for by each factor are presented in Table 2.4. The procedure identified three factors within the Cognitive Flexibility measure. The three subscales derived from the items loading on each factor demonstrated internal consistency scores with Cronbach's α ranging from .55 to .73. See Appendix H for the items of each subscale.

Factor 1, "Perceived Internal Control", consisted of items referring to respondents' perceptions of their ability to achieve goals and exercise control over their environment (e.g. "When I get what I want it's usually because I worked hard for it", "When I make plans, I am almost certain to make them work"). Factor 2, "Competitiveness", was comprised of statements describing the extent to which respondents value the personal quality of competitiveness (e.g. "Competitiveness encourages excellence", "On any sort of exam or competition I like to know how well I do relative to everyone else"). Factor 3, "Perceived External Control" contained items pertaining to individuals' beliefs that they are unable to determine life outcomes (e.g. "I usually don't make plans because I have a hard time following through on them," "The extent of personal achievement is often determined by chance"). Factor 1 was used in

subsequent statistical analyses, as it was (a.) most conceptually reflective of the locus of control construct and (b.) the most reliable factor ($\alpha = .73$)

Argumentativeness

Levels of argumentativeness were assessed by having participants complete the Argumentativeness Scale (Infante & Rancer, 1982) (see Appendix E). The Argumentativeness Scale consists of 20 statements measuring individuals' predispositions to willingly engage in arguments on controversial issues. Ten (10) items assess an individual's tendency to approach argumentative situations (ARGAP), while the remaining 10 evaluate their tendency to avoid social situations calling for higher levels of argumentativeness (ARGAV). Participants' score on the tendency-to-avoid items is subtracted from their score on the tendency-to-approach; the resulting score represents a participant's argumentative trait (ARGGT).

The Argumentativeness Scale appears sufficiently reliable. The ARGAP has demonstrated a Cronbach's alpha of .91, and the ARGAP has been reported as having alpha levels of .86 (Infante & Rancer, 1982). The three elements of the Argumentativeness Scale (ARGAP, ARGAV, ARGGT) also appear to be very stable, as each component demonstrated test-retest correlations with r values of .87, .86, and .91, respectively. Evidence for the validity of the Argumentativeness Scale rests in the correlations of scores on the instrument against other measures assessing similar constructs, such as communication apprehension and unwillingness to communicate (Infante & Rancer, 1982). When correlated against instruments measuring these related constructs, the r s reported were significant, ranged from slight to moderate, and were in the expected directions.

The instrument was submitted to a principal-axis factor analysis using a Direct Oblimin rotation. The eigenvalues and percentages of total variance accounted for by each factor are presented in Table 2.4. The procedure identified two factors within the ARGAP subscale, and one factor in the ARGAV subscale. Likewise, the items comprising each of the three factors were identified as being highly intercorrelated, as they yielded Cronbach's α coefficients ranging from .85 to .90. See Table 2.4 Appendix H for the items of each subscale.

Factor 1, "Enjoyment of Arguing" contained items referring to the amount of enjoyment respondents derive from arguing (e.g. "I am energetic and enthusiastic when I argue," "I enjoy a good argument over controversial issues," "I enjoy defending my point of view on an issue"). Factor 2, "General Argumentativeness" consisted of items pertaining to a favorable attitude towards argumentative behavior. Factor 3, "ARGAV (Avoidance of Arguments), was made up of items corresponding to unfavorable attitudes toward argumentative behavior (e.g. "I get an unpleasant feeling when I realize I am about to get into an argument," "I am happy when I keep an argument from happening," "Once I finish an argument I promise myself that I will not get into another").

Factor 1 was selected to serve as the subscale used to represent the approach dimension of argumentativeness for several reasons. First, the items loading on this factor reflect argumentativeness' conceptual definition as a motivational predisposition in the sense that Factor 1's statements referred almost exclusively to enjoyment of arguing, and that individuals are assumed to engage in activities they regard favorably. Second, Factor 1 ($\alpha = .90$) appeared slightly more reliable than Factor 2 ($\alpha = .85$). Third, Factor 1 contained (two) more items than Factor 2.

Trait Assertiveness

Levels of trait assertiveness were assessed by having participants complete the Bakker Assertiveness Inventory (ASI) (see Appendix D). The ASI consists of 18 statements describing common circumstances, and an accompanying course of action, which represents either an assertive response or an unassertive response (Bakker, Bakker-Rabdau, & Breit, 1978). Respondents are asked to indicate how frequently their behavior matches the behavior described in the prompt using a seven-point scale. Scenarios listing an unassertive response were reverse scored. The Bakker ASI appears to represent a fairly reliable instrument for measuring assertiveness. A split-half procedure of .73 suggests the measure possesses internal consistency, and scale demonstrated test-retest reliability of .75 over a six week period (Bakker, Bakker-Rabdau, & Breit, 1978).

Factor analysis was used to explore the dimensionality of the Bakker ASI: The instrument was submitted to a principal-axis factor analysis using a Direct Oblimin rotation. The eigenvalues and percentages of total variance accounted for by each factor are presented in Table 2.4. The procedure identified six factors with eigenvalues greater than one, none of which were able to be conceptually interpreted. A reliability check of the measure resulted in a Cronbach's α of .72.

Table 2.4

Eigenvalues & % Total Variance for Factor Loadings

Measure & Factors	Eigenvalue	% Total Variance
Conversation Orientation		
Conversational Range	6.83	48.81
Conversational Inclusion	1.24	8.83
Conformity Orientation		
General Conformity	4.25	38.67
Structural Traditionalism	1.70	15.41
Opinion Conformity	1.09	9.94
Cognitive Flexibility		
Flexibility in Problem Solving	4.14	34.46
Behavioral Inflexibility	1.73	14.39
Behavioral Efficacy	1.07	8.95
Extroversion	4.10	68.39
Locus of Control		
Perceived Internal Control	2.95	29.51
Competitiveness	1.62	16.21
Perceived External Control	1.27	12.66
ARG _{AP}		
Enjoyment of Arguing	6.24	60.24
General Argumentativeness	1.12	11.22

Table 2.4 Cont.

Measure & Factors	Eigenvalues	% Total Variance
ARG _{AV}	5.25	52.51
Assertiveness		
Uninterpretable Factor	3.59	19.92
Uninterpretable Factor	1.58	8.77
Uninterpretable Factor	1.52	8.22
Uninterpretable Factor	1.32	7.35
Uninterpretable Factor	1.15	6.38
Uninterpretable Factor	1.05	5.84

Demographics

At the conclusion of the study, participants were asked to provide information indicating their gender, age, and class standing (freshman, sophomore, etc.). Gender was assessed as a covariate of assertiveness for the reason that as a general trend, men typically report themselves as being more assertive than women (Furnham & Henderson, 1981; Orenstein, Orenstein, & Carr, 1975). Age and class standing were taken into consideration during data analysis in order to investigate potential relationships between age and the several variables under investigation.

Statistical Tests

The hypotheses proposed by the present study were evaluated by the use of several types of statistical tests, the most frequent tests being (a.) a standard or multiple regression between the theoretical model's specified independent and dependent variables to predict respondents' scores on the various measures to be used and (b.) an accompanying one-way analysis of variance (ANOVA) or multiple analysis of variance (MANOVA) in order to assess differences between the various family types.

H1-3 were be tested by conducting a standard linear or multiple regression between FCPs and respondents' scores on the measures for cognitive flexibility, trait assertiveness, and argumentativeness, in conjunction with a one-way MANOVA to assess differences by family typology.

A Pearson's product moment correlation will be employed to test H4. Like Hs 1 - 3, Hs 5 & 6 will use three standard linear regressions in conjunction with the previously described one-way MANOVA.

RQ1 was explored through the use of a standard multiple regression where trait assertiveness and argumentativeness were assessed together to determine which represents the better predictor of message assertiveness.

Three standard linear regressions and a 4 (Family Type) X 3 (Message Type) X 2 (Scenario) X 2 (Power) ANOVA were used to investigate (a.) H7's expectations concerning the relationship between relational power and message assertiveness (b.) H8's predictions concerning the various family type's preferences for assertive messages. Finally, a standard multiple regression utilizing all identified predictors (conversation, conformity, relational power, message type, scenario, trait assertiveness, argumentativeness, extroversion, and locus of control) will investigate RQ₂.

Categorization of Message Assertiveness

The results of the pilot study were used to categorize each scenario's utterances into three message types: Low, medium, or high levels of assertiveness. Given that each scenario used twelve utterances, the four messages featuring the lowest pre-test means for the question "How assertive is this message?" were designated as reflecting "low" assertiveness. Likewise, the next four messages with means higher than the first four were termed "medium" assertive messages; the same procedure was completed to create a group for "high" assertive messages. After data collection, participants' responses were averaged to obtain mean ratings for their expected likelihood of using a low, medium, or highly assertive message. The purpose of this variable is to facilitate testing of Hs _{7, 8}, & RQ₂. so as to assess the impact of the various independent variables (FCPs, traits, power) on respondents' likelihood of using all of the different types of messages presented to them.

Statistical Power

This study's hypotheses and accompanying supplementary analyses were investigated through the use of thirty-seven statistical tests. These tests consisted of twenty-eight standard linear and multiple regressions, one multiple analysis of variance (MANOVA), seven one-way analyses of variance (ANOVA), and one correlation coefficient. Statistical power was calculated using the G*Power software package (Faul, Erdfelder, Lang, & Buchner, 2007).

Power estimates for regression analyses.

Of these twenty-eight regressions, nineteen were standard linear regressions utilizing one predictor.

Eleven of these linear regressions had one predictor and a sample size of 762 participants. These analyses yielded power estimates of 1.00 for effect sizes of .35, power estimates of 1.00 for effect sizes of .15, and power estimates of .97 for effect sizes of .02.

An additional six linear regressions employed one predictor and a sample of 252 respondents. These analyses produced power estimates of 1.00 for effect sizes of .35, power estimates of .99 for effect sizes of .15, and power estimates of .61 for effect sizes of .02.

Another standard linear regression employed one predictor and a sample of 383 respondents. This resulted in power estimates of 1.00 for effect sizes of .35, power estimates of .99 for effect sizes of .15, and power estimates of .79 for effect sizes of .02.

The final standard linear regression had a sample of 377 respondents, and produced power estimates of 1.00 for effect sizes of .35, power estimates of .99 for effect sizes of .15, and power estimates of .78 for effect sizes of .02.

Six of the study's analyses were standard multiple regressions with two predictors and a sample size of 762 responses. These analyses resulted in power estimates of 1.00 for effect sizes of .35, power estimates of 1.00 for effect sizes of .15, and power estimates of .95 for effect sizes of .02.

Two of the standard multiple regressions contained nine predictors. The first of these operated under a sample size of 383 responses, which yielded power estimates of 1.00 for effect sizes of .35, power estimates of .99 for effect sizes of .15, and power estimates of .43 for effect sizes of .02. The second multiple regression featuring nine predictors used a sample size of 377; this gave way to power estimates of 1.00 for effect sizes of .35, power estimates of .99 for effect sizes of .15, and power estimates of .42 for effect sizes of .02.

One multiple regression had ten predictors and a sample size of 762 responses. This resulted in power estimates of 1.00 for effect sizes of .35, power estimates of 1.00 for effect sizes of .15, and power estimates of .76 for effect sizes of .02.

Power estimates for MANOVA and ANOVAs.

The eight remaining tests consisted of one MANOVA (multiple analysis of variance) and eight ANOVAs with the number of groups per test ranging from two to four.

The MANOVA contained four groups (Family Typology), and a sample size of 762 responses. This analysis produced power estimates of 1.00 for effect sizes of .40, power estimates of 1.00 for effect sizes of .25, and power estimates of 1.00 for effect sizes of .10.

Three of these analyses were one-way ANOVAs with two groups (gender) and sample sizes of 252. These produced power estimates of .99 for effect sizes of .40, power estimates of .98 for effect sizes of .25, and power estimates of .35 for effect sizes of .10.

A one-way ANOVA with four groups (Family Type) and a sample of 383 (respondents assigned to the Roommate scenario) produced power estimates of .99 for effect sizes of .40, power estimates of .99 for effect sizes of .25, and power estimates of .34 for effect sizes of .10. Likewise, a one-way ANOVA consisting of four groups and a sample of 377 (participants who read the Car scenario) yielded power estimates of .99 for effect sizes of .40, power estimates of .99 for effect sizes of .25, and power estimates of .34 for effect sizes of .10.

An additional one-way ANOVA consisted of four groups (Family Type) and a sample size of 61 responses. This resulted in power estimates of .71 for effect sizes of .40, power estimates of .32 for effect sizes of .25, and power estimates of .09 for effect sizes of .10.

The final ANOVA contained four groups, and sought interactions among the variables of Family Type, Message Type, Power, and Scenario, so a more appropriate measure of statistical power was used to calculate power estimates of .99 for effect sizes of .40, power estimates of .97 for effect sizes of .25, and power estimates of .19 for effect sizes of .10.

Power estimate for correlation coefficient.

The last analysis was a correlation between the measures of trait assertiveness and argumentativeness. H_4 's product moment correlation resulted in power estimates of 1.00 for effect sizes of .50, power estimates of .99 for effect sizes of .30, and power estimates of .48 for effect sizes of .10.

Conclusions from power estimates.

The results from these power estimates suggest that the study's analyses operated under very high levels of statistical power: In nearly every set of estimates, effect size conventions for medium and large effects produced power estimates of either 1.00 or .99.

Chapter 3

RESULTS

Preliminary Analyses

Before proceeding to describe the results of the various hypothesis tests, several other analyses were performed in order to first obtain a general understanding of respondents' preferences for the types of messages presented to them, and then to investigate if any of the covariates under study significantly contributed to levels of message assertiveness. A one-way between groups multivariate analysis of variance (MANOVA) was performed to investigate not only differences between family types for the covariates of extroversion and locus of control, but also to assess differences for the three dependent variables of cognitive flexibility, trait assertiveness, and argumentativeness.

First, respondents' gender was used to test for differences in message assertiveness between males and females. Three one-way ANOVAs were performed to investigate this possibility in respondents' use of low, medium, and highly assertive messages. The first ANOVA assessing differences in males' ($M = 4.99$, $SD = 1.08$) and females' ($M = 5.17$, $SD = 1.02$) use of low assertive messages produced no statistically significant findings between the two groups, $F(1, 251) = 1.69$, $p = .20$, $\eta^2 = .003$. The second ANOVA assessing differences in the use of medium assertive message between males ($M = 5.11$, $SD = 1.01$) and females ($M = 5.18$, $SD = .97$) also resulted in no

significant results $F(1, 251) = .28, p = .61, \eta^2 = -.003$. Finally, the third ANOVA investigating differences in males' ($M = 4.25, SD = 1.34$) and females' ($M = 3.92, SD = 1.59$) likelihood of using highly assertive messages again produced no significant findings, $F(1, 251) = 2.93, p = .09, \eta^2 = .008$. Given the absence of significant differences between males' and females' use of assertive messages, participants' gender was excluded from subsequent analyses.

Investigations were then made to investigate possible links between FCPs, the covariates of extroversion ($M = 5.32, SD = 1.18$) and locus of control ($M = 5.44, SD = .97$), and message assertiveness. A standard multiple regression was performed to assess FCPs as predicting extroversion. The model predicted 5.1% of the variance, adjusted $R^2 = .05, F(2, 761), p < .000$. A significant relationship was found between conversation orientation as a predictor for extroversion, $B = .19, t = 5.36, p < .001$. Conformity orientation approached significance as a negative predictor for extroversion, $B = -.06, t = -1.70, p = .09$.

A one-way ANOVA was also performed to assess differences in extroversion amongst the four family types. The analysis found significant differences in individuals' levels of extroversion, $F(3, 758) = 13.34, p < .001, \eta^2 = .05$. Post-hoc comparisons using the Tukey HSD test revealed that mean extroversion scores among consensuals ($M = 5.57, SD = 1.29$), pluralistics ($M = 5.53, SD = 1.10$), and laissez-faires ($M = 5.36, SD = 1.07$) were significantly different and greater than protectives' ($M = 4.92, SD = 1.19$) where $p < .05$. The results of these analyses suggest that FCPs play a role in contributing to the extent individuals are predisposed towards engaging others in social interaction.

Following assessments of FCPs' impact on extroversion, three standard linear regressions were conducted to explore the possibility of extroversion predicting levels of message assertiveness. The regression analyses demonstrated that extroversion levels did not significantly predict the use of low assertive messages, $F(1, 252), B = .08, t = 1.4, p = .16$, or highly assertive messages, $F(1, 252), B = -.01, t = -.08, p = .94$. However, another standard linear regression revealed that extroversion did significantly predict the use of medium assertive messages, where the model predicted 2.2% of the variation, adjusted $R^2 = .02, F(1, 252), B = .12, t = 2.36, p = .02$. The results of these analyses suggest that extroversion may play a role in leading individuals to prefer medium assertive messages, but not highly assertive messages (as previously forecasted in Chapter 2) or low assertive messages. Thus, extroversion may represent a contributing factor for the popularity of medium assertive messages among respondents and will be incorporated into later analyses.

Next, analyses were performed to investigate similar links between FCPs, locus of control, and message assertiveness. A standard multiple regression was conducted to assess FCPs as predicting locus of control. The model predicted 3.8% of the variance, adjusted $R^2 = .04, F(2, 761), p < .001$. A significant relationship was found for conversation orientation predicting respondents' locus of control, $B = .16, t = 5.44, p < .001$. Conformity orientation also emerged as a significant predictor of locus of control, $B = .07, t = 2.42, p = .02$.

A one-way ANOVA was then performed to assess differences in locus of control by family type. The analysis found significant differences in locus of control among the family types, $F(3, 758) = 5.55, p = .001, \eta^2 = .02$. Post-hoc comparisons

using the Tukey HSD also showed that there were significant differences in locus of control by family type, with consensuals ($M = 5.63$, $SD = .91$), pluralistics ($M = 5.52$, $SD = .97$) and protectives ($M = 5.41$, $SD = .88$) reporting higher locus of control scores than laissez-faires ($M = 5.21$, $SD = 1.10$). These findings suggest that FCPs appear to play some role in contributing to the development of individuals' locus of control

Then, three standard linear regressions were conducted to assess locus of control predicting levels of message assertiveness. Two standard linear regressions revealed that extroversion levels did not significantly predict the use of either low assertive messages, $F(1, 252)$, $B = -.02$, $t = -.32$, $p = .75$, or highly assertive messages, $F(1, 252)$, $B = -.12$, $t = -1.28$, $p = .20$. However, a third standard linear regression produced significant findings, where locus of control significantly predicted likelihood of using medium assertive messages; the model predicted 2.3% of the variation, adjusted $R^2 = .02$, $F(1, 252)$, $B = .15$, $t = 2.42$, $p = .02$. The results of these analyses imply that locus of control may very well contribute to individuals' preferring medium assertive messages, but not low assertive or high assertive messages. As such, like extroversion, locus of control will be incorporated into later statistical analyses.

Trait Analyses

Predictors of Cognitive Flexibility

Based on the previous findings of Koesten et al. (2009) where individuals from families featuring higher levels of conversation orientation reported higher levels of cognitive flexibility than individuals from families featuring both (a.) lower levels of conversation orientation and (b.) higher levels of conformity orientation, H_1 predicted an

ordering among individuals from the four family types based on the notion that high levels of conversation appear to encourage the development of cognitive flexibility, while higher levels of conformity discourage it. Accordingly, pluralistics were hypothesized as reporting the highest levels of cognitive flexibility, followed by consensuals, then laissez-faires, and lastly protectives. Two analyses were performed to test this hypothesis. First, a standard multiple regression was conducted to assess conversation and conformity as significant predictors of cognitive flexibility in their expected directions. Second, the one-way between-groups MANOVA assessed levels of cognitive flexibility by family type.

The regression analysis revealed that conversation and conformity significantly predicted cognitive flexibility, with the model predicting 3.2% of the variation, adjusted $R^2 = .03$, $F(2, 759) = 12.35$, $p < .001$. Conversation was a significant positive predictor for cognitive flexibility scores, $B = .08$, $t = 3.03$, $p = .003$, and conformity was a significant negative predictor, $B = -.08$, $t = -2.86$, $p = .004$.

The one-way MANOVA uncovered statistically significant differences in levels of cognitive flexibility among the family types, $F(3, 758) = 14.20$, $p < .001$, $\eta^2 = .05$. Post-hoc comparisons using the Tukey HSD test indicated that the mean scores for pluralistics ($M = 5.51$, $SD = .86$), consensuals ($M = 5.55$, $SD = .84$), and laissez-faires ($M = 5.35$, $SD = .84$) were significantly different from those of protectives ($M = 5.05$, $SD = .94$). The means for pluralistics, consensuals, and laissez-faires did not differ significantly from one another.

Collectively, these results indicate that H_1 was mostly supported: The regression analysis replicated Koesten et al.'s (2009) findings that FCPs significantly

predicted levels of cognitive flexibility, and the one-way MANOVA revealed that respondents' reported levels of cognitive flexibility were somewhat in line with the predictions made by H₁, where consensuals and pluralistics indicated higher levels of cognitive flexibility than protectives. However, H₁ was not supported in the sense that (a.) while laissez-faires' levels of cognitive flexibility were in line with the ordering predicted by H₁, their means did not differ significantly from pluralistics and consensuals, and (b.) the orderings predicted for pluralistics and consensual were both reversed, and not significantly different from one another.

Predictors of Trait Assertiveness

H₂ stated that cognitive flexibility would predict levels of trait assertiveness ($M = 4.49$, $SD = .61$), with greater cognitive flexibility resulting in higher mean levels of assertiveness. Given H₁'s predictions concerning emergent levels of cognitive flexibility amongst the various family types, H₂ posited that pluralistics were expected to report the highest amounts of assertiveness, followed by consensuals, then laissez-faires, and finally, protectives. Again, like H₁, two analyses were conducted to investigate the relationship between cognitive flexibility, FCPs, and trait assertiveness: A regression analysis assessed cognitive flexibility as representing a direct predictor of assertiveness, while the one-way MANOVA investigated differences in reported assertiveness among the various family typologies.

The regression analysis revealed that the model significantly predicted assertiveness; the model predicted 2% of the variance, adjusted $R^2 = .02$, $F(1, 760) = 17.59$, $p < .001$. A significant relationship was found between cognitive flexibility as a predictor for trait assertiveness, $B = .10$, $t = 4.19$. Likewise, the one-way MANOVA also

uncovered statistically significant differences in mean levels of trait assertiveness, $F(3, 758) = 5.16, p = .002, \eta^2 = .02$, and post-hoc comparisons using the Tukey HSD test found that pluralistics ($M = 4.59, SD = .60$) reported significantly higher scores on the trait assertiveness measure than protectives ($M = 4.38, SD = .58$) where $p < .05$. Consensuals' ($M = 4.53, SD = .64$) and laissez-faires' ($M = 4.47, SD = .64$) levels of trait assertiveness did not differ significantly from the other family types. Given these findings, H_2 was mostly supported: Cognitive flexibility scores did predict reported levels of trait assertiveness, and levels of trait assertiveness did mirror the ordering proposed by H_2 (with pluralistics indicating the highest amounts of trait assertiveness, followed by consensuals, laissez-faires, and protectives), although significant differences did not emerge for the consensual and laissez-faire family types.

Following testing of H_2 , an additional analysis investigated the possibility of a direct link between FCPs and levels of trait assertiveness. A standard multiple regression was performed between the dependent variable of trait assertiveness and the independent variables of conversation orientation and conformity orientation. Regression analysis indicated that the model achieved statistical significance, $F(2, 759) = 8.84, p < .001$. While conversation did not significantly predict scores on the trait assertiveness scores, $B = 0.0, t = .007, p = .99$, conformity did emerge as a significant negative predictor of assertiveness, $B = -.08, t = -4.01, p < .001$. These findings are suggestive of a link between conformity and lower levels of trait assertiveness.

Predictors of Argumentativeness

H_3 predicted that FCPs spur the development of argumentativeness ($M = 6.32, SD = 2.85$) in a manner reminiscent of the extent individuals are encouraged to

engage in robust debate within their family of birth: Higher levels of conversation would predict argumentativeness, while conformity was expected to discourage it. Accordingly, pluralistics were expected to emerge as the most argumentative, followed by consensuals, then laissez-faires, and finally, protectives. Two analyses were conducted to investigate the relationship between FCPs and argumentativeness. A standard multiple regression analysis assessed FCPs as direct predictors of argumentativeness, and the one-way MANOVA investigated differences in reported argumentativeness among individuals from the various family typologies. The regression analysis demonstrated that the model did not significantly predict argumentativeness, $F(2, 759) = 1.13, p = .32$. Neither conversation ($B = .05, t = .54, p = .59$) nor conformity ($B = -.10, t = -1.18, p = .24$) significantly predicted argumentativeness. Likewise, no significant differences in mean levels of argumentativeness emerged from the MANOVA, $F(3, 758) = .16, p = .92, \eta^2 = .002$. Given the results of these two analyses, H_3 was not supported.

A supplementary analysis was conducted to test for the possibility of cognitive flexibility as representing a significant predictor of argumentativeness. A standard linear regression was performed between argumentativeness and cognitive flexibility. The model predicted 10% of the variation, adjusted $R^2 = .09, F(1, 760) = 82.34, p < .001$. A significant relationship was found between cognitive flexibility as a predictor for levels of argumentativeness, $B = .99, t = 9.07$. The results of this analysis suggest that cognitive flexibility likely contribute to individuals' levels of argumentativeness, while also suggesting an indirect relationship between FCPs and argumentativeness.

H₄ predicted a significant, positive correlation between scores on measures assessing the traits of argumentativeness and assertiveness. As hypothesized, there was a significant correlation in scores on these two measures, $r = .43, p < .001$. Thus, H₄ was supported.

Communicative Behavior Analyses

Likelihood of Message Use for Family Types, Message Types, Scenarios, and Power

A 4 (Family Type) X 3 (Message Type) X 2 (Power) X 2 (Scenario) ANOVA was performed to generate the results needed to test H₇ (which predicted that individuals possessing relational power would indicate greater likelihood of using more assertive messages than those lacking power) and H₈ (which proposed an ordering of respondents' preferences for assertive messages based on a hypothesized interaction between the characteristics of their reported FCPs and power). The analysis revealed four statistically significant findings (Message Type, Scenario, Scenario X Message Type, and Scenario X Power) and two results that approached significance (Power and Scenario X Family Type). We will begin with the significant findings for Scenario, Message Type, and Scenario X Message Type, followed by the effects for Power and Scenario X Power as they relate to H₇, and then present the interactions for Family Type.

Analyses for Scenario, Message Type, and Scenario X Message Type

The first significant finding was an effect for Scenario, $F(1, 762) = 80.26, p < .001, \omega^2 = .005$, where respondents indicated themselves as more likely to use utterances corresponding to Roommate scenario ($M = 5.12, SD = 1.11$) scenario than the Car scenario ($M = 4.42, SD = 1.39$).

Second, there was a main effect for Message Type, $F(2, 762) = 81.49, p < .001, \omega^2 = .01$. Post-hoc comparisons using the Tukey HSD test indicated that the mean scores for respondents' reported likelihood of using low ($M = 5.11, SD = 1.05$) and medium ($M = 5.15, SD = .99$) assertive messages were significantly different and greater than their reported likelihood of using highly assertive messages ($M = 4.05, SD = 1.50$).

Third, an interaction for Scenario X Message Type also emerged, $F(2, 762) = 73.09, p < .001, \omega^2 = .008$. While the main effect for Message Type found that respondents indicated that they were more likely to use low and medium assertive messages than highly assertive messages, the results of the Scenario X Message Type interaction instead demonstrate that respondents' preferences for specific message types differed by scenario. More specifically, post-hoc comparisons using the Tukey HSD test found that participants assigned to the Roommate scenario were more likely to use low assertive messages ($M = 5.41, SD = 1.12$) over medium ($M = 4.92, SD = 1.12$) and highly assertive messages ($M = 5.01, SD = 1.04$). On the other hand, the results from a similar post-hoc test revealed that respondents who completed the Car scenario were most likely to use medium assertive messages ($M = 5.39, SD = .76$), less likely to use low assertive messages ($M = 4.80, SD = .87$), and least likely to employ highly assertive messages ($M = 3.07, SD = 1.24$).

Analyses Relevant to Power and Scenario X Power

H₇ predicted that individuals possessing relational power would indicate greater willingness to use more assertive messages than those lacking power. Individuals possessing power were expected to be more likely to use highly assertive messages, and less likely to use low assertive messages. Conversely, individuals in situations where

they lacked power were predicted to report greater likelihood of using low assertive messages, and less likelihood of using highly assertive messages. No relationship was predicted between power and expected likelihood of using medium assertive messages.

The main effect for power approached significance, $F(1, 762) = 3.28, p = .07, \eta^2 = .0001$. In instances where respondents possessed relational power over their described interaction partner, they reported less likelihood of message use ($M = 4.70, SD = 1.26$) than in instances where they lacked power ($M = 4.84, SD = 1.34$). This effect was superseded by a significant interaction for Scenario X Power, $F(1, 762) = 3.85, p = .05, \eta^2 = .0002$, where respondents assigned to the low power condition of the Roommate scenario ($M = 5.29, SD = 1.13$) were more likely to use messages than those in the high power condition ($M = 4.95, SD = 1.08$). Conversely, in the Car scenario, participants' message preferences in the low power condition ($M = 4.40, SD = 1.40$) were about equal with those assigned to the high power condition ($M = 4.44, SD = 1.38$). As such, this finding suggests that power affected expected message behavior in one of the scenarios, but not both.

The other related interactions, Message Type X Power, $F(3, 762) = .57, p = .57$, and Message Type X Scenario X Power, $F(2, 762) = .4, p = .67$, were not significant, suggesting little support for H7.

In addition to the above ANOVA, H7 was also investigated through the use of several standard linear regressions. Once again, individuals with power were expected to prefer more highly assertive messages, and report themselves as being inclined toward low assertive messages. Conversely, individuals lacking power were expected to be more drawn to low assertive messages, and less predisposed towards highly assertive messages.

Once again, no relationship was expected to emerge between power and respondents' preferences for medium assertive messages.

Three standard multiple regressions were performed, where power served as an independent variable to predict respondents' likelihood of using low, medium, or highly assertive messages. In the first regression, individuals possessing relational power were significantly less likely to use low assertive messages than individuals without power $F(1, 252) = 3.91, B = -.26, t = -1.99, p = .05$. The model predicted 1.6% of the variation, adjusted $R^2 = .01$. Subsequent regressions demonstrated that power did not significantly predict respondents' reported likelihood of using medium assertive messages, $F(1, 252) = .55, B = -.09, t = -.74, p = .46$ or highly assertive messages, $F(1, 252) = .15, B = -.07, t = -.39, p = .70$.

In total, these findings suggest little support for H7 for two reasons. First, possessing power was hypothesized as rendering respondents both (a.) more likely to use highly assertive messages than those who lacked power and (b.) less likely to use low assertive messages than those without it. This relationship was not observed in analyses pertaining to the Car scenario. While power-wielding individuals in the Roommate scenario reported being less likely to use low assertive messages and while a regression analysis predicted that respondents possessing power being less likely to use low assertive messages than those without power, these effects were most likely a byproduct of the Scenario X Power interaction where individuals with power in the Roommate scenario indicated lower levels of expected message use for all three message types than those in the low power condition. Second, because the concept of assertiveness is tied to individuals' willingness to speak on their own behalf, the Scenario X Power interaction

suggests that respondents assigned to the low power condition of the Roommate scenario were actually more assertive than participants in the high power condition, given that they were more willing to use all of the message types provided to them. Said more simply, the opposite of H_7 occurred: Rather than leading individuals towards more assertive message behavior, power rendered respondents to behave less assertively than those without it.

Analyses Relevant to Family Type

First, the main effect for Family Type was not significant, $F(3, 762) = 1.62$, $p = .18$. Meanwhile, the interaction for Family Type X Scenario approached significance, $F(3, 762) = 2.46$, $p = .06$, $\eta^2 = .0003$. However, post-hoc comparisons using the Tukey HSD test indicated no significant differences between the family types for overall likelihood of message use.

In order to further investigate this possible interaction, a one-way ANOVA assessing likelihood of message use by family type was conducted for each scenario (two analyses total). The first analysis for the Roommate scenario indicated significant differences in participants' likelihood of message use, $F(3, 380) = 3.74$, $p = .01$, $\eta^2 = .03$. Post-hoc comparisons using the Tukey HSD test revealed that the mean likelihood of message use for pluralistics ($M = 5.36$, $SD = 1.14$) differed significantly from protectives' ($M = 4.89$, $SD = 1.10$). Laissez-faires ($M = 5.04$, $SD = .99$) and consensuals ($M = 5.20$, $SD = 1.18$) did not differ significantly from the other family types. The second ANOVA assessing likelihood of message use by family type in the Car scenario did not yield significant findings, $F(3, 377) = .19$, $p = .90$.

The results of these supplementary analyses indicate that pluralistics assigned to the Roommate scenario expressed greater willingness to use all of the messages presented to them. Given that this effect occurred only within the Roommate scenario, this invites speculation that combinatory effects between pluralistics' and protectives' respective family backgrounds and the features of the Roommate scenario were likely responsible for this difference. This is a finding that will receive more extensive exploration in the study's Discussion section.

H8 proposed an ordering of respondents' preferences for assertive messages based on a hypothesized interaction between the characteristics of their reported FCPs and power: In instances where they lacked relational power, individuals from the various family types were expected to indicate preferences for assertive messages that reflected the extent to which they are able to speak their minds when interacting with their families (with pluralistics being the most assertive, and protectives the least). However, in situations where respondents possessed power, protectives were expected to report use of the most assertive messages (due to a congruence between protective parents' hyper-assertive behavior, and possession of power), followed by pluralistics, consensuals, and lastly laissez-faires. The results from this analysis do not support H8, given the absence of significant interactions for Family Type X Power, $F(2, 762) = .45, p = .72$, Family Type X Power X Scenario, $F(3, 762) = .84, p = .47$, Family Type X Power x Message Type, $F(6, 762) = .69, p = .68$, and Family Type, Power, Message Type, X Scenario, $F(2, 762) = .72, p = .64$. Table 3.1 lists the means and standard deviations for likelihood of individuals from each family type using each of the message types (low, medium, or high) in both the low and high power conditions across both scenarios.

Table 3.1

Means and Standard Deviations for Likelihood of Message Use X Family Type X Power Across Scenarios

Message Assertiveness	Low Power			High Power		
	Low	Med	High	Low	Med	High
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Pluralistic	5.24	1.17	5.37	1.00	4.00	1.80
					5.01	1.03
					5.29	.85
					4.09	1.57
Consensual	5.40	1.10	4.99	1.04	4.46	1.43
					4.86	1.33
					5.46	1.07
					4.05	1.60
Laissez-Faire	5.30	.84	5.16	.98	3.88	1.47
					5.05	.90
					4.89	.99
					4.02	1.32
Protective	5.06	1.08	5.15	.99	4.16	1.45
					4.98	.92
					4.86	.98
					3.91	1.31
Total	5.24	1.06	5.20	.99	4.09	1.57
					4.98	1.03
					5.11	.98
					4.01	1.43

While the ANOVA failed to find evidence for the hypothesized interaction between family type, power, and message assertiveness, an additional series of one-way ANOVAs were performed solely with the intention of obtaining descriptive statistics for the family types' message preferences in scenario by power condition; the means and standard deviations from these analyses are found in Tables 3.2 and 3.3. In these analyses, one of the ANOVAs assessing the various family types' likelihood of using medium assertive messages in the high power condition of the Car scenario approached significance, $F(3, 58) = 2.29, p = .09, \eta^2 = .06$, suggesting that there may have been differences between the family types' reported likelihood of using medium assertive messages. Post-hoc comparisons using the Tukey HSD test approached statistical significance, where $p = .06$. Consensuals did report a noticeably higher likelihood of using medium assertive messages ($M = 5.64, SD = 1.03$) than laissez-faires ($M = 4.92, SD = .88$).

So, although the analysis failed to yield statistically significant findings at the $p < .05$ threshold, both the analysis and its accompanying post-hoc test did approach significance, while simultaneously resembling previous findings where consensuals and pluralistics routinely reported greater levels of traits such as trait assertiveness, extroversion, and locus of control than laissez-faires and protectives. This finding is not in keeping with H_8 in that the hypothesis predicted an interaction where protectives possessing relational power would exhibit higher levels of preferences for more assertive messages than the other family types. However, this finding is consonant with other results produced by this study, such as respondents from the high-conversation typologies' (a.) reporting higher levels of trait assertiveness, extroversion, and locus of

control, (b.) indicating greater likelihood of use for all message types, and (c.) participants' overall preferences for more moderately assertive messages.

Other related effects (both main and interaction) that failed to achieve significance were Family Type X Message Type, $F(6, 762) = .61, p = .72$, Family Type X Message Type X Scenario, $F(6, 762) = .60, p = .73$. In sum, H_8 was not supported: Power did not interact with family type to impact individuals' preferences for assertive messages in ways resembling the proposed theoretical justification.

Additional Analysis

The results of the previously described interaction found for family type in the Roommate scenario also resulted in the need for an additional supplementary analysis. Given that pluralistics demonstrated greater likelihood of message use than protectives in the Roommate scenario, this suggests that cognitive flexibility scores might very well predict respondents' average scores for likelihood of message use in this scenario, as FCPs were shown to predict levels of cognitive flexibility in both this study and in Koesten et al. (2009). Accordingly, two standard linear regressions were conducted (one per scenario). First, cognitive flexibility scores were used to predict respondents' likelihood of message use in the Roommate scenario. The regression analysis showed that the relationship for cognitive flexibility predicting likelihood of message approached significance, with the model predicting 1% of the variation, adjusted $R^2 = .01$, $F(1, 382) = 3.61$, $B = .11$, $t = 1.90$, $p = .06$. Conversely, the regression analysis for the Car scenario failed to reach statistical significance, $F(1, 376) = .60$, $B = .08$, $t = .78$, $p = .44$. The results from these two last regressions continue to support an additional possible connection between FCPs and message behavior. Given the results of this additional

analysis, cognitive flexibility will be included as a predictor in later investigations of RQ₂.

Taken together, the set of findings produced by this study suggests that while family type and power failed to interact as hypothesized, individuals from the high conversation-orientation family types appear to possess more trait assertiveness than the low-conversation family types, and may be more likely to behave in a moderately assertive manner than the remaining types of families described by Koerner and Fitzpatrick (2002a).

Table 3.2

Means and Standard Deviations for Likelihood of Message Use X Family Type X Power for *Roommate Scenario*

Message Assertiveness	Low Power			High Power		
	Low	Med	High	Low	Med	High
	<u>M</u>	<u>SD</u>		<u>M</u>	<u>SD</u>	
Pluralistic	5.85	1.07	5.29	1.26	5.50	1.12
			5.42	.98	4.97	1.08
			5.07			1.20
Consensual	5.90	.96	4.88	1.11	5.10	.93
			4.92	1.72	5.22	1.12
			5.05			1.16
Laissez-Faire	5.53	.95	4.88	1.25	5.05	.88
			5.15	.93	4.87	1.08
			4.73			.67
Protective	5.28	1.36	4.94	1.06	5.00	1.08
			5.13	.96	4.48	1.04
			4.63			1.06
Total	5.64	1.11	5.02	1.17	5.19	1.02
			5.18	1.10	4.82	1.08
			4.84			1.04

Table 3.3

Means and Standard Deviations for Likelihood of Message Use X Family Type X Power for *Car* Scenario

Message Assertiveness	Low Power			High Power								
	Low	Med	High	Low	Med	High						
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>						
Pluralistic	4.69	.98	5.44	.74	2.64	1.03	4.65	.95	5.57	.47	3.25	1.36
Consensual	4.59	.82	5.16	.94	3.44	1.55	4.81	1.01	5.63*	1.03	3.29	1.48
Laissez Faire	5.10	.68	5.41	.59	2.85	1.04	4.89	.89	4.92*	.88	2.83	1.29
Protective	4.85	.72	5.35	.91	3.37	1.32	4.80	.87	5.28	.68	3.12	1.11
Total	4.83	.82	5.38	.77	2.99	1.21	4.77	.91	5.40	.76	3.16	1.28

**p* = .06

Predictors of Message Use: H₅, H₆, RQ₁, and RQ₂

H₅ stated that levels of trait assertiveness would be related to participants' preferences for assertive messages, with higher levels of trait assertiveness predicting greater likelihood of using more assertive messages. Accordingly, higher trait assertiveness scores were expected to significantly predict respondents' reported likelihood of using highly assertive messages, but not medium assertive messages. Similarly, trait assertiveness scores should also negatively predict respondents' indicated likelihood of using low assertive messages.

Three standard linear regressions were conducted to investigate this hypothesis, where trait assertiveness scores ($M = 5.35$, $SD = .89$) were used to predict level of message assertiveness, low ($M = 5.11$, $SD = 1.05$), medium ($M = 5.15$, $SD = .99$), or high ($M = 4.05$, $SD = 1.50$). There were no statistically significant relationships between scores on the assertiveness measure and participants' reported likelihood of using low assertive messages, $F(1, 252) = 1.33$, $p = .25$, or medium assertive messages, $F(1, 252) = 2.68$, $p = .10$. On the other hand, a significant relationship was found for trait assertiveness predicting increased likelihood of respondents using messages featuring higher levels of assertiveness; $F(1, 252) = 5.98$, $B = .37$, $t = 2.45$, $p = .02$; the model predicted 2.3% of the variation, adjusted $R^2 = .02$. Given the results of this analysis, H₅ was partially supported, as only one of the two defining criteria were met: Trait assertiveness scores significantly predicted respondents' reported likelihood of using highly assertive messages, but not low assertive messages.

H₆ maintained that trait levels of argumentativeness would also be related with respondents' preferences for more assertive messages. The same rationale used to

test H_5 was used in assessing H_6 : Argumentativeness scores were expected to predict respondents' likelihood of using low and highly assertive messages, but not medium assertive messages. Again, three standard linear regressions were performed, one per message type. As was the case in H_5 , no significant relationships were found between participants' levels of argumentativeness and their reported likelihood of using low assertive messages, $F(1, 252) = .18, p = .68$, or medium assertive messages, $F(1, 252) = 2.00, p = .16$. However, higher reported levels of argumentativeness did predict a significantly greater likelihood of highly assertive messages, $F(1, 252) = 6.61, B = .08, t = 2.57, p = .01$; the model predicted 2.6% of the variation, adjusted $R^2 = .02$. As higher levels of argumentativeness did predict a greater likelihood of using more assertive messages, but not low assertive messages, H_6 was partially supported.

RQ₁ asked whether trait assertiveness or argumentativeness was the better predictor of message assertiveness. To answer this question, a standard multiple regression was performed where trait assertiveness and argumentativeness scores were used to predict respondents' use of highly assertive messages in conjunction with one another. The model significantly predicted respondents' use of highly assertive messages, $F(2, 251) = 4.42, p = .01$; the model predicted 3.4% of the variation, adjusted $R^2 = .03$. No significant relationships were found between either trait assertiveness ($B = .25, t = 1.48, p = .14$) or argumentativeness ($B = .06, t = 1.68, p = .09$) and respondents' likelihood of using highly assertive messages.

The variables' standardized β coefficients were then assessed in order to facilitate understanding of how trait assertiveness and argumentativeness each individually contributed to the model. Trait assertiveness produced a standardized β

coefficient of .10, and argumentativeness yielded a β coefficient of .12. Given that (a.) these coefficients were quite similar and (b.) neither variable made unique contributions to the regression equation that were statistically significant, there is no evidence of any difference between trait assertiveness and argumentativeness in predicting individuals' likelihood of using highly assertive messages. However, as a prelude to investigations of RQ₂, this analysis did not control for possible moderating influences of other variables, such as Scenario or Power.

RQ₂ sought to investigate how each causal path specified by the model contributed toward overall message assertiveness. To answer this question, a standard multiple regression was performed, where all of the independent variables that could possibly affect respondents' likelihood of using assertive messages (conversation orientation, conformity orientation, trait assertiveness, argumentativeness, relational power, extroversion, locus of control, scenario, cognitive flexibility, and message type) were designated as the predictors. The model achieved significance, $F(10, 751) = 21.35$, $p < .001$, predicting 20.4% of the variation, adjusted $R^2 = .19$. Of the ten predictors, four significantly predicted likelihood of message use (scenario, power, message type, and conversation), two approached significance (conformity and trait assertiveness), and four produced null findings (locus of control, extroversion, argumentativeness, and cognitive flexibility). Presented first are the results for the four significant independent variables, then reported are the results that approached statistical significance, and finally the null findings for the four non-significant predictors are described. As a whole, many of these results bear substantial resemblance to those found by the ANOVAs performed in testing Hs 7 & 8, but function to provide greater clarity for these findings.

To begin, there was a significant relationship between Scenario as a predictor for likelihood of message use, $B = -.71$, $t = -8.28$, $p < .001$, which suggests that individuals assigned to the Car scenario were less likely to use messages than those who completed the Roommate scenario. Next, Power emerged as a significant predictor of likelihood of message use, $B = -.17$, $t = -1.99$, $p = .05$, where respondents possessing relational power indicated decreased likelihood of using assertive messages. Message Type was also significantly predicted likelihood of message use, $B = -.53$, $t = -10.20$, $p < .001$: As previously observed, respondents were more likely to use low ($M = 5.11$, $SD = 1.05$) or medium assertive messages ($M = 5.15$, $SD = .99$) than highly assertive messages ($M = 4.05$, $SD = 1.50$). Finally, conversation orientation predicted likelihood of message use as well, $B = .08$, $t = 2.06$, $p = .04$, where individuals from families featuring higher orientations toward conversation were more likely to use messages than those families with lower orientations toward the same construct.

Meanwhile, the independent variables of conformity orientation ($B = .07$, $t = 1.85$, $p = .07$) and trait assertiveness' contributions ($B = .14$, $t = 1.71$, $p = .09$) to the equation approached statistical significance. On the contrary, locus of control ($B = -.01$, $t = -.26$, $p = .79$), extroversion ($B = .03$, $t = .76$, $p = .45$), argumentativeness ($B = .02$, $t = 1.17$, $p = .24$), and cognitive flexibility ($B = .005$, $t = .85$, $p = .40$), did not significantly predict respondents likelihood of using assertive messages.

The variables' standardized β coefficients were then examined in order to gain an understanding of each variable's relative contribution to the regression equation. Scenario ($\beta = -.27$) and Message Type ($\beta = -.33$) featured the largest coefficients. With β coefficients of $-.07$ and $.07$, power and conversation (respectively) made contributions

that were smaller and roughly equal (though in opposite directions). If conformity ($\beta = .07$) and trait assertiveness ($\beta = .06$) did make unique contributions to the equation, they would have each accounted made contributions that were about proportionately equal with one another.

Given the higher contributions of Scenario, two additional standard multiple regressions were performed in order to assess how the variables under study would affect likelihood of message use in each of the individual scenarios (Roommate and Car):

In the first regression, the variables under study were used to predict likelihood of message use in the Roommate scenario. The model was significant, $F(9, 374) = 4.43$, $p < .001$, and predicted 9.6% of the variation, adjusted $R^2 = .08$. While the findings were mostly analogous to what was found for the previously described regression, one previously non-significant predictor achieved significance (extroversion, $B = .11$, $t = 2.07$, $p = .04$), and another approached significance (trait assertiveness, $B = .19$, $t = 1.77$, $p = .08$). Additionally, one of the variables that approached significance in the first regression failed to achieve significance in this investigation of the Roommate scenario (conformity orientation, $B = .02$, $t = .44$, $p = .66$).

A second standard multiple regression was then performed in order to investigate the possibility of additional effects that pertained solely to the Car scenario. The model predicted 28.4% of the variation, adjusted $R^2 = .27$, $F(9, 368)$, $p < .001$. In contrast to the previous two regressions, this analysis identified two new predictors that approached significance: conformity orientation ($B = .09$, $t = 1.77$, $p = .08$) and argumentativeness ($B = .05$, $t = 1.84$, $p = .07$). In addition, and several predictors that were active in the regression for the Roommate scenario, conversation orientation ($B =$

.003, $t = .06$, $p = .95$), power ($B = .03$, $t = .26$, $p = .79$), extroversion ($B = -.29$, $t = -.53$, $p = .59$), and trait assertiveness ($B = .10$, $t = .94$, $p = .35$) had no bearing in determining respondents' likelihood of message use. Taken together, these final analyses again suggest that features of the individual scenarios were likely responsible for determining which predictors were active in determining respondents' likelihood of message use.

In sum, to provide an answer to RQ2 that is both comprehensive and succinct, the role of each pathway and its various predictors appears dependent upon the extent to which aspects of the social situation contain cues that elicit behavior germane to individuals' personal traits and previously developed social schemas.

Chapter 4

DISCUSSION

This study sought to investigate how family communication patterns (conversation orientation and conformity orientation) present in one's family of birth contribute to trends in their preferences for assertive messages. Taken as a whole, the study's results provide some support for the theoretical model proposed, while also suggesting that the extent individuals behave assertively is more dependent on social context than originally hypothesized. Discussion will begin with consideration of the results pertaining to the relationships between FCPs and the development of the various traits under study hypothesized by the indirect causal path, followed by interpretation of the results germane to FCPs', traits', and relational power's impact in determining their expected use of assertive communication in social situations.

Discussion of Trait Analyses

Predictors of Cognitive Flexibility

As previously discovered by Koesten et al. (2009), the FCPs of conversation and conformity orientation each predicted the development of cognitive flexibility in their expected directions (with there being a positive relationship between conversation orientation and cognitive flexibility, and a negative association between conformity orientation and said construct), and there were significant differences between the family

types featuring higher levels of conversation orientation (pluralistics and consensuals) and the protective family type (low conversation and high conformity orientations). One ambiguity unable to be explored by the results of the present study concerns laissez-faires' reporting levels of cognitive flexibility that were about equal with pluralistics' and consensuals'. One possible explanation for this result rests in the nature of the laissez-faire family typology: Family members of this type are less conversationally involved with one another and might accordingly establish strong relational ties with individuals *outside* their family (Koerner & Fitzpatrick, 2002a). While laissez-faires do not have high levels of conversation orientation within their own family, they may engage in regular dialogue on a sufficiently wide range of topics with others (e.g. friends, teachers, coaches, etc.), which may in turn render them about as cognitively flexible as those from consensual and pluralistic families.

At the same time, however, laissez-faires' somewhat higher than hypothesized levels of cognitive flexibility could have been a product of the study's sample, as respondents reported higher levels of conversation orientation ($M = 5.20$) and lower levels of conformity orientation ($M = 2.50$) than previous FCP research. This is an issue that could have impacted many of this study's findings (significant, null, as well as those that approached significance). While many of the hypothesized orderings for the family types did emerge, differences between typologies were usually on the smaller side. This could have been the product of higher conversation orientation means negating the effects of conformity orientation, given that conversation orientation was hypothesized as promoting trait development, while conformity orientation was predicted as discouraging

it. All in all, effects for all of the study's hypotheses might have been larger with a sample featuring means for the FCP measures that were less skewed.

Returning to the issue of laissez-faires' somewhat higher than predicted levels of cognitive flexibility, this also suggests that protectives' lower levels of the construct are likely the product of an interaction between a low conversation orientation, and a high conformity orientation, given that laissez-faires' (families with low orientations towards both conversation and conformity) means for the construct were not significantly different from pluralistics' and consensuals'.

Predictors of Trait Assertiveness and Argumentativeness

Also as hypothesized, cognitive flexibility did play some role in predicting assertiveness levels, suggesting that possessing stronger awareness of one's behavioral options likely facilitates the emergence of greater trait assertiveness. Additionally, respondents' mean trait assertiveness levels reflected the ordering proposed by H₂, with the largest and most significant differences existing between pluralistics and protectives, even though there were no significant differences between pluralistics, consensuals, and laissez-faires.

The supplementary regression analysis between FCPs and trait assertiveness suggests a negative relationship between conformity orientation and said construct. On the other hand, no relationship emerged between conversation orientation and trait assertiveness, which implies that the link between conversation orientation and trait assertiveness is both (a.) indirect and (b.) mediated by cognitive flexibility.

The absence of a relationship between FCPs and argumentativeness was surprising to the extent that the qualities of each family type were suggestive of

individuals' general predispositions to argue. Equally unexpected was cognitive flexibility's subsequent predicting of argumentativeness: These results suggest that similar to the relationship between conversation orientation, cognitive flexibility, and assertiveness, the relationship between FCPs and argumentativeness is most likely indirect, and the product of cognitive development following from higher levels of conversation orientation within one's family, rather than the proposed hypothesis where individuals develop a predisposition to argue that directly reflects their family's communication style.

Predictors of Extroversion and Locus of Control

While formal hypotheses were not offered to predict differences in extroversion and locus of control by family type, the results of these analyses were generally in keeping with the present study's predictions concerning FCPs' impact on traits related to individuals' subsequent social interaction tendencies. First, pluralistics, consensuals, and laissez-faires all reported significantly higher levels of extroversion than protectives. This finding is intuitive to the extent that the protective type stresses the importance of intra-family relationships more strongly than the other three family types (Koerner & Fitzpatrick, 2002a). Second, assessments of the family typologies' locus of control indicated that while consensuals' and pluralistics' levels of the construct differed significantly from laissez-faires', protectives' were not substantially different from any of the remaining family types.

One possible explanation for this finding is that the laissez-faire family type's lack of familial cohesion and frequent interaction discourages the development of more *definitive* social schemas that provide individuals with the internalized understanding that

they (rather than external factors) are personally responsible for achieving their goals. Likewise, protectives might have reported higher than anticipated locus of control levels because while the FCP combination of low conversation/high conversation orientation generally discourages the promotion of the traits under study (trait assertiveness, extroversion, locus of control), the protective family type's comparatively greater emphasis of the importance of familial relationships represents a more *definitive* social schema than the one promoted by the laissez-faire typology. Accordingly, family typologies possessing a stronger sense of family identity may be partially responsible for the extent to which individuals develop either an internal or external locus of control.

Summary Assessments of FCPs' Impacts on Trait Development

The results of the previous analyses suggest that as hypothesized, FCPs do appear to be related to the development of various psychological traits. However, a broader question unable to be answered definitively by this study's findings is the extent to which there are meaningful differences between the more "adjacent" (e.g. pluralistics and consensuals or consensuals and laissez-faires) family types for some of the traits measured (e.g. cognitive flexibility, extroversion, trait assertiveness, and locus of control). Again, while the orderings of the family types' means generally reflected those proposed in the study's hypotheses, family types "closer" to one another usually did not report significant differences in assessments of the traits under study. Examples include the absence of significant differences between pluralistics, consensuals, and laissez-faires on reported levels of (a.) cognitive flexibility, (b.) extroversion, as well as (c.) the lack of significant differences between consensuals and laissez-faires from pluralistics and protectives for assessments of trait assertiveness, and (d.) protectives' average locus of

control scores, which were not significantly different from the remaining three family types.

The results of this study suggest two possible explanations concerning the nature of trait differences among the family typologies. First, as previously discussed, these results could have been the product of the study's sample, where the skewed means for conversation and conformity orientations resulted in smaller effects, which could have resulted in fewer significant differences between the outer and innermost family types. Second, FCPs might only render substantial differences between the family types bearing the least amount of similarity in terms of the ways that family members communicate with one another (again, pluralistics and protectives). Without additional data from other samples, this question cannot be answered definitively from the present results. Despite this potentially unsatisfying conclusion, again, the observed trait differences between family types should be interpreted as representing support for the claim that differences in family communication do appear to have impacts on the development of individual traits, and that these trait differences almost certainly play a role in shaping individuals' subsequent competencies and experiences as social actors.

Expected Message Behavior

Discussion of Respondents' Message Preferences and Expected Likelihood of Use

The results for respondents' expected communicative behavior in the Roommate and Car scenarios suggest two primary themes. First, both overall and by individual scenario, respondents' lower expected likelihood of using highly assertive messages implies that participants experienced a general unease with the prospect of

behaving in a very assertive manner: Common to both scenarios was a greater willingness to use low assertive messages in lieu of more highly assertive utterances. Second, respondents' preferences for assertive messages differed substantially by scenario, suggesting that the nature of the social situation also likely had an impact in determining both (a.) likelihood of message use and (b.) how assertive respondents believed their messages should be.

Initial support for the claim that the nature of the social situation substantially informs the assertiveness of individuals' message behavior lies in the differences of respondents' overall likelihood of using messages for each of the two scenarios. Respondents assigned to the Roommate scenario indicated significantly greater likelihood of using messages than those in the Car scenario. This finding implies that respondents were more willing to speak on their own behalf in the Roommate scenario than the Car scenario. Greater likelihood of message use in one scenario is related to the concept of assertiveness, because regardless of the types of message preferred by individuals, saying anything to further one's goals (even using a low assertive message) represents a more assertive course of action than saying nothing at all. Therefore, this difference in likelihood of message use by scenario implies that features of the Roommate scenario scenarios elicited more assertive message behavior than the Car scenario.

Consideration of respondents' message preferences, the details of each scenario, and speculation on respondents' motivations provide clues as to why message preferences differed for each vignette. In the Roommate scenario, while low assertive messages were still the most preferred, the less preferred message types of medium and highly assertive messages were preferred about as equally. In contrast, individuals

responding to the Car scenario expressed a more distinct hierarchy of message preferences in the Car scenario: Medium assertive messages ranked first in terms of likelihood of use, which were followed by low assertive messages; highly assertive messages received the lowest levels of expected use. One possible explanation for this difference between situations lies in the nature of the Roommate scenario: Respondents were told that their roommate(s) were responsible for a messy apartment that they shared. As such, participants may have felt more at ease with the prospect of using highly assertive messages for the reason that they regarded asking roommates to pick up after themselves within their rights as individuals who shared a living space with the responsible parties. In the Car scenario, respondents were told that their romantic partner was seriously considering the purchase of a new car s/he could not realistically afford, and the reader was asked how s/he would tell the partner that his/her proposed course of action represented an unsound financial decision. Participants may have shied away from more assertive messages concerning personal finances because they believed that they were inappropriate in dating relationships, and resulted in the speaker appearing either insensitive or overly controlling toward their partner.

In addition to the scenario-based explanations described above, several other similar, interrelated hypotheses provide additional insight into the nature of respondents' message preferences in each of the two scenarios. First, politeness norms and concerns with face maintenance likely played a role in determining respondents' preferences for assertive messages. According to Brown and Levinson's politeness theory (1987), very assertive messages may suggest a lack of concern or regard for their interaction partner (or, threaten their "positive face") as well as representing messages interpretable as

possibly imposing on hearers' individual freedoms (threaten their "negative face"). Applying Brown and Levinson's (1987) politeness theory to respondents' message preferences in each scenario, their expected use of (a.) low assertive messages in both scenarios and (b.) moderately assertive messages in the Car scenario express little in the way of negative evaluations towards the described interaction partners. Accordingly, these types of messages may have been selected to maintain hearers' sense of positive face. Similarly, these messages appeal to targets' sense of negative face in that they embody only *suggestions* for possible action, rather than direct impositions or requests. At the same time, respondents' relatively equal use of medium and highly assertive messages in the Roommate scenario implies that face concerns may have been somewhat less operative than the aggregate message preferences may suggest. Roommates living with one another may have felt more at ease with addressing one another in a more direct and assertive manner, most likely due to increased interpersonal familiarity and the necessity of interacting with one another on a regular, more frequent basis. In contrast, participants considering highly assertive messages in the Car scenario may have felt that they ran the risk of appearing callous or insensitive toward their romantic partner, and instead gravitated more toward medium and low assertive messages in order to maintain their own positive face in the eyes of their partner.

A second closely related explanation for respondents' preferences for less assertive messages lies in the difficulty of designing communication that furthers the achievement of both instrumental and relational goals, which are present in almost all instances of social interaction. More assertive messages tend to embody more direct expressions of individuals' instrumental goals. Similarly, less assertive messages often

allow individuals to pursue more relational goals (e.g. avoiding a fight between one's romantic partner), but perhaps at the expense of achieving instrumental goals (e.g. unequivocally saying "No" to a romantic partner's request to spend time together due to previous time commitments). Likewise, extant research examining the relationship between compliance-oriented communication also suggests that relational concerns frequently constrain the types of message behavior individuals perceive as available to them (Kellermann, 2004). Other perspectives such as the constructivist tradition (Burleson & Rack, 2008) and O'Keefe's Message Design Logic approach (O'Keefe & McCornack, 1987) maintain that the most successful messages are those that achieve multiple goals simultaneously. Respondents' overall preferences for low and medium assertive messages in this study suggest that participants were probably at least implicitly aware of this challenge, and in turn may have favored messages that would allow them to manage these opposing concerns. This tension was more evident in the Roommate scenario, and the absence of differences between medium and high assertive messages suggests that respondents experienced some difficulty in deciding whether to employ utterances that either (a.) maintained harmony in the relationship or (b.) directly conveyed respondents' dissatisfaction with a dirty apartment they were not responsible for causing. In the Car scenario, however, respondents' preference for medium assertive messages may be interpreted as an attempt to both maintain the relationship, but also make their concerns known to their romantic partner.

A third and final explanatory account for respondents' message preferences lies in the importance of a matter to the speaker. Ostensibly, individuals should exhibit more assertiveness if a matter is of greater immediate importance to them. Across

scenarios, respondents may have indicated less preference for highly assertive messages simply because the situations described may not have been perceived as highly important and meriting of very assertive responses. Likewise, the scenarios utilized were not likely interpreted as being closely tied to participants' self-concepts due to the need to design scenarios that all respondents could envision themselves facing. On the other hand, respondents likely reported higher expected use of highly assertive messages in the Roommate scenario than the Car scenario for the reason that the issue was of greater personal relevance, given that individuals were told that they share a dwelling with two other individuals, which refers to a set of living conditions respondents must deal with on a day-to-day basis. Conversely, participants may have been less likely to use highly assertive messages in the Car scenario because while they had a romantic relationship with the described individual, the problem described was less directly their own.

All in all, though the above explanations provide some insight on the processes likely at work in determining respondents' message preferences, the study's results are silent on whether there is a de facto preference among broader populations for moderate (medium) or low assertive messages, or if individuals' preferences for assertive messages depend entirely upon the nature of the social situation. Admittedly, a paradigmatic shift favoring the influence of the situation creates problems for generalizing from the present findings, given that message preferences only *two* social encounters were assessed in the present study. In spite of the absence of additional data, we offer the tentative (and speculative) conclusion that in the absence of factors that may promote message assertiveness (e.g. increased personal relevance, decreased relevance of

politeness norms), individuals often use moderately (medium) or less (low) assertive messages in order to behave in a socially acceptable manner.

Impact of FCPs and Traits in Determining Preferences for Assertive Messages

Individuals' FCPs and trait levels (trait assertiveness, argumentativeness, extroversion, and locus of control) were expected to predict message behavior tendencies that reflected these traits. Trait levels did make some contributions in predicting of respondents' message preferences, but more specific analyses suggest the more nuanced conclusion that whether traits play a role in predicting subsequent message behavior appears somewhat dependent upon the extent a situation contains cues that render individuals' traits active in affecting the messages they use. Though speculative, one interesting area of discussion involves the general congruence between communicative aspects of each scenario, and the traits and FCPs that made significant or near significant contributions to respondents' expected message behavior for each scenario. Said differently, expected message behavior in each scenario may have been affected somewhat by a set of traits and social schemas that bear some similarity to the communicative nature of each scenario.

In the Roommate scenario, variables that predicted likelihood of use and preferences for specific message types included conversation-orientation, trait assertiveness, and extroversion. Given that the Roommate scenario was based in a conflict prompting imminent interpersonal exchange between described interaction partners, these traits and FCPs reflect a general concern with individuals' willingness to engage others in communication. In the Car scenario, however, the variables included conformity orientation, argumentativeness, and locus of control. In contrast to the

variables operative in the Roommate scenario, these predictors instead appear related to the extent individuals seek compliance or attempt to exert control over others. To abbreviate in upcoming discussion, each scenario's situational cue and its related traits will be referred to as either "willingness to communicate" (Roommate) or "willingness to control" (Car).

Again, conversation orientation, trait assertiveness, and extroversion made contributions to respondents' likelihood of message use and their preferences for specific message types in the Roommate scenario (but not the Car scenario), and this network of traits reflected the Roommate scenario's concern with willing to engage others. Conversation orientation probably predicted likelihood of message use given how much verbal communication is necessary to sustain a functional relationship, such as among roommates. As previously discussed, assertiveness reflects a speaker's willingness to make his/her desires or preferences directly and explicitly known in the face of the type of adverse consequences that the Roommate scenario represents (Rich & Schroeder, 1976). Extroversion, another trait concerned with individuals' willingness to engage others, may have predicted message use in the Roommate scenario rather than the Car scenario perhaps because the Roommate scenario was inherently more *social* in nature, as it featured a greater number of individuals than the Car scenario.

In the Car scenario, the variables of conformity orientation, argumentativeness, and locus of control either approached significance in their predicting respondents' likelihood of message use, or predicted respondents' preferences for specific message types. Similarly, each of these three variables reflect an underlying concern with the achievement of interpersonal compliance, suggesting that these traits play a role in

determining assertive message behavior in social situations where individuals wish to impose their will over others. The Car scenario featured similarity to the conformity dimension in the sense that respondents were asked to issue a statement to their romantic partner that both (a.) conveyed their disapproval with the partner's course of action, and (b.) stressed the importance of the partner complying with the reader (e.g. not buy the car). Argumentativeness may have contributed to respondents' expected message behavior in the Car scenario given the trait's concern with individuals' willingness to take a strong stance on a potentially touchy issue. Finally, locus of control did predict respondents' willingness to use medium assertive messages in the Car scenario. Also, given locus of control's individuals' perceptions of efficacy in managing situational outcomes, the trait merits placement within this second network of traits related individuals' willingness to actively seek compliance from others.

The present study's results suggest that while the primary source of message assertiveness was the nature of the situation, traits do likely have some bearing on individuals' message behavior. Relating these findings more generally to the types of processes proposed by the present theoretical model, the extent each path contributes to messages appears ultimately dependent upon the nature of the social situation, which facilitates contributions from variables that feature similarities and pertain to the situation.

Impact of Power on Message Behavior

Two hypotheses were offered concerning the impact of power differentials on individuals' expected use of assertive communication: that individuals possessing power in a described relationship would report greater expected use of more assertive messages

than individuals lacking power, and an ordering of respondents preferences of assertive messages based on (a.) whether or not they possessed power over their described interaction partner and (b.) their assigned family typology, where individuals from the more conversationally expressive family types were expected to report greater willingness to use more assertive messages. For the most part, possessing power did not render individuals more predisposed to use more assertive messages. In the Roommate scenario, individuals who were told they possessed power were reported less likelihood of using all three of the message types available to them than those who lacked power. Put another way, individuals assigned to the low power condition were actually *more* assertive than those who had with power, which is a finding contrary to the study's hypotheses. In contrast, power had no impact on respondents' expected message behavior in the Car scenario.

Regarding power's unexpected effect on respondents placed in the Roommate scenario, one possible explanation for this finding lies in the way in which power was operationalized in the Roommate scenario: Respondents in the low power condition were only previous acquaintances of their roommates, rather than close friends. High power respondents had a close friendship with one of their roommates, while the offending party was an acquaintance. Participants may have indicated less likelihood of using messages in the high power condition because they knew the problem would be relatively easy to address given their two-person majority. Accordingly, possessing power in this scenario might have resulted in an odd form of social loafing (Kravitz & Martin, 1986) where team members became less committed to the task at hand due to merely knowing that they possessed a majority over the messy roommate. On the

contrary, participants placed in the low power condition may have reported higher likelihood of use levels due to a higher perceived need to speak up themselves.

Another possible explanation for power's effect in the Roommate scenario lies in consideration of the scenario alongside its accompanying utterance set. Only three of the twelve utterances generated for the Roommate scenario make reference to the roommate who is the reader's best friend, and respondents in the high power condition may have reported lower likelihood of use for all message types because they would have actually preferred messages that made more explicit reference to their power as a two-person majority. However, this explanation appears ultimately unlikely for the reason that the Roommate scenario also produced effects seemingly unrelated to the messages available to respondents, such as the previously described effect for conversation orientation's promoting likelihood of message use, and the observed differences between the pluralistic and protective family types' likelihood of message use.

In contrast to the effect for power in the Roommate scenario, the power manipulation used in the Car scenario had no impact on respondents' expected message behavior, as participants' message use was essentially identical in both the low and high power conditions. One possibility for the absence of an effect rests in the previously addressed distinction between the pursuit of instrumental and relational goals. Just as goals may be divided into these two categories, power may also be characterized as being either relational or instrumental in nature, where individuals possessing *relational* power are able to generate rewards for less powerful interaction partners that are probably less tangible (e.g. those commonly found in romantic relationships, such as having a partner with a "great personality") than those able to be bestowed by individuals with

instrumental power (e.g. those held by employers). The power manipulation in the Car scenario may have been ineffective because it assumed that those possessing *relational* power (in this case, whether the reader possessed greater or fewer codependent tendencies than the described romantic partner) would result in greater likelihood of exerting *instrumental* power (use of more assertive messages) over one's interaction partner, while in actuality, the extent to which relational power informs the use of instrumental power may be more dependent on social context and/or the specific relationship under consideration. Again, as previously discussed, participants may have felt that it was simply not their place to directly express their thoughts concerning their partner's personal finances, regardless of whether they possessed relational power.

As a whole, the results from the study's power manipulations were probably not in keeping with the offered hypotheses (with accompanying hypotheses producing null findings) for two plausible reasons. First, the interpretation of social exchange theory (Thibaut & Kelley, 1959) that served as a rationale for H₇'s prediction that individuals possessing relational power over their interaction partners would use more highly assertive messages than those lacking power was likely flawed in that it tacitly assumed that individuals are concerned only with the achievement of *instrumental* goals, while in reality, they simultaneously possess multiple goals, with some being instrumental, and some being relational. Second, results reflecting the study's hypotheses for the interaction between power and message assertiveness might not have occurred due to the lack of more traditional power differentials. Results for this effect may have been different if the study had utilized scenarios describing interactions where the power

wielding individuals possess much more in the way of instrumental power, such as between professors and students, or employers and employees.

Limitations and Future Research

The results from the present study suggest several possibilities for future research pertaining to the exploration of FCPs' impact on individuals' use of assertive communication. First lies the issue concerning the study's very high estimates of statistical power, which likely contributed to the number of effects reported that achieved statistical significance. Simultaneously, most observed effects accounted for very small proportions of variance, which calls into question the extent to which this study's results reflect meaningful differences in individuals' traits and subsequent communicative behavior. As such, we acknowledge that the interpretations offered to provide an explanatory account of the study's findings must be tempered by this admission. Two possible courses of action exist to address this problem in future research utilizing a similar methodology: First, additional studies could employ a smaller sample size than the one used in the study reported here in order to achieve more moderate estimates of statistical power. Second, future work could use a similar sample size, but analyze the data via alternative methods that require sample sizes like the present study's.

The second issue involves the study's experiment-wise error rate (α_{ew}). As previously described, this study involved the use of thirty-seven statistical tests. With an assumed α level of .05, this produces an α_{ew} of .85, which suggests that the results of at least one or more analyses were statistically significant simply by chance. As such, one or more results were likely the product of Type 1 error. To remedy this limitation, future

work should involve methods that assess the impact of FCPs using a smaller number of statistical analyses.

Second, future studies should attempt to sample from populations with less skewed means for the FCP orientations of conversation and conformity. The FCP means observed in the present study were most likely related to the mainstream cultural values of the Mid-Atlantic and northeast areas of the U.S., which promote both (a.) open and frequent communicative exchange between parents and children and (b.) less authoritarian parenting styles. Samples from other geographic regions emphasizing more traditional family values (e.g. Midwestern and Southern locales) might provide samples featuring more moderate levels of conversation orientation, and somewhat increased levels of conformity orientation. The rationale for this recommendation is twofold. Future research with these more balanced means would more definitively demonstrate whether there are meaningful differences between more conceptually adjacent family types (e.g. pluralistics and concensuals, laissez-faires vs. protectives), as the most significant differences typically occurred only between pluralistics and protectives. Also, additional research using samples reporting more even levels of conversation and conformity orientation would also indicate whether the effects of FCPs are dependent upon the balance between families' levels of conversation and conformity: Again, many of the differences found by the present research were somewhat small, and possibly a product of the sample's reporting higher levels of conversation (which were hypothesized as promoting higher levels of trait assertiveness) and lower levels of conformity (which were expected to discourage the use of assertive messages).

Third, future investigations should more fully explore the effects of cognitive flexibility on other communicative traits and behaviors. Cognitive flexibility ultimately appeared related to individuals' willingness to engage others in communicative dialogue (though it did predict higher levels of trait assertiveness and argumentativeness), but the ways the construct affects other aspects of communication should be examined more fully.

Fourth, future research in this area must also explore the impact of the social situation on differences in assertive message use in more detail. The conclusion that emergent communication is largely situation-dependent is in many ways, unsatisfying, given both (a.) the wide range of social situations individuals face on a day-to-day basis and (b.) communication science's goal of identifying more specific trends in the ways individuals interact with one another. Future research should both (a.) employ more scenarios and (b.) attempt to identify specific situational cues that trigger the influence of FCPs and traits in predicting message assertiveness. This latter recommendation is important, given that conversation orientation significantly predicted message use in the Roommate scenario, while conformity orientation may have affected message behavior in the Car scenario. Future research should more specifically investigate this possibility.

Fifth, the impact of relational power requires much more investigation, as the results where power had (a.) the effect of discouraging message use in the Roommate scenario and (b.) no effect in message behavior in the Car scenario were not in keeping with the present study's hypotheses. Several possible explanations for these findings were offered (e.g. social loafing and relational [as opposed to instrumental] power's possibly having a null impact on message behavior), and these ultimately suggest that

power was not operationalized in a manner where possessing power in a relationship encouraged the use of more assertive messages. Future work using the scenario/likelihood of response methodology should use scenarios describing interpersonal relationships where power differences are more clearly evident to respondents in order to assess power's effect on their expected use of assertive messages.

Sixth, future work should utilize a different trait assertiveness measure, given that factor analyses of the Bakker Assertiveness Inventory (BAI) failed to identify conceptual relationships between the scale's items. While mean scores on the measure did mostly support the study's hypotheses, a more reliable measure would lend additional credence to research findings and their subsequent interpretations.

Practical Applications and Interpretations

First and foremost, the present study suggests the conclusion that the extent we as individuals feel comfortable asserting ourselves in interpersonal exchanges is more the product of previously internalized understandings of how we should behave in specific situations, and that this willingness is probably informed somewhat less by our family background and individual trait levels than previously hypothesized. Second, the study provides evidence that FCPs and other relevant traits do make secondary contributions in some circumstances; thus, the communicative atmosphere of the family unit seems to be at least somewhat relevant in promoting interaction tendencies related to communicative skill.

For that reason, the study's findings have some application for individuals who plan to begin families of their own. Family values and the communication patterns they promote are a personal matter, and the claim that some values and FCPs are

inherently “better” than others cannot be made. However, FCPs were demonstrated as impacting the development of several psychological and communication traits, which (as discussed above) may have made some contributions to individuals’ expected levels of message assertiveness. If these types of traits promote assertive message behavior that assists individuals achieve their goals, then some FCPs can be considered more advantageous than others. Given that the human experience is a social one and that we tend to smile upon displays of extroversion (which assertiveness represents a facet of) and open expression, (a.) being able to discuss a wide range of topics with one’s children and (b.) not imposing one’s will too strongly over other family members appear to represent desirable family communication benchmarks for future parents.

Theoretical Contributions

The results of the present study also offer additional support for extant communication theory that maintains that the ways individuals understand how they should behave is substantially informed by the politeness norms governing different types of social interaction (Brown & Levinson, 1987). Other theories and factors were discussed that also explained the study’s findings, such as constructivist theory (Burleson & Rack, 2008), message design (O’Keefe & McCornack, 1987), and the perceived importance of a matter to a speaker, but politeness theory merits special consideration as an explanation for message assertiveness for the reason that politeness explains commonalities in the human experience (desires to be thought of well by others, but also be free from their obligation), while the other approaches stress individual differences, the present application of FCP theory included (Koerner & Fitzpatrick, 2002a). Though politeness norms differ by scenario, individuals’ needs to maintain both their own and

their interaction partners' sense of face in different situations help to inform individuals how assertive their messages should be.

The results of this study fit especially well within the previously described schematic theories of interpersonal communication (Baldwin, 1992; Fletcher, 1993) that serve as the theoretical bedrock for FCP Theory (Koerner & Fitzpatrick, 2002a): To review, these perspectives posit that previously developed social models are responsible for determining social behavior, with some schemas pertaining to larger numbers of relationships than others (e.g. with a general social schema providing broad guidelines for interacting with all other individuals, and a more specific schema containing relational knowledge on behaving in romantic relationships).

The inception for this study was the product of theorizing that the characteristics of FCPs would promote the development of relational schemas that lead individuals to use assertive communication that reflects the extent individuals are able to express themselves when interacting with their families. However, the study's results instead suggest the far more nuanced conclusion that while FCPs appear to predict trait development in the directions hypothesized, which in turn play a role in predicting preferences for assertive messages, individuals' ultimate expectations for assertive message behavior appears far more dependent upon the influence of social factors (e.g. relationship type, specific relationship, social norms, etc). Likewise, these findings also strongly suggest that the social situation is instrumental in earmarking what traits and factors are active in determining message assertiveness. For example, situations featuring more intensive social interaction appear to result in extroversion's predicting of message

assertiveness, while situations likely to feature arguments may result in argumentativeness' predicting the use of more highly assertive messages.

Conclusion

The inspiration for this study was to identify broad commonalities present within the human experience based on differences in family communication. Though the observed findings suggest a fair amount of support for many of the causal processes hypothesized, their occurrence was more scattershot, and again, very dependent upon social context. To rephrase the conclusion of the present study's findings as reflecting schematic theories of interpersonal communication, the highly variable nature of social context renders it immensely difficult to behave in a highly manner across all relationships. Said more plainly, employees usually do not tell off their bosses, regardless of how assertive they may be, and spouses frequently employ a softer touch with one another during disagreements in the name of maintaining a harmonious marriage.

In some ways, the conclusion that assertive behavior appears more dependent upon social context than individual differences is relieving in the sense that it suggests that a great many individuals learn to become competent social actors despite their coming from less advantageous family communication backgrounds, or possessing lesser amounts of assertiveness-oriented traits. Said differently, the factors moderating assertive behavior (such as politeness concerns) likely help to "level the playing field" in the sense that both highly assertive and more timid individuals frequently arrive at the same general conclusions regarding what types of messages they should use when communicating their goals to others, suggesting that in some ways, at least with respects to assertive communication, we are more similar than different.

APPENDICES

Appendix A

Scenario/Utterance Pilot Test

Page 1

Thank you in advance for participating in the survey.

In the space below, type your COMM-341 Animal Name. You **MUST** type your Animal Name in order to receive extra credit.

Page 2: Instructions

Survey Instructions

We are interested in the ways people converse in relationships. You will have two tasks in this survey.

First, you will read a number of short scenarios, and answer a few questions about each one. Second, you will read a series of utterances an individual in the scenario might say, and answer two questions about each utterance. **IMPORTANT:** When reading each scenario, **imagine YOURSELF** in the situation.

Click the "Next" arrow below to begin the survey.

SCENARIOS

Roommate/Low Power

You are a sophomore who shares a three bedroom apartment with two other individuals from your major named Carson and Ray. Carson and Ray are best friends who needed a third roommate, and you agreed.

However, since you have begun living with Carson and Ray, you have discovered that you have very different expectations regarding the cleanliness of the common areas you share, such as the kitchen, living room, and bathroom. While you are by no means the cleanest person you know, Carson and Ray consistently leave the apartment messy to the point of it being unlivable, and in general, it no longer represents an appealing place for you to spend time at. After several weeks, you realize it's time to bring the issue up with Carson and Ray, as you have the whole rest of the school year ahead of you.

How realistic is this scenario?

Not Realistic 1 2 3 4 5 6 7 Very Realistic

Could you imagine yourself in this situation?

Not At All 1 2 3 4 5 6 7 Very Much

How dominant would you feel in these circumstances?

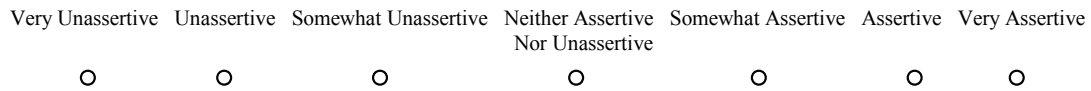
Not Dominant 1 2 3 4 5 6 7 Very Dominant

How much authority would you have in these circumstances?

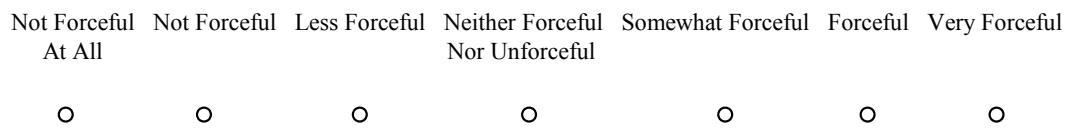
No Authority 1 2 3 4 5 6 7 A Lot of Authority

- “Could you guys try to pick up after yourselves a little more?”

How assertive is this message?

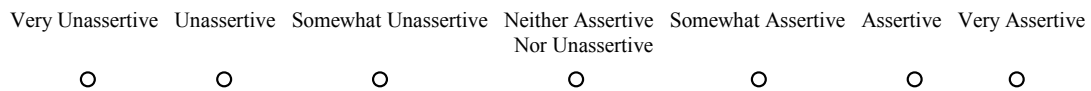


How forceful is this message?

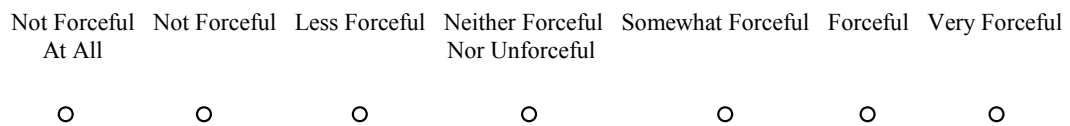


- “The place looks terrible, and it’s not fair for me to have to deal with a mess I didn’t make.”

How assertive is this message?



How forceful is this message?



- “When was the last time we cleaned around here?”
- “Guys, the place is a little messy.”
- “The place is a mess, let’s do something about it.”

- “Do you think we should pick up a little bit?”
- “Sometimes I get a little frustrated with how you guys keep the apartment.”
- “Do you guys have a few minutes to straighten things up a little bit?”
- “It’s been sort of a while since we cleaned up around here.”
- “When’s a good time for you guys straighten up?”
- “I’d really appreciate it if you two pitched in sometimes.”
- “Do you think we could pick up a little bit?”

Roommate/High Power

You are a sophomore who shares a three bedroom apartment with two other individuals from your major named Carson and Ray. You and Carson are best friends, while Ray is more of a mutual acquaintance who you thought would be a good roommate.

However, since you and Carson have begun living with Ray, you have discovered that you have very different expectations regarding the cleanliness of the common areas you share, such as the kitchen, living room, and bathroom. While you and Carson are by no means the cleanest people you know, Ray consistently leaves the apartment messy to the point of it being unlivable, and in general, the apartment no longer represents an appealing place for you to spend time at. After several weeks, you and Carson realize it's time to bring the issue up with Ray, as you have the whole rest of the school year ahead of you.

This is a realistic scenario.

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I could imagine myself in this situation

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

How powerful would you feel in this scenario?

Entirely Powerless Mostly Powerless Somewhat Powerless Neither Powerful Nor Powerless Somewhat Powerful Powerful Very Powerful

☐ ☐ ☐ ☐ ☐ ☐ ☐

How dominant or submissive would you feel in these circumstances?

Very Submissive Submissive Somewhat Submissive Neither Dominant Somewhat Dominant Dominant Very Dominant

○ ○ ○ ○ ○ ○ ○

How assertive is this message?

Very Unassertive	Unassertive	Somewhat Unassertive	Neither Assertive Nor Unassertive	Somewhat Assertive	Assertive	Very Assertive
○	○	○	○	○	○	○

How forceful is this message?

Not Forceful At All Not Forceful Less Forceful Neither Forceful Nor Unforceful Somewhat Forceful Forceful Very Forceful

○ ○ ○ ○ ○ ○ ○

- “The place looks terrible, and it’s not fair for us to have to deal with a mess we didn’t make.”

How assertive is this message?

Very Unassertive Unassertive Somewhat Unassertive Neither Assertive Nor Unassertive Somewhat Assertive Assertive Very Assertive

○ ○ ○ ○ ○ ○ ○

How forceful is this message?

Not Forceful At All Not Forceful Less Forceful Neither Forceful Nor Unforceful Somewhat Forceful Forceful Very Forceful

- “When was the last time we cleaned around here?”
- “Ray, the place is a little messy.”

- “The place is a mess, let’s do something about it.”
- “Do you think we should pick up a little bit?”
- “Ray, sometimes Carson and I get a little frustrated with how you keep the apartment.”
- “Hey Ray, do you have a few minutes to straighten things up a little bit?”
- “It’s been sort of a while since we cleaned up around here.”
- “When’s a good time for you to straighten up?”
- “Ray, we’d really appreciate it if you pitched in sometimes.”
- “Do you think we could pick up a little bit?”

Car/Low Power

You are in a romantic relationship, and your partner's name is Sam. While you care deeply for Sam, Sam is more independent than you are, and you tend to rely on Sam more heavily for advice and guidance. One day, you're both talking, and Sam brings up the possibility of trading in his/her car for a new vehicle. Sam already has a fair amount of credit card debt and student loans, and would have to take out another loan to make the trade.

Given Sam's present financial situation, you believe this is a bad idea. You are thinking about the best way to tell Sam how you feel about the matter.

How realistic is this scenario?

Not Realistic 1 2 3 4 5 6 7 Very Realistic

Could you imagine yourself in this situation?

Not At All 1 2 3 4 5 6 7 Very Much

How dominant would you feel in these circumstances?

Not Dominant 1 2 3 4 5 6 7 Very Dominant

How much authority would you have in these circumstances?

No Authority 1 2 3 4 5 6 7 A Lot of Authority

• "This is a terrible idea. I will not let you do this to yourself."

How assertive is this message?

Very Unassertive Unassertive Somewhat Unassertive Neither Assertive Somewhat Assertive Assertive Very Assertive
Nor Unassertive

○ ○ ○ ○ ○ ○ ○

How forceful is this message?

Not Forceful Not Forceful Less Forceful Neither Forceful Somewhat Forceful Forceful Very Forceful
At All Nor Unforceful

○ ○ ○ ○ ○ ○ ○

- “You should probably try to deal with some of your existing debt before you take on any more.”

How assertive is this message?

Very Unassertive Unassertive Somewhat Unassertive Neither Assertive Somewhat Assertive Assertive Very Assertive
Nor Unassertive

○ ○ ○ ○ ○ ○ ○

How forceful is this message?

Not Forceful Not Forceful Less Forceful Neither Forceful Somewhat Forceful Forceful Very Forceful
At All Nor Unforceful

○ ○ ○ ○ ○ ○ ○

- “Have you thought about buying a used car instead?”

How assertive is this message?

Very Unassertive Unassertive Somewhat Unassertive Neither Assertive Somewhat Assertive Assertive Very Assertive
Nor Unassertive

○ ○ ○ ○ ○ ○ ○

How forceful is this message?

Not Forceful Not Forceful Less Forceful Neither Forceful Somewhat Forceful Forceful Very Forceful
At All Nor Unforceful

○ ○ ○ ○ ○ ○ ○ ○

- “What you’re talking about is financial suicide. I can’t get behind this decision.”
- “You might want to think this one over a little more before you do anything.”
- “Let’s be real, you just can’t afford this right now.”
- “If you’re really going to do this, you should buy a used car instead of a new one.”
- “I know you want that new car, but wouldn’t it feel better to get a new car a little later without so much debt on your shoulders?”
- “If you *really* think you can pull it off, go ahead.”
- “There’s no way I can let you do this.”
- “Taking on any more unnecessary debt is just going to hurt you in the long run.”
- “This is a big decision. You should wait a few more months before you even *think* about doing something like this.”
- “In the end, you should do what you want, but I think this is just going to cause more problems for you.”
- “Maybe you should save a little more first.”
- “You should listen to me seriously about this: You should really consider sticking with your old car for a bit longer until you figure out your financial situation.”
- “You are *not* doing this. Are we clear?”
- “This is a bad idea, plain and simple.”
- “Financially, I don’t think now is the right time for you to do this. Obviously, I can’t make the choice for you, but I just wanted to let you know my opinion.”
- “I guess you could do it, but I don’t think it’s a good idea.”

- “Even though I know this is what you want, it’s a better idea to wait.”

Car/High Power

You are in a romantic relationship, and your partner's name is Sam. While you care deeply for Sam, Sam is less independent than you are, and tends to rely on you more heavily for advice and guidance more so than you do him/her. One day, you're both talking, and Sam is asking you what you think about the idea of trading in his/her car for a new vehicle. Sam already has a fair amount of credit card debt and student loans, and would have to take out another loan to make the trade.

Given Sam's present financial situation, you believe this is a bad idea. You are thinking about the best way to tell Sam how you feel about the matter.

This is a realistic scenario.

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

I could imagine myself in this situation

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

How powerful would you feel in this scenario?

Entirely Powerless Mostly Powerless Somewhat Powerless Neither Powerful Nor Powerless Somewhat Powerful Powerful Very Powerful

☐ ☐ ☐ ☐ ☐ ☐ ☐

How dominant or submissive would you feel in these circumstances?

Very Submissive Submissive Somewhat Submissive Neither Dominant Nor Submissive Somewhat Dominant Dominant Very Dominant

☐ ☐ ☐ ☐ ☐ ☐ ☐

- “This is a terrible idea. I will not let you do this to yourself.”

How assertive is this message?

Very Unassertive	Unassertive	Somewhat Unassertive	Neither Assertive Nor Unassertive	Somewhat Assertive	Assertive	Very Assertive
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How forceful is this message?

Not Forceful At All	Not Forceful	Less Forceful	Neither Forceful Nor Unforceful	Somewhat Forceful	Forceful	Very Forceful
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- “You should probably try to deal with some of your existing debt before you take on anymore.”

How assertive is this message?

Very Unassertive	Unassertive	Somewhat Unassertive	Neither Assertive Nor Unassertive	Somewhat Assertive	Assertive	Very Assertive
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How forceful is this message?

Not Forceful At All	Not Forceful	Less Forceful	Neither Forceful Nor Unforceful	Somewhat Forceful	Forceful	Very Forceful
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- “Have you thought about buying a used car instead?”
- “What you’re talking about is financial suicide. I can’t get behind this decision.”
- “You might want to think this one over a little more before you do anything.”

- “Let’s be real, you just can’t afford this right now.”
- “If you’re really going to do this, you should buy a used car instead of a new one.”
- “I know you want that new car, but wouldn’t it feel better to get a new car a little later without so much debt on your shoulders?”
- “If you *really* think you can pull it off, go ahead.”
- “There’s no way I can let you do this.”
- “Taking on any more unnecessary debt is just going to hurt you in the long run.”
- “This is a big decision. You should wait a few more months before you even *think* about doing something like this.”
- “In the end, you should do what you want, but I think this is just going to cause more problems for you.”
- “Maybe you should save a little more first.”
- “You should listen to me seriously about this: You should really consider sticking with your old car for a bit longer until you figure out your financial situation.”
- “You are *not* doing this. Are we clear?”
- “This is a bad idea, plain and simple.”
- “Financially, I don’t think now is the right time for you to do this. Obviously, I can’t make the choice for you, but I just wanted to let you know my opinion.”
- “I guess you could do it, but I don’t think it’s a good idea.”
- “Even though I know this is what you want, it’s a better idea to wait.”

Appendix B

Revised Family Communication Pattern Instrument

Conversation Orientation Subscale

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Neither Agree Nor Disagree
- 5 = Slightly Agree
- 6 = Agree
- 7 = Strongly Agree

- 1.) “In our family, we often talk about topics like politics and religion where some persons disagree with others.”

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

○ ○ ○ ○ ○ ○ ○

- 2.) “My parents often say something like “Every member of the family should have some say in family decisions.”

- 3.) “My parents often ask my opinion when the family is talking about something.”

- 4.) “My parents encourage me to challenge their ideas and beliefs.”

- 5.) “My parents often say something like ‘You should always look at both sides of an issue.’”

- 6.) "I usually tell my parents what I am thinking about things."
- 7.) "I can tell my parents almost anything."
- 8.) "In our family, we often talk about our feelings and emotions."
- 9.) "My parents and I often have long, relaxed conversations about nothing in particular."
- 10.) "I really enjoy talking with my parents, even when we disagree."
- 11.) "My parents encourage me to express my feelings."
- 12.) "My parents tend to be very open about their emotions."
- 13.) "We often talk as a family about things we have done during the day."
- 14.) "In our family, we often talk about our plans and hopes for the future."
- 15.) "My parents like to hear my opinion, even when I don't agree with them."

Conformity Orientation Subscale

- 1.) "When anything really important is involved, my parents expect me to obey without question."
- 2.) "In our home, my parents usually have the last word."
- 3.) "My parents feel that it is important to be the boss."
- 4.) "My parents sometimes become irritated with my views if they are different from theirs."
- 5.) "If my parents don't approve of it, they don't want to know about it."
- 6.) "When I am at home, I am expected to obey my parents' rules."
- 7.) "My parents often say things like 'You'll know better when you grow up'."
- 8.) "My parents often say things like 'My ideas are right and you should not question them.'"
- 9.) "My parents often say things like 'A child should not argue with adults.'"
- 10.) "My parents often say things like 'There are some things that just shouldn't be talked about.'"
- 11.) "My parents often say things like 'You should give in on arguments rather than risk making people mad.'"

Appendix C

Cognitive Flexibility Measure

*** Items marked R are reverse scored.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Neither Agree Nor Disagree
- 5 = Slightly Agree
- 6 = Agree
- 7 = Strongly Agree

1.) "I can communicate an idea in many different ways."

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

2.) "I avoid new and unusual situations." (R)

3.) "I feel like I never get to make decisions."

4.) "I can find workable solutions to seemingly unsolvable problems."

5.) "I seldom have choices when deciding how to behave." (R)

6.) "I am willing to work at creative solutions to problems."

7.) "In any given situation, I am able to act appropriately."

- 8.) "My behavior is a result of conscious decisions that I make."
- 9.) "I have many possible ways of behaving in any given situation."
- 10.) "I have difficulty using my knowledge on a given topic in real life situations." (R)
- 11.) "I am willing to listen and consider alternatives for handling a problem."
- 12.) "I have the self-confidence necessary to try different ways of behaving."

Appendix D

Extroversion Subscale from the Abbreviated Form of the Revised Eysenck Personality Questionnaire (EPQR-A)

*** Items marked R are reverse scored.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Neither Agree Nor Disagree
- 5 = Slightly Agree
- 6 = Agree
- 7 = Strongly Agree

1.) Are you a talkative person?

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

2.) Are you rather lively?

3.) Can you easily get some life into a rather dull party?

4.) Do you tend to keep in the background on social occasions? ***

5.) Are you mostly quiet when you are with other people? ***

6.) Do other people think of you as a being very lively?

APPENDIX E

Personal Efficacy Subscale from the Spheres of Control Instrument

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Neither Agree Nor Disagree
- 5 = Slightly Agree
- 6 = Agree
- 7 = Strongly Agree

1. When I get what I want it's usually because I worked hard for it.

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

○ ○ ○ ○ ○ ○ ○

2. When I make plans I am almost certain to make them work.
3. I prefer games involving some luck over games requiring pure skill.
4. I can learn almost anything if I set my mind to it.
5. My major accomplishments are entirely due to hard work and intelligence.
6. I usually don't make plans because I have a hard time following through on them.
7. Competition encourages excellence.
8. The extent of personal achievement is often determined by chance.

9. On any sort of exam or competition I like to know how well I do relative to everyone else.
10. Despite my best efforts I have few worthwhile accomplishments.

APPENDIX F

Argumentativeness Scale

This questionnaire contains statements about arguing controversial issues. Indicate how often each statement is true for you personally by marking the appropriate number:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Slightly Disagree
- 4 = Neither Agree Nor Disagree
- 5 = Slightly Agree
- 6 = Agree
- 7 = Strongly Agree

1.) While in an argument, I worry that the person I am arguing with will form a negative impression of me.

Strongly Disagree Disagree Slightly Disagree Neither Agree Nor Disagree Slightly Agree Agree Strongly Agree

☐ ☐ ☐ ☐ ☐ ☐ ☐

2.) Arguing over controversial issues improves my intelligence.

3.) I enjoy avoiding arguments.

4.) I am energetic and enthusiastic when I argue.

5.) Once I finish an argument I promise myself that I will not get into another.

6.) Arguing with a person creates more problems for me than it solves.

- 7.) I have a pleasant, good feeling when I win a point in an argument.
- 8.) When I finish arguing with someone I feel nervous and upset.
- 9.) I enjoy a good argument over controversial issues.
- 10.) I get an unpleasant feeling when I realize I am about to get into an argument.
- 11.) I enjoy defending my point of view on an issue.
- 12.) I am happy when I keep an argument from happening.
- 13.) I do not like to miss the opportunity to argue a controversial issue.
- 14.) I prefer being with people who rarely disagree with me.
- 15.) I consider an argument an exciting intellectual challenge.
- 16.) I find myself unable to think of effective points during an argument.
- 17.) I feel refreshed and satisfied after an argument on a controversial issue.
- 18.) I have the ability to do well in an argument.
- 19.) I try to avoid getting into arguments.
- 20.) I feel excitement when I expect that a conversation I am in is leading to an argument.

APPENDIX G

Bakker Assertiveness Inventory

Below are several different situations. Each is followed by one way of responding. Your task is to read each question and indicate how likely you are to respond in that way, according to the following scale:

- 1 = Very Unlikely
- 2 = Unlikely
- 3 = Somewhat Unlikely
- 4 = Neither Likely Nor Unlikely
- 5 = Somewhat Likely
- 6 = Likely
- 7 = Very Likely

***** Responses with “+” sign are reverse scored.**

- 1.) You have set aside the evening to get some necessary work done. Just as you get started some friends drop over for a social visit.

+ You welcome them in and postpone what you had planned to do.

Very Unlikely Unlikely Somewhat Unlikely Neither Likely Nor Unlikely Somewhat Likely Likely Very Likely

○ ○ ○ ○ ○ ○ ○

- 2.) You are standing in line when someone pushes ahead of you.

- You tell the person to get back in line behind you.

3.) A friend or relative asks to borrow your car or other valuable property but you would prefer not to lend it to them.

+ You lend it to them anyway.

4.) A person who has kept you waiting before is late again for an appointment.

+ You ignore it and act as if nothing has happened.

5.) Someone has, in your opinion, treated you unfairly or incorrectly.

- You confront the person directly concerning this.

6.) Friends or neighbors fail to return some items they have borrow from you.

- You keep after them until they return them.

7.) Others put pressure on you to drink, smoke pot, take drugs, or eat too much.

- You refuse to yield to their pressure.

8.) Another person interrupts you while you are speaking.

+ You wait until the other is finished speaking before you go on with your story.

9.) You are asked to carry out a task that you do not feel like doing.

- You tell the other that you don't want to do it.

10.) Your sexual partner has done something that you do not like.

+ You act as if nothing bothersome has happened.

11.) A salesperson has spent a great deal of time showing you merchandise but none of it is exactly what you want.

+ You buy something anyway.

12.) You are invited to a party or other social event, which you would rather not attend.

+ You accept the invitation.

13.) In a concert or a movie theater a couple next to you distracts you with their conversation.

- You ask them to be quiet or move somewhere else.

14.) In a restaurant you receive food that is poorly prepared.

- You ask the waiter or waitress to replace it.

15.) You receive incorrect or damaged merchandise from a store.

- You return the merchandise.

16.) A person who seems a lot worse off than you asks you for something you could easily do without but you do not want to.

+ You give the person what he/she asks for.

17.) Someone gives you – unasked for- a negative appraisal of your behavior.

- You tell the other you are not interested.

18.) Friends or parents try to get information from you that you consider personal.

+ You give them the information they want.

Appendix H

Results from Factor Analyses of Measures Used

RFCP Instrument

Factor 1: Conversational Range

$\alpha = 0.90$

- “I usually tell my parents what I am thinking about things.”
- “I can tell my parents almost anything.”
- “In our family, we often talk about our feelings and emotions.”
- “My parents and I often have long, relaxed conversations about nothing in particular.”
- “My parents encourage me to express my feelings.”
- “We often talk as a family about things we have done during the day.”

Factor 2: Conversational Inclusion

$\alpha = 0.74$

- “Every member of the family should have some say in family decisions.”
- “My parents often ask my opinion when the family is talking about something.”

Factor 3: General Conformity

$\alpha = 0.82$

- “My parents often say things like ‘My ideas are right and you should not question them.’”
 - “My parents often say things like ‘A child should not argue with adults.’”
 - “My parents often say things like ‘There are some things that just shouldn’t be talked about.’”
- “My parents often say things like ‘You should give in on arguments rather than risk making people mad.’”

Factor 4: Structural Traditionalism

$\alpha = 0.823$

- “When anything really important is involved, my parents expect me to obey without question.”
- “In our home, my parents usually have the last word.”
- “My parents feel that it’s important to be the boss.”
- “When I am at home, I am expected to obey my parents’ rules.”

Factor 5: Opinion Conformity

- “My parents sometimes become irritated with my views if they are different from theirs.”
- “My parents often say things like ‘My ideas are right and you should not question them.’”

Cognitive Flexibility Measure

Factor 1: Flexibility in Problem Solving

$\alpha = 0.731$

- “I can communicate an idea in many different ways.”
- “I can find workable solutions to seemingly unsolvable problems.”
- “I am willing to work at creative solutions to problems.”

Factor 2: Behavioral Inflexibility

$\alpha = 0.66$

- “I avoid new and unusual situations.”
- “I feel like I never get to make decisions.”
- “I seldom have choices when deciding how to behave.”

Factor 3: Behavioral Efficacy

$\alpha = 0.74$

- “In any given situation, I am able to act appropriately.”
- “My behavior is a result of conscious decisions that I make.”

Personal Efficacy Subscale (Locus of Control)

Factor 1: Perceived Internal Control

$\alpha = 0.73$

- “When I get what I want it’s usually because I worked hard for it.”

- “When I make plans, I am almost certain to make them work.”
- “My major accomplishments are entirely due to my hard work and intelligence.”

Factor 2: Competitiveness

$\alpha = 0.63$

- “Competitiveness encourages excellence.”
- “On any sort of exam or competition I like to know how well I do relative to everyone else.”

Factor 3: Perceived External Control

$\alpha = 0.55$

- “I usually don’t make plans because I have a hard time following through on them.”
- “The extent of personal achievement is often determined by chance.”

Argumentativeness Scale

Factor 1: Enjoyment of Arguing

$\alpha = 0.89$

- “I am energetic and enthusiastic when I argue.”
- “I have a pleasant, good feeling when I win a point in an argument.”
- “I enjoy a good argument over controversial issues.”
- “I enjoy defending my point of view on an issue.”
- “I have the ability to do well in an argument.”

Factor 2: General Argumentativeness

$\alpha = 0.85$

- “I do not like to miss the opportunity to argue a controversial issue.”
- “I feel refreshed and satisfied after an argument on a controversial issue.” (I don’t really understand why this item loaded with the others here, but it did.)
- “I feel excitement when I expect that a conversation I am in is leading to an argument.”

Factor 3: Argumentative Avoidance

$\alpha = 0.90$

- While in an argument, I worry that the person I am arguing with will form a negative impression of me.
- I enjoy avoiding arguments.
- Once I finish an argument I promise myself that I will not get into another.
- Arguing with a person creates more problems for me than it solves.
- When I finish arguing with someone I feel nervous and upset.
- I get an unpleasant feeling when I realize I am about to get into an argument.
- I am happy when I keep an argument from happening.
- I prefer being with people who rarely disagree with me.
- I find myself unable to think of effective points during an argument.
- I try to avoid getting into arguments.

APPENDIX I

Scenario Instructions for Main Study

In the next portion of the survey, you will read a short scenario describing a hypothetical interaction between yourself and another person.

IMPORTANT: Try your best to imagine yourself in the scenario described.

After reading the scenario, you will read a series of responses you could plausibly say to the individual described in the scenario.

After reading each response, indicate how likely it is you yourself would **actually** say something that resembles the statement provided.

Click the "Next" button to continue.

Roommate/Low Power

You are a sophomore who shares a three bedroom apartment with two other individuals from your major named Carson and Ray. Carson and Ray are best friends who needed a third roommate, and you agreed.

However, since you have begun living with Carson and Ray, you have discovered that you have very different expectations regarding the cleanliness of the common areas you share, such as the kitchen, living room, and bathroom. While you are by no means the cleanest person you know, Carson and Ray consistently leave the apartment messy to the point of it being unlivable, and in general, it no longer represents an appealing place for you to spend time at.

After several weeks, you realize it's time to bring the issue up with Carson and Ray, as you have the whole rest of the school year ahead of you.

How likely are you to say something that resembles each of the following statements in your discussion with Carson and Ray?

“When’s a good time for you guys to straighten up?”

Very Unlikely Unlikely Somewhat Unlikely Neither Likely Nor Unlikely Somewhat Likely Likely Very Likely

☐ ☐ ☐ ☐ ☐ ☐ ☐

Roommate/High Power

You are a sophomore who shares a three bedroom apartment with two other individuals from your major named Carson and Ray. You and Carson are best friends, while Ray is more of a mutual acquaintance who you thought would be a good roommate.

However, since you and Carson have begun living with Ray, you have discovered that you have very different expectations regarding the cleanliness of the common areas you share, such as the kitchen, living room, and bathroom. While you and Carson are by no means the cleanest people you know, Ray consistently leaves the apartment messy to the point of it being unlivable, and in general, the apartment no longer represents an appealing place for you to spend time at. After several weeks, you and Carson realize it's time to bring the issue up with Ray, as you have the whole rest of the school year ahead of you.

How likely are you to say something that resembles each of the following statements in your discussion with Carson and Ray?

“When’s a good time for you guys to straighten up?”

Very Unlikely Unlikely Somewhat Unlikely Neither Likely Nor Unlikely Somewhat Likely Likely Very Likely

☐ ☐ ☐ ☐ ☐ ☐ ☐

Car/Low Power

You are in a romantic relationship, and your partner's name is Sam. While you care deeply for Sam, Sam is more independent than you are, and you tend to rely on Sam more heavily for advice and guidance. One day, you're both talking, and Sam brings up the possibility of trading in his/her car for a new vehicle. Sam already has a fair amount of credit card debt and student loans, and would have to take out another loan to make the trade.

Given Sam's present financial situation, you believe this is a bad idea. You are thinking about the best way to tell Sam how you feel about the matter.

How likely are you to say something that resembles each of the following statements in your discussion with Sam?

“Maybe you should save a little more first.”

Very Unlikely Unlikely Somewhat Unlikely Neither Likely Nor Unlikely Somewhat Likely Likely Very Likely

☐ ☐ ☐ ☐ ☐ ☐ ☐

Car/High Power

You are in a romantic relationship, and your partner's name is Sam. While you care deeply for Sam, Sam is less independent than you are, and tends to rely on you more heavily for advice and guidance more so than you do him/her. One day, you're both talking, and Sam is asking you what you think about the idea of trading in his/her car for a new vehicle. Sam already has a fair amount of credit card debt and student loans, and would have to take out another loan to make the trade.

Given Sam's present financial situation, you believe this is a bad idea. You are thinking about the best way to tell Sam how you feel about the matter.

How likely are you to say something that resembles each of the following statements in your discussion with Sam?

"Maybe you should save a little more first."

Very Unlikely Unlikely Somewhat Unlikely Neither Likely Nor Unlikely Somewhat Likely Likely Very Likely

☐ ☐ ☐ ☐ ☐ ☐ ☐

REFERENCES

- Alberti, R., & Emmons, M. (2008). *Your perfect right: Assertiveness and equality in your life and relationships* (9th ed.). Atascadero, CA, US: Impact Publishers.
- Appelbaum, A. S., Tuma, J. M., & Johnson, J. H. (1975). Internal-external control and assertiveness of subjects high and low in social desirability. *Psychological Reports*, 37(1), 319-322.
- Bacon, C. C., & Severson, M. L. (1986). Assertiveness, responsiveness, and versatility as predictors of leadership emergence. *Communication Research Reports*, 3, 53-59.
- Bakker, C. B., Bakker-Rabdau, M. K., & Breit, S. (1978). The measurement of assertiveness and aggressiveness. *Journal of Personality Assessment*, 42(3), 277-284.
- Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin*, 112, 461-484.
- Botta, R. A., & Dumlao, R. (2002). How do conflict and communication patterns between fathers and daughters contribute to or offset eating disorders? *Health Communication*, 14(2), 199-219.
- Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage*. New York, NY, US: Cambridge University Press.
- Burleson, B. R., & Rack, J. J. (2008). *Constructivism theory*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Cooley, E. L., & Nowicki, S. (1984). Locus of control and assertiveness in male and female college students. *Journal of Psychology: Interdisciplinary and Applied*, 117(1), 85-87.

- Costa, P. T., & McCrae, R. (1980). Still stable after all these years: Personality as a key to some issues in adulthood and old age. In P. B. Baltes & O. G. Brim (Eds.), *Lifespan development and behavior* (Vol. 3, pp. 65-102). New York: Academic Press.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.
- Fletcher, G. J. O. (1993). Cognition in close relationships. *New Zealand Journal of Psychology*, 22(2), 69-81.
- Furnham, A., & Henderson, M. (1981). Sex differences in self-reported assertiveness in Britain. *British Journal of Clinical Psychology*, 20(4), 227-238.
- Hernandez, S. K., & Mauger, P. A. (1980). Assertiveness, aggressiveness and Eysenck's personality variables. *Personality and Individual Differences*, 1(2), 143-149.
- Hollandsworth, J. G. (1977). Differentiating assertion and aggression: Some behavioral guidelines. *Behavior Therapy*, 8(3), 347-352.
- Huang, L. (1999). Family communication patterns and personality characteristics. *Communication Quarterly*, 47(2), 230-243.
- Infante, D. A., & Rancer, A. S. (1982). A conceptualization and measure of argumentativeness. *Journal of Personality Assessment*, 46(1), 72-80.
- Kellermann, K. (2004). A goal-directed approach to gaining compliance: Relating differences among goals to differences in behaviors. *Communication Research*, 31(4), 397-445.
- Kerlinger, F. N. (1986). *Foundations of behavioral research* (3rd ed.). Fort Worth, TX: Harcourt Brace Jovanovich.
- Koerner, A. F., & Fitzpatrick, M. A. (1997). Family type and conflict: The impact of conversation orientation and conformity orientation on conflict in the family. *Communication Studies*, 48, 59-78.
- Koerner, A. F., & Fitzpatrick, M. A. (2002). Toward a theory of family communication. *Communication Theory*, 12(1), 70-91.

- Koerner, A. F., & Fitzpatrick, M. A. (2002). Understanding family communication patterns and family functioning: The roles of conversation orientation and conformity orientation. In W. B. Gudykunst (Ed.), *Communication yearbook 26*. (pp. 36-68). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Koesten, J., Schrod, P., & Ford, D. J. (2009). Cognitive flexibility as a mediator of family communication environments and young adults' well-being. *Health Communication, 24*(1), 82-94.
- Kravitz, D. A., & Martin, B. (1986). Ringelmann rediscovered: The original article. *Journal of Personality and Social Psychology, 50*(5), 936-941.
- Lashbrook, W. B., & Lashbrook, V. J. (1979). *The statistical adequacy of the social style profile*. Eden Prairie, MN: Wilson Learning.
- Ledbetter, A. M. (2009). Family communication patterns and relational maintenance behavior: Direct and mediated associations with friendship closeness. *Human Communication Research, 35*(1), 130-147.
- Martin, M. M., & Rubin, R. B. (1995). A new measure of cognitive flexibility. *Psychological Reports, 76*(2), 623-626.
- McCroskey, J. C., Heisel, A. D., & Richmond, V. P. (2001). Eysenck's BIG THREE and communication traits: Three correlational studies. *Communication Monographs, 68*(4), 360-366.
- O'Keefe, B. J., & McCornack, S. A. (1987). Message design logic and message goal structure: Effects on perceptions of message quality in regulative communication situations. *Human Communication Research, 14*(1), 68-92.
- O'Keefe, B. J. (1988). The logic of message design: Individual differences in reasoning about communication. *Communication Monographs, 55*(1), 80-103.
- O'Keefe, D. J. (2002). *Persuasion: Theory and research* (2nd ed.). Thousand Oaks, CA, US: Sage Publications, Inc.
- Orenstein, H., Orenstein, E., & Carr, J. E. (1975). Assertiveness and anxiety: A correlational study. *Journal of Behavior Therapy and Experimental Psychiatry, 6*(3), 203-207.

- Orrego, V. O. & Rodriguez, J. (2001). Family communication patterns and college adjustment: The effects of communication and conflictual independent on college students. *The Journal of Family Communication*, 1(3), 175-189.
- Rancer, A. S., & Avtgis, T. A. (2006). *Argumentative and aggressive communication: Theory, research, and application*. Thousand Oaks, CA, US: Sage Publications, Inc.
- Replogle, W. H., O'Bannon, R. M., McCullough, P. W., & Cashion, L. N. (1980). Locus of control and assertive behavior. *Psychological Reports*, 47(3), 769-770.
- Rich, A. R., & Schroeder, H. E. (1976). Research issues in assertiveness training. *Psychological Bulletin*, 83(6), 1081-1096.
- Rueter, M. A., & Koerner, A. F. (2008). The effect of family communication patterns on adopted adolescent adjustment. *Journal of Marriage and Family*, 70(3), 715-727.
- Schrodt, P., Ledbetter, A. M., & Ohrt, J. K. (2007). Parental confirmation and affection as mediators of family communication patterns and children's mental well-being. *Journal of Family Communication*, 7(1), 23-46.
- Snavey, W. B. (1981). The impact of social style upon person perception in primary relationships. *Communication Quarterly*, 29, 132-143.
- Spitzberg, B. H. (2003). Methods of interpersonal skills assessment. In J. O. Greene, & B. R. Burleson (Eds.), *Handbook of communication and social interaction skills*. (pp. 93-134). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. Oxford, England: John Wiley.
- Williams, J. M., & Stout, J. K. (1985). The effect of high and low assertiveness on locus of control and health problems. *Journal of Psychology: Interdisciplinary and Applied*, 119(2), 169-173.