

ABSTRACT

Title of Document: CHILDREN'S PERCEPTIONS OF THEIR
RELATIONSHIPS WITH MOTHERS,
FATHERS AND FRIENDS: A CROSS-
CULTURAL STUDY

Wonjung Oh, Doctor of Philosophy, 2008

Directed By: Professor Kenneth H. Rubin
Department of Human Development

The purpose of this study was to cross-culturally examine children's perceptions of their relationships with mothers, fathers and friends among South Korean and European-American children. During middle childhood and preadolescence, although parent-child relationships are presumed to be the primary source of social support, friendships become increasingly salient; provisions for closeness and interdependence begin to shift from parents to friends. Researchers, however, have mostly examined mother-child and father-child relationships and friendships in isolation. The present study examined children's mother-child and father-child relationships and friendships as relationship networks in terms of various latent relationship constructs (social provisions; negative interactions; power distance). Of particular interest was whether the traditional emphasis on the family system in the South Korean culture would reveal distinct patterns of children's relationships with their mothers, fathers and friends.

Participants included the South Korean and the European-American children ages 10 to 11 years old from two-parent families in the Seoul and the Washington

D.C. Metropolitan Area. Variable-centered and person-centered approaches were employed to address individual differences (latent classes) on relationship qualities. Results revealed both cultural dissimilarities and similarities. Cultural differences were found in the mean levels of affection, conflict, and punitive aspects. The South Korean children perceived more social provisions from their mothers and fathers than from their friends, whereas the European-American children perceived similar levels of social provisions from their mothers, fathers and friends. Despite the changes in today's South Korean society, the South Korean family system continues to play a major role in providing social provisions for South Korean children. Cultural similarities were found regarding the patterns of relationship networks on power distance in both of the South Korean and European-American samples. Structural Equation Modeling also revealed structural invariance in terms of the manner in which the relationship constructs were associated with children's satisfaction with their mothers and fathers. In addition, considerable heterogeneity was revealed in affection, punitive aspects, and power distance. Taken together, findings from the present study highlight the importance of considering cross-cultural perspectives as well as person-centered approaches in the examination of relationship qualities.

CHILDREN'S PERCEPTIONS OF THEIR RELATIONSHIPS WITH MOTHERS,
FATHERS AND FRIENDS: A CROSS-CULTURAL STUDY

by

Wonjung Oh

Dissertation submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2008

Advisory Committee:

Professor Kenneth H. Rubin, Chair
Professor Cathryn L. Booth-LaForce
Professor Natasha Cabrera
Professor Michele Gelfand
Professor Melanie Killen

© Copyright by
Wonjung Oh
2008

ACKNOWLEDGEMENTS

Throughout my graduate training at the University of Maryland, College Park, there are many people I wish to thank for their friendship, encouragement and inspiration. It has been a great privilege to work in the Laboratory for the Study of Child and Family Relationships, the “Rubin Lab”, in the Department of Human Development. Despite the fact that I have been 7,000 miles away from my hometown, Seoul, South Korea, intelligent and caring members of the Rubin Lab have helped me feel at home. I thank past and present members including Julie Wojslawowicz Bowker, Dr. Kim Burgess, Alli Buskirk-Cohen, Ebony Dashiell-Aje, Melissa Duchene, Kathleen Dwyer, Kathryn Ellison, Bridget Fredstrom, Sue Hartman, Angel Kim, Sarrit Kovacs, Kristina McDonald, Melissa Menzer, Margro Purple, Amy Kennedy Root, Jenn Wang, Alissa Wigdor as well as wonderful visiting scholars including Hao Liu and Drs. Seong-Yeon Park, Hyunsook Chung and Tina Malti.

I would like to extend my appreciation to my dissertation advisory committee members, Drs. Cathryn Booth-LaForce, Natasha Cabrera, Michele Gelfand, Melanie Killen and Ken Rubin, for their constructive feedback on my proposal and the final dissertation. I thank Dr. Booth-LaForce for her collaboration over the years and for serving on my committee even though she had to travel from Seattle. I also thank Dr. Cabrera for her support and unique perspective regarding father-child relationships. I thank Dr. Gelfand for serving as the Dean’s representative and for her unique perspective concerning cross-cultural study. Special thanks to Dr. Killen for her advice and insights on cross-cultural research.

I would like to express my sincere appreciation to Dr. Unhai Rhee, my master's advisor and a mentor throughout the years at Yonsei University in Seoul, South Korea. I thank her deeply for her support and advice, and for providing me with the South Korean data set for my dissertation. I extend my appreciation to Drs. Moon Ja Chung, Kyung Hee Kim, Myung Soon Kim, Sook Hyun Lee, Young Lee, Kyung Ja Park, and Sunjin Jung at Yonsei University for their support and guidance.

I also sincerely thank Dr. Gregory Hancock, my advisor of the Graduate Certificate program in the Department of Measurement, Statistics, and Evaluation, for his advice and the opportunity to discover my passion for research and data analysis. Special thanks to Dr. Jaehwa Choi for his advice on statistics and support over the years.

I extend my greatest thanks to my advisor and my mentor, Dr. Ken Rubin, for his support, encouragement and inspiration. Ken has helped me grow as a researcher and as a person. I admire the way he combines his depth and breadth of knowledge to impact research regarding human behavior and development. My greatest thanks go to Ken for providing me with opportunities to collaborate and meet with stellar scholars in the field and to obtain the necessary publications for a future career in academia. I chose to come to the United States of America from Seoul, South Korea to pursue my doctoral study with Ken. Ever since, it has been a great privilege having him as a mentor and a surrogate father, especially when my family is far away in Seoul. I sincerely thank him for his patience and confidence in me and I look forward to many years of collaboration and friendship.

Throughout my graduate training, I have been blessed with support and love from my dear friends. I thank Dr. Soyeon Park for her encouragement and a lot of laughter that we shared. I have been fortunate to work with Dr. Hyoun Kim and I appreciate her support. In Maryland, I had the great fortune of meeting two of my best friends and my biggest supporters, Angel and David. I would like to express my most sincere thanks for their support, encouragement and excitement that we have shared together at the University of Maryland. As well, my very special thanks to Ebony, Menzer and Duchene for their friendships and support over the years.

Finally, my love and thanks go to my family. My heartfelt thanks and appreciation go to my mom for her unconditional love, support and for believing in me. I dedicate my dissertation to my late dad. I thank him for teaching me the love of learning and for filling up my childhood and adolescence with excitement and happy memories. I really miss you, dad. I have been fortunate to grow up with my dearest sisters, Woo Young and Jung Joo, and my brother, Jung Kyu, and I thank them for their love and fun we have had together. My great appreciation goes to my Grandma in An-Dong for her unwavering support. I also thank my in-laws for their valuable support and love.

My deepest thanks and love go to my husband, JooHong. He has been full of support and has been my very best friend since our undergraduate years at Yonsei University. I thank him for his strength, encouragement and enthusiasm for everything I do. I look forward to the journey that we will have together. Lastly, to my son, Ethan, you have brought me so much joy and happiness. I look forward to the many adventures that we will have together as a family.

TABLE OF CONTENTS

LIST OF TABLES	vii
LIST OF FIGURES.....	ix
CHAPTER I: OVERVIEW	1
The Specific Aims	3
CHAPTER II: BACKGROUND AND SIGNIFICANCE	5
Part I: Relationships with Mothers, Fathers, and Friends in Middle Childhood	5
Vertical versus Horizontal Relationships: Power Asymmetry versus symmetry.....	5
Positive Dimensions of Relationships: Social Provisions.....	7
Negative Interactions: Conflicts and Punitive Aspects	19
Part II: Culture and Relationships with Mothers, Fathers and Friends	24
Culture as a Developmental Context for Individual Development	24
Satisfaction: Individual Evaluation of Appropriateness of the Relationships.....	34
Overview of the Present Study.....	35
Purposes and Hypotheses of the Study.....	37
CHAPTER III: METHODOLOGY.....	43
Participants	43
Procedures	44
South Korean Sample	44
European American Sample	44
Measure.....	44
Data Analyses	45
CHAPTER IV: RESULTS.....	49
Overview of Data Analytic Plans.....	49
Part I: Latent Constructs of Mother-Child and Father-Child Relationships and Friendships	50
Mother-Child Relationships.....	52
Father-Child Relationships.....	54
Friendships	55
Part II: The Patterns of Relationship Networks across Mother-Child and Father-Child Relationships and Friendship: Within-Culture Examination ..	57
Affection	59
Intimacy	62
Positive Interactive Behaviors	64

Conflict	67
Punitive Aspects.....	70
Power Distance	73
Part III: Relationship Qualities and Children's Satisfaction with the Relationships with Mothers, Fathers and Friends: Cross-Culture Examination	76
Mother-Child Relationships	76
Father-Child Relationships.....	79
Friendships.....	81
CHAPTER V: DISCUSSION.....	83
Latent Constructs of Mother-Child and Father-Child Relationships and Friendships	84
Measurement Equivalence.....	84
Latent Relationship Constructs in Mother-Child Relationships.....	85
Latent Relationship Constructs in Father-Child Relationships.....	88
Latent Relationship Constructs in Friendships	89
The patterns of Relationship Networks across Mother-Child and Father-Child Relationships and Friendships.....	90
Positive Social Provisions.....	91
Negative Dimensions	92
Power Distance.....	95
Distinct and yet Complementing Aspects of Variable-Centered and Person-Centered Approaches	95
Relationship Qualities and Children's Satisfaction with the Relationships with Mothers, Fathers and Friends.....	95
Structural Invariance in the Latent Factor Structure.....	98
Mother-Child Relationships.....	99
Father-Child Relationships.....	100
Friendships	102
Conclusions and Directions for Future Research.....	103
TABLES	107
APPENDICES	118
Appendix A: Network of Relationship Inventory (English)	118
Appendix B: Network of Relationship Inventory (Korean)	138
REFERENCES	150

LIST OF TABLES

1. Indicators of Latent Constructs.....	107
2. Network of Relationship Inventory Item Means and Standardized Deviations ...	108
3. Correlations among All Relationship Factors in Mother-Child relationships	109
4. Correlations among All Relationship Factors in Father-Child Relationships	109
5. Correlations among All Relationship Factors in Friendships.....	110
6. Standardized Factor Loadings and Residuals in the Measurement Portion of the Model (Confirmatory Factor Analysis).....	111
7. Structural Path Coefficients and Standard Errors for the Effects of Country on Latent Relationship Constructs (MIMIC DIF)	112
8. Affection across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)	113
9. Affection across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)	113
10. Intimacy across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)	113
11. Intimacy across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)	113

12. Positive Interactive Behaviors across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)	114
13. Positive Interactive Behaviors across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)	114
14. Conflict across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)	114
15. Conflict across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)	114
16. Punitive Aspects across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample).....	115
17. Punitive Aspects across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)	115
18. Power Distance across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample).....	115
19. Power Distance across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)	115
20. Standardized Path Coefficients and Standard Errors in the Structural Model....	116
21. Correlations among Exogenous Variables in the Structural Model	117

LIST OF FIGURES

1. MIMIC Model with DIF Effects in Mother-Child Relationships.....	51
2. Structural Portion of Factor Mixture Modeling.....	57
3. Means of the Estimated Measured-item Means for Latent Classes.....	60
4. Means of the Estimated Measured-item Means for Latent Classes.....	60
5. Means of the Estimated Measured-item Means for Latent Classes.....	63
6. Means of the Estimated Measured-item Means for Latent Classes.....	63
7. Means of the Estimated Measured-item Means for Latent Classes.....	66
8. Means of the Estimated Measured-item Means for Latent Classes.....	66
9. Means of the Estimated Measured-item Means for Latent Classes.....	69
10. Means of the Estimated Measured-item Means for Latent Classes	69
11. Means of the Estimated Measured-item Means for Latent Classes	71
12. Means of the Estimated Measured-item Means for Latent Classes	71
13. Means of the Estimated Measured-item Means for Latent Classes	74
14. Means of the Estimated Measured-item Means for Latent Classes	74
15. Structural Portion of a multi-group SEM	77

CHAPTER I

OVERVIEW

The significance of close interpersonal relationships is well-established in both the theoretical and empirical literatures (Hinde, 1997). The noteworthy recognition of the importance of interpersonal relationships dates back, at least, to the Greek philosophers; for example, Aristotle described human beings as social animals. In recent years, the field of psychology has attempted to offer scientific and systemic knowledge of close relationships and their impact on individuals' well-being. For example, Weiss (1974) initially laid emphasis on the social provisions of close relationships. He postulated that individuals have requirements for well-being which can only be met within adequately functioning relationships. Baumeister and Leary (1995) have contended that "human beings have a pervasive drive to form and maintain at least minimum quantity of lasting, positive, and significant relationships" (p.497). Among these significant, close relationships are those between parents and their children and those between friends.

The importance of parent-child relationships has been studied theoretically and empirically (for a review see Collins, Madsen, & Susman-Stillman, 2002). For many years, researchers have examined the contributions of parenting and parent-child relationships to the well- or ill-being of their offspring (e.g., Bowlby, 1982; Bretherton & Waters, 1985; Hinde, 1997). Indeed, some theorists have proposed that the seeking of such social provisions as support and protection in parent-child relationships is a universal phenomenon (Bowlby, 1969; Hinde, 1997; Sullivan, 1953; Weiss, 1974).

With increasing age, children's social worlds expand beyond the family context to include peer relationships. In particular, peer relationships and friendships become increasingly salient and play a significant role in adaptive development during middle and late childhood (for recent reviews see Rose & Asher, 2000; Rubin, Bukowski, & Parker, 2006). During middle childhood and preadolescence, parent-child relationships remain as the primary source of support, but provisions for closeness and interdependence begin to shift from parents to friends (Laursen, Furman, & Mooney, 2006).

Whilst it may be the case that parents in all cultures nurture their children to be healthy and to feel secure, there appear to be culture-specific norms with regard to how children's well-being is developed and achieved. In spite of the recognition of cultural diversity, it remains the case that most research examining parent-child relationships has focused on Western cultures. In recent years, there has been increasing conceptual and empirical attention to culture as a context for human development (e.g., Bornstein, 1995; Harkness & Super, 2002; Super & Harkness, 1999; Rubin & Chung, 2006). The cross-cultural literature on social development suggests that what may be viewed as "acceptable" and "healthy" in one culture may not be necessarily considered as acceptable and desirable in others (e.g., Peterson, Steinmetz, & Wilson, 2005; Rubin & Chung, 2006).

Given that social relationships are defined and regulated by rules and value systems of culture (Hinde, 1997), there is a need for cross-cultural examination of (a) how such close relationships as parent-child relationships and friendships are

manifested in various cultures; and (b) how the underlying constructs of relationships are perceived and evaluated by individuals in different cultures.

The extant literature has contributed to our understanding of the relations between parent-child relationships and friendships and children's development. Supportive relationships with parents and friends have been linked to such adjustment correlates and "outcomes" as interpersonal competence and self-worth (Collins & Laursen, 2004; Rubin et al., 2006). However, most researchers have examined mother-child relationships, without consideration of the possible differential or cumulative effects of father-child relationships and peer relationships (friendships) on child and adolescent development. Moreover, researchers have mostly examined parent-child relationships and friendship in isolation, rather than simultaneously (Collins & Steinberg, 2006; Laursen et al., 2006). Thus, the unique and joint contributions of mother-child and father-child relationships and friendships to child and adolescent development within and across cultures have yet to be untangled. In the present study, children's perceptions of their relationships with their mothers, fathers, and best friends were simultaneously examined using variable-centered and person-centered approaches.

The first specific aim of this study was to examine, cross-culturally, the quality of relationships with mothers, fathers and friends. To this end, positive and negative dimensions of mother-child and father-child relationships and friendships were examined among South Korean and European-American children. Given the cross-cultural nature of the study, *power distance* (Hinde, 1997; Furman & Buhrmester, 1985; Furman, 1996) was examined as well.

The second specific aim of the study was to examine the patterns of children's perceptions of relationship quality across mother-child, father-child relationships and friendships. To this end, a person-centered approach was employed to examine individual differences in the patterns of relationship networks; subgroups of children were identified for those who share similar patterns of relationship networks across these three relationships (e.g., a subgroup of children who perceived their relationships with mothers to be high on provisions, low on conflict, and more hierarchical).

The third specific aim of the present study was to examine the relations between the underlying dimensions of the relationships with mothers, fathers and friends and children's satisfaction with each of these relationships. A cross-cultural examination of the extent to which relationship constructs account for satisfaction within each relationship would reveal how children (young adolescents) evaluate the appropriateness of a given relationship within and across cultures (Hinde 1997).

A cross-cultural framework was employed to address these specific aims among European-American and South Korean children. South Korea is often characterized as a hierarchical social system which is known to stress children's submission to, and acceptance of, parents; considerable authority is given to family systems (Kim & Choi, 1994; Kim & Turiel, 1996). A cross-cultural examination of putative hierarchical relationships (i.e., mother-child, father-child relationships) and horizontal relationships (i.e., friendships) may provide a better understanding of the cultural universality and specificity of these relationships.

CHAPTER II

BACKGROUND AND SIGNIFICANCE

Part I: Relationships with mothers, fathers, and friends in middle childhood

Vertical versus horizontal relationships: Power asymmetry versus symmetry

Weiss (1974) postulated that different relationships may provide distinct social provisions and functions. This view has a long history in the psychology literature (Hartup, 1989; Hartup & Laursen, 1991; Laursen et al., 2006; Maccoby, 1995; Piaget, 1932; Rubin & Coplan, 1992; Sullivan, 1953; Youniss, 1980; Youniss & Smollar, 1985). For example, Piaget (1932) posited that parent–child relationships and peer relationships are fundamentally different. The distinction between the two kinds of relationships has been characterized along *vertical* and *horizontal* planes. *Vertical* relationships such as parent-child relationships typically involve asymmetrical distributions of power, whereas *horizontal* relationships such as friendships may be depicted as, to some extent, symmetrical and egalitarian (Bretherton, 1985; Hartup & Laursen, 1991; Hinde, 1997; Kochanska, 1992; Piaget, 1932; Youniss, 1980).

A historically long-held view of the parent–child relationship is that vertical ties between children and their mothers and fathers are distinct in terms of power distribution, control and autonomy. Maccoby (1992), for example, indicated that there is fundamental asymmetry in power and competence between adults and children. Although there is no agreed definition of ‘power’, power involves an influence by one partner on the relative probabilities of actions by the other (Murstein & Adler, 1995). Importantly, Hinde (1997) argued that power is a property of the relationship and not of individuals. In fact, *where* power lies (power distance; power distribution) results

from negotiation between two parties. For example, power distance involves the question: “Who takes charge and decides what should be done?” in close relationships. The distribution of power in close relationships may be influenced by the context (e.g. in certain cultures, males often have more power). Due to given differences in maturity, experience, wisdom, and authority, accordingly, parent-child relationships involve care-giving during the early years as well as teaching and learning in later years (Youniss, 1980). There is a greater degree of power asymmetry in parent-child relationships in infancy than in early and middle childhood. As children enter a wider social world in middle childhood, developmental changes occur in the balance of power and autonomy between parent and child. Consequently, changes and shifts in closeness and interdependence are evidenced in parent-child relationships and friendships (Laursen et al., 2006; Rubin, Bukowski, & Parker, 2006).

Whilst there are distinctive differences in the power distributions of parent-child relationships and friendships, recent thinking suggests a possibility of variability on power and autonomy. Hinde (1997) argued that every relationship is unique in at least some aspects. Although the peer relations of children and young adolescents are thought to be relatively symmetrical and equal on dimensions of power and control, there may be considerable variation in power and autonomy. For example, when one participant in a friendship exercises more power, it results in the other’s relative decrease in autonomy. According to Hinde, what matters is the latter’s *perception* of this power asymmetry. Agreement/ disagreement or acceptance/ rejection of the power distance between friends may affect their perceptions and evaluations of the

relationships. Disagreement about where power lies may lead to conflict (Hinde, 1997).

Relatedly, Russell, Pettit and Mize (1998) have argued that horizontal qualities can be found within vertical relationships. For example, within the parent-child relationship there may be opportunities for co-construction; and parent-child interactions may take on a bidirectional face (e.g., Kuczynski, 1997; Kuczynski, Marshall, & Schell, 1997; Mills & Grusec, 1988; Rogoff, 1990; Russell & Russell, 1992). Parent-child relationships may provide opportunities wherein children experience and practice the social skills essential for well-functioning relationships with peers. Inductive discipline (Hart, Ladd, & Burleson, 1990), authoritative parenting (Baumrind, 1967, 1978), and attachment security (Cohn, 1990; Elicker, Englund, & Sroufe, 1992; LaFreniere & Sroufe, 1985; Troy & Sroufe, 1987) have been linked to children's social skills with peers.

In keeping with the possibility that relationships may vary along a variety of dimensions (e.g., power distance), the purposes of this study include: 1) the examination of children's perceptions of power distance in relationships with mothers, fathers and friends (as a network of relationships in the context of other relationships); and 2) the examination of children's subjective evaluations of each relationship.

Positive dimensions of relationships: Social provisions

Early research on parent-child relationships was guided mainly the examination of parenting styles (e.g., Baumrind, 1971; Maccoby & Martin, 1983) rather than relationship qualities. One exception was the study of the parent-child attachment

relationship in infancy and early childhood. A typological approach suggests four types of childrearing practices: *Authoritative* (i.e., high on both parental control and warmth); *authoritarian* (i.e., high on control; low on warmth); *permissive* (i.e., low on control; high on warmth); and *negligent* (i.e., low on both control and warmth). Given that this study's main focus is on the qualitative aspects of *relationships* with mothers, fathers and friendships, the relevant relationship literature is reviewed, and not the literature on parenting behavior.

According to Weiss (1974), the *provisions* of social relationships reflect what is received from relationships with other people. Weiss postulated the following six provisions: guidance, reliable alliance, reassurance of worth, attachment (emotional closeness), social integration (a sense of belonging to a group), and opportunity for nurturance. Other researchers have also examined the provisions of close relationships in terms of social support, intimacy, instrumental help, companionship, and affection (e.g., Cutrona & Russell, 1987; Furman, 1996; Furman & Buhrmester, 1985; Laursen et al., 2006). In this section, the positive dimensions of relationships are explored with reference to social provisions.

Attachment in parent-child relationships and friendships. For several decades, the overarching constructs of attachment theory have dominated psychologists' thinking about parent-child relationships (Rothbaum et al., 2007). From an evolutionary perspective, a core element of Ainsworth's (1967) and Bowlby's (1969) conceptualization of the attachment relationship is that the formation of the relationship bond between infants and their caregivers is the outcome of evolution. That is, genetic selection favored attachment behaviors because they increase the

likelihood of child-caregiver proximity, which, in turn, leads to a greater likelihood of protection and survival. In other words, humans are evolutionarily biased to become attached to a primary caregiver; children seek proximity to, and contact with a caregiver or an attachment figure when they are frightened, tired or ill (Bowlby, 1982). Through experience from repeated interactions, infants internalize a mental representation, schema or “internal working model”, of the caregiver, the self and their relationship (Bowlby, 1969, 1982). Bowlby suggested that these internal working models are built slowly from repeated social interactions and affective experiences throughout childhood and adolescence. For example, the infant develops a relational schema as to whether the caregiver is available and responsive to her/his needs; and whether s/he is worthy of care and love. Beyond infancy, attachment theorists (e.g., Ainsworth, 1967; Bowlby, 1969,1982) have posited that a warm and continuously supportive relationship with a primary caregiver promotes psychological well-being throughout life and that a secure infant-mother attachment relationship may have long-term implications for later relationships, self-perceptions of efficacy, and psychopathology (Thompson, 1999).

With increasing age, children achieve developmental advances in cognitive and social skills. Such advances include the capacity for understanding the mental and affective perspectives of others, and their expanded social worlds beyond the family context (see Collins, Madsen & Susman-Stillman, 2002 for a review). From middle childhood through early adolescence, changes that children and young adolescents experience include wider and more diverse relationships with others, and

physical and cognitive maturity. These changes, consequently, have an impact on the parent-child relationship and friendship.

Reflecting these developmental achievements, the association between attachment and other close relationships becomes more relevant in middle and late childhood (Thompson & Raikes, 2003). Researchers have shown that parents play an important role in their children's peer relationships (see Ladd & Pettit, 2002 for a review). Children learn social skills that are necessary for peer relationships through early interactions with their parents. Modeling, coaching, and the arrangement of social contacts all play a role in developing the social skills necessary for developing positive relationships out-of-the-home (Ladd, 1992).

Friendships have long been viewed as significant sources of social support in individual development. Numerous theorists have suggested the importance of friendship for adaptive development. For example, Sullivan (1953) argued that the peer system is essential for the development of a sense of well-being. In particular, Sullivan emphasized the importance of chumships for the emergence of social competencies in which children can learn from their acceptability as a desirable peer. Piaget (1932) proposed that the development of perspective-taking skills and interpersonal competence can be fostered from experience within such horizontal relationships as friendships. According to Piaget, friendships are relatively egalitarian in nature and they provide opportunities for cooperative social exchanges.

It has been suggested that friendships of high quality can buffer, or protect children from negative outcomes (e.g., Parker & Asher, 1993). In fact, a number of researchers have found associations between early attachment in infant-mother dyads

and children's peer relationships and friendships in later years (e.g., Berlin & Cassidy, 1999; Rubin, Dwyer, Booth-LaForce, Kim, Burgess, & Rose-Krasnor, 2004; Schneider, et al., 2001). According to Booth-LaForce and colleagues (2005), the trust and intimacy built in secure parent-child attachment relationships result in an internal working model about the relationships. This internalized model of relationships, in turn, affects the quality of friendships. Booth-LaForce and colleagues (2006), for example, have shown that children's attachment security is related to social competence in middle childhood. Significant correlations have been also found between adolescents' perceptions of their relationships with their parents and friends (Seiffge-Krenke, Shulman, & Klessinger, 2001; Way & Robinson, 2003). However, a meta-analysis (Schneider et al., 2001) indicated that although links between attachment security and friendship were stronger, there is a small-to-moderate effect size linking attachment security and peer relationships. In another study, Magolese and colleagues (2005) examined the role of working models of specific attachment figures (i.e., mother, father, best friend and romantic partner) on adolescents' adjustment with great attention to the processes. It was found that insecurely attached adolescents tend to make negative attributions regarding themselves when encountered with stresses and they were found to ruminate; insecure attachment relationships with romantic partner and with mother (for girls only) were associated with depression.

Relations between the relationships with parents and peers. The patterns of relations between relationship systems such as the parent-child relationship and peer relationships have long intrigued researchers (e.g., internal working models). As the

literature extant has provided somewhat inconsistent findings, three distinct points of view can be distinguished. *First*, drawing from the internal working model framework, generalized cognitive schemas about relationships help individuals evaluate and orient to their relationships with others (for a review see Hartup & Laursen, 1999). One such relational schema pertains to perceptions of social support. Because they partially comprise global representations of relationships, it is likely that the perceptions of social support are, to some extent, stable over time and consistent across contexts (i.e., different relationships; Laursen et al., 2006). Furman (2001), for instance, has shown that social support from friendship dyads are related to the adolescents' secure working models and are inversely related to dismissing working models. In another study, Laursen and colleagues (2006) examined adolescents' perceptions of social support in relationships with mothers, close friends, and romantic partners from Grade 10 to Grade 12. They found that perceived social support appears to be similar across relationships and over time. In particular, approximately 60% of the adolescents in Grades 10th and 12th appeared to report similar levels of social support in relationships with their mothers and friends. In their follow-up analysis, it appeared as if the percentage of adolescents with concordant relationships with mothers and friends (i.e., consistently high or consistently low levels of social support) exceeded 80%.

Relatedly, from an evolutionary viewpoint, humans are biologically predisposed to affiliate with social company in which cooperative food sharing, protection and opportunities for play could be provided through social interactions. Furman and colleagues, for example, suggested that such social affiliations may be

considered as a *behavioral system* like attachment (Furman, 2001; Furman & Simon, 1999; Furman & Wehner, 1994). They argued that, although the content of the working models may vary among various relationships, the representations of the attachment system as well as other behavioral systems operating in a given relationships (e.g., representations of caregiving and affiliation) would be somewhat consistent (Furman, 2001).

In addition, the interpersonal *congruency* framework suggests that individuals seek congruency between particular aspects of the self-concept (and behavior regarding those aspects) and relevant perceptions, feelings or behaviors of others (Hinde, 1997; Backman, 1988). According to this proposition, congruency is achieved because individuals are likely to form relationships with those who would allow them to behave in a way to conserve the self-concept (Hinde, 1997). Although individuals attempt to achieve congruency, as they develop and experience different life events, there are likely to be changes in their self-concept and, accordingly, individuals adapt these changes when they negotiate with others in relationships. It is also possible that individuals realize that the nature of social reality is a co-construction between participants in relationships and, as a result, they tend to compromise allowing various levels of congruency (Swann, 1987).

Similarly, the behavior and personality characteristics of the individual may elicit similar responses from different partners in relationships, demonstrating considerable similarities across interpersonal relationships (Connolly & Johnson, 1996; Furman et al., 2002; Helsen et al., 2000; Laursen et al., 2006). For example, Laursen et al. (2006) have shown that perceived social support scores were

moderately correlated across relationships (e.g., mother-child, friendships and romantic relationships).

Although relational representations become more stable over time and increasingly subconscious (Bowlby, 1982), discontinuity and inconsistency across relationships may be possible. While friendships are important close relationships, most friendships are not thought to be attachment relationships (Cassidy, 1999). That is, although some children and adolescents may seek proximity to their friends and some may consider them as safe havens, most friendships tend not to provide secure bases from which to explore the world. Friends are, however, recognized as important affiliative figures (e.g., Furman, 2001; Hartup, 1999; Piaget, 1932). Given that no relationship can be understood independently from the social and cultural contexts in which it is embedded (Hinde, 1997), there is need to investigate these close relationships incorporating other relationships simultaneously. According to Hinde, every dyadic relationship is nested within a network of other relationships; each relationship would influence the others and be influenced by them. Thus, it is important to further investigate relationships in the contexts of other close relationships.

The goal of the present study was to examine children's perceptions of their relationships with mothers, fathers and friends as a system of relationship networks (that is, to examine the relationships with mothers, fathers and friends simultaneously in the context of the other relationships). The focus in the current investigation was on children's *perceptions* of their relationships with mothers, fathers and friends because subjective views of close relationships are known to be better predictors of

self-worth than observed behaviors in relationships (Laursen et al., 2006; Shrauger & Schoeneman, 1979).

Second, there is another view that can be translated into a *compensation* model regarding the relations between relationship systems. In the compensation model, individuals who perceive little social support in their parent-child relationships may turn to their friends for support (compensation). In this perspective, for example, low-quality parent-child relationships can be overcome by high-quality friendships. In this regard, Steinberg and Silverberg (1986) proposed a “conflict” hypothesis that leads to the prediction that parental bonding should be correlated negatively with peer bonding due to “parent-peer conflict”. For example, Helsen and colleagues (2000) found that adolescents who reported low levels of social support from their parents and high levels of support from friends showed the highest levels of emotional problems. The authors suggested that such relationship networks indicate a tendency of adolescents’ turning to their friends in times of distress when parents are not available. While adolescents attempted to compensate the lack of parental support, their dysfunctional emotion problems appear to indicate that peer support was not able to compensate for the lack of parental support.

In another study, Rubin, Dwyer, Booth-LaForce, Kim, Burgess, and Rose-Krasnor (2004) examined the independent and interactive effects of parent-child relationships and friendship on psychosocial functioning in early adolescence. They found a buffering effect of friendship quality on the association between the lack of parental support and internalizing difficulties. It may be that only friendships of high quality can protect children from negative outcomes, compensating for their low

quality parent-child relationships (e.g., Hartup & Stevens, 1997; Parker & Asher, 1993).

A third point of view conceptualizes parent-child relationships and peer relationships as two distinct relationships. As early as 1970's, Weiss (1974) posited that different social relationships provide distinctive provisions. Berndt (1979) has also stated that family and peers are two different "social worlds". In developing the "situational hypothesis", Brittain (1968) proposed that parents and peers both had an influence on individuals, but in *different* situations. According to this third view, each relationship is relatively independent and provides its *unique* contribution (provisions) to children and adolescents. Although, as noted earlier, there may be moderate concordance across children's relationships with mothers, fathers, and friends, researchers in line with this point of view have paid attention to the differential effect of each relationship. Some researchers, for example, suggest that the roles of fathers and mothers are different and complementary (e.g., Blankenhorn, 1995; Day & Mackey, 1989; see Marsiglio, Amato, Day, & Lamb, 2000 for a review). One common approach to disentangling mothering and fathering involves identifying significant contributions of each relationship to children's adjustment (see Stolz, Barber & Olsen, 2005 for a review). It typically examines whether the aspects of each relationship with mothers and fathers explains a significant portion of the variance in children's outcome measures. In other words, this approach tends to determine the significance of mother-child relationships and father-child relationships in separate models. For example, in a meta-analytic analysis of 18 studies of maternal and paternal support, Amato (1998) showed that 11 (out of 18) studies reported

significant contributions of mothers and fathers (e.g., Amato & Rivera, 1999), whereas 7 studies found significant contributions of mothers only (e.g., Umberson, 1992). However, this approach failed to consider the overlapping and shared effects of relationships with mothers and fathers on children (Stolz et al., 2005).

Alternatively, a growing body of researchers examine children's relationships with *both* mothers and fathers together in the same model (i.e., in the context of the other parent). For example, Stolz et al. (2005) examined differential effects of mother-child and father-child relationships on youths' antisocial behavior, depression, and social initiative (Grades 5 and 8). The authors revealed differential effects of perceived maternal and paternal social support: Youths' perceived paternal support was significantly and uniquely related to their social initiative. That is, the sons and daughters (Grades 5 and 8) who perceived their fathers as supportive were more likely to show initiative in engaging prosocially with peers. The authors suggested that paternal support is possibly interpreted as encouragement of prosocial behaviors toward outside home because traditionally in the United States fathers represent the family's interest to community. This contention of the authors is in line with the view which suggests that fathers' sensitivity and nurturing relationships with their young children may promote higher levels of social and cognitive skills and reduce children's externalizing behaviors (e.g., Braungart-Rieker, Garwood, Powers, & Notaro, 1998; Cabrera, Fitzgerald, Bradley, & Roggman, 2007; Denham et al., 2000).

In line with this third point of view, unique contributions of social support from the relationship with parents and friends have also been found. For example, Laursen et al. (2006) have shown that perceived maternal support is associated with

adolescents' global self-worth; social support in friendships was related to adolescents' social competence; and social support in romantic relationships was related to adolescents' romantic competence. With adolescents ranging in age from 12 to 24, Helsen and colleagues (2000) examined perceived social support from parents and friends in relation to adolescents' emotional problems. They found a change in the degree of perceived support during early adolescence. That is, although parental support remained significant in predicting emotional problems in adolescence, adolescents' perceived support from parents declined, while perceived support from friends increased. Correlations between parental support and friendship supports appeared to be modest. The authors suggested that these two types of relationships should be considered as two relatively independent support systems. Similar to Cassidy (1999)'s view, this third proposition suggests that although friendships are important close relationships, peer relationships are not thought to provide secure bases from which to explore the world.

Beyond social support, other aspects of social provisions in close relationships have been examined in middle childhood and early adolescence. Such positive relationship features or constructs include intimacy, instrumental help and guidance, companionship, affection and reliable alliance. For example, Furman and Buhrmester (1985) examined social provisions in relationships with same sex-friends, romantic partners, parents, siblings, classmates and adults across grades 2 through 8 with the Network of Relationship Inventory (NRI: Furman & Buhrmester, 1985). They found that intimacy and companionship increased with friends and romantic partners, but decreased with family members, classmates and adults. In another study (across

grades 4 to 10), Furman and Buhrmester (1992) found similar results. In the study, a composite of social provisions (including intimacy, companionship, affection, and reliable alliance) increased for friends and romantic partners, but it decreased for parents, siblings, and teachers.

As noted above, the literature extant concerning mother-child and father-child relationships and friendships has provided inconsistent (and contradictory) findings (see Amato, 1998; Helsen et al., 2000; Marsiglio, Amato, Day, and Lamb, 2000) and there is a need to consider various aspects of close relationships such as mother-child, father-child relationships and friendships in the context of other relationships. A goal of the present study was to examine these three relationships with mothers, fathers, and friends as a relationship network. The joint consideration of these close relationships allowed us to understand 1) to what extent children perceived social provisions from each relationship; and 2) to what extent perceptions of social provision were similar across mother-child, father-child relationships and friendships.

Negative interactions: Conflicts and punitive aspects

In addition to perceptions of social provisions in close relationships, attention has been given to other aspects of relationships. Helsen and colleagues (2000), as noted above, indicated that adolescents' perceived social support appeared to account for only a portion of relationship quality, suggesting that there is a need to consider other dimensions of relationships such as positive *and* negative aspects of relationship quality. Such distinct aspects of relationships include negative interactions such as conflict and punitive aspects.

Conflict. Conflict can be defined as behavioral opposition or interference (Peterson, 1983). Conflict may result when participants in relationships have incompatible goals (Cahn, 1992). According to Cahn, parents directly and indirectly socialize their children to behave appropriately within their culture. Sometimes conflict ensues. Although conflicts between parents and children are part of the socialization process, far less attention has been given to parent-child conflict per se (Collins & Steinberg, 2006; Eisenberg, Valiente, Losoya, Zhou, Cumberland, Liew, & Maxon, 2008; Osborne & Fincham, 1996). Often conflict involves an inequality or uneven distribution of power. Although no cohesive literature has emerged on the topic of conflict in close relationships, exchange theory provides a framework of the rewards and costs in interdependent relationships. That is, rewards are often equated with closeness; costs with conflict (Kelly et al., 1983).

From late childhood to adolescence, although not necessarily thought of a period of “storm and stress” (Arnett, 1999), there are increases in negativity and decreases in the closeness between parents and youth (Collins & Steinberg, 2006; McGue et al., 2005). However, there appear to be individual differences in aspect of parent-child conflict, For example, Collins and Laursen (2006) found that only approximately 5-15% of youths report extremely conflictual relationships with their parents. In most cases, however, conflicts in parent-adolescent relationships appear to be focus on everyday issues such as household rules, chores and responsibilities, school, and autonomy from middle childhood to early adolescence (Collins & Laursen, 2004; Laursen, 1993).

Laursen, Coy, and Collins (1998) examined frequency and intensity of parent-child conflict from middle childhood to adolescence using the meta-analytic procedure. They found that although the frequency of conflicts between parents and children tended to decline across adolescence, the intensity of parent-child conflicts increased in negative affect from early to mid-adolescence. McGue et al. (2005) also found that disagreements, anger, and tension between parents and children increased from age 11 to 14, especially for girls. In another study, Loeber et al. (2000) have shown that positive affect in parent-child relationships tends to decline from middle childhood to adolescence (Loeber, Burke, Lahey, Winters, & Zera, 2000).

Gender differences in the intensity and frequency of conflicts among parents and children appear to be inconsistent. Conflicts between mothers and their children and young adolescents tend to be more intense than conflict between fathers and their children and young adolescents (Laursen & Collins, 1984; Steinberg & Silk, 2002). It may be that because adolescents tend to have closer relationships with their mothers than with their fathers, youth are more likely to have more frequent interactions as well as more conflicts with their mothers (Richardson et al., 1984). McGue et al. (2005) also found some developmental changes in conflicts and relationship patterns for girls and boys in their longitudinal study. That is, girls reported more positive relationships with parents at age 11, showing less hostile and conflictual interactions than boys did; this trend was washed out by age 14, reflecting a more drastic decline in the quality of parent-child relationships from late childhood to adolescence. However, the meta-analysis of Laursen et al. (1998) did not show gender differences.

In terms of the role of conflict in close relationships, there are a few different viewpoints. Conflict in interpersonal relationships can be aversive and detrimental. However, it is believed that the valence of conflict depends on the context in which it arises: Conflict in supportive relationships can be potentially constructive and beneficial, whereas conflict in low-quality relationships is thought to be destructive and detrimental (Adams & Laursen, 2002). Relatedly, Steinberg and Silk (2002) suggested that the affective intensity of conflict distinguishes adaptive and maladaptive conflict between parents and youths. For example, when parent-child conflict is contentious and hostile, it has been linked to negative outcomes for youth (Kim et al., 2001; Ramos, Guerin, Gottfried, Bathurt, & Oliver, 2005). However, when adolescents perceive their parent-child relationships as supportive, the relations between parent-child conflict and negative developmental outcomes become modest or non-significant (Barrera & Stice, 1998; Galambos, Sears, Almeida, & Kolaric, 1995).

As youth explore their identity and individuation process, their gained autonomy may evoke conflict in decision making. Supportive parent-child interactions during problem solving or potentially conflictual discussions likely promote a sense of connection between adolescents and their parents (Grotevant, 1998). In fact, moderate levels of parent-child conflict that occur within supportive relationship contexts appear to be related to better adjustment than either no or frequent conflict (Adams & Laursen, 2001; Smetana et al., 2006).

Punitive aspects. Beyond conflict, the literature extant suggests that parents' harsh, inconsistent discipline, inadequate supervision, parental rejection, and lack of

involvement with their children appear to be the most powerful concurrent predictors of children's maladjustment (Loeber & Dishion, 1983; Loeber & Stouthamer-Loeber, 1986; Dishion, & Patterson, 2006). Recent reviews and meta-analyses (e.g., Dishion, & Patterson, 2006) establish punitive and harsh discipline practices and the poor quality of the parent-child relationship as precursors of antisocial behaviors and dysfunctional development of adolescents. It has been shown that parental intrusive behaviors are associated with low warmth and high hostility in parent-child relationships, which may result in children developing problems with arousal modulation and emotion regulation (Sroufe, Jacobvitz, Mangelsdorf, DeAngelo, & Ward, 1985). Relatedly, Linder and Collins (2005) found that intrusive parental behaviors during parent-child interactions at the age of 13 predicted violence perpetration and victimization in romantic relationship in early adulthood.

Taken together, during late childhood and early adolescence, changes and shifts are expected in children's relationships with family and peers insofar as closeness, interdependence, and conflict are concerned. Although individual differences in relationship quality with parents and friends have been examined, little is known about the patterns of relationship quality across mother-child and father-child relationships, and friendships.

Recent statistical and analytic advances allow researchers to examine individual differences in variables of interests. In the present study, children's relationships with mothers, fathers and friends were examined by the traditional variable-centered approach as well as a person-centered approach. Because a person-centered approach concerns individual differences, it focuses on processes that are

presumed to be specific to individuals who share particular attributes and profiles (e.g., Bergman, Magnusson, & El-Khoury, 2003). This analytic strategy helps shed light on distinct patterns of individual relationship networks. What are the most (and least) common patterns of relationship networks with reference to provisions across relationships with mothers, fathers and friends? What are the most (and least) common patterns of relationship networks with regard to conflict across these three relationships? What are the most (and least) common patterns of relationship networks on power distance across these three relationships? Are there distinctive subgroups of children (i.e., latent class) who share similar patterns of relationship networks? Such questions were to be examined in the present study.

Part II: Culture and relationships with mothers, fathers and friends

Culture as a developmental context for individual development

Does a given relationship construct function in the same way in different contexts and cultures? Or are there different meanings ascribed to given relationship features when they occur in different cultures? Although it may be the case that parents in all cultures nurture their children to be healthy and to feel secure, there appear to be culture-specific norms with regard to how child health and security may be developed and achieved (Hinde, 1987, 1997). In spite of the recognition of cultural diversity, it remains the case that most research examining the importance of parenting practices and parent-child relationships has focused on Western cultures.

In recent years, there has been increasing conceptual and empirical attention directed to culture as a context for the development of parent-child relationships. Cross-cultural and comparative studies have indicated that child-rearing practices and

beliefs vary from culture-to-culture, suggesting that what may be viewed as acceptable and healthy in one culture may not be necessarily considered as acceptable and desirable in others (e.g., Peterson, Steinmetz, & Wilson, 2005; Rubin & Chung, 2006). The meaning of behaviors is, in large part, culturally determined as a function of the embedded cultural context. It may be that the provisions and support provided within relationships are also manifested in different ways in different cultures. In this regard, cross-cultural studies may provide a framework for understanding parent-child relationships from the perspectives of distinct cultural belief systems and norms.

In addition, there is also a practical reason for conducting cross-cultural approach on the topic of interpersonal relationships. With the current rate of immigration to the United States, the society is becoming increasingly diverse. The proportion of the school-age population that spoke at least one language other than English at home was 14% in 1990; this figure has increased to 18% by 2000 (the U.S. census; Shin & Bruno, 2003).

Conceptual frameworks. Culture may be defined as a system of shared beliefs, values, customs, behaviors, and artifacts that the members of society use to cope with their world and with one another, and that are transmitted from generation to generation through learning (Matsumoto, 1997). This definition suggests that culture involves three key components: what people think, what they do, and the material products they produce. Cultural values and beliefs, particularly those pertaining to developmental goals and socialization practices, may affect the function and organization of parenting and parent-child relationships. That is, values, beliefs and attitudes that help define a particular culture also serve to shape and influence values

and beliefs about that which is normal or abnormal, acceptable or unacceptable, and typical and atypical (Rubin & Chung, 2006).

Developmental theorists have proposed ways in which culture may influence individuals, their social relationships and psychological functioning. For example, Bronfenbrenner (1979) argued that the *macrosystem* of cultural orientations and belief systems exerts a direct influence on the *microsystem* (e.g., individuals, parent-child relationships). The macrosystem also affects individuals and interpersonal relationships *indirectly*, through the *ecosystem* (e.g., family, school) as well as the *exosystem* (e.g., workplace, mass media). According to this ecological perspective, parent-child relationships and parent-child interactions influence individual growth and development. And these relationships and interactions are themselves shaped by such broader social contexts as the nuclear and extended family, the school system, and cultural beliefs and value systems.

Classical ethnographical approaches date back to the early twentieth century with regard to the conceptualization and study of parenting in different cultures. The central questions of early ethnographical research were: 1) What is the nature and extent of variability of normative parenting? (2) How are cultural customs, beliefs and values related to parenting practices? For example, classical anthropological studies by Benedict (1946) and Mead (1928) focused on how culture affected individuals, shedding light on cultural patterns of childrearing and parenting.

In line with the ethnographic perspective, Super and Harkness (1999) proposed the *Developmental Niche* as a framework to explain how culture-specific environments are organized to shape parenting and child development. The

developmental niche comprises three basic components: (1) the physical and social settings of the child's everyday life; (2) culturally regulated customs of child care and child rearing; and (3) the psychology of the caretakers such as orientations and beliefs about the nature of child and child rearing. According to the developmental niche framework, the interactions of these three components help us to better understand how such environmental factors as household settings, customs and caretaker psychologies form the cultural contexts of child development and facilitate individual development through mutual adaptation.

Cultural values and orientations have also been described in terms of the constructs of *individualism* versus *collectivism* (Hofstede, 1980; Triandis, 1995). Since Hofstede's seminal study (Hofstede, 1980) which suggested four dimensions (i.e., power distance, uncertainty avoidance, masculinity/femininity and individualism/collectivism) to classify cultures, the dimension of individualism/collectivism has the largest body of research. A cultural bias toward individualism emphasizes the socialization of independence from others by encouraging autonomy, assertiveness, and self-reliance; a cultural bias in the direction of collectivism places an emphasis on conformity, compliance, group loyalty, respect for authority figures, and harmonious interdependence (e.g., Hui & Triandis, 1986; Triandis & Gelfand, 1998). These constructs appear to be relevant to understanding how social and cultural orientations may help structure individuals' beliefs, behaviors and relationships. Although the *individualism/collectivism* perspective has inspired much research on cultural variability, its dichotomous approach suggests the assumption that members of cultural groups must be either collectivistic or

individualistic. It seems unlikely, however, that a distinct, clear-cut cultural dualism of individualism or collectivism actually exists (Greenfield, 1994; Killen & Wainryb, 2000; Wainryb, 2004). Rather, it seems more appropriate to view cultures as more or less collectivistic and more or less individualistic (e.g., Miller, 2002). In fact, Triandis (1995) argued that individualism/collectivism is not a unidimensional but a bidimensional construct. For example, it has been noted that such “collectivistic” countries as South Korea and Indonesia, or such individualistic cultures as the USA and Sweden would not be biased, to the same extent, with regard to the constructs or ideologies of collectivism, on the one hand, and individualism on the other (Chen, French, & Schneider, 2006).

Korean culture. Confucian principles have been the cornerstone of Korean culture. Traditional Confucian ideals have placed a great emphasis on respect for a hierarchical structure of authority and family order (Kim & Choi, 1994). In promoting the ultimate goal of Confucianism, *harmony* in the self, family and social relationships, family order has been regarded as an ideal model for all social relationships; thus, the family is given the highest priority (Lam, 1997; Macdonald, 1996). In terms of the roles within hierarchical family structures, the traditional family system places men in superior positions and women in more subordinate positions in hierarchy; children are expected to remain close to their parents emotionally and financially throughout the lifetime (Lam, 1997). Historically, conformity and acceptance of patriarchal relationships has been emphasized to minimize social conflict and, eventually, attain harmony (Kim & Choi, 1994).

Although the modernization process in South Korea has affected expectations of gender roles, Confucian ideals tend to remain influential on family relationships and cultural context. For example, there has been a movement towards more egalitarian gender roles. Equal expectations are placed for boys and girls to pursue their education and women appear to practice more positions of power (e.g., political positions and decision makings; Soh, 1993). However, despite changes in society at large, Confucian ideology continues to influence the socialization of individuals in the society, emphasizing conformity, obedience, respect, and self-control to maintain hierarchy and harmony in relationships.

In terms of parent-child relationships in South Korea, as traditional Confucian principles place an importance on family system, the parent-child relationship is given highest honor and is considered more important than any other social relationships (Chung, 1992). A central concept that describes traditional Korean parent-child relationships is *Hyo*. *Hyo*, filial piety, is considered to guide the parent-child relationship. Because children are expected to adhere to familiar expectations held by their parents, obedience and conformity to their parents are primary obligations of children (Kim, 2006). In other words, being respectful towards parents (and parental authority) is thought to be an important feature of the parent-child relationship. For example, children are deterred from expressing dissenting opinions or confronting their parents' authority, reflecting children's obligations to be respectful towards their parents (Hurh, 1998). Due to the strong emphasis on parental authority, parent-child relationships in Korea tend to be regarded as being stringent (Rohner & Pettengill, 1985).

With regard to differences in mother-child and father-child relationships, mothers are expected to take primary responsibility for socializing their children, whereas fathers are considered to be the primary breadwinner and decision makers for the family (Kim & Hurh, 1987). In particular, fathers are expected to be strict and stern, setting the broader rules of the family context; and mothers are to be benevolent and understanding, providing themselves as the emotional provider of the family (Kim & Choi, 1994).

Moving beyond the family context, French (2004) has shown that, in certain cultures in which the family system is given more power and authority, the significance of other relationships such as friendships appear to be different from friendships in Western cultures. Consequently, it is conceivable to hypothesize that there would be considerable variation in children's perceptions and evaluations about their friendships across cultures.

In sum, traditional Confucian principles promoting harmony place an emphasis on the family system including parental authority and children's compliance and obedience to their parents. Despite changes in today's Korean society, this ideology is thought to be influential on the development and manifestation of social relationships in Korea. However, little is known about how children perceive their mother-child, father-child relationships and friendships. Thus, in the present study, I examined children's perceptions of their mother-child and father-child relationships as well as friendships in different cultures.

A cultural perspective in parent-child relationships and friendships. Some researchers have drawn the conclusion that maintaining intimate relationships with

parents may be a more important developmental task for Asian adolescents than it is for Western adolescents (Korea Survey, 1991; Lee & Lee, 1990; Pettengill & Rohner, 1985). For example, Takahashi and colleagues (2002) examined cultural similarities and dissimilarities in close relationships among Americans and Japanese ranging in age from 20 to 64 years with regard to the areas of affective, instrumental, and conflictual aspects of the relationships (Takahashi, Ohara, Antonucci, & Akiyama, 2002). In particular, they examined the relative importance of parent-child relationships versus friendship. According to French (2004), in cultures in which the family system is given more emphasis than other relationships (e.g., Japan), individuals are more likely to turn to family members than to outside nonfamily members for social provisions. The findings from Takahashi's study (2002) partially support this proposition. That is, affective scores toward nonfamily members were higher for the Americans than the Japanese. However, affective scores toward family members also appeared to be higher for the Americans than the Japanese.

In another cross-cultural study, Park (1996) examined intimacy in friendships between Korean and German adolescents. According to Henderson and Argyle (1986), East Asians avoid self-disclosure more than Westerners. However, Park (1986) found no cultural differences in intimacy between Korean and German adolescents. Similarly, Koh and colleagues (2003) found no cultural differences in intimacy in friendships among Korean and Canadian college students. The findings from Koh et al. (2003), however, indicated that the average levels of social provisions in friendships were higher for the Canadian than Korean adolescents.

Beyond positive aspects of relationships, few researchers have examined different cultural traditions regarding issues of respect for parental authority and power distance. Recently, for example, Dixon, Graber, and Brooks-Gunn (2008) examined parent-child conflict in different ethnic groups including African American, European American, and Latina girls and their mothers during middle childhood. It was found that the African American and Latina girls showed significantly more respect for parental authority than did European American girls. Furthermore, African American and Latina mothers reported significantly more intense conflicts when they perceived low levels of respect from their children, showing that respect for parental authority was most salient to group differences in parent-child conflict.

In another study, Yamada (2004) investigated conflict in Japanese parent-child relationships. Given emphasis on harmony in parent-child relationships in the Japanese culture, children are deterred from engaging in conflictual situations with their parents (Min, 1998). Using hypothetical stories depicting various conflict situations in parent-child relationships, the authors found that the Japanese children did not always accept parental authority in accord with a global cultural orientation such as collectivism and interdependence. In particular, the Japanese children appeared to make decisions as to whether to comply with their parents' demands depending on the context (e.g., moral, conventional, and personal concerns).

Beside conflict, in the Western cultures, there has been a consistent finding that frequent parental use of psychological control (e.g., guilt and love withdrawal) is related to such undesirable children's developmental variables as emotional distress and negative self-esteem (for a recent review see Barber, Stolz, & Olsen, 2006). This

is because psychological control intrudes on the development of children's sense of a positive self. Parents' behavioral control (e.g., monitoring) seems to be associated with such desirable developmental outcomes as academic achievement and lack of delinquency because it provides children with guidance without risking individuation. Such findings are typically attributed to the mainstream European–American values of autonomy, individuation and independence in the United States (Barber, Stolz, & Olsen, 2006). Given such an emphasis on relatedness and interdependence, East Asian parents' psychological and behavioral control has not been found to be associated with children's negative outcomes (Chao & Tseng, 2002; Greenfield, Keller, Fuligni, & Maynard, 2003). Rohner and Pettengill (1985) found that for South Korean adolescents, but not for North American adolescents, strict parental control was associated with perceived parental warmth; in North American youth, adolescent appraisals of parental control was associated with parental hostility or rejection. Rohner and Pettengill (1985) indicated that Korean adolescents do not consider their parent-child relationships as negative when parents use strict control. Thus, the authors suggested that certain characteristics of parent-child relationships traditionally considered as negative in the U.S. may not be so considered in contexts within which strict obligations and conformity to others (e.g., elders in family) are emphasized. The latter description characterizes many Asian cultures with a Confucian heritage such as China and Japan (Chao & Tseng, 2002).

In sum, the aforementioned conceptual frameworks suggest that cultural norms, values, and orientations may influence the interpretation and perceptions of acceptable and desirable behaviors in a given culture. Through these processes,

normative dyadic and group relationships are defined at the cultural level, which, in turn, may affect children's development and adjustment. Therefore, in the present study, I considered individual variability in perceptions of relationship provisions and relationship satisfaction as a function of differences in relationships with mothers, fathers and friends.

Satisfaction: Individual evaluation of appropriateness of the relationships

Satisfaction involves the question "Do the participants perceive the relationship to be close to optimal and desirable?" (Hinde, 1997). In other words, satisfaction with the relationships involves two distinct aspects: the participant's subjective perception of the relationship; and the evaluation about what he/she feels to be appropriate to the relationship (Hinde 1997).

Despite recent advancements in the conceptual understanding of culture, any found differences in relationships across different cultures have been attributed to differences in cultural values and beliefs at the group level, not differences in *individual's* perceptions or evaluations of relationships in a given culture (e.g. Rohner & Pettengill, 1985). Harkness and Super (2002), for example, indicated that cultural values refer to abstract notions of general cultural beliefs; thus, what each individual feels to be appropriate may depend on values and norms about the relationship in a given culture. In this regard, the degree to which an individual is satisfied with a given relationship may reflect how the sociocultural context influences evaluations about what is appropriate in relationships within a given culture (Hinde 1997). In other words, an important conceptual feature of satisfaction with the relationship is its emphasis on individual variability in the perception and interpretation of their close

relationships (e.g., Harkness, Super, & van Tjen, 2000; Killen & Wainryb, 2000; Schwarz, Trommsdorff, Kim, & Park, 2006; Triandis, 1995).

Hinde (1987) posited dialectical relations among each level of social complexity (individuals, interactions, relationships and groups). According to Hinde's model, parent-child relationships and friendships are embedded within a socio-cultural structure. Thus, normative descriptions of parent-child relationships may vary at the cultural level (e.g., What does a good and healthy parent-child relationship look like in a given culture? Belsky, 1984). Similarly, it is possible that norms regarding friendships may vary across cultures. However, there is a need to consider individual differences in the perception and evaluation of his or her close relationships in different cultures. Therefore, in the present study, I examined the extent to which relationship constructs (positive social provisions, negative dimensions, and power distance) would account for children's satisfaction with their mothers, fathers and friends in the South Korean and European-American samples.

Overview of the Present Study

In summary, a review of the literature on parent-child relationships and friendships supports that the form and function of such relationships may vary across cultures. Given the importance of adequately functioning close relationships on individuals' well-being, it is important to examine such significant close relationships as parent-child relationships and friendships in different cultures. Despite the recognition of cultural diversity, it remains the case that most research examining parent-child relationships has focused on Western cultures. Drawing from Hinde (1997), social relationships are governed by rules and value systems of culture,

therefore, there is a need for cross-cultural examination of how such close relationships as parent-child relationships and friendships are manifested in various cultures. It is also important to note that what may be viewed as “desirable” in one culture may not be necessarily considered as acceptable in others (e.g., Peterson, Steinmetz, & Wilson, 2005; Rubin & Chung, 2006).

Although the extant literature has contributed to our understanding of the relations between parent-child relationships and friendships on individuals’ development, there is a paucity of research examining such relationships as a network of relationship systems. In attempting to tap into the unique and joint contributions of mother-child and father-child relationships and friendships on individuals’ development, a simultaneous investigation of these close relationships is necessary (in the context of the other relationships).

This study was unique in that it examined children’s perceptions of close relationships such as mother-child and father-child relationships and friendships as networks of relationships (that is, each relationship was examined in the context of the other two relationships). To fully appreciate the understanding of relationship quality, various dimensions of relationship constructs (i.e., power distance, social provisions and negative interactions) were explored across these three relationships. In addition, given the significance of cultural contexts in individual development, a cross-cultural framework was employed, examining individuals’ evaluations about what he/she feels to be appropriate to the relationship (e.g., satisfaction) in different cultures. Lastly, the utilization of variable-centered and person-centered approaches allowed this study address the relations among the variables of interests (variable-

centered approach) as well as individual differences in networks of relationships (person-centered approach; identifying subgroups which share particular characteristics).

Purposes and Hypotheses of the Study.

The current study was designed to examine the quality of relationships with mothers, fathers and friends in different cultures. Specific aims, hypotheses, and analytic procedures are presented below.

Aim 1: To uncover the latent factor structures of mother-child and father-child relationships and friendships in South Korean and the European-American samples from middle income class, two-parent families. The following dimensions of these three relationships were examined: (a) Positive social provisions (affection, intimacy, and interactive behaviors/instrumental help); (b) negative interactions (conflict, punitive aspects), and (c) power distance.

H1a (A cross-cultural examination of mother-child relationships): It was hypothesized that the South Korean children would report higher levels of positive social provisions; lower levels of conflict; and greater asymmetric power distance in mother-child relationships than would the European-American children, given that traditional Confucian principles in Korean culture place significance on the family system, and especially on hierarchical family order. From this perspective, children are expected to stay closely connected to their family and especially their parents; mothers are to be benevolent and understanding of their children and are considered to be the emotional providers of the family system (Kim & Choi, 1994). In keeping with the traditional Confucian goal of *harmony* in the social relationships, minimizing

social conflict is strongly emphasized for the attainment of harmony for the self, family and social relationships.

Analytic Procedures: To identify sources of measurement nonequivalence, a possibility of differential item functioning (DIF) was tested. Thereafter, latent mother-child relationship constructs were cross-culturally examined using Multiple Indicators/Multiple Causes (MIMIC) model, controlling for DIF effects as well as other control variables ('child's sex'; 'the degree of time spent with mothers'). Same analytic procedures described above were performed to examine the study hypotheses for father-child relationships (H1b) and friendships (H1c).

H1b (A cross-cultural examination of father-child relationships): It was hypothesized that the South Korean children would report lower levels of conflict and greater asymmetric power distance in their father-child relationships than would the European-American children. Again, this hypothesis was drawn from traditional Confucian principles. With regard to positive social provisions, no specific hypothesis was offered because the traditional role of fathers is to be the authority figure as a head of the family (rather than the emotional providers of the family), although Korean children were expected to be closely connected to their parents.

H1c (A cross-cultural examination of friendships): It was hypothesized that South Korean children would report lower levels of positive social provisions and conflict in their friendships than would European-American children given the Korean culture's greater emphasis on keeping harmony in the social relationships by minimizing social conflict. No specific hypotheses were offered with regard to power distance.

Second, children's patterns of relationship networks were examined insofar as mother-child and father-child relationships and friendships are concerned. Specific aims, hypotheses, and analytic procedures are presented below.

Aim 2: Children's patterns of relationship networks were examined. To these ends, individual differences in the patterns of relationship networks were explored using a person-centered approach within a given culture. To tap into heterogeneity in the relationship patterns, latent class memberships were determined based on the patterns of relationship qualities across the mother-child relationships, father-child relationships, and friendships.

H2a (Within culture examination: *The South Korean children*)

Based on the lack of empirical findings of individuals' patterns of close relationship networks, no specific hypotheses were offered regarding the number of latent class membership and the frequency of class membership. From current available limited knowledge (e.g., Kim, 2005; Kim & Choi, 1994; Pettengill & Rohner, 1985), however, the South Korean children were hypothesized to report higher positive social provisions from their mother-child and father-child relationships than from friendships given the emphasis on the family system in South Korean culture; the children were expected to report similar levels of negative interactions with their mother, fathers and friends; and the children were expected to report greater power asymmetry in their mother-child and father-child relationships.

Analytic Procedures: Factor Mixture Model (FMM) analyses were conducted to examine the patterns of relationship networks, identifying the number of latent classes (i.e., distinct subgroups) and the frequency of each class membership

based on the patterns of relationship quality across these three relationships with regard to following relationship constructs (positive social provisions, negative interactions, and power distance). In other words, latent class of relationship network can classify subgroups of children who share similar patterns of relationship quality. In addition, latent class modeling would reveal what the most (or least) common networks of relationships were. Note that same analytic procedures were used for the analyses for the European-American children.

H2b (Within culture examination: *The European-American children*)

Based on the lack of empirical findings of individuals' patterns of close relationship network, no specific hypotheses were offered regarding the number of latent class and the frequency of each class membership (e.g., the most common patterns). From current available limited knowledge, (e.g., Furman & Buhrmester, 1985, 1992; Furman, Simon, Shaffer & Bouchev, 2002; Laursen, Furman & Mooney, 2006), however, the European American children were hypothesized to report higher positive social provisions from their friendships than from their mother-child and father-child relationships given that changes and shifts in closeness and interdependence are evidenced in parent-child relationships and friendships during late childhood (Laursen et al., 2006; Rubin, Bukowski, & Parker, 2006); the children were hypothesized to report more negative interactions with their mothers and fathers than with their friends; and the children were expected to report moderate power asymmetry in their mother-child and father-child relationships.

Lastly, in the present study, I examined the relations between children's perceptions of their relationships with mothers, fathers and friends and children's

satisfaction with each of these relationships. Specific aims, hypotheses, and analytic procedures are presented below.

Aim 3: The extent to which relationship constructs account for satisfaction in mother-child and father-child relationships, and friendships were examined, cross-culturally, in terms of positive social provisions, negative interactions and power distance.

H3a (A cross-cultural examination of mother-child relationships): It was hypothesized that there would be cultural dissimilarities in the way in which the relationship constructs were associated with satisfaction in mother-child relationships. In particular, it was hypothesized that high levels of social provisions, low levels of negative interactions and power asymmetry would predict children's satisfaction with their mothers in the South Korean sample. In contrast, it was hypothesized that high levels of social provisions, low levels of negative interactions and power symmetry would predict children's satisfaction with their mothers in the European-American sample. These hypotheses were drawn from cross-cultural perspectives. For example, greater emphasis on family order and hierarchy in South Korea was presumed to lead the positive relations between asymmetric power distance and children's satisfaction with their parents.

Analytic Procedures: Structural Equational Modeling (SEM) was performed to examine the associations between the relationships constructs and children's satisfaction with their mother-child relationships. Based on the findings from MIMIC analyses with DIF effects (measurement non-invariance), DIF effects were taken into account in the models by allowing the paths between DIF items and each

corresponding latent factor to freely vary across countries. Thereafter, structural invariance was tested by comparing two competing models: An initial model without any constraints across groups being compared assumed structural non-invariance; a reduced constraint model assumed structural invariance, constraining the factor loadings to be identical across countries. Same analytic procedures were used for examining father-child relationships and friendships.

H3b (A cross-cultural examination of father-child relationships): It was hypothesized that there would be cultural dissimilarities in the manner in which the relationship constructs were associated with satisfaction in father-child relationships. In particular, it was hypothesized that high levels of social provisions, low levels of negative interactions and power asymmetry would predict children's satisfaction with their fathers in the South Korean sample; in contrast, it was hypothesized that high levels of social provisions, low levels of negative interactions and power symmetry would predict children's satisfaction with their fathers in the European-American sample.

H3c (A cross-cultural examination of friendships): It was hypothesized that there would be cultural similarities in the manner in which the relationship constructs were associated with satisfaction in friendships. Specifically, it was hypothesized that high levels of social provisions, low levels of negative interactions and power symmetry would predict children's satisfaction with their friends in both of the South Korean and the European-American samples. Although traditional Confucian principles in the Korean culture stress the family system over friendships, it may be that the important aspects of friendship quality would be similar across cultures.

CHAPTER III

Methodology

Participants

The present study included two samples of children (South Korean and European American) from middle income class family with two parents (i.e., mother and father) given that the present study was designed to cross-culturally examine the quality of relationships with mothers, fathers and friends among children from middle income class family with two parents. The South Korean sample was drawn from a larger normative sample of fifth-grade students (N= 456, 224 girls) from two public schools which ranging in age from 10 to 11 years in the Seoul Metropolitan area, South Korea, for whom written parental permission was received (consent rate = 98%). South Korea is very homogeneous in terms of ethnic and racial compositions except for about 20,000 Chinese (Korea Survey, 1991); other demographic information of this sample was not available. However, the two public schools were located in the area of the city in which the majority of residents are from middle income class family.

The European American sample was drawn from a larger normative longitudinal sample of sixth-grade students (N= 140, 79 girls) from three ethnically diverse public schools ranging in age from 10 to 11 years in the Washington D.C. Metropolitan Area, for whom written parental permission was received (consent rate = 84%). Available demographic information indicated similar county-wide ethnic and racial compositions of the larger sample (43% European-American, 19% Hispanic/Latino-American, 23% African-American, 15% Asian-American).

Procedures

South Korean sample. Korean children were asked to complete a battery of group-administered questionnaires in their classrooms. To ensure proper translations, all the questionnaires used in a larger study were translated into Korean and back-translated into English by two psychology major Korean American bilingual students.

European American sample. During the Fall (November or December) and Spring (April or May) semesters of the 6th grades, participants completed a battery of group-administered questionnaires in their classrooms. The questionnaires identified the children's best friends in the school, and the behavioral characteristics of each participant. Based on friendship status and behavioral characteristics, children and their parents were invited to a laboratory at a large University for completion of additional battery of questionnaires and observational session. Data on the perceived relationships were obtained from the 6th grade participants with mutual best friends during laboratory visits, which occurred between the Fall and Spring school assessments.

Measures

Network of Relationship Inventory (NRI; Furman & Buhrmester, 1985). The NRI was used to assess children's perceptions of relationships with mothers, fathers and friends. The thirty-item a five-point Likert-type questionnaire yields 11 subscales that load on four factors: (1) social support (e.g., companionship, instrumental help, intimacy, nurturance of the other, affection, reliable alliance, enhancement of worth), (2) satisfaction, (3) negativity (e.g., conflict, punitive aspects), and (4) relative power distance (Furman, 1996). Reliability (Alpha: .76-.91) and validity of this measure has

been previously established (see Furman, 1996). Two items were added to original 30 items (“How much do you and this person annoy or bug each other?”; “How much do you and this person hassle or nag one another?”); two items were excluded in the data analyses in the present study because preliminary factor analyses indicated that these following two items did not load onto any factors (“How sure are you relationship will continue in years to come?”; “How often do you go places and do enjoyable things with ...?”).

The present study explored the latent constructs of the NRI using Confirmatory Factor Analysis (CFA). Attempting to reflect the characteristics of the items and constructs, based on the factor structure from Confirmatory Factor Analysis, relationship constructs (i.e., factors) were labeled as follows: Positive social provisions (affection, intimacy, interactive behaviors); negative interactions (conflict, punitive aspects); power distance. The original factor labels of the NRI were kept if possible (e.g., conflict, intimacy, punitive aspects). Various dimensions of relationship quality have been previously demonstrated to be applicable across parent-child relationships and friendships (Furman, 1996; Furman & Buhrmester, 1985; Furman & Buhrmester, 1992). The items for each constructs are presented in Table 1.

Data Analyses

The primary hypotheses were tested using variable-centered and person-oriented approaches to address not only the relations between variables of interest, but also individual differences in relationship qualities. The variable-centered approach is found in most studies, in which addresses associations among variables;

and it focuses on processes that are thought to be a similar degree in all individuals in the sample. Using this approach, underlying relationship constructs in mother-child and father-child relationships, and friendships were examined with regard to the first and the third specific aims of this study. The person-centered approach was employed to examine the patterns of relationship network with regard to the second specific aim of the present study, tapping into individual differences in the patterns of mother-child and father-child relationships and friendship as a network of relationships.

The present study was designed to investigate latent relationship constructs, which assumes that invisible or latent concepts can be represented by observable or measurable variables. Latent variable analysis has demonstrated its strengths in handling measurement errors and improving statistical estimation (Hancock & Muller, 2006). The latent variable approach benefited the present study in establishing measurement equivalence and validity of cross-cultural investigation.

Specifically, regarding the first specific aim of the present study, the latent constructs of mother- and father-child relationships and friendships were cross-culturally examined using Multiple Indicators/Multiple Causes (MIMIC) modeling, a Confirmatory Factor Analysis (CFA) with covariates within a Structural Equation Modeling framework, allowing simultaneous investigation of group differences on latent factor means after adjusting control variables (Jöreskog & Goldberger, 1975; Muthén, 1989). Given that measurement validity is critical in cross-cultural research, in the present study, a possibility of differential item functioning (DIF) were examined to establish measurement validity and meaningful cross-cultural comparisons. DIF is defined as a direct effect of the group variable examined (i.e.,

country) on the observed (measured) variable. To establish measurement equivalence, DIF analyses examined whether the response to an item is a function of group membership *over and beyond* group differences in the latent variable as shown in Figure 1 in Results (dashed direct paths). In other words, if there is measurement invariance, group differences in observed variables would be proportional to the mean differences in latent factors. Multiple Indicators/Multiple Causes (MIMIC) modeling with DIF has demonstrated its strength in adjusting significant DIF effects (Teresi & Fleishman, 2007).

With regard to the second specific aim of the study, children's patterns of relationship networks were examined using Factor Mixture Modeling (FMM), a combination of Latent Class Analysis (LCA) and Confirmatory Factor Analysis (CFA) with person-centered approach. FMM was conducted to identify the patterns of children's relationship networks with mothers, fathers, and friends for each latent relationship construct.

In terms of the third specific aim of the study, a series of Structural Equation Modeling (SEM) was conducted to examine the relations between children's perceptions of their relationship qualities with mothers, fathers and friends and their satisfaction with the relationship in question. Specifically, a set of multi-group SEMs was run to cross-culturally examine the extent to which relationship constructs account for satisfaction in mother-child and father-child relationships, and friendships regarding latent relationship constructs.

Missing data. The models were estimated using the *Mplus* statistical program which uses a full-information maximum-likelihood (FIML) estimation operating

under the assumption that data are missing at random (*MAR*). *MAR* assumes that the reason for missing data is either random or random after incorporating other variables measured in the study (Little, 1995).

CHAPTER IV

RESULTS

Overview of data analytic plans

Prior to hypothesis testing, the psychometric properties of the *Network of Relationship Inventory (NRI)* were examined in terms of means and standard deviations for all study items (Table 2) and correlations between the relationship constructs (Tables 3, 4, and 5) for the South Korean and the European-American samples. The indicators (measured items) of latent constructs are presented in Table 1.

In Part I, the latent constructs of mother- and father-child relationships and friendships were cross-culturally examined using Multiple Indicators/Multiple Causes (MIMIC) modeling, a Confirmatory Factor Analysis (CFA) with covariates within a Structural Equational Modeling framework, allowing the simultaneous investigation of group differences on latent factor means after adjusting control variables. Given that measurement validity is critical in cross-cultural research, I examined the possibility of differential item functioning (DIF), a systematic difference in responses to measured items, controlling for the latent variable. DIF effects were adjusted in the models to establish measurement validity and meaningful cross-cultural comparisons. In Part II, individual differences in the patterns of children's relationship networks were examined using a person-centered approach. Specifically, the patterns of children's perceptions of their relationships with mothers, fathers and friends for each latent construct were identified using Factor Mixture Modeling, a combination of Latent Class Analysis (LCA) and Confirmatory Factor Analysis (CFA). Lastly, in Part III, a series of multi-sample Structural Equational Modeling (SEM) analyses was

conducted to examine the extent to which relationship constructs account for children's satisfaction with mothers, fathers and friends and their satisfaction with the relationship in question.

Part I: Latent constructs of mother-child and father-child relationships and friendships: Cross-cultural comparisons

Cross-cultural group differences on the latent factors of mother-child and father-child relationships and friendships were examined using Multiple Indicators/Multiple Causes (MIMIC) models with differential item functioning (DIF) in the South Korean and the European-American samples. I followed Jöreskog (2002) and Muthén's (1989) approaches of SEM MIMIC modeling with DIF: (1) Examining the relative contributions of multiple exogenous variables on latent factor (i.e., MIMIC); (2) testing measured item-level measurement non-invariance (i.e., DIF); and (3) adjusting DIF effects in the model when DIF effects were detected. Specifically, for each relationship (i.e., mother-child relationship; father-child relationships; and friendships), an initial MIMIC model was run including only paths from all exogenous covariates to all six latent factors to measured items. In other words, this initial model assumed measurement level invariance by modeling only paths from the covariates to the latent factors to measured items (i.e., indirect effects from covariates to measured items as a function of latent factors).

Exogenous variables included 'country', 'sex of child' and 'the degree of time spent with mothers, fathers and friends'. Of greater interest were group differences due to country membership. 'Sex of child' and 'the degree of time spent' were included as control variables. To detect the possibility of measurement non-

invariance (i.e., DIF), the inclusion of *direct* paths from country to measured items (i.e., direct effects or DIF) was determined based on Lagrange Multiplier (LM) modification indices. The final MIMIC models included significant DIF effects as well as indirect paths (e.g., country group differences on the latent factors). Model adequacy of the proposed MIMIC with DIF was checked based on Hu and Bentler's (1999) suggestion for satisfactory fit indices (e.g., a RMSEA value that is less than or equal to .06 and a SRMR value that is less than or equal to .10). A MIMIC model with DIF in mother-child relationships is presented in Figure 1, showing direct effects (DIF) in dashed lines and indirect effects (e.g., cultural differences on latent factors) in solid lines from exogenous variables to latent factors.

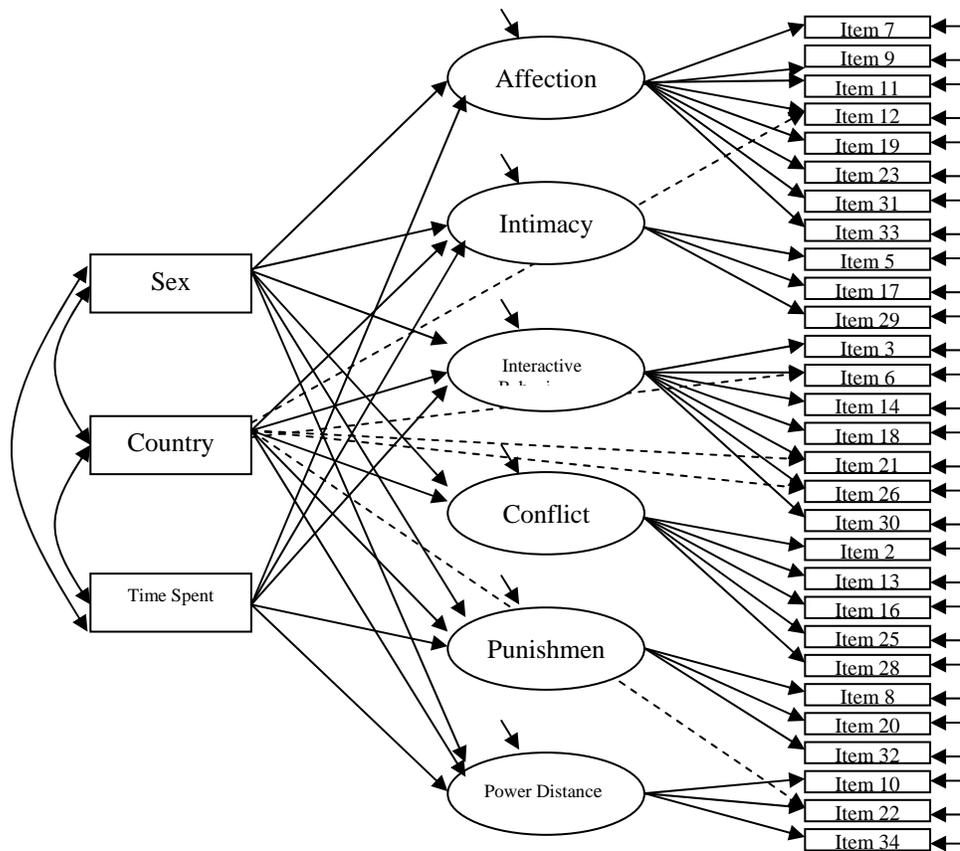


Figure 1. MIMIC Model with DIF Effects in Mother-Child Relationships

Mother-child relationships

An initial MIMIC model was run with only indirect effects of country, sex, and the degree of time spent with mothers (i.e., paths from all covariates to all six latent factors). The possibility of DIF effects was examined based on LM modification indices and, then, the selected DIF effects were included in the final MIMIC model. Model fit indices of the final model indicated that the model reflected the data very well ($\chi^2=1304.099$, $df=426$; CFI= .89; RMSEA = .065, 90 % Confidence Interval .061, .068; SRMR .053), meeting Hu and Bentler's (1999) suggestion for satisfactory model fit. Standardized factor loadings and residuals in the measurement portion of the model (Confirmatory Factor Analysis) are presented in Table 6. As shown in Figure 1, the proposed MIMIC model includes significant DIF effects for following items: "How much do you play around and have fun with this person?" (item 12; $est=0.769$, $SE=0.079$, $p= .000$); "This person helps with things she/he can't do by her/himself?" (item 6; $est = 0.382$, $SE =0.102$, $p = .000$); "This person treats you like you're good at many things?" (item 21; $est=-0.442$, $SE=0.069$, $p= .000$); "This person help you when you need to get something done?" (item 26; $est =-0.376$, $SE=0.076$, $p= .000$); "How often is this person the boss in your relationship?" (item22; $est=-1.415$, $SE=0.131$, $p= .000$). DIF analyses indicated that the South Korean children tended to score highly on item 12 ('affection') and items 6 and 21 ('positive interactive behaviors') *over and beyond* group differences in their corresponding latent factors; the European-American children tended to respond with higher scores to items 26 ('positive interactive behaviors') and 22 ('power distance') *over and beyond* group differences in their corresponding latent factors. The

structural path coefficients and standard errors regarding the effects of country on the latent constructs are presented in Table 7.

Results from the final MIMIC model revealed cross-cultural group differences in the following latent factors: 'affection', 'positive interactive behaviors' (e.g., instrumental help, protection, and validation), 'conflict', 'punitive aspects', and 'power distance' (Figure 2). Specifically, South Korean children perceived more positive interactive behaviors such as instrumental help, protection, and validation in their mother-child relationships than did the European-American children did. European-American children perceived more affection in their mother-child relationships than did their South Korean counterparts. The European-American children reported more conflict with their mothers than did their South Korean counterparts; the South Korean children reported more punitive aspects from their mothers than did the European-American children. As for the power distance, the South Korean children perceived more vertical asymmetry in their mother-child relationships than did the European-American children. In terms of control variables that were included in the model, a sex difference was only significant in the level of positive interactive behaviors, indicating that boys tended to report more instrumental help, protection and validation in their mother-child relationships than did girls. On the other hand, the degree of time spent with mothers was significantly associated with the levels of five latent factors. That is, the more time children spent with their mothers, the more they were likely to report higher levels of affection, intimacy, positive interactive behaviors such as instrumental help, protection, and validation. In

addition, the more they spent time with their mothers, children were more likely to report lower levels of conflict and punitive aspects in their mother-child relationships.

Father-child relationships

Paralleling the MIMIC DIF modeling for mother-child relationships, an initial MIMIC model was run with only the paths from all covariates to all six latent factors. The possibility of DIF effects was examined based on LM modification indices and, then, the selected DIF effects were included in the final MIMIC model. Model fit indices of the proposed model indicated that the model reflects the data well (CFI= .883; RMSEA = .061, 90 % CI: .057, .065; SRMR .077). The final MIMIC model includes significant DIF effects for following items: “How much do you play around and have fun with this person?” (item 12; est=0.516, SE=0.086, $p=.000$); “This person helps with things she/he can't do by her/himself?” (item 6; est=0.591, SE=0.101, $p=.000$); “This person treats you like you're good at many things?” (item 21; est=-0.378, SE=0.070, $p=.000$); and “How much do you and this person argue with each other?” (item 25; est=-0.275, SE=0.080, $p=.001$). DIF analyses indicated that the South Korean children tended to score highly on items 12 (‘affection’) and 6 (‘positive interactive behaviors’) *over and beyond* group differences in their corresponding latent factors. The European-American children tended to respond with higher scores to item 21 (‘positive interactive behaviors’) and item 25 (‘conflict’) *over and beyond* group differences in their corresponding latent factors. The structural path coefficients and standard errors regarding the effects of country on the latent constructs are presented in Table 7.

Results from the final MIMIC model revealed cross-cultural group differences in the following latent factors: ‘Affection’, ‘intimacy’, ‘conflict’, ‘punitive aspects’ and ‘power distance’. Specifically, the South Korean children perceived more intimacy and punitive aspects in their father-child relationships than the European-American children, whereas the European-American children perceived more affection, conflict and vertical power distance than their South Korean counterparts. With regard to control variables that were included in the model, significant sex difference were found on the following latent factors: ‘Affection’, ‘intimacy’, ‘punitive aspects’ and ‘power distance’ in father-child relationships. Girls reported higher affection, whereas boys reported greater intimacy, punitive aspects and vertical power distribution in their father-child relationships. In terms of the degree of time spent with fathers, it was significantly associated with the five latent factors with the exception of power distance. That is, the more children spent time with their fathers, the more they were likely to report higher levels of affection, intimacy, positive interactive behaviors, and lower levels of conflict and punitive aspects in their father-child relationships.

Friendships

Mirroring the MIMIC modeling procedures of mother-child and father-child relationships, an initial MIMIC model was run with only indirect effects of country, sex, and the degree of time spent with fathers (i.e., paths from all covariates to all six latent factors). The possibility of DIF effects was examined based on LM modification indices and, then, the selected direct paths (i.e., DIF effects) were included in the final MIMIC model. Model fit indices of the final model showed that

the model reflected the data very well (CFI= .904; RMSEA = .055, 90 % CI: .052, .059; SRMR .062). The final MIMIC model included significant DIF effects for following items: “This person treats you like you're admired and respected?” (item 9, est=-0.421, SE=0.088, $p=.000$); “ This person teaches you how to do things that you don't know how to do? (item 3 est=0.753, SE=0.098, $p=.000$)”; How much does this person help you figure out or fix things? (item 14 est=0.319, SE=0.095, $p=.001$); “How much do you protect and look out for this person? (item 18 est=-0.483, SE=0.096, $p=.000$)”; “This person treats you like you're good at many things?” (item 21 est=-0.385, SE=0.094, $p=.000$); “How much do you and this person hassle or nag one another?” (item 28 est=-0.247, SE=0.086, $p=.004$); and “How often does this person tell you what to do?” (item 10 est=-0.291, SE=0.141, $p=.039$). DIF analyses indicated that the South Korean children tended to score highly on item 3 (‘positive interactive behaviors’) *over and beyond* group differences in the latent factor; the European-American children tended to respond with higher scores to item 9 (‘affection’), items 14, 18, 21 (‘positive interactive behaviors’), item 28 (‘conflict’), and item 10 (‘power distance’) *over and beyond* group differences in their corresponding latent factors. The structural path coefficients and standard errors regarding the effects of country on the latent constructs are presented in Table 7.

Results from the final MIMIC model revealed cross-cultural group differences in the following five latent factors: ‘Affection’, ‘intimacy’, ‘positive interactive behaviors’, ‘punitive aspects’ and ‘power distance’. Specifically, the South Korean children perceived more punitive aspects and power asymmetry in their friendships than the European-American children, whereas the European-American children

perceived more affection, intimacy, and positive interactive behaviors than their South Korean counterparts. With regard to control variables that were included in the model, significant sex differences were found on the latent factors ‘affection’, ‘intimacy’, and ‘positive interactive behaviors’ in their friendships: Girls reported higher levels of affection, intimacy and instrumental help, protection, and validation than did boys. In terms of the degree of time spent with fathers, it was significantly associated with the five latent factors with the exception of punitive aspects. That is, the more time children spent with their friends, the more they reported higher levels of affection, intimacy, positive interactive behaviors, asymmetric power distribution; and lower levels of conflict in their friendships.

Part II: The patterns of relationship networks across mother-child and father-child relationships and friendship: Within-culture examination

Children’s patterns of relationship networks were examined using a person-centered approach. Factor Mixture Modeling, a combination of Latent Class Analysis (LCA) and Confirmatory Factor Analysis (CFA) was conducted to identify the patterns of children’s relationship networks with mothers, fathers, and friends for each relationship construct examined in Part I. The structural portion of Factor Mixture model is presented in Figure 2.

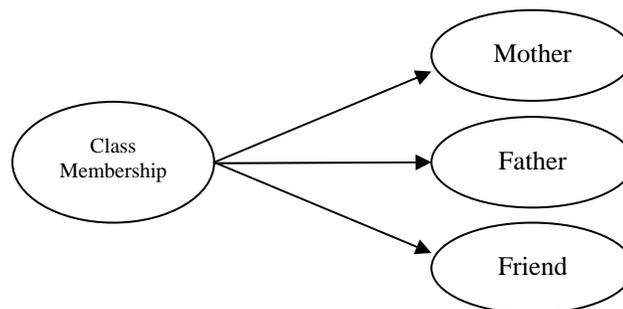


Figure 2. Structural Portion of Factor Mixture Modeling

FMM analyses were performed within each culture given the exploratory nature of the present investigation. To this end, latent class memberships were determined based on the patterns of relationship quality across the mother-child relationships, father-child relationships, and friendships for each latent factor. The optimal number of latent classes was determined based on the following statistical criteria as well as the interpretability of the classes: (1) the Bayesian Information Criteria (BIC); (2) entropy; and (3) posterior probability. The BIC balances goodness of fit with parsimony; lower scores of the BIC represent better fitting models (Nagin, 1999). Entropy refers to the average classification accuracy in assigning individuals to classes; values range from zero to 1, with higher scores reflecting a better accuracy in classification of class membership. To check model adequacy and class discrimination, I examined the posterior probabilities; each individual receives as an estimated probability for belonging in each of the classes. Class membership was assigned according to the highest posterior probabilities of latent classes (Bande-en-Roche, Miglioretti, Zeger, & Rathouz, 1997). Given the nature of latent means analyses, the latent means of the reference class set to be zero, which does not provide information regarding the characteristics of the latent classes (e.g., levels of measured items); and the comparisons of latent class patterns were made by investigating relative differences between the reference class and the other latent class in question. In attempting to accommodate ease of interpretability of the reference class, the means of the estimated measured-item means were plotted for FMM

solutions which were chosen as final models in Figures 3 through 14. Latent means of classes from these FMM solutions are presented in Tables 8 through 19.

Affection across mother-child and father-child relationships and friendships

South Korean children. Factor Mixture models with one-class through four-class solutions were run to identify the distinct patterns of affection levels across mother-child and father-child relationships and friendships. The BIC decreased as classes were added from one-class through four-class solutions (24392.28, 24063.95, 23895.27 and 23666.70, respectively). The entropies from one-class through four-class solutions (1.00, .98, .99, and .98, respectively) indicated that accuracy in assigning individuals to classes was very good. Based on the BIC, entropy and posterior probabilities, the four-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. Average latent class probabilities for most likely latent class membership ranged from .94 to .99 for the four-class model, indicating that class discrimination is very good.

Four distinct classes of affection patterns across mother-child and father-child and friendships were identified (Figure 3; Table 8): (1) class 1 (the reference class) showed high levels of affection in mother-child and father child relationships and moderate levels of affection in friendships, consisting of 386 children (85% of the sample) whose estimated mean affection scores for mothers, fathers and friends were 4.73, 4.69, and 3.78, respectively (from a 5-point Likert scale, ranging from 1 to 5); (2) class 2 showed significantly lower levels of affection in all three relationships, relative to the reference class, consisting of 39 children (8% of the sample); (3) class 3 showed significantly lower levels of affection in father-child relationships and

friendships, relative to the reference class, consisting of 15 children (3% of the sample); and (4) class 4 showed significantly lower levels of affection in mother-child and father-child relationships, relative to the reference class, consisting of 10 children (2% of the sample).

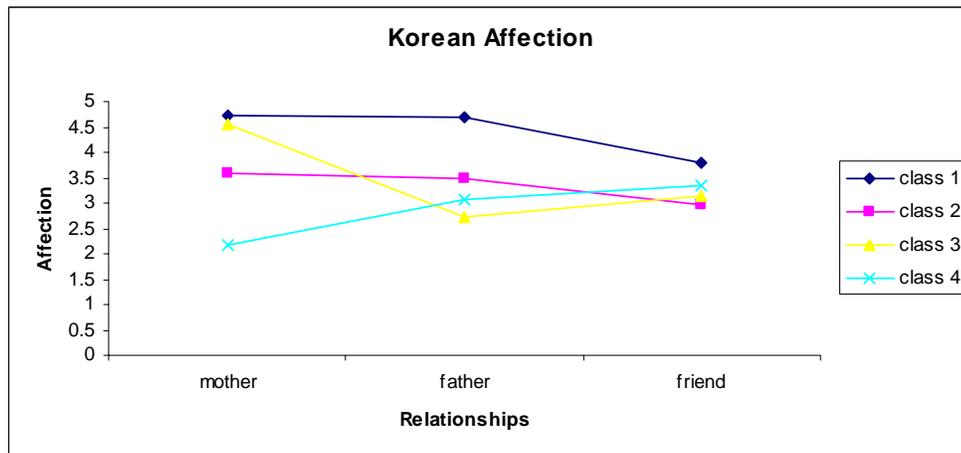


Figure 3. Means of the Estimated Measured-item Means for Latent Classes

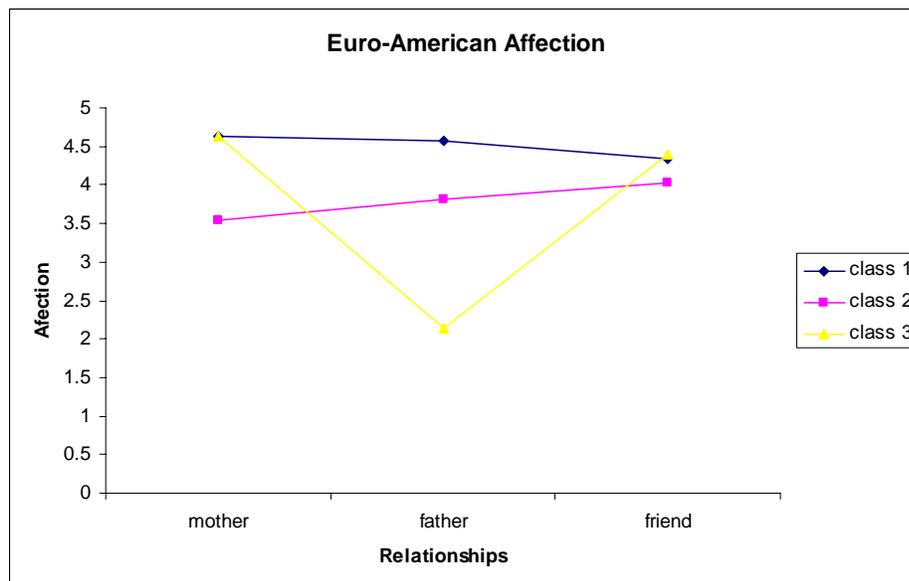


Figure 4. Means of the Estimated Measured-item Means for Latent Classes

European-American children. Factor Mixture models with one- through three-class solutions were run to identify the distinct patterns of affection levels across mother-child and father-child relationships and friendships. The four-class solution was not considered due to a low level of entropy (.262). The BIC decreased as classes were added from one-class through three-class solutions (6090.65, 6020.12 and 5912.70, respectively). The entropies from the one-class through three-class solutions (1.00, .98 and .99, respectively) also indicated that accuracy in assigning individuals to classes was very good. Based on the BIC, entropy and posterior probabilities, the three-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership ranged from .99 to 1.00 for the three-class model, indicating that class discrimination was very good.

Three distinct classes of affection patterns were identified across mother-child and father-child and friendships (Figure 4; Table 9): (1) class 1 (the reference class) showed high levels of affection in mother-child and father child relationships and friendships, and consisted of 127 children (89% of the sample) whose estimated mean affection scores for mothers, fathers and friends were 4.63, 4.57, and 4.35, respectively; (2) class 2, consisting of 10 children, showed significantly lower levels of affection in mother-child and father-child relationships, relative to the reference class (10% of the sample); and (3) class 3, consisting of 2 children, showed significantly lower levels of affection in father-child relationships, relative to the reference class (1% of the sample).

Intimacy across mother-child and father-child relationships and friendships

South Korean children. Factor Mixture models with one-class through four-class solutions were run to identify the distinct patterns of intimacy levels across mother-child and father-child relationships and friendships. The BIC decreased as classes were added from one- through four-class solutions (12515.36, 12399.51, 12345.94 and 12303.46, respectively). The entropies from one- through four-class solutions (1.00, .95, .98, and .95, respectively) indicated that accuracy in assigning individuals to classes was very good. Based on the BIC, entropy and posterior probabilities, the three-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined: The average latent class probabilities for most likely latent class membership ranged from .995 to .999 for the three-class model, indicating that class discrimination was very good.

Three distinct classes of intimacy patterns were identified across mother-child and father-child and friendships (Figure 5; Table 10): (1) class 1, consisting of 395 children, (the reference class) showed moderately high levels of intimacy in mother-child and father child relationships and moderate levels of affection in friendships (87% of the sample) whose estimated mean intimacy scores for mothers, fathers and friends were 3.57, 3.37, and 2.77, respectively (from a 5-point Likert scale, ranging from 1 to 5); (2) class 2, consisting of 51 children, showed significantly higher levels of intimacy in their mother-child relationships and significantly lower levels of intimacy in their father-child relationships relative to the reference class (11% of the sample); and (3) class 3, consisting of 5 children (1% of the sample), showed significantly lower levels of intimacy in their mother-child relationships and

significantly higher levels of intimacy in their friendships, relative to the reference class.

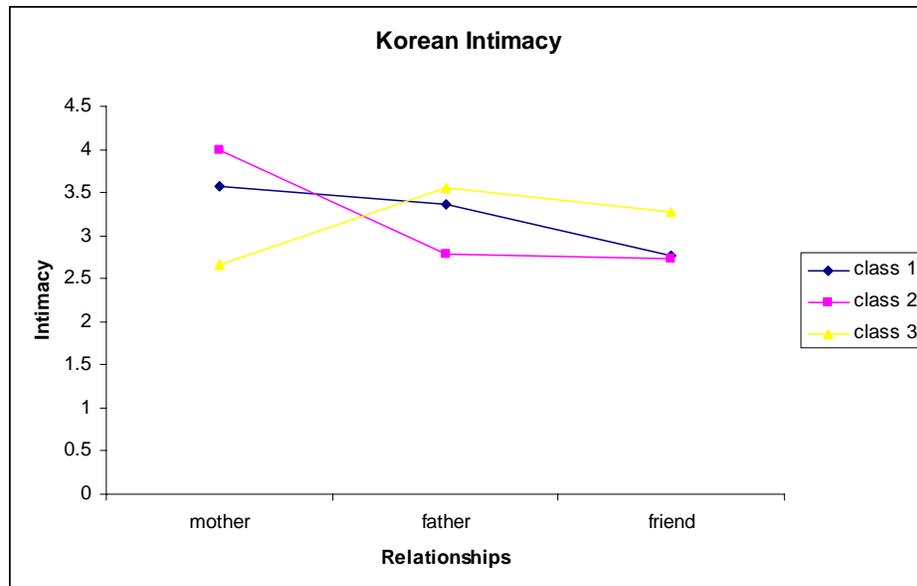


Figure 5. Means of the Estimated Measured-item Means for Latent Classes

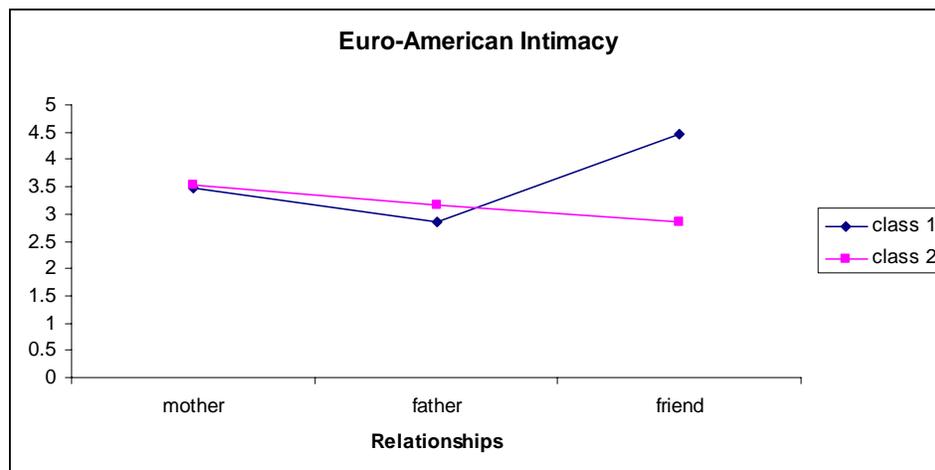


Figure 6. Means of the Estimated Measured-item Means for Latent Classes

European-American children. Factor Mixture models with one- through four-class solutions were run to identify the distinct patterns of intimacy levels across

mother-child and father-child relationships and friendships. The BIC decreased as class was added from one-class to two-class solutions and slightly increased from two-class through four-class solutions (6329.27, 3382.463, 3388.84, and 3408.614, respectively). The entropies from one- through four-class solutions (1.00, .99, .93, and .94, respectively) indicated that accuracy in assigning individuals to classes was very good. Based on the BIC, entropy and posterior probabilities, the three-class solution was chosen to be optimal. Note that the three-class solution made valid assignment of the individuals to the two different classes. To check model adequacy, the posterior probabilities were examined: The average latent class probabilities for most likely latent class membership ranged from .96 to .98 for the three-class model, indicating that class discrimination is very good.

Two distinct classes of intimacy patterns were identified across mother-child and father-child and friendships (Figure 6; Table 11): (1) class 1 (the reference class), consisting of 88 children (63% of the sample), showed moderately high levels of intimacy in mother-child and father child relationships and very high levels of intimacy in friendships; the estimated mean intimacy scores for mothers, fathers and friends were 3.46, 2.85, and 4.47, respectively; (2) class 2, consisting of 52 children (37% of the sample), showed significantly lower levels of intimacy in their friendships, relative to the reference class.

Positive interactive behaviors across mother-child and father-child relationships and friendships

South Korean children. Mixture models with one- through four-class solutions were run to identify the distinct patterns of positive interactive behaviors (e.g.,

instrumental help, protection, and validation) levels across mother-child and father-child relationships and friendships. The BIC decreased as classes were added from one-class through four-class solutions (12798.77, 24999.87, 25024.33 and 24858.59, respectively). The entropies from one- through four-class solutions (1.00, .87, .92, and .82, respectively) indicated that accuracy in assigning individuals to classes was acceptable. Based on the BIC, entropy and posterior probabilities, the three-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership ranged from .90 to .95 for the three-class model except for class 2 (.67), indicating that class discrimination among classes 1, 3 and 4 was very good. However, class discrimination between class 1 and class 2 was not robust.

Three distinct patterns of positive interactive behaviors such as instrumental help, protection and validation were identified across mother-child and father-child and friendships (Figure 7; Table 12): (1) class 1 (the reference class), consisting of 359 children (79% of the sample), showed high levels of instrumental help, protection and validation in mother-child and father child relationships and moderate levels in friendships whose estimated model mean scores for mothers, fathers and friends were 4.49, 4.34 and 3.51, respectively; (2) class 2, consisting of 19 children (4% of the sample), showed significantly lower levels of instrumental help, protection and validation in their friendships, relative to the reference class; (3) class 3, consisting of 60 children (13% of the sample), showed significantly lower levels of instrumental help, protection and validation in all three relationships, relative to the reference class; and (4) class 4, consisting of 14 children (3% of the sample), showed

significantly lower levels of instrumental help, protection and validation in their father-child relationships, relative to the reference class.

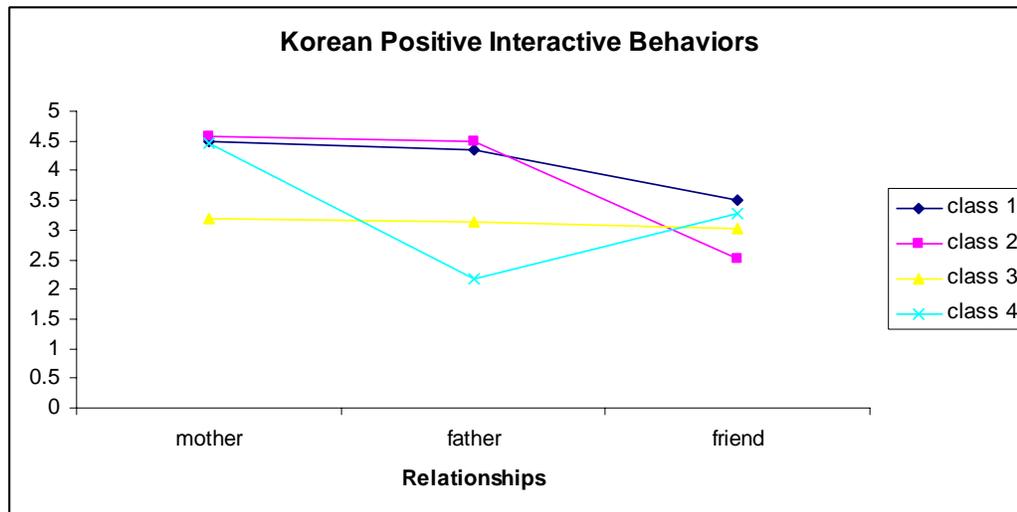


Figure 7. Means of the Estimated Measured-item Means for Latent Classes

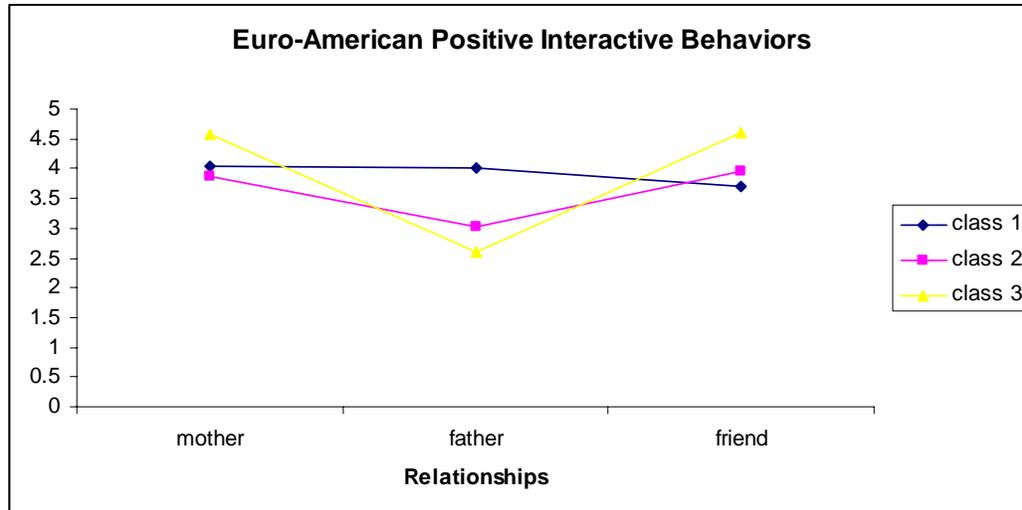


Figure 8. Means of the Estimated Measured-item Means for Latent Classes

European-American children. Mixture models with one- through four-class solutions were run to identify the distinct patterns of positive interactive behaviors

(e.g., instrumental help, protection, and validation) levels across mother-child and father-child relationships and friendships. The BIC decreased as classes were added from one- through four-class solutions (7743.50, 7763.26, 7721.64 and 7766.54, respectively). The entropies from one- through four-class solutions (1.00, 1.00, .99, and .99, respectively) indicated that accuracy in assigning individuals to classes was very good. Based on the BIC, entropy and posterior probabilities, the three-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership ranged from .990 to .996 for the three-class model, indicating that class discrimination was very good.

Three distinct patterns of positive interactive behaviors such as instrumental help, protection and validation were identified across mother-child and father-child and friendships (Figure 8; Table 13): (1) class 1 (the reference class), consisting of 131 children (93% of the sample), showed high levels of instrumental help, protection and validation in all three relationships; the estimated model mean scores for mothers, fathers and friends were 4.03, 4.03 and 3.69, respectively; (2) class 2, consisting of 8 children (6% of the sample), showed significantly lower levels of instrumental help, protection and validation in their friendships, relative to the reference class; and (3) class 3, consisting of 1 child (1% of the sample), showed significantly lower levels of instrumental help, protection and validation in all three relationships, relative to the reference class. Although the class 3 only appeared to have one child, based on the other indices, this class was kept in the model to point to its distinct pattern.

Conflict across mother-child and father-child relationships and friendships

South Korean children. Mixture models with one- through four-class solutions were run to identify the distinct patterns of conflict levels across mother-child and father-child relationships and friendships. The BIC decreased as classes were added from one- through four-class solutions (18126.63, 18029.47, 17902.82, and 17885.19, respectively). The entropies from one- through four-class solutions (1.00, .96, .98, and .96, respectively) indicated that accuracy in assigning individuals to classes was very good. Based on the BIC, entropy and posterior probabilities, the three-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership ranged from .94 to .996 for the three-class model, indicating that class discrimination was very good.

Three distinct patterns of conflict were identified across mother-child and father-child and friendships (Figure 9; Table 14): (1) class 1 (the reference class), consisting of 421 children (93% of the sample), showed low levels of conflict in all three relationships; the estimated model mean scores for mothers, fathers and friends were 2.20, 2.12 and 1.88, respectively (from 5-Likert scale, ranging from 1 to 5); (2) class 2, consisting of 28 children (6% of the sample), showed significantly higher levels of conflict in their mother-child relationships, relative to the reference class; and (3) class 3, consisting of 3 children (1% of the sample), showed significantly higher levels of conflict in their father-child relationships, relative to the reference class.

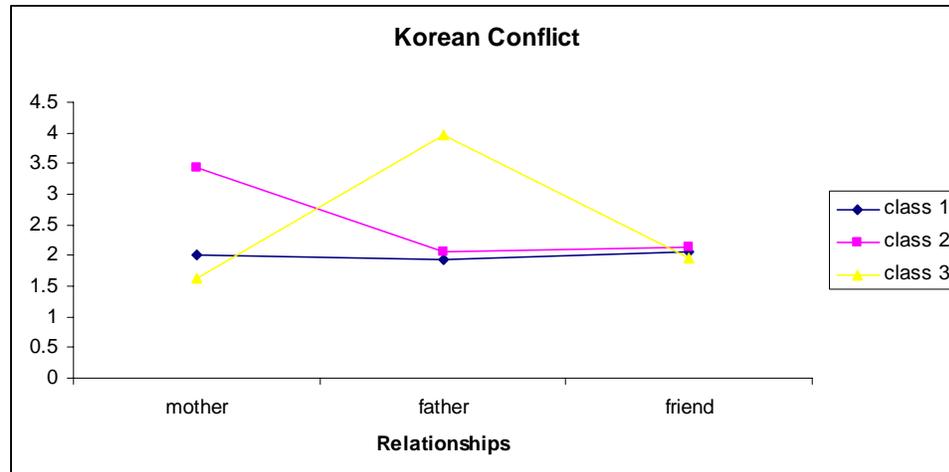


Figure 9. Means of the Estimated Measured-item Means for Latent Classes

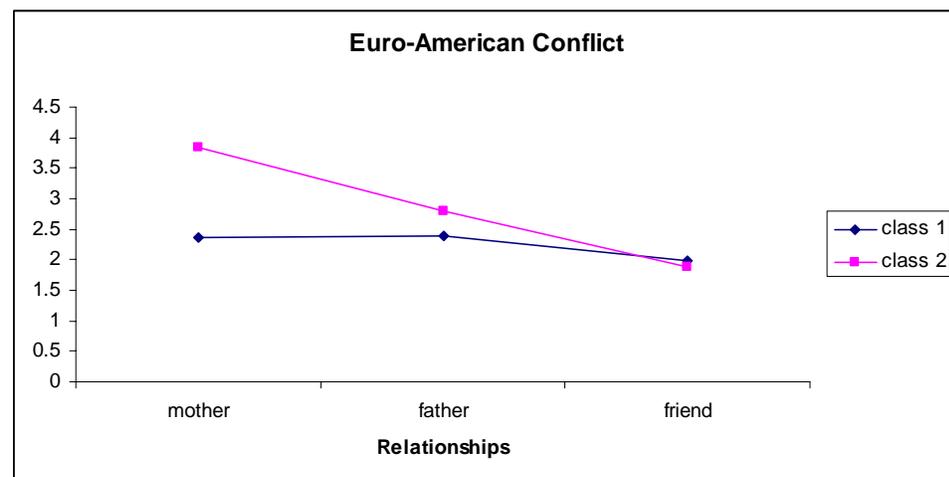


Figure 10. Means of the Estimated Measured-item Means for Latent Classes

European-American children. Mixture models with one- through four-class solutions were run to identify the distinct patterns of conflict levels across mother-child and father-child relationships and friendships. The BIC decreased as classes were added from one- to two-class solutions and then increased from two- through four-class solutions (4822.29, 4821.89, 4833.66, and 4834.36, respectively). The entropies from one- through four-class solutions (1.00, .83, .77, and .80, respectively) indicated that accuracy in assigning individuals to classes was very good. Based on

the BIC, entropy and posterior probabilities, the two-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership ranged from .88 to .97 for the two-class model, indicating that class discrimination was very good.

Two distinct patterns of conflict were identified across mother-child and father-child and friendships (Figure 10; Table 15): (1) class 1 (the reference class), consisting of 117 children (84% of the sample), showed low levels of conflict in all three relationships; the estimated model mean scores for mothers, fathers and friends were 2.35, 2.39 and 1.99, respectively; and (2) class 2, consisting of 23 children (16% of the sample), showed significantly higher levels of conflict in their mother-child relationships, relative to the reference class.

Punitive aspects across mother-child and father-child relationships and friendships

South Korean children. Mixture models with one- through four-class solutions were run to identify the distinct patterns of punitive aspects levels across mother-child and father-child relationships and friendships. The BIC decreased as class was added from one- to two-class solutions and then the BIC increased from two- through four-class solutions (10955.04, 10894.67, 10919.12, and 10906.44, respectively). The entropies from one- through four-class solutions (1.00, .96, .97, and .80, respectively) indicated that accuracy in assigning individuals to classes was very good. Based on the BIC, entropy and posterior probabilities, the two-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership ranged

from .98 to .99 for the two-class model, indicating that class discrimination was very good.

Two distinct patterns of punitive aspects levels were identified across mother-child and father-child and friendships (Figure 11; Table 16): (1) class 1 (the reference class), consisting of 400 children (89% of the sample), showed moderately high levels of punitive aspects in their mother-child and father-child relationships and low levels of punitive aspects in their friendships; the estimated model mean scores for mothers, fathers and friends were 3.21, 3.04 and 1.68, respectively; and (2) class 2, consisting of 51 children (11% of the sample), showed significantly higher levels of punitive aspects in their all three relationships, relative to the reference class.

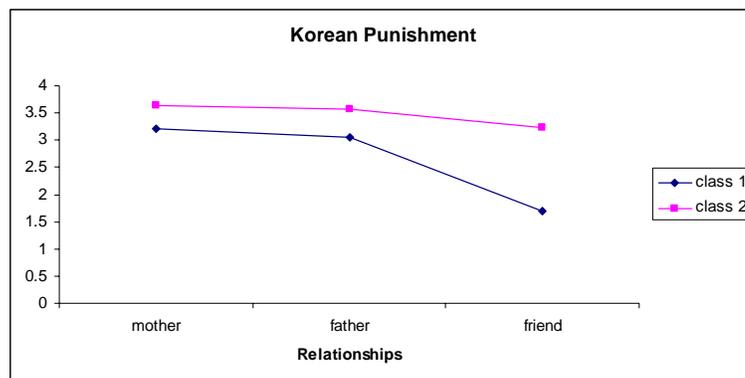


Figure 11. Means of the Estimated Measured-item Means for Latent Classes

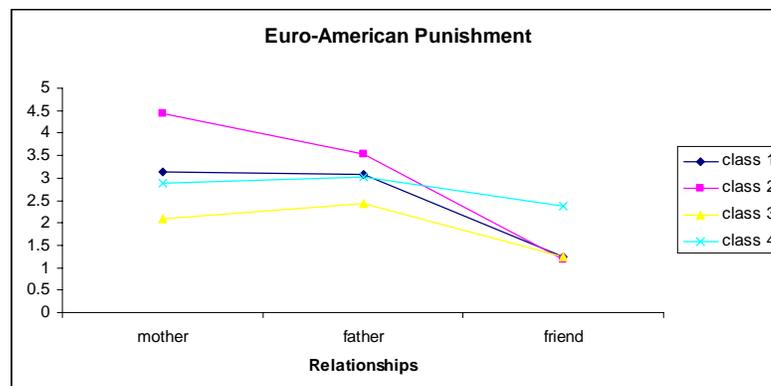


Figure 12. Means of the Estimated Measured-item Means for Latent Classes

European-American children. Mixture models with one- through four-class solutions were run to identify the distinct patterns of punitive aspects levels across mother-child and father-child relationships and friendships. The BIC increased as class was added from one- to three-class solutions and then the BIC decreased from three- to four-class solutions (2868.09, 2881.178, 2889.85, and 2838.15, respectively). The entropies from one- through four-class solutions (1.00, .78, .95, and .81, respectively) indicated that accuracy in assigning individuals to classes was acceptable. Based on the BIC, entropy and posterior probabilities, the four-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership ranged from .86 to .95 for the four-class model, indicating that class discrimination was good.

Four distinct patterns of punitive aspects levels were identified across mother-child and father-child and friendships (Figure 12; Table 17): (1) class 1 (the reference class), consisting of 66 children (47% of the sample), showed moderately high levels of punitive aspects in their mother-child and father-child relationships and low levels of punitive aspects in their friendships; the estimated model mean scores for mothers, fathers and friends were 3.13, 3.08 and 1.25, respectively; (2) class 2, consisting of 12 children (8.5% of the sample), showed significantly higher levels of punitive aspects in their mother-child relationships, relative to the reference class; (3) class 3, consisting of 50 children (36% of the sample), showed significantly lower levels of punitive aspects in their mother-child and father-child relationships, relative to the reference class; and (4) class 4, consisting of 12 children (8.5% of the sample),

showed significantly higher levels of punitive aspects in their friendships, relative to the reference class.

Power distance across mother-child and father-child relationships and friendships

South Korean children. Factor Mixture models with one- through three-class solutions were run to identify the distinct patterns of conflict levels across mother-child and father-child relationships and friendships (the four-class solution did not converge due to computational issues). The BIC decreased as classes were added from one- to two-class solution and then increased from two- to three-class solutions (12215.48, 12106.52, and 12130.98, respectively). The entropies from one- through four-class solutions (1.00, .84, and .41, respectively) indicated that accuracy in assigning individuals to classes is good for the two-class solution. Based on the BIC, entropy and posterior probabilities, the two-class solution was chosen to be optimal. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership ranged from .93 to .95 for the two-class model, indicating that class discrimination was very good.

Two distinct patterns of power distance were identified across mother-child and father-child and friendships (Figure 13; Table 18): (1) class 1 (the reference class) , consisting of 357 children (79% of the sample), showed moderately high levels of asymmetric (vertical) power distance in their mother-child and father-child relationships and quite symmetric power distance in their friendships; the estimated model mean scores for mothers, fathers and friends were 3.12, 2.97 and 2.41, respectively; and (2) class 2, consisting of 95 children (21% of the sample), showed

significantly higher levels of asymmetric (vertical) power distance in their father-child relationships and friendships, relative to the reference class.

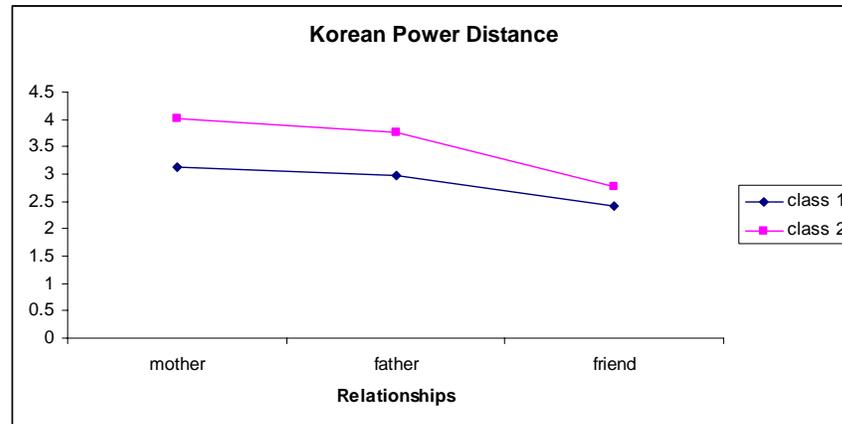


Figure 13. Means of the Estimated Measured-item Means for Latent Classes

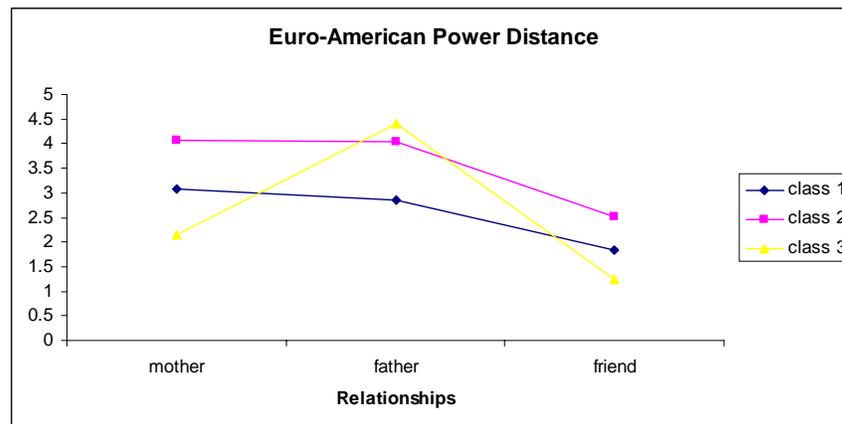


Figure 14. Means of the Estimated Measured-item Means for Latent Classes

European-American children. Factor Mixture models with one- through four-class solutions were run to identify the distinct patterns of conflict levels across mother-child and father-child relationships and friendships. The BIC decreased as class were added from one-class to two-class solution and increased from two- to three-class solutions, then decreased from three- to four-class solutions (3445.33,

3435.77, 3455.54 and 3452.00, respectively). The entropies from one-class through four-class solutions (1.00, .99, .99, and .89, respectively) indicated that accuracy in assigning individuals to classes was very good. For the model selection, a greater attention was given to the posterior probabilities and interpretability herein, rather than the BIC and entropy, given that the BIC did not show consistent patterns of incline or decline. The four-class solution was chosen to be optimal. Note that the four-class solution assigned the individuals to three different latent classes and the three-class solution assigned the individuals to two different latent classes. To check model adequacy, the posterior probabilities were examined. The average latent class probabilities for most likely latent class membership using the posterior probabilities ranged from .92 to 1.00 for the four-class model, indicating that class discrimination was very good.

Three distinct patterns of power distance were identified across mother-child and father-child and friendships (Figure 14; Table 19): (1) class 1 (the reference class), consisting of 64 children (46% of the sample), showed moderate levels of asymmetric power distance in their mother-child and father-child relationships and quite symmetric power distance in their friendships; the estimated model mean scores for mothers, fathers and friends were 3.07, 2.86 and 1.84, respectively ; (2) class 2, consisting of 74 children (53% of the sample), showed significantly higher levels of asymmetric (vertical) power distance in all three relationships, relative to the reference class; and (3) class 3, consisting of 2 children (1% of the sample), showed significantly higher levels of asymmetric (vertical) power distance in father-child

relationships and egalitarian symmetric relationships with their friends, relative to the reference class.

Part III: Relationship qualities and children's satisfaction with the relationships with mothers, fathers and friends: Cross-culture examination

A series of Structural Equation Modeling (SEM) analyses was conducted to examine the relations between children's perceptions of their relationship qualities with mothers, fathers and friends and their satisfaction with the relationship in question. To these ends, a set of multi-group SEMs was run to cross-culturally examine the extent to which relationship constructs account for satisfaction in mother-child and father-child relationships, and friendships in terms of positive social provisions (affection, intimacy, positive interactive behaviors), negative interactions (conflict, punitive aspects) and power distance. Then, a significance test between an initial model and its revised model was performed to determine a final model for examination of study hypotheses in each relationship.

Mother-child relationships

With regard to structural model specification, as shown in Figure 15, an endogenous latent variable 'satisfaction' was regressed on all exogenous variables (i.e., latent relationship factors) which were allowed to covary. Given that MIMIC analyses revealed significant DIF effects, DIF effects were taken into account in the models by allowing the paths between measured items 6, 12, 21, 22, 26 and each corresponding latent factor to freely vary across countries. Based on Lagrange Multiplier (LM)

modification indices, three pairs of the residuals of measured items were allowed to correlate: Items 30 and 18; items 23 and 11; and items 14 and 3.

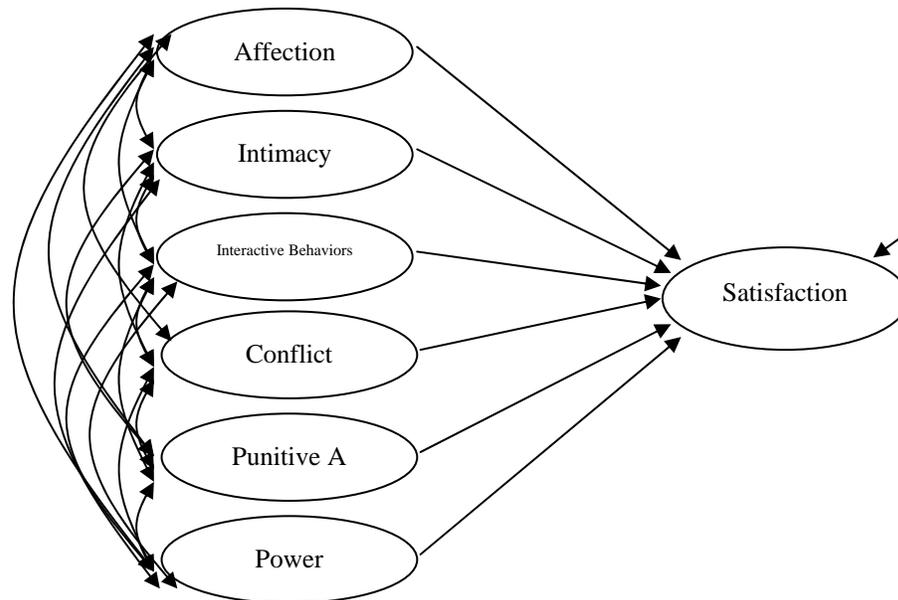


Figure 15. Structural Portion of a multi-group SEM

To determine whether there are significant cross-cultural differences, structural invariance across groups was tested. An initial SEM model did not assume the structural invariance, allowing the factor loadings to be free across countries (structural inequality model: $\chi^2 = 2156.63$, $df = 925$; CFI = .871; RMSEA = .067, 90 % Confidence Interval: .064, .071; SRMR .136); the reduced constraint model assumed the structural invariance, constraining the factor loadings to be identical across countries (structural equality model: $\chi^2 = 2165.59$, $df = 931$; CFI = .871; RMSEA = .067, 90 % Confidence Interval: .064, .071; SRMR .142). Model fit indices indicated that both initial and reduced models fit the data reasonably well. I, then,

performed a significance test between the structural inequality model and the structural equality model to determine a final model. If the structural inequality model was not significantly better than the structural equality model, then this would suggest that the structural equality model provided a more parsimonious account of the relations among these latent variables than did structural inequality model.

Results indicated that the structural inequality model was not statistically better than the reduced structural equality model, $\chi^2_{diff}(6) = 8.96, p > .05$. Thus, the reduced structural equality model was chosen as a final model. The standardized path coefficients and standard errors are shown in Table 20, although correlations among exogenous variables are presented in Table 21.

Having achieved a final structural model, the study's hypotheses were tested. It was originally hypothesized that there would be cultural dissimilarities in the manner in which the relationship constructs were associated with satisfaction in mother-child relationships. However, the final model, described above, revealed structural equality across countries in mother-child relationships. Affection, positive interactive behaviors, conflict, punitive aspects and power distance significantly predicted children's satisfaction with their mothers in the European-American and South Korean samples. Specifically, the more children perceived affection, positive interactive behaviors (instrumental help, protection, and validation) in their mother-child relationships, the more they were likely to be content in their relationships with their mothers. With regard to the negative dimension of the relationship construct, the more children perceived conflict in their mother-child relationships, the less content they were with the relationship with their mothers; the more children perceived

punitive aspects in their mother-child relationships, the more they were likely to be content with the relationship with their mothers. In terms of power distance, the more children perceived symmetric power distance in their mother-child relationships, the more they were likely to be content with the relationship with their mothers.

Father-child relationships

Paralleling the structural modeling procedures for mother-child relationships, described above, an endogenous latent variable 'satisfaction' was regressed on all exogenous variables (i.e., latent relationship factors) which were allowed to covary. Given that MIMIC analyses revealed significant DIF effects, DIF effects were taken into account in the models by allowing the paths between measured items 6, 12, 21, 25 and each corresponding latent factor to freely vary across countries. Based on Lagrange Multiplier (LM) modification indices, three pairs of the residuals of measured items were allowed to correlate: Items 9 and 7; items 30 and 18; and items 28 and 16.

Structural invariance across groups was tested to determine whether there are significant cross-cultural differences in the latent factor structure of father-child relationships. An initial SEM model represented structural inequality, allowing the factor loadings to be free across countries (model: $\chi^2 = 2237.28$, $df = 926$; CFI = .869; RMSEA = .070, 90 % Confidence Interval: .066, .073; SRMR .109); the reduced constraint model assumed the structural invariance, constraining the factor loadings to be identical across countries (structural equality model: $\chi^2 = 2249.19$, $df = 932$; CFI = .869; RMSEA = .069, 90 % Confidence Interval: .066, .073; SRMR .110). Model fit indices indicated that both initial and reduced models fit the data reasonably

well. Then, I performed a significance test between the structural inequality model and structural equality model to determine a final model. If the structural inequality model was not significantly better than the structural equality model, then this would suggest that the structural equality model provides a more parsimonious account of the relations among these latent variables than did the structural inequality model.

Results indicated that the structural inequality model was not statistically better than the revised structural equality model, $\chi^2_{diff}(6) = 11.91, p > .05$. Thus, the reduced structural equality model was chosen as a final model. The standardized path coefficients and standard errors are shown in Table 20, although correlations among exogenous variables are presented in Table 21.

Having achieved a final structural model, the study's hypotheses were tested. It was originally hypothesized that there would be cultural dissimilarities in the manner in which the relationship constructs were associated with satisfaction in father-child relationships. However, the final model, described above, revealed structural equality across countries in father-child relationships. Positive interactive behaviors, punitive aspects and power distance significantly predicted children's satisfaction with their fathers in the European-American and South Korean samples. Specifically, the more children perceived positive interactive behaviors (instrumental help, protection, and validation) in their father-child relationships, the more content they were with their relationships with fathers. With regard to the negative dimension of relationship construct, the more children perceived punitive aspects in their father-child relationships, the more they were likely to be content with the relationship with their fathers. In terms of power distance, the more children perceived symmetric

power distance in their father-child relationships, the more content they were with their relationships with fathers.

Friendships

Following similar structural modeling procedures for mother-child and father-child relationships, as previously described, an endogenous latent variable ‘satisfaction’ was regressed on all exogenous variables (i.e., latent relationship factors) which were allowed to covary. The structural paths between measured items 3, 9, 10, 14, 18, 21, 28 and each corresponding latent factor were allowed to freely vary across countries, taking into account the significant DIF effect which MIMIC analyses revealed.

To determine whether there were significant cross-cultural differences in the latent factor structure of friendships, structural invariance across groups was tested. An initial SEM model did not assume the structural invariance, allowing the factor loadings to be free across countries (structural inequality model: $\chi^2 = 2117.00$, $df = 929$; CFI = .865; RMSEA = .066, 90 % Confidence Interval: .062, .069; SRMR .089); the reduced constraint model assumed the structural invariance, constraining the factor loadings to be identical across countries (structural equality model: $\chi^2 = 2130.07$, $df = 935$; CFI = .864; RMSEA = .066, 90 % Confidence Interval: .062, .069; SRMR .090) . Model fit indices indicated that both initial and reduced models fit the data reasonably well. Then, I performed a significance test between the structural inequality model and structural equality model to determine a final model. If the structural inequality model was not significantly better than the structural equality model, then this would suggest that the structural equality model provided a more parsimonious account of the relations among these latent variables

than did structural inequality model. Results indicated that the structural inequality model was statistically better than the reduced structural equality model, $\chi^2_{diff}(6) = 13.072, p < .05$. Thus, the initial structural inequality model was chosen as a final model. The standardized path coefficients and standard errors are shown in Table 20, although correlations among exogenous variables are presented in Table 21.

Having achieved a final structural model, the study's hypotheses were tested. It was originally hypothesized that there would be cultural dissimilarities in the manner in which the relationship constructs were associated with satisfaction in friendships. The final model, described above, revealed structural inequality across countries in friendships. Affection significantly predicted children's satisfaction with their friends in the South Korean and the European-American samples, whereas positive interactive behaviors significantly predicted children's satisfaction with their friends only for the European-American sample. Specifically, the more children perceived affection in their friendships, the more they were content in their friendships in both of the South Korean and the European-American samples. However, the more children perceived positive interactive behaviors (instrumental help, protection, and validation), the less content they were with their friends in the European-American sample.

CHAPTER V

DISCUSSION

In the present study, close interpersonal relationships were examined cross-culturally among South Korean and European-American children. During middle childhood and preadolescence, although parent-child relationships remain as the primary source of support, friendships become increasingly salient and play a significant role in individual development (Rubin, Bukowski, & Parker, 2006); provisions for closeness and interdependence begin to shift from parents to friends (Laursen, Furman, & Mooney, 2006). Researchers, however, have mostly examined parent-child relationships and friendships in isolation, rather than simultaneously (Collins & Steinberg, 2006; Laursen et al., 2006). Thus, the unique and interactive contributions of mother-child and father-child relationships and friendships to individual development have yet to be untangled.

Given that such social relationships are defined and guided by rules and value systems of culture (Hinde, 1997), there is a need for cross-cultural examination of (a) how such close relationships as mother-child and father-child relationships and friendships are manifested in various cultures; and (b) how the underlying latent constructs of relationships are perceived and evaluated by individuals in different cultures. In the present study, therefore, children's perceptions of their relationships with mothers, fathers, and best friends were simultaneously examined cross-culturally using variable-centered and person-centered approaches. The specific aims, hypotheses and findings of the study are discussed below. Findings are discussed as

they support or deviate from the extant literature. Thereafter, suggestions for future research are discussed.

Latent constructs of mother-child and father-child relationships and friendship:

Cross-cultural comparisons

The first goal of the present study was to examine, cross-culturally, the latent factor structures of mother-child and father-child relationships and friendships in South Korean and the European-American samples from middle income class, two-parent families. The following dimensions of these three relationships were examined: (a) Positive social provisions (affection, intimacy, and positive interactive behaviors such as instrumental help, protection, and validation); (b) negative interactions (conflict, punitive aspects), and (c) power distance.

Measurement equivalence. Establishment of measurement equivalence is critical in drawing valid conclusions from cross-cultural comparisons. To this end, measurement invariance was first tested using DIF within MIMIC models. DIF analyses revealed measurement non-invariance to some extent. That is, group differences in responding to some questionnaire items were evidenced; these differences could not be attributed to true differences in latent constructs across the groups being compared. Instead, they may be attributable to measurement errors (e.g., questionnaire administration, differences in individuals' comprehension of the items).

It is not surprising that measures developed in one culture and then exported to and imposed on another can result in measurement validity issues pertaining to psychometric strength. Specifically, the South Korean children scored higher than did

the European-American children on some items of ‘affection’ and ‘positive interactive behaviors’, regardless of the levels of the corresponding latent factors ‘affection’ and ‘positive interactive behaviors’ in mother-child and father-child relationships. Similarly, the European-American children scored higher than did the South Korean children on two items of ‘positive interactive behaviors’ regardless of the levels of corresponding latent factors for ‘positive interactive behaviors’ in mother-child and father-child relationships; ‘power distance’ in mother-child relationships; and ‘conflict’ in father-child relationships. To establish the validity of cross-cultural comparisons, these identified DIF effects were controlled in MIMIC models (Jöreskog, 2002; Muthén, 1989).

Latent relationship constructs in mother-child relationships. Having achieved the identification of a source of measurement non-invariance (DIF), latent relationship constructs in the assessment of mother-child relationships were examined using MIMIC, controlling for DIF effects, sex of child, and the degree of time spent with mothers. Sex of child was included, in the modeling analyses, as one of the control variables. Thus, sex differences were not analyzed due to statistical power issue within MIMIC modeling with DIF. It was hypothesized that the South Korean children would report higher levels of positive social provisions; lower levels of conflict; and greater asymmetric power distance in mother-child relationships than would the European-American children. This hypothesis was drawn from traditional Confucian principles which have been the cornerstone of Korean culture. These principles place significance on the family system, and especially on hierarchical family order. From this perspective, mothers are to be benevolent and understanding

of their children and are considered to be the emotional providers of the family system (Kim & Choi, 1994). In keeping with the traditional Confucian goal of *harmony* in the social realm, minimizing social conflict is strongly emphasized for the attainment of harmony for the self, family and social relationships. In the current investigation, traditional Confucian principles concerning the South Korean sample were of especial consideration given the potential effects of modernization on interpersonal family relationships.

Results of the present study supported most hypotheses, revealing that the South Korean children viewed that their relationships with their mothers were more strongly imbued by positive interactive behaviors (instrumental help, protection, and validation), punitive aspects, and greater asymmetric power distance than was the case for European-American children. European-American children reported more affection and conflict in their mother-child relationships than did their South Korean counterparts. These findings are, partly, in line with traditional Confucian ideology. For example, in Korean culture, being respectful towards parental authority is thought to be an important feature of the parent-child relationship; conflict between mothers and their children's are thought to be considered as children confronting their parents' authority (Hurh, 1998). Thus, from this perspective, it is not surprising that the South Korean children reported lower levels of conflict and greater asymmetric power distance in their mother-child relationships. With regard to punitive aspects, because of the strong emphasis on parental authority, children's obligations to be respectful of parents, and to conform to parental wishes may result in a view of Korean parents as being strict and stringent (Rohner & Pettengill, 1985). It may also be that South

Korean parents are more controlling of their children. In fact, several researchers have shown that East Asian parents use more psychological and behavioral control than do the North American parents (Chao & Tseng, 2002; Greenfield, Keller, Fuligni, & Maynard, 2003). Rohner and Pettengill (1985) also found that South Korean adolescents perceived their parents to use more strict parental control than did the North American adolescents. In this latter case, however, the Korean adolescents did not view the use of strict control by parents to reflect negativity in their relationships. Given that the South Korean parents showed higher levels of strict control and discipline, their children may have viewing their parents as being more punitive than did their European-American counterparts.

Interestingly, the South Korean children reported lower levels of affection in their mother-child relationships than did Euro-American children. South Korean parents traditionally tend to consider high levels of (strict) control and involvement in their children's daily lives as a way of expressing parental love (affection) and caring toward their children (Kim, 2005; Pettengill & Rohner, 1985). However, today's Korean children may not have perceived their parents' control or involvement as an expression of love or affection. Because the current investigation concerned children's perceptions of their relationships, it is not conclusive whether South Korea children *perceived* less affection from their mothers than did their European-American counterpart or, alternatively, the mothers of South Korean children, in fact, *expressed* less affection toward their children than did the European-American mothers.

Latent relationship constructs in father-child relationships. Paralleling the statistical procedures for examining mother-child relationships, I first tested DIF to identify sources of measurement nonequivalence. Thereafter, latent father-child relationship constructs were cross-culturally examined using MIMIC, controlling for DIF effects as well as other control variables ('child's sex;' 'the degree of time spent with fathers'). Significant DIF effects for 'affection', 'positive interactive behaviors' and 'conflict' were detected and adjusted in the statistical models.

It was hypothesized that the South Korean children would report lower levels of conflict and greater asymmetric power distance in their father-child relationships than the European-American children. Again, this hypothesis was drawn from traditional Confucian principles. Results revealed that the South Korean children perceived more intimacy and punitive aspects in their father-child relationships than the European-American children. The European-American children perceived more affection, conflict and vertical power distance in their father-child relationships than their South Korean counterparts. The finding that the South Korean children perceived more punitive aspects than the European-American children may be attributable to the Korean parents' strict control and discipline styles. With regard to affection, again, South Korean parents traditionally consider high levels of (strict) control and involvement in their children's daily lives as a way of expressing parental love and caring toward their children (Kim, 2005; Pettengill & Rohner, 1985). However, Korean children may not have perceived their fathers' control or involvement as an expression of affection. In this regard, the South Korean children reported lower levels of affection in their father-child relationship.

It may be that, in keeping the Confucian goal of 'harmony' in social relationships, Korean children are less likely than European-American children to engage in conflict with their fathers. Interestingly, contradicting the hypotheses, Korean children reported *higher* levels of intimacy and symmetric father-child relationships than did the European-American children. It is possible, though, that conformity and acceptance of patriarchal relationships has been historically emphasized in Korean culture, which may result in a view in which asymmetric power distance in father-child relationships is thought to be typical in the South Korean culture (Kim & Choi, 1994).

Latent relationship constructs in friendships. Moving beyond mother-child and father-child relationships, latent relationship constructs in friendships were examined cross-culturally using MIMIC, controlling for DIF effects as well as other control variables. Significant DIF effects were adjusted in the models in the following latent constructs: 'Affection', 'positive interactive behaviors', 'conflict' and 'power distance'. It was hypothesized that South Korean boys would report lower levels of positive social provisions and conflict in their friendships than would European-American children. This hypothesis was drawn from French's (2004) view on the significance of relationships in different cultures. For example, in certain cultures such as South Korea, a greater emphasis is placed on authority in the family system and family relationships. The significance of other relationships, such as friendships, appears to differ from those in Western cultures. Therefore, it is conceivable that there would be considerable variation in children's perceptions and evaluations about their friendships across cultures. No significant differences in power distance in

children's friendships for the South Korean and European American boys and girls were expected.

Results of the present study supported the main hypothesis, showing that the South Korean children perceived lower levels of affection, intimacy, and positive interactive behaviors in their friendships than did their European-American counterparts. Drawing from French (2004), it may be that, given Korean culture's emphasis on the family system as a major source of emotional and instrumental provisions, the South Korean children were less likely to rely on their friendships for positive social provisions than their European-American counterparts. Results also revealed that the South Korean children perceived more punitive aspects and power asymmetry in their friendships than the European-American children. It may be a result of the Korean children's perceptions that their friends played a "deviant" role (e.g., punitive aspects, discipline, asymmetric power) from what friendships are thought to be. That is, traditionally the family systems are given more (hierarchical) authority for such domains as discipline, asymmetric power; however, when friendships involve asymmetric power distance or control (punitive aspects), South Korean children may have responded to it more sensitively. This speculation is inconclusive; further investigation is needed whether power asymmetry in friendships would be evidenced among Korean children in future research.

The patterns of relationship networks across mother-child and father-child relationships and friendships

The second goal of the present study was to examine children's patterns of relationship networks across mother-child and father-child relationships, and

friendships using a person-centered approach. Given the nature of Latent Class Analysis and Factor Mixture Modeling, the findings from the South Korean and European-American samples are likely descriptive within each culture, rather than comparisons of these two samples. However, significance tests were provided between the reference class and the class in question within each sample. Toward these ends, latent class memberships were determined based on the patterns of quality across mother-child relationships, father-child relationships, and friendships for each relationship construct.

Given the lack of empirical findings of individuals' patterns of close relationship networks, no specific hypotheses were offered regarding the number of latent classes and the frequency of class membership. As for the general patterns of relationship networks, drawing from the emphasis on the family system in South Korean culture, however, it was expected that the South Korean children would report higher levels of positive social provisions in their mother-child and father-child relationships than in their friendships.

Positive social provisions (affection, intimacy, and interactive behaviors). As expected, in the South Korean sample, the most common relationship pattern across mother-child and father-child relationships and friendship was a network with high levels of affection in mother-child and father child relationships and moderate levels of *affection* in friendships (85% of the sample). A similar relationship pattern across the three relationships was found for *intimacy* and *interactive* behaviors such as instrumental help, protection and validation in the South Korean sample. In contrast, in the European-American sample, a majority of children (the most common pattern)

showed a relationship pattern with high levels of *affection* in mother-child and father-child relationships *and* friendships (91% of the sample). This pattern was found for *interactive* behaviors as well. For *intimacy*, the most common pattern of relationship networks was one with high levels of intimacy in children's mother-child and father-child relationships, and with even higher levels of intimacy in their friendships.

These findings support French's (2004) contention that the significance of different relationships varies depending on a given culture's emphasis on different relationships. It may be that despite the changes in today's South Korean society, the family system continues to play a major role in providing positive social provisions for South Korean children. Among European-American children, friendships and mother-child and father-child relationships appeared to play an equally important role in providing these social provisions. This latter finding is in line with Laursen and his colleagues (2006) in that children's and young adolescents' friendships are likely to gain an increasing significance while their parent-child relationships remain as important sources of social provisions, during middle childhood and early adolescence.

Negative dimensions (conflict, punitive aspects). Although no specific hypotheses were offered given the exploratory nature of the current investigation, it was expected that the most common pattern of relationship networks in the South Korean sample would show moderate levels of conflict and punitive aspects across mother-child and father-child relationships and friendships. Minimizing social conflict is thought to be considered an important traditional Confucian goal. On the other hand, it was expected that the most common pattern of relationship networks in

the European American sample would show higher levels of conflict and punitive aspects in children's mother-child and father-child relationships than in their friendships because parental control and involvement in children's daily lives (e.g., house chores, homework, and choice of clothing) are likely to result in (potential) conflict between mother-child and father-child relationships in middle childhood and early adolescence (e.g., Greenberger & Chen, 1996). In fact, as children enter a wider social world in middle childhood, developmental changes occur in the balance of power and autonomy between parents and their children. Consequently, changes and shifts in independence and (autonomy-related) negotiations are evidenced in parent-child relationships and friendships (e.g., Laursen et al., 2006). However, extant literature regarding conflict has shown inconsistent findings. For example, although Collins and Laursen (2006) found that only approximately 5-15% of youths report extremely conflictual relationships with their parents, a majority of conflicts in parent-adolescent relationships appeared regarding daily issues such as household rules, chores and responsibilities, school, and autonomy during middle childhood and early adolescence (Collins & Laursen, 2004; Laursen, 1993). McGue et al. (2005) also found that disagreements, anger, and tension between parents and children increased from age 11 to 14. Laursen, Coy, and Collins (1998), however, found that the frequency of conflicts between parents and children tends to decline across adolescence, although the intensity of parent-child conflicts appear to increase in negative affect from early to mid-adolescence. In line with this latter findings, Loeber et al. (2000) have shown that positive affect in parent-child relationships tends to

decline from middle childhood to adolescence (Loeber, Burke, Lahey, Winters, & Zera, 2000).

Findings from the present study partially supported the hypotheses above. As expected, the most common pattern of relationship networks demonstrated consistently low levels of conflict across mother-child and father-child relationships and friendships among the South Korean children. Interestingly, the most common pattern of relationship networks in the European-American sample also involved consistently low levels of conflict across these three relationships. Although a statistical test was not available between these two sets of analyses, the patterns of the estimated mean scores showed that South Korean children displayed slightly *lower* levels of conflict than their European-American counterparts, which is in line with the findings from MIMIC analyses in Part I (the South Korean children reported lower levels of conflict than did their European-American counterparts).

It is important to note that the present study was a cross-sectional study among children in middle childhood and early adolescence. Drawing from developmental perspectives, as previously noted, the intensity and frequency of conflicts in parent-child relationships may increase from middle childhood to early- to mid-adolescence as children gain autonomy (e.g., Laursen, Coy, & Collins, 1998; Loeber et al., 2000; McGue et al., 2005).

With reference to punitive aspects, the most common pattern of relationship networks among the South Korean children as well as among the European-American children showed moderately high levels of punitive aspects in mother-child and father-child relationships and low levels of punitive aspects in their friendships. This

finding is not surprising given that children likely experience more discipline from their parents due to tensions (conflict) between attempts at increased autonomy by young adolescents (Laursen & Collins, 1984; Steinberg & Silk, 2002).

Power distance. Drawing from traditional Confucian ideology, the most common pattern in the South Korean sample was expected to be as follows: greater levels of asymmetric mother-child and father-child relationships and symmetric friendships. Results, however, showed that the most common patterns of relationship networks of power distance were similar in both of the South Korean and European-American samples. Specifically, the most common patterns of relationship networks of power distance in both of the South Korean and European-American samples revealed moderate levels of asymmetric (vertical) power distance in their mother-child and father-child relationships and quite symmetric power distance in their friendships. The reference classes of the Korean children (79% of the sample) and the European-American children (46% of the sample) appeared to show similar levels of power distance. However, a great deal of heterogeneity was evidenced in the European-American samples, revealing three distinct patterns of relationship networks. In particular, in the European-American sample, the two non-reference classes (total of 54% of the sample) displayed higher levels of asymmetric power distance, relative to the reference group, whereas the non-reference class (21% of the south Korean sample) displayed higher levels of asymmetric power distance, relative to the reference group in the South Korean sample.

Distinct and yet complementing aspects of variable-centered and person-centered approaches. Taken together from the *variable-centered* cross-cultural

comparisons in the latent relationships constructs (Part I MIMIC with DIF) and the *person-centered* approach of latent classes (Part II individual differences in the patterns of relationship networks), the following conclusions may be reached: Variable-centered analyses revealed cultural differences in the mean levels of such latent constructs as ‘punitive aspects’, ‘affection,’ and ‘conflict’; person-centered analyses revealed considerable heterogeneity in these latent constructs in terms of the patterns of relationship networks. For example, with regard to *affection*, the South Korean children reported lower levels of affection in *all three* relationships (mother-child and father-child relationships; friendships) than did their European-American counterparts. Factor Mixture Modeling analysis, however, indicated that there were at least four distinct patterns of relationship networks in terms of affection among the South Korean children. That is, even though the mean levels of affection in the South Korean sample appeared to be lower than those of the European-American sample, the reference class of the Korean sample (85% of the sample) displayed very high levels of affection. On the other hand, the European-American sample showed less heterogeneity in the patterns of affection than did their South Korean counterparts. Taken together, these findings suggest that *not* all South Korean children tended to report lower levels of affection in their parent-child relationships; distinct subgroups of Korean children in terms of affection in their parent-child relationships may take divergent pathways of development.

Interestingly, variable-centered analyses revealed that the South Korean children perceived higher levels of *punitive aspects* in *all three* relationships (mother-child and father-child relationships; friendships) than did their European-American

counterparts. The construct of punitive aspects includes items such as "... scold you for doing something you're not supposed to do?", reflecting negative interactions in mother-child and father-child relationships and friendships. Person-centered analyses, however, indicated that there was a great deal of heterogeneity evidenced in the four distinct patterns of relationship networks in terms of punitive aspects in the European-American sample. Although the mean levels of punitive aspects in the South Korean sample (from two distinct classes) appeared to be higher than those of the European-American sample, the reference classes of both Korean and European-American samples displayed similar levels of punitive aspects. However, when three other classes' (total 53% of the European-American sample) lower levels of punitive aspects were taken into consideration, the average level of punitive aspects in the European-American sample became lower than that of the South Korean sample. As a considerable heterogeneity is evidenced, further investigation about links between distinct subgroups and their adaptive (maladaptive) development would be needed in future research.

With regard to conflict, both the variable-centered and person-centered analyses revealed similar findings, suggesting a conclusion that the South Korean children tended to have lower levels of conflict in their relationships than their European-American counterparts.

Relationship qualities and children's satisfaction with the relationships with mothers, fathers and friends: Cross-culture examination

The third goal of the present study was to examine the relations between latent relationship constructs and children's satisfaction with the relationships with mothers,

fathers and friends. The focus on children's *perceptions* of their relationships with mothers, fathers and friends in the current investigation was based on a viewpoint in which subjective views of close relationships are known to be important in individuals' evaluation about themselves and their social relationships (Laursen et al., 2006). In addition, as previously noted, of interest was 'satisfaction' with mother-child and father-child relationships and friendships; satisfaction reflects individuals' evaluations about the desirability of their relationships (Harkness, Super, & van Tjen, 2000; Hinde 1997). To these ends, a set of multi-group SEMs was run to examine, cross-culturally, the extent to which relationship constructs would account for satisfaction in mother-child and father-child relationships, and friendships.

Structural invariance in the latent factor structure. Given that MIMIC analyses revealed significant DIF effects (measurement non-invariance), DIF effects were taken into account in the models by allowing the paths between DIF items and each corresponding latent factor to freely vary across countries. Then, the structural invariance was tested by comparing two competing models: An initial model without any constraints across groups being compared; a reduced constraint model which assumed structural invariance across groups being compared, constraining the factor loadings to be identical across countries.

Surprisingly, a series of significance tests revealed the structural invariance in the latent factors' structure in mother-child and father-child relationships across cultures, although structural invariance was not supported in friendships. Recall that, prior to the structural modeling, DIF effects were incorporated during model specification procedures, taking into account the source of measurement non-

invariance (DIF). This particular model specification was conducted to ensure that the final structural models would address true differences across groups being compared concerning the relations between latent relationship constructs and children's satisfaction with the relationship in question. Model fit indices of the final models for mother-child and father-child relationships and friendships showed that the models reflected the data well.

Mother-child relationships. It was originally hypothesized that there would be cultural dissimilarities in the way in which the relationship constructs were associated with satisfaction in mother-child relationships. Results, however, revealed structural equality across countries. Affection, positive interactive behaviors, conflict, punitive aspects and power distance significantly predicted children's satisfaction with their mothers in the European-American and South Korean samples. In particular, the more children perceived affection and positive interactive behaviors (instrumental help, protection, and validation) in their mother-child relationships, the more they were likely to be content in their relationships. Also, the more children perceived conflict in their mother-child relationships, the less they were likely to be content in their relationships. Symmetric power distance in mother-child relationships predicted children's satisfaction. These findings are not surprising because the positive dimensions of the relationships were positively associated with children's satisfaction with mothers, whereas the negative dimension of the relationships were negatively related to children's satisfaction with mothers (e.g., Laursen et al., 2006; Smetana et al., 2006).

Surprisingly, children's perception of punitive aspects was *positively* related to their satisfaction with mothers. It may be possible that heterogeneity in children's perceptions of punitive aspects evidenced from person-centered analyses may have played a role in the model estimation. As previously noted, Factor Mixture Model analyses revealed a great deal of heterogeneity in the levels of punitive aspects especially in the European-American sample (four distinct classes with each class with 47%, 8.5%, 36%, and 8.5% of the sample). Although the reference classes of both Korean and European-American samples displayed similar levels of punitive aspects, the mean levels of punitive aspects in the South Korean sample (from two distinct classes) appeared to be higher than those of the European-American sample. Alternatively, this positive relation between punitive aspects and satisfaction with the relationship may be because a result of children considering their mothers' levels of punitive aspects as indicating maternal involvement and commitment. This may have resulted in children's satisfaction with their mothers. For example, Ho and colleagues (2008) showed that parental control, strictness, and demand for obedience are considered to represent warmth, love, and involvement in the East Asian culture. It is, however, important that researchers continue to investigate the relations between the levels of punitive aspects and satisfaction.

Father-child relationships. It was hypothesized that there would be cultural dissimilarities in the way in which the relationship constructs were associated with satisfaction in father-child relationships. Results, however, revealed structural equality across countries in father-child relationships. Positive interactive behaviors, punitive aspects and power distance significantly predicted children's satisfaction

with their fathers in the European-American and South Korean samples. In particular, the more children perceived positive interactive behaviors (instrumental help, protection, and validation) in their father-child relationships, the more they were likely to be content. Symmetric power distance in father-child relationships predicted children's satisfaction with fathers. In other words, the more children perceived symmetric power distance in their father-child relationships, the more they were likely to be content with the relationship.

These findings are not surprising because the positive dimensions of the relationships were positively associated with children's satisfaction with their fathers, whereas the power distance in father-child relationships were negatively related to children's satisfaction.

Surprisingly, again, children's perceptions of punitive aspects were positively related to satisfaction with their fathers. It may be also possible that heterogeneity in children's perception of punitive aspects may have played a role in the model estimation. As previously noted, Factor Mixture Model analyses revealed a great deal of heterogeneity in the levels of punitive aspects, although to a somewhat lesser extent than that of mother-child relationships, especially in the European-American sample (four distinct classes with each class with 47%, 8.5%, 36%, and 8.5% of the sample). The reference classes of both Korean and European-American samples displayed similar levels of punitive aspects, whereas the mean levels of punitive aspects in the South Korean sample (from two distinct classes) appeared to be higher than those of the European-American sample.

Alternatively, this positive relation between punitive aspects and satisfaction with the relationship may have indicated that children considered their fathers' levels of punitive aspects as reflecting involvement (Ho et al., 2008). It is, however, inconclusive why the positive relation between children's perceptions of punitive aspects and satisfaction with their fathers would appear.

Friendships. It was hypothesized that there would be cultural similarities in the manner in which the relationship constructs were associated with satisfaction in friendships. Unlike mother-child and father-child relationships, results from the final model revealed structural *inequality* in the latent factors' structure across countries in friendships. Affection significantly predicted children's satisfaction with their friends in the South Korean and the European-American samples, whereas positive interactive behaviors significantly predicted children's satisfaction with their friends only for the European-American sample. Specifically, the more children perceived affection in their friendships, the more they were content in their friendships in both of the South Korean and the European-American samples.

Surprisingly, however, the more children perceived positive interactive behaviors (instrumental help, protection, and validation), the less content they were with their friends only for the European-American sample. This unexpected finding may be a result of a ceiling effect of high levels of positive interactive behaviors in the European-American sample. MIMIC with DIF in Part I indicated that the European-American children showed higher levels of positive interactive behaviors than did their South Korean counterparts; FMM analyses revealed that there were three distinct patterns of positive interactive behaviors in the European-American

sample, although all these three classes showed very high levels of interactive behaviors (all three classes ranging from 4 to 5 in a 5-point Likert scale), whereas there were a great amount of heterogeneity (four distinct classes ranging from 2 to 4 in a 5-point Likert scale) in the South Korean sample.

Alternatively, it is also possible that, given that the latent construct ‘positive interactive behaviors’, which involves teaching and helping or fixing things that children cannot do on their own. Although teaching and helping are thought to be positive features of friendships, drawing from autonomy development (Grotevant, 1998) and power distance in middle childhood and early adolescence, children who are in need of help may feel an imbalance in their relationships. It is also not impossible that constantly being a recipient of teaching or helping may threaten a child’s autonomy, which may result in less satisfactory relationships. However, this alternative view is inconclusive and further investigation is needed whether this relation would be replicable in future research.

Conclusions and Directions for Future Research

Taken together, the results of the present study suggest the need to employ variable-centered and person-centered approaches in the examination of relationship qualities in mother-child and father-child relationships, and friendships in middle childhood. Given that different cultures may emphasize and promote different patterns and qualities of social relationships, of particular was whether the traditional emphasis on the family system in the South Korean culture would reveal distinct patterns of children’s relationships with their mothers, fathers and friends. Findings from the present study showed both cultural similarities and dissimilarities. With regard to

unique aspects of these close relationships among the South Korean children, it is likely that the traditional Confucian principles such as keeping harmony in social relationships and an emphasis on the family system continue to influence today's children in South Korea. The South Korean children perceived more positive social provisions from their mothers and fathers than from their friends. Moreover, the South Korean children reported less conflict across these three relationships than did their European-American counterparts. Yet, using person-centered analyses, the data indicated that there was considerable heterogeneity in the patterns of relationship networks in both the South Korean and the European-American samples. While variable-centered analysis allows the examination of the relations among variables of interest, person-centered analysis allows address of individual differences and heterogeneity in the patterns of variables' characteristics. Given that mother-child and father-child relationships and friendships are embedded within cultural contexts, cross-cultural investigation provides a better understanding of cultural similarities and dissimilarities. In addition, the results of the present study pointed to the need to establish measurement validity in cross-cultural research. Establishment of measurement validity is critical, especially in cross-cultural comparisons to demonstrate group differences attributable to true differences in latent factors. Well controlled research designs as well as data analytic methods ensures the validity of cultural similarities and dissimilarities found in cross-cultural research.

Limitations. There were several notable limitations of the present study. Although the current investigation attempted to control unknown sources of non-invariance in measurement to establish the validity of cross-cultural comparisons, it is

also not impossible that certain *indigenous constructs* are more or less meaningful in a given culture. For example, Japan's indigenous construct *amae* (or interdependence) is believed to be an important aspect of attachment and parent-child relationships in Japan (Rothbaum et al., 2007). Relatedly, Rothbaum and colleagues (2007) indicated that attachment studies conducted in non-Western cultures tend to fail to capture indigenous constructs when using measures being developed in the West.

The present study examined only the South Korean children and the European-American children from two-parent family in the Metropolitan city areas in which a majority of the residents are from a wide range of middle income class. Specifically, the European-American participants were drawn from ethnically and racially diverse public schools; the South Korean participants were ethnically and racially homogeneous. Therefore, the generalization of the current investigation should be made with cautions, taking into account the characteristics of the participants from South Korea and the United States of America.

It would also behoove researchers to include measures of cultural values and beliefs as well as individual adjustment in future studies on links between relationship qualities and children's psychosocial adjustment to fully appreciate the function and meanings of the relationship characteristics. In addition, the use of multiple informants such as observations of interactions between mothers and fathers and their children would add to the understanding of the relationship qualities by minimizing the shared variance issue.

Despite several limitations of the current study, this study is unique in that it examined children's perceptions of close relationships, taking into account the

contexts of the other relationships, simultaneously. To fully appreciate the understanding of relationship quality, various dimensions of relationship constructs (i.e., power distance, social provisions and negative interactions) were explored across these three relationships. In addition, given the significance of cultural contexts, a cross-cultural framework was employed, examining individuals' evaluations about what he/she feels to be appropriate to the relationship (e.g., satisfaction) in different cultures. Greater emphasis was given to establishment of the measurement invariance to ensure valid cross-cultural comparisons. Lastly, the utilization of variable-centered and person-centered approaches would allow this study to examine the relations among the variables of interests as well as individual differences in networks of relationships, identifying heterogeneous subgroups which share particular characteristics.

Table 1. Indicators of Latent Constructs

Latent Construct	Indicator
<i>Affection</i>	7. How much does this person like or love you? 9. ... treat you like you're admired and respected? 11. How sure are you that relationship will last no matter what? 12. How much do you play around and have fun with this person? 19. How much does this person really care about you? 23. How sure are you that your relationship will last even if you have fights? 31. ... have a strong feeling of affection (love or liking) toward you? 33.... like or approve of the things you do?
<i>Intimacy</i>	5. How much do you tell this person everything? 17. ... share your secrets and private feelings with this person? 29. ... talk to ... about things that you don't want others to know?
<i>Positive Interactive behavior</i>	3. ... teach you how to do things that you don't know how to do? 6. ... help ... with things she/he can't do by her/himself? 14. How much does this person help you figure out or fix things? 18. How much do you protect and look out for this person? 21... treat you like you're good at many things? 26. ... help you when you need to get something done? 30. How much do you take care of this person?
<i>Conflict</i>	2. How much ... get upset with each other or mad at each other? 13. How much do you and this person disagree and quarrel? 16. How much do you and this person annoy or bug each other? 25. How much do you and this person argue with each other? 28. How much do you and this person hassle or nag one another?
<i>Punitive aspects</i>	8. How much does this person punish you? 20. ... discipline you for disobeying him/her? 32.... scold you for doing something you're not supposed to do?
<i>Power distance</i>	10. How often does this person tell you what to do? 22. How often is this person the boss in your relationship? 34.... take charge and decide what should be done?
<i>Satisfaction</i>	4. How satisfied are you with your relationship with? 15. How happy are you with the way things are between you and ...? 27. How good is your relationship with this person?
<i>Time spent*</i>	1. How much free time do you spend with ...?

* Note. 'Time spent' is not a latent construct.

Table 2. *Network of Relationship Inventory* Item Means and Standardized Deviations
(Numbers of Participants Varies according to Variables)

	Mother-Child				Father-Child				Friendships			
	<u>South Korean</u>		<u>Euro-American</u>		<u>South Korean</u>		<u>Euro-American</u>		<u>South Korean</u>		<u>Euro-American</u>	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Item 7	4.80	0.63	4.89	0.41	4.73	0.74	4.86	0.51	3.87	1.06	4.38	0.73
Item 9	4.37	0.92	4.34	0.83	4.29	1.02	4.22	0.96	3.25	1.15	4.22	0.93
Item11	4.69	0.76	4.69	0.68	4.61	0.89	4.58	0.86	3.76	1.21	4.23	0.88
Item12	4.29	1.01	3.61	1.04	4.10	1.11	3.67	1.10	4.08	1.05	4.43	0.77
Item19	4.79	0.62	4.87	0.40	4.72	0.73	4.82	0.54	3.73	1.15	4.48	0.66
Item23	4.52	1.05	4.66	0.70	4.46	1.08	4.59	0.83	3.69	1.29	4.41	0.83
Item31	4.69	0.77	4.85	0.46	4.60	0.84	4.76	0.65	3.59	1.21	4.24	0.88
Item33	4.23	0.94	4.23	0.87	4.19	0.99	4.11	0.93	3.43	1.19	4.20	0.73
Item 5	3.99	1.07	3.68	0.96	3.62	1.21	3.20	1.06	3.09	1.15	3.99	0.89
Item17	3.66	1.34	3.31	1.23	3.26	1.39	2.79	1.27	2.68	1.32	3.86	1.15
Item29	3.21	1.51	3.47	1.21	2.94	1.50	2.91	1.27	2.54	1.30	3.79	1.15
Item 3	4.45	0.89	3.96	0.87	4.18	1.08	3.91	0.99	3.35	1.17	2.94	0.95
Item 6	4.02	1.11	3.29	1.18	3.79	1.21	3.08	1.24	3.44	1.11	3.68	1.00
Item14	4.47	0.83	4.07	0.98	4.28	1.02	4.04	0.90	3.44	1.18	3.53	1.05
Item18	4.22	1.16	3.97	1.20	4.06	1.24	3.84	1.22	3.26	1.26	4.19	0.90
Item21	4.38	0.87	4.46	0.81	4.23	1.01	4.47	0.85	3.43	1.20	4.22	0.94
Item26	4.34	0.95	4.34	0.88	4.11	1.13	4.19	0.98	3.29	1.15	3.69	1.05
Item30	4.12	1.21	4.02	1.18	3.91	1.28	3.92	1.25	3.19	1.27	3.77	1.14
Item 2	2.17	1.10	2.50	0.87	2.04	1.05	2.35	0.89	2.09	1.01	1.81	0.76
Item13	2.05	1.19	2.76	0.95	1.95	1.16	2.60	0.91	2.12	1.06	2.04	0.91
Item16	1.86	1.05	2.45	1.05	1.79	1.01	2.32	1.02	2.07	1.05	2.00	0.94
Item25	2.13	1.09	2.77	0.93	1.91	1.01	2.60	0.90	2.20	1.06	2.02	0.96
Item28	2.33	1.28	2.57	1.11	2.15	1.19	2.44	1.02	1.88	1.04	1.99	0.96
Item 8	2.84	1.10	2.45	0.90	2.65	1.09	2.44	0.88	1.49	0.80	1.11	0.43
Item20	3.35	1.14	2.99	1.02	3.21	1.19	3.06	1.08	1.81	0.97	1.36	0.71
Item32	3.61	1.28	3.10	1.03	3.45	1.27	3.13	1.04	2.29	1.17	1.55	0.73
Item10	3.77	1.19	3.63	0.91	3.47	1.22	3.54	0.97	2.35	1.21	2.17	0.92
Item22	2.16	1.29	3.41	1.32	2.13	1.28	3.31	1.32	2.23	1.23	2.09	0.97
Item34	4.05	1.06	3.74	0.98	3.86	1.12	3.66	1.07	2.92	1.25	2.33	0.93
Item 4	4.69	0.76	4.45	0.76	4.62	0.88	4.27	0.97	4.20	0.97	4.59	0.68
Item15	4.59	0.80	4.45	0.86	4.48	0.94	4.33	0.96	3.82	1.12	4.60	0.72
item27	4.68	0.73	4.53	0.90	4.55	0.88	4.39	1.04	4.02	0.99	4.64	0.69
Item 1	4.05	1.10	3.75	0.85	3.52	1.20	3.35	0.89	3.84	1.09	3.95	0.67

Table 3. Correlations among All Relationship Factors in Mother-Child relationships

	Affection	Intimacy	Interactive B.	Conflict	Punitive A.	Power D.	Satisfaction
Affection	-	.467***	.730***	-.347***	-.089	.112*	.835***
Intimacy	.641***	-	.514***	-.133**	-.014	.197***	.422***
Interactive B.	.777***	.684***	-	-.293***	-.087	.218***	.680***
Conflict	-.535***	-.379***	-.434***	-	.537***	.379***	-.411***
Punitive A.	-.251**	-.178*	-.151	.626****	-	.442***	-.139**
Power D.	-.150	-.123	-.169*	.375***	.547***	-	.036
Satisfaction	.807***	.611***	.748***	-.539***	-.236**	-.197*	-

Note. South Korean sample diagonal above; European-American sample diagonal below

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 4. Correlations among All Relationship Factors in Father-Child Relationships

	Affection	Intimacy	Interactive B.	Conflict	Punitive A.	Power D.	Satisfaction
Affection	-	.524***	.770***	-.369***	-.109*	.170**	.857***
Intimacy	.624***	-	.611***	-.160**	-.057	.231***	.484***
Interactive B.	.745***	.653***	-	-.339***	-.091	.280***	.741***
Conflict	-.371***	-.327***	-.359***	-	.436***	.299***	-.454***
Punitive A.	-.254**	-.211*	-.183*	.634***	-	.400***	-.155**
Power D.	-.110	-.074	-.026	.453***	.587***	-	.122*
Satisfaction	.863***	.635***	.726***	-.388***	-.230**	-.082	-

Note. South Korean sample diagonal above; European-American sample diagonal below

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5. Correlations among All Relationship Factors in Friendships

	Affection	Intimacy	Interactive B.	Conflict	Punitive A.	Power D.	Satisfaction
Affection	-	.499***	.816***	-.409**	.012	.239**	.825**
Intimacy	.588**	-	.527***	-.109*	.131**	.255***	.422***
Interactive B.	.704**	.582***	-	-.352**	.096*	.303**	.742**
Conflict	-.396**	-.086	-.276**	-	.359**	.208***	-.411**
Punitive A.	-.279**	-.063	-.116	.457***	-	.400**	-.040
Power D.	-.249**	-.070	-.120	.451***	.283**	-	.162**
Satisfaction	.801**	.454***	.491***	-.403**	-.312**	-.173*	-

Note. South Korean sample diagonal above; European-American sample diagonal below

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 6. Standardized Factor Loadings and Residuals in the Measurement Portion of the Model (Confirmatory Factor Analysis)

Latent Construct	Indicator	Factor loading	<i>P-value</i>	Residual
Affection	Item7	0.78	0.000	0.56
	Item 9	0.69	0.000	0.53
	Item 11	0.75	0.000	0.39
	Item 12	0.61	0.000	0.66
	Item 19	0.82	0.000	0.39
	Item 23	0.62	0.000	0.50
	Item 31	0.77	0.000	0.53
	Item 33	0.62	0.000	0.61
Intimacy	Item 5	0.78	0.000	0.44
	Item 17	0.75	0.000	0.55
	Item 29	0.49	0.000	0.58
Interactive Behaviors	Item 3	0.69	0.000	0.41
	Item 6	0.53	0.000	0.37
	Item 14	0.77	0.000	0.43
	Item 18	0.57	0.000	0.67
	Item 26	0.74	0.000	0.33
	Item 30	0.55	0.000	0.26
Conflict	Item 21	0.76	0.000	0.46
	Item 2	0.66	0.000	0.74
	Item 13	0.65	0.000	0.61
	Item 16	0.79	0.000	0.36
	Item 25	0.80	0.000	0.48
Punitive A.	Item 28	0.72	0.000	0.48
	Item 8	0.71	0.000	0.76
	Item 20	0.86	0.000	0.70
	Item 32	0.66	0.000	0.41
Power	Item 10	0.62	0.000	0.57
Distance	Item 22	0.35	0.000	0.61
	Item 34	0.39	0.000	0.85

Table 7. Structural Path Coefficients and Standard Errors for the Effects of Country on Latent Relationship Constructs (MIMIC DIF)

Relationship Construct	Mother-Child		Father-Child		Friendships	
Affection	-0.128	(0.043)**	-0.099	(0.050)*	-0.518	(0.070)***
Intimacy	0.124	(0.086)	0.285	(0.094)**	-0.924	(0.086)***
Interactive Behaviors	0.239	(0.062)***	0.062	(0.066)	-0.290	(0.070)***
Conflict	-0.378	(0.072)***	-0.359	(0.070)***	0.107	(0.061)
Punitive A.	0.364	(0.082)***	0.150	(0.074)*	0.393	(0.057)***
Power Distance	0.199	(0.103)*	-0.350	(0.111)**	0.481	(0.112)***

Note. Standard Errors in parentheses.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 8. Affection across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	-1.126	0.188	0.000	-1.218	0.193	0.000	-0.828	0.151	0.000
Class 3	-0.166	0.174	0.338	-1.979	0.394	0.000	-0.658	0.281	0.019
Class 4	-2.563	0.280	0.000	-1.608	0.425	0.000	-0.420	0.306	0.170

Table 9. Affection across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	-1.126	0.188	0.000	-1.218	0.193	0.000	-0.828	0.151	0.000
Class 3	-0.166	0.174	0.338	-1.979	0.394	0.000	-0.658	0.281	0.019

Table 10. Intimacy across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	0.302	0.077	0.000	-0.587	0.093	0.000	-0.123	0.115	0.283
Class 3	-1.234	0.313	0.000	0.199	0.127	0.116	0.542	0.403	0.179

Table 11. Intimacy across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	0.056	0.236	0.813	0.280	0.177	0.114	-1.270	0.129	0.000

Table 12. Positive Interactive Behaviors across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	0.097	0.067	0.149	0.139	0.102	0.174	-0.993	0.220	0.000
Class 3	-1.282	0.190	0.000	-1.216	0.146	0.000	-0.500	0.139	0.000
Class 4	-0.026	0.191	0.890	-2.152	0.289	0.000	-0.240	0.345	0.488

Table 13. Positive Interactive Behaviors across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class2	-0.172	0.300	0.565	-1.008	0.711	0.156	0.260	0.124	0.037
Class3	0.545	0.221	0.014	-1.413	0.591	0.017	0.915	0.263	0.001

Table 14. Conflict across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class2	1.416	0.209	0.000	0.110	0.103	0.287	0.077	0.126	0.542
Class3	-0.372	0.189	0.049	2.033	0.171	0.000	-0.107	0.578	0.853

Table 15. Conflict across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	1.353	0.187	0.000	0.371	0.313	0.236	-0.098	0.223	0.662

Table 16. Punitive aspects across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	0.336	0.116	0.004	0.405	0.114	0.000	1.982	0.122	0.000

Table 17. Punitive aspects across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	1.162	0.299	0.000	0.357	0.303	0.238	-0.031	0.029	0.290
Class 3	-0.934	0.112	0.000	-0.514	0.162	0.002	-0.008	0.026	0.741
Class 4	-0.216	0.196	0.271	-0.055	0.246	0.822	0.565	0.297	0.057

Table 18. Power Distance across Mother-Child and Father-Child Relationships and Friendships (South Korean Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class 2	0.368	0.360	0.307	0.355	0.154	0.021	0.328	0.151	0.030

Table 19. Power Distance across Mother-Child and Father-Child Relationships and Friendships (European-American Sample)

Latent Class	Mother			Father			Friend		
	Estimate	SE	P-Value	Estimate	SE	P-Value	Estimate	SE	P-Value
Class 1	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Class2	-0.673	0.442	0.127	0.458	0.155	0.003	-0.732	0.210	0.000
Class3	-1.314	0.000	999.000	2.823	0.000	999.000	-0.539	0.000	999.000

Table 20. Standardized Path Coefficients and Standard Errors in the Structural Model

Relationship Construct	Mother-Child		Father-Child		Friendships			
					South Korean		Euro-American	
Affection	0.900	(0.113)***	0.529	(0.350)	0.821	(0.120)***	1.711	(0.388)***
Intimacy	-0.002	(0.040)	-0.165	(0.139)	-0.041	(0.051)	-0.017	(0.105)
Interactive Behaviors	0.345	(0.100)**	1.364	(0.595)*	-0.005	(0.185)	-0.628	(0.276)*
Conflict	-0.141	(0.047)**	0.286	(0.226)	-0.030	(0.072)	-0.233	(0.218)
Punitive A.	0.129	(0.047)**	0.555	(0.268)*	-0.079	(0.165)	0.068	(0.348)
Power Distance	-0.262	(0.062)***	-0.961	(0.427)*	0.019	(0.128)	0.264	(0.224)

Standard Errors in parentheses.

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 21. Correlations among Exogenous Variables in the Structural Model

Path between Latent Constructs		Mother-Child		Father-Child		Friendships			
		Estimate	<i>P-value</i>	Estimate	<i>P-value</i>	South Korean		Euro-American	
						Estimate	<i>P-value</i>	Estimate	<i>P-value</i>
Intimacy	- Affection	0.787	0.000	0.678	0.000	0.626	0.000	0.731	0.000
Interactive Behavior	- Affection	0.954	0.000	0.827	0.000	0.92	0.000	0.873	0.000
	- Intimacy	0.862	0.000	0.79	0.000	0.679	0.000	0.743	0.000
Conflict	- Affection	-0.678	0.000	-0.468	0.000	-0.496	0.000	-0.498	0.000
	- Intimacy	-0.623	0.000	-0.412	0.000	-0.182	0.003	-0.186	0.065
	- Interactive B.	-0.699	0.000	-0.402	0.000	-0.436	0.000	-0.409	0.000
Punitive Aspect	- Affection	-0.434	0.000	-0.3	0.001	-0.01	0.864	-0.454	0.000
	- Intimacy	-0.44	0.000	-0.295	0.002	0.152	0.021	-0.188	0.121
	- Interactive B.	-0.422	0.000	-0.169	0.086	0.105	0.084	-0.275	0.033
	- Conflict	0.798	0.000	0.739	0.000	0.486	0.000	0.673	0.000
Power Distance	- Affection	-0.453	0.000	-0.168	0.135	0.66	0.000	-0.436	0.000
	- Intimacy	-0.491	0.000	-0.15	0.204	0.576	0.000	-0.208	0.088
	- Interactive B.	-0.529	0.000	0.131	0.272	0.782	0.000	-0.272	0.035
	- Conflict	0.676	0.000	0.687	0.000	-0.083	0.448	0.73	0.000
	- Punitive A.	0.83	0.000	0.893	0.000	0.544	0.000	0.581	0.000

Appendix A

ID #: _____ Cohort: _____ Grade: _____ Date: _____

Birthdate _____
month day year**General Instructions**

On these questionnaires you are going to fill out, we want to know what you really think about each question; so answer as honestly as possible. There are no right or wrong answers. All this information will be kept private and confidential, which means that your name will not be on any of the forms, and nobody will know how you answered any of the questions. Read carefully and try to answer every question. If you have any questions as you go along, please ask me – I'll be in the next room.

Directions for the Relationships Questionnaire

Everyone has a number of people who are important in his or her life. For example, your parents, brothers or sisters, other relatives, teachers, and friends are people who might be important to you. The questions below are about your relationships with your family members and friends.

1. Circle all the parents you have who are alive:

mother father step-mother step-father

2. Circle the parents you live with right now:

mother father step-mother step-father

3. Which of the following relatives is most important to you?

a grandmother a grandfather an aunt an uncle

4. What is the name of the teacher at your school who is most important to you?

The next questions ask about your relationships with each of the following people:

1) your mother or step-mother (if you have both, describe your relationship with the one you live with); 2) your father or step-father (if you have both, describe your relationship with the one you live with); 3) your friend; 4) your teacher; 5) your relative; and 6) each of your siblings. Answer each of the following questions for each person. Sometimes the answers for different people may be the same; sometimes they may be different.

When answering questions about your **friend**, it should be the same person you named on page 2 (question #5). When answering questions about your **relative**, it should only be the person you named on page 2 (question #3).

1. How much **free time** do you spend with this person?

	None	Little	Some	A lot	Almost all
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

2. How much do you and this person get upset with each other or mad at each other?

	None	Little	Some	A lot	Almost always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

3. How much does this person teach you how to do things that you don't know how to do?

	None	Little	Some	A lot	Almost always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

4. How satisfied are you with your relationship with this person?

	Not satisfied	A little satisfied	Somewhat satisfied	Very satisfied	Extremely satisfied
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

5. How much do you tell this person everything?

	Tell nothing	Tell a little	Tell some things	Tell a lot of things	Tell all
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

6. How much do you help this person with things she/he can't do by her/himself?

	Not at all	A little	Somewhat	A lot	Almost always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

7. How much does this person like or love you?

	Not at all	A little	Somewhat	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

8. How much does this person punish you?

	Not at all	A little	Somewhat	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

9. How much does this person treat you like you're admired and respected?

	Not at all	A little	Somewhat	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

10. How often does this person tell you what to do?

	Never	Seldom	Sometimes	Often	Always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

11. How sure are you that this relationship will last no matter what?

	Not at all sure	A little sure	Somewhat sure	Very sure	Extremely
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

12. How much do you play around and have fun with this person?

	Not at all	A little	Somewhat	A lot	A ton
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

13. How much do you and this person disagree and quarrel?

	Not at all	A little	Somewhat	A lot	A ton
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

14. How much does this person help you figure out or fix things?

	Not at all	A little	Sometimes	A lot	The most
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

15. How happy are you with the way things are between you and this person?

	Not happy	A little happy	Somewhat happy	Very happy	Extremely happy
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

16. How much do you and this person annoy or bug each other?

	Never	A little	Sometimes	Often	Very often
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

17. How much do you share your secrets and private feelings with this person?

	Never	A little	Sometimes	Often	Very often
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

18. How much do you protect and look out for this person?

	Never	A little	Sometimes	Often	Very often
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

19. How much does this person really care about you?

	Not at all	A little	Somewhat	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

20. How much does this person discipline you for disobeying him/her?

	Not at all	A little	Somewhat	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

21. How much does this person treat you like you're good at many things?

	Not at all	A little	Somewhat	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

22. How often is this person the boss in your relationship?

	Never	Seldom	Sometimes	Often	Always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

23. How sure are you that your relationship will last even if you have fights?

	Not at all	A little sure	Somewhat sure	Very sure	Extremely sure
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

24. How often do you go places and do enjoyable things with this person?

	Never	Seldom	Sometimes	Often	Always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

25. How much do you and this person argue with each other?

	Not at all	A little	Sometimes	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

26. How often does this person help you when you need to get something done?

	Never	Seldom	Sometimes	Often	Always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

27. How good is your relationship with this person?

	Bad	A little bad	Good	Very good	Great
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

28. How much do you and this person hassle or nag one another?

	Not at all	A little	Sometimes	A lot	Almost always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

29. How much do you talk to this person about things that you don't want others to know?

	Not at all	A little	Some	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

30. How much do you take care of this person?

	Not at all	A little	Some	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

31. How much does this person have a strong feeling of affection (love or liking) toward you?

	Not at all	A little	Some	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

32. How much does this person scold you for doing something you're not supposed to do?

	Not at all	A little	Some	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

33. How much does this person like or approve of the things you do?

	Not at all	A little	Some	A lot	Very much
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

34. How often does this person take charge and decide what should be done?

	Never	Seldom	Sometimes	Often	Always
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

35. How sure are you that your relationship will continue in the years to come?

	Not at all sure	A little sure	Somewhat sure	Very sure	Extremely sure
Mother	1	2	3	4	5
Father	1	2	3	4	5
Friend	1	2	3	4	5
Teacher	1	2	3	4	5
Relative	1	2	3	4	5
Sibling 1	1	2	3	4	5
Sibling 2	1	2	3	4	5
Sibling 3	1	2	3	4	5
Sibling 4	1	2	3	4	5

다음 질문들은 다음에 나오는 각각의 사람들과 여러분의 관계에 관한 것입니다:

여러분의 어머니 또는 새어머니(만일 둘 다 있다면, 둘 중에서 더 가깝게 느끼는 한 사람과의 관계에 대해 응답하세요.); 2) 여러분의 아버지 또는 새아버지(만일 둘 다 있다면, 둘 중에서 더 가깝게 느끼는 한 사람과의 관계에 대해 응답하세요.); 그리고 3) 여러분의 친구. 만일, 어떤 이유로 (예를 들어, 부모 중 한 명이 돌아가셔서) 어떤 사람에 대해 응답할 수 없다면, 응답하지 않아도 돼요. 각각 한 사람을 위한 다음의 질문들을 하나씩 응답하세요. 때때로 다른 사람에 대한 응답이 서로 같을 수도 있어요: 또한 다를 수도 있구요.

여러분의 친구에 대해 응답할 때는 앞 페이지에서 여러분이 이름을 쓴 그 친구를 생각하며 응답하세요.

이 질문들을 누구에 대해서 응답을 하려고 하나요?

어머니 _____ 새어머니_____

아버지 _____ 새아버지_____

여기 하나의 예가 있어요:

여러분은 이 사람과 얼마나 자주 쇼핑을 하러 가나요?

가지 않음	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4 5
아버지	1	2	3	4 5
친구	1	2	3	4 5

1. 여러분은 자유 시간을 어느 정도나 이 사람과 함께 보내나요?

	보내지 않음	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

2. 여러분과 이 사람은 어느 정도나 서로를 속상하게 하거나 서로에게 화를 내나요?

	전혀 아님	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

3. 이 사람은 여러분이 어떻게 해야 할 지 모르는 것에 대해 어느 정도나 가르쳐 주나요?

	전혀 아님	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

4. 여러분은 이 사람과의 관계에 대해 어느 정도나 만족하나요?

	만족하지 않음	약간 만족함	어느 정도 만족함	매우 만족함	지극히 만족함
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

5. 여러분은 이 사람에게 모든 것을 어느 정도나 이야기 하나요?

	아무것도 말하지 않는다	약간 말한다	어느 정도 말한다	많이 말한다	모두 다 말한다
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

6. 여러분은 어느 정도나 이 사람이 혼자서 할 수 없는 것을 도와주나요?

	전혀 아님	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

7. 이 사람은 여러분을 어느 정도나 좋아하거나 사랑하나요?

	전혀 아님	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

8. 이 사람은 여러분을 얼마나 야단치나요?

	전혀 아님	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

9. 이 사람은 여러분을 어느 정도나 훌륭하게 생각하고 존중하는 것처럼 대해주나요?

	전혀 아님	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

10. 얼마나 자주 이 사람은 여러분에게 무엇을 하라고 말하나요?

	전혀 아님	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

11. 여러분은 어떤 일이 있어도 이 사람과의 관계가 지속될 것이라는 것을 얼마나 확신하나요?

	전혀 확신 못함	약간 확신함	어느 정도 확신함	매우 확신함	전적으로 확신함
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

12. 여러분은 이 사람과 얼마나 함께 놀거나 재미있게 지내나요?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

13. 여러분과 이 사람은 얼마나 의견이 잘 맞지 않고 다툰니까?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

14. 이 사람은 여러분이 무엇을 이해하거나 해결하도록 어느 정도나 도와주나요?

	전혀 아님	약간	어느 정도	많이	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

15. 여러분은 이 사람과의 일이 진행되는 방식에 대해서 얼마나 행복한가요?

	행복 하지 않음	약간 행복함	어느 정도 행복함	매우 행복함	지극히 행복함
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

16. 이 사람과 여러분은 서로를 어느 정도나 괴롭히고 짜증나게 하나요?

	전혀 아님	약간	어느 정도	자주	매우 자주
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

17. 여러분의 비밀과 사적인 감정을 어느 정도나 이 사람과 나누나요?

	전혀 아님	약간	어느 정도	자주	매우 자주
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

18. 여러분은 이 사람을 어느 정도나 보호하고 돌보나요?

	전혀 아님	약간	어느 정도	자주	매우 자주
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

19. 이 사람은 여러분을 어느 정도나 정말로 아껴주나요?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

20. 여러분이 말을 듣지 않았을 때 이 사람은 얼마나 야단치나요?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

21. 이 사람은 어느 정도나 여러분이 잘하는 것이 많은 사람으로 대해주나요?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

22. 이 사람은 여러분과의 관계에서 얼마나 자주 자기 맘대로 하려고 하나요?

	전혀 아님	약간	어느 정도	자주	거의 언제나
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

23. 싸우더라도 이 사람과의 관계는 지속될 거라고 어느 정도나 확신하나요?

	전혀 확신 못함	약간 확신함	어느 정도 확신함	매우 확신함	전적으로 확신함
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

24. 여러분은 이 사람과 얼마나 자주 어디를 함께 가고 재미난 일을 함께 하나요?

	전혀 아님	약간	어느 정도	자주	항상
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

25. 여러분은 이 사람과 어느 정도나 말다툼을 하나요?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

26. 여러분이 어떤 일을 끝 내야 할 때 이 사람은 얼마나 자주 여러분을 도와주나요?

	전혀 아님	약간	어느 정도	자주	항상
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

27. 이 사람과의 관계는 어느 정도나 좋은가요?

	나쁘다	약간 나쁘다	좋다	매우 좋다	최고다
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

28. 여러분과 이 사람은 얼마나 서로를 들볶고 서로에게 잔소리 하나요?

	전혀 아님	약간	어느 정도	많이	거의 항상
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

29. 여러분은 다른 사람들이 알면 싫은 것에 대해 이 사람에게 얼마나 이야기 하나요?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

30. 여러분은 이 사람을 얼마나 많이 돌보아 줍니까?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

31. 이 사람은 얼마나 여러분에 대해 강한 애정을 가지고 있습니까?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

32. 여러분이 하면 안되는 어떤 것을 했을 때 이 사람은 여러분을 얼마나 꾸짖나요?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

33. 이 사람은 여러분이 하는 일을 얼마나 좋아하고 찬성하나요?

	전혀 아님	약간	어느 정도	많이	아주 많이
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

34. 이 사람은 얼마나 자주 해야 할 일을 결정하고 주도를 하나요?

	전혀 아님	약간	어느 정도	자주	항상
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

35. 여러분은 이 사람과의 관계가 앞으로 계속 지속될 것이라고 얼마나 확신하나요?

	전혀 확신 못함	약간 확신함	어느 정도 확신함	매우 확신함	전적으로 확신함
어머니	1	2	3	4	5
아버지	1	2	3	4	5
친구	1	2	3	4	5

REFERENCES

- Adams, R., & Laursen, B. (2001). The organization and dynamics of adolescent conflict with parents and friends. *Journal of Marriage and the Family*, *63*, 97-110.
- Ainsworth, M. D. S. (1967). *Infancy in Uganda: Infant care and the growth of love*. Baltimore, MD: Johns Hopkins University Press.
- Amato, P. R., & Rivera, F. (1999). Paternal involvement and children's behavioral problems. *Journal of Marriage and the Family*, *61*, 375-384.
- Amato, P. R. (1998). More than money? Men's contributions to their children's lives. In A. Booth & A. C. Crouter (Eds.), *Men in families: When do they get involved? What difference does it make?* (pp. 241-278). Mahwah, NJ, US: Lawrence Erlbaum Associates.
- Arnett, J. J. (1999). Adolescent Storm and Stress, Reconsidered. *American Psychologist*, *54*, 5, 317-326.
- Barber, B. K., Stolz, H. E., & Olsen, J. A. (2006). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development*, *70*, Serial No. 282, 1-137.
- Barrera, M. J. & Stice, E. (1998). Parent-adolescent conflict in the context of parental support: Families with alcoholic and nonalcoholic fathers. *Journal of family psychology*, *12*, 195-208.

- Baumeister, R. F. & Leary, M. R. (1995). The need to belong: Desire of interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Baumrind, D. (1967). Child-care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75, 43–88.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monographs*, 4 (1), 1–103.
- Baumrind, D. (1978). Parental disciplinary patterns and social competence in youth. *Youth and Society*, 9, 239–276.
- Backman, C. W. (1988), "The self: a dialectical approach", *Advances in Experimental Social Psychology*, 21, 229-260.
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55(1), 83-96.
- Benedict, R. (1946). *The chrysanthemum and the sword: Patterns of Japanese culture*. Boston, MA: Houghton Mifflin.
- Bergman, L., Magnusson, D., & El-Khoury, B. M. (2003). *Studying individual development in an interindividual context: A person-oriented approach*. Vol. 4 of *Paths through life* (D. Magnusson, Series Ed.). Mahwah, NJ: Erlbaum.
- Berlin, L. J. & Cassidy, J. (1999). Relations among relationships: Contributions from attachment theory and research In: J. Cassidy and P. Shaver (Eds.), *Handbook of attachment* (pp. 688–712). Guilford Press, New York.
- Blankenhorn, D. (1995). *Fatherless America*. New York: Basic Books.

- Booth-LaForce, C., Rubin, K.H., Rose-Krasnor, L., & Burgess, K. (2005). Attachment and Friendship Predictors of Psychosocial Functioning in Middle Childhood and the Mediating Roles of Social Support and Self-Worth. In K. Kerns & Richardson, R.A. (Eds.), *Attachment in Middle Childhood*. New York: Guilford.
- Booth-LaForce, C.L., Oh, W., Kim, A., Rubin, K.H., Rose-Krasnor, L., & Burgess, K.B. (2006). Attachment, Self-Worth, and Peer-Group Functioning in Middle Childhood. *Attachment and Human Development*, 8, 309-325.
- Bornstein, M. H. (1995). Form and function: Implications for studies of culture and human development. *Culture and Psychology*, 1(1), 123-138.
- Bowlby, J. (1969/1982). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.
- Braungart-Rieker, J.M., Garwood, M.M., Powers, B.P., & Notaro, P.C. (1998). Infant affect and affect-regulation during the still-face paradigm with mothers and fathers: The role of infant characteristics and parental behavior. *Developmental Psychology*, 34, 1428-1437.;
- Bretherton, I. (1985). Attachment theory: Retrospect and prospect. In I. Bretherton & E.Waters (Eds.), *Growing points of attachment theory and research*. Monographs of the Society for Research in Child Development, 50, (1-2), 3–35.
- Bretherton & Waters, 1985;
- Brittain, C. V. (1968). An exploration of the bases of peer-compliance and parent-compliance in adolescence. *Adolescence*, 445–458.

- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Cabrera, N., Fitzgerald, H. E., Bradley, R.H., & Roggman, L. (2007). Modeling the dynamics of paternal influences on children over the life course. *Applied Developmental Science, 11*, 185-189.
- Cahn, D. D. (1992). *Conflict in intimate relationships*. New York: Guilford Press.
- Cassidy, J. (1999). The nature of the child's ties. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of Attachment: Theory, research, and clinical applications* (pp.3-20). New York: Guilford Press.
- Chao, R., & Tseng, V. (2002). Parenting of Asians. In M. H. Bornstein (Ed.), *Handbook of parenting: Social conditions and applied parenting* (2nd ed., Vol. 4, pp. 59-93). Mahwah, NJ: Lawrence Erlbaum Associates.
- Chen, X., French, D., & Schneider, B. (2006). Culture and peer relationships. In X. Chen, D. French, & B. Schneider (Eds.), *Peer relationships in cultural context* (pp. 3-20). New York : Cambridge University Press.
- Chung, D. K. (1992). Asian cultural commonalities: A comparison with mainstream American culture. In S. M. Furuto (Ed.), *Social practice with Asian Americans* (pp. 27-44). Newbury Park, CA: Sage.
- Cohn, D. (1990). Child-mother attachment of 6-year-olds and social competence at school. *Child Development, 61*, 152-177.
- Collins, W. A., & Laursen, B. (2004). Parent-adolescent relationships and influences. In R. Lerner & L. Steinberg (Eds.), *The handbook of adolescent psychology* (pp. 331-362). New York: Wiley.

- Collins, W. A., & Steinberg, L. (2006). Adolescent development in interpersonal context. In W. Damon (Series Ed.) and N. Eisenberg (Vol. Ed.), *The handbook of child psychology Vol. 3. Social, emotional, and personality development* (6th ed.). New York: Wiley.
- Collins, W. A., Madsen, S. D., & Susman-Stillman, A. (2002). Parenting during middle childhood. In M. Bornstein (Ed.), *Handbook of parenting: Children and parenting* (2nd ed., Vol. 1, pp. 73-101). Mahwah, NJ: Lawrence Erlbaum Associates.
- Connolly, J. A., & Johnson, A. M. (1996). Adolescents' romantic relationships and the structure and quality of their close interpersonal ties. *Personal Relationships, 3*, 185–195.
- Cutrona, C.E., & Russell, D. (1987). The provisions of social relationships and adaptation to stress. In W.H. Jones & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 1, pp. 37-67). Greenwich, Conn.: JAI Press.
- Day, R. D., & Mackey, W. C. (1989). An alternate standard for evaluating American fathers. *Journal of Family Issues, 10*, 401-408.
- Denham, S. A., Workman, E., Cole, P., Weissbrod. C., Kendziora, K. T., & Zahn-Waxler, C. (2000). Prediction of externalizing behavior problems from early to middle childhood: The role of parental socialization and emotion expression, *Development and Psychopathology, 12*, 23-45
- Dishion, T. J., & Patterson, G. R. (2006). The development and ecology of antisocial behavior in children and adolescents. In D. Cicchetti & D. J. Cohen (Eds.),

Developmental psychopathology, Vol. 3: Risk, disorder, and adaptation (pp. 503-541). New York: Wiley.

Dixon, S. V., Graber, J. A., & Brooks-Gunn, J. (2008). The Roles of Respect for Parental Authority and Parenting Practices in Parent–Child Conflict Among African American, Latino, and European American Families. *Journal of Family Psychology, 22*, 1-10.

Eisenberg, N., Valiente, C., Losoya, S., Zhou, Q., Cumberland, A., Liew, J., & Maxon, E. (2008). Understanding mother-adolescent conflict discussions: Concurrent and across-time prediction from youths' dispositions and parenting. *Monographs of the Society for Research on Child Development* (Vol. 72).

Elicker, J., Englund, M., & Sroufe, L. A. (1992). Predicting peer competence and peer relationships in childhood from early parent-child relationships. In R. D. Parke & G. W. Ladd (Eds.), *Family-peer relationships: Modes of linkage* (pp. 77–106). Hillsdale, NJ: Erlbaum.

French, D. C. (2004). The cultural context of friendships. *ISSBD Newsletter, 28*, 19-20.

Furman, W. (1996). The measurement of friendship perceptions: Conceptual and methodological issues. In W. M. Bukowski, A. F. Newcomb, & W.W. Hartup (Eds.), *The company they keep: Friendship in childhood and adolescence* (pp. 41–65). New York: Cambridge University Press.

Furman, W. (2001). Working models of friendships. *Journal of Social and Personal Relationships, 18*(5), 583-602.

- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*, 1016–1024.
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development, 63*, 103–115.
- Furman, W., Simon, V. A., Shaffer, L., & Bouchey, H. A. (2002). Adolescents' working models and styles for relationships with parents, friends, and romantic partners. *Child Development, 73*, 241–255.
- Furman, W., & Wehner, E. A. (1994). Romantic views: Toward a theory of adolescent romantic relationships. In R. Montemayor, G. R. Adams, & G. P. Gullota (Eds.), *Relationships during adolescence* (pp. 168–195). Thousand Oaks, CA: Sage.
- Furman, W., Simon, V. A., Shaffer, L., & Bouchey, H. A. (2002). Adolescents' working models and styles for relationships with parents, friends, and romantic partners. *Child Development, 73*, 241–255.
- Galambos, N.L., Sears, H.A., Almeida, D.M., & Kolaric, G.C. (1995). Parents' work overload and problem behavior in young adolescents. *Journal of Research on Adolescence, 5*, 201-223.
- Greenberger, E., & Chen, C. (1996). Perceived family relationships and depressed mood in early and late adolescence: A comparison of European and Asian Americans. *Developmental Psychology, 32*(4), 707-716.
- Greenfield, P. (1994). Independence and interdependence as developmental scripts. In P. Greenfield & R. Cocking (Eds.), *Cross-cultural roots of minority child*

- development* (pp.1-40). Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.
- Greenfield, P., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology*, *54*, 461-490.
- Grotevant, H. D. (1998). Adolescent Development in Family Contexts. In W. Damon N. Eisenberg, *Handbook of Child Psychology* (pp. 1097–1149). New York: John Wiley & Sons.
- Hancock, G. R., & Mueller, R. O. (Eds.). (2006). *Structural equation modeling: A second course*. Greenwich, CT: Information Age Publishing, Inc.
- Harkness, S., & Super, C. M. (2002). Culture and parenting. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 2. Biology and ecology of parenting* (2d ed., pp. 253–280). Mahwah, NJ: Erlbaum.
- Hart, C. H., Ladd, G. W., & Burleson, B. R. (1990). Children's expectations of the outcomes of social strategies: Relations with sociometric status and maternal disciplinary style. *Child Development*, *61*, 127–137.
- Hartup, W. W. (1989). Social relationships and their developmental significance. *American Psychologist*, *44*, 120–126.
- Hartup, W. W., & Laursen, B. (1991). Relationships as developmental contexts. In R. Cohen & A. W. Siegel (Eds.), *Context and development* (pp. 253–279). Hillsdale, NJ: Erlbaum.
- Hartup, W. H., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin*, *121*, 355–370.

- Helsen, M., Vollebergh, W., & Meeus, W. (2000). Social support from parents and friends and emotional problems in adolescence. *Journal of Youth and Adolescence*, 29, 319–335.
- Henderson, M., & Argyle, M. (1986). The informal rules of working relationships. *Journal of Occupational Behavior*, 7, 259-275.
- Hinde, R.A. (1987). *Individuals, relationships and culture*. Cambridge: Cambridge University press.
- Hinde, R. A. (1997). *Relationships: A dialectical perspective*. Hove, UK: Psychology Press.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hui, C. H., & Triandis, H. C. (1986). Individualism-collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology*, 17, 225-248.
- Hurh, W. (1998). *The Korean Americans*. Westport, CT: Greenwood Press.
- Jöreskog, K. G. (2002, June). *Analysis of ordinal variables 5: Covariates*. Retrieved January 6, 2004 from <http://www.ssicentral.com/lisrel/column11.htm>.
- Jöreskog, K. G., & Goldberger, A. S. (1975). Estimation of a model with multiple indicators and multiple causes of a single latent variable. *Journal of the American Statistical Association*, 70, 631-639.
- Kelley, H. H., Berscheid, E., Christensen, A., Harvey, J. H., Huston, T. L, Levinger, G., McClintock, E., Peplau, L. A., & Peterson, D. R. (1983). *Close relationships*. New York: Freeman

- Killen, M., & Wainryb, C. (2000). Independence and interdependence in diverse cultural contexts. In S. Harkness, C. Raeff, & C.M. Super (Eds.), *Variability in the social construction of the child. New Directions for Child and Adolescent Development*, 87, 5-21.
- Kim, K. W. (2006). "Hyo" and parenting in Korea. In K.H. Rubin, & O.B. Chung (Eds.), *Parenting beliefs, behaviors, and parent-child relations: A cross-cultural perspective* (pp. 3-33). New York, NY, U.S.: Psychology Press.
- Kim, U., & Choi, S. H. (1994). Individualism, collectivism, and child development: A Korean perspective. In P. M. Greenfield & R. R. Cocking (Eds.), *Cross-cultural roots of minority child development*, (pp. 227-257). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Kim, K. & Hurh, W. (1987). Employment of Korean immigrant wives and the division of household tasks. In E. Y. Phillips, & E. H. Phillips (Eds.), *Korean women in transition: At home and abroad* (pp.199-217). Los Angeles, CA: Center for Korean-American and Korean Studies.
- Kim, J.M., & Turiel, E. (1996). Korean and American children's concepts of adult and peer authority . *Social Development*, 5, 310–329.
- Kim, B.S., Yang, P.H., Atkinson, D.R., Wolfe, M.M., & Hong, S. (2001). Cultural value similarities and differences among Asian American ethnic groups. *Cultural Diversity and Ethnic Minority Psychology*, 7(4), 343-361.
- Kochanska, G. (1992). Children's interpersonal influence with mothers and peers. *Developmental Psychology*, 28, 491–499.

- Koh, Y.- J., Mendelson, M. J., & Rhee, U. (2003). Friendship satisfaction in Korean and Canadian university students. *Canadian Journal of Behavioural Science*, 35 (2), 239-253.
- Korea Survey (1991). *The youth of the world and Korea*. Seoul, Korea: Korea Survey Gallup Polls.
- Kuczynski, L. (1997, April). Power asymmetry revisited: Power in the parent-child relationship. In D. B. Bugental (Chair), *Power and negotiation in parent-child relationships*. Paper symposium conducted at the biennial meeting of the Society for Research in Child Development, Washington DC.
- Kuczynski, L., Marshall, S., & Schell, K. (1997). Value socialization in a bidirectional context. In J. E. Grusec & L. Kuczynski (Eds.), *Parenting and children's internalization of values: A handbook of contemporary theory* (pp. 23–50). New York: Wiley.
- Ladd, G. W. (1992). Themes and theories: Perspectives on processes in family-peer relationships. In R. D. Parke & G. W. Ladd (Eds.), *Family-peer relationships: Modes of linkage* (pp. 1-34). Hillsdale, N.J.: Lawrence Erlbaum Press.
- Ladd, G. W. & Pettit, G. S. (2002). Parenting and the development of children's peer relationships. In M. H. Bornstein (Ed.), *Handbook of parenting: Children and parenting* (2nd ed., Vol. 1, pp. 269-309). Mahwah, NJ: Lawrence Erlbaum Associates.

- LaFreniere, P. J., & Sroufe, L. A. (1985). Profiles of peer competence in the preschool: Interrelations between measures, influence of social ecology, and relation to attachment history. *Developmental Psychology*, *21*, 56–69.
- Lam, C. M. (1997). A cultural perspective on the study of Chinese adolescent development. *Child and Adolescent Social Work Journal*, *14*(2), 95-113.
- Laursen, B. (1993). Conflict management among close peers. In B. Laursen (Ed.), *Close friendships in adolescence* (pp.39-54). San Francisco: Jossey-Bass.
- Laursen, B., Furman, W., & Mooney, K. S. (2006). Predicting interpersonal competence and self-worth from adolescent relationships and relationship networks: Variable-centered and person-centered perspectives. *Merrill-Palmer Quarterly*, *52*(3), 572-600.
- Laursen, B., Coy, K. C., & Collins, W. A. (1998). Reconsidering changes in parent-child conflict across adolescence: A metaanalysis. *Child Development*, *69*, 817–832.
- Lee, E. H., & Lee, K. W. (1990). *The Korean mothers' socialization process for children* (in Korean). Seoul: Ehwa Women's University.
- Linder & Collins (2005). Parent and peer predictors of verbal aggression, physical aggression, and conflict management in romantic relationships in late adolescence and young adulthood. *Journal of Family Psychology*, *19*, 252-262.
- Little, R. J. A. (1995). Modeling the drop-out mechanism in repeated-measures studies. *Journal of the American Statistical Association*, *90*, 1112-1121.
- Loeber, R., & Dishion, T. (1983). Early predictors of male delinquency: A review. *Psychological Bulletin*, *94*, 68-99.

- Loeber, R., & Stouthamer-Loeber, M. (1986). Family factors as correlates and predictors of juvenile conduct problems and delinquency. In M. Tonry & N. Morris (Eds.), *Crime and Justice* (pp. 29-149). Chicago: University of Chicago Press.
- Loeber, R., Burke, J. D., Lahey, B. B., Winters, A., & Zera, M. (2000). Oppositional defiant and conduct disorder: A review of the past 10 years, Part I. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 1468–1484.
- Maccoby, E. E. (1995). The two sexes and their social systems. In P. Moen, G. H. Elder, & K. Luscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 347–364). Washington, DC: American Psychological Association.
- Maccoby, E., & Martin, M. (1983). Socialization in the context of the family: Parent–child interaction. In E. M. Hetherington (Ed.), *Handbook of child psychology* (Vol. 4, pp. 1–101). New York: Wiley.
- MacDonald, K. (1996). What do children want? A conceptualization of evolutionary influences on children’s motivation in the peer group. *International Journal of Behavioral Development*, 19, 53–73.
- Magolese, S. K., Markiewicz, D., & Doyle, A. B. (2005). Attachment to parents, best friend, and romantic partner: Predicting different pathways to depression in adolescence. *Journal of Youth and Adolescence*, 34, 637-650.
- Marsiglio, W., Amato, P., Day, R. D., & Lamb, M. E. (2000). Scholarship on fatherhood in the 1990s and beyond. *Journal of Marriage and the Family*, 62, 1173-1191.

- Matsumoto, D. (1997). *Culture and modern life*. Belmont, CA: Brooks/Cole Publishing Co.
- McGue, M., Elkins, I., Walden, B., & Iacono, W. G. (2005). Perceptions of the parent-adolescent relationship: a longitudinal investigation. *Developmental Psychology, 41*(6), 971-84.
- Mead, M. (1928). *Coming of Age in Samoa*. WM: Morrow and Co.
- Miller, J.G. (2002). Bring culture to basic psychological theory – Beyond individualism and collectivism: Comment on Oyserman et al. (2002). *Psychological Bulletin, 128*, 97-109.
- Mills, R. S. L., & Grusec, J. E. (1988). Socialization from the perspective of the parent-child relationship. In S. Duck, D. F. Hay, S. E. Hobfoll, W. Ickes, & B. M. Montgomery (Eds.), *Handbook of personal relationships: Theory, research and interventions* (pp. 177–191). Chichester, UK: Wiley.
- Min, P. (1998). *Changes and Conflict: Korean Immigrant Families in New York*. Needham Heights, MA: Allyn & Bacon.
- Murstein, B. I., & Adler, E. R. (1995). Gender differences in power and self-disclosure in dating and married couples. *Personal Relationships, 2* (3), 199–209.
- Muthén, B. O. (1989). Using item specific instructional information in achievement modelling. *Psychometrika, 54*, 385-396.
- Osborne, L. N. & Fincham, F. D. (1996). Marital conflict, parent-child relationships, and child adjustment: Does gender matter?. *Merrill-Palmer Quarterly, 42*, 48–75.

- Park, Y. J. K. (1996). Das soziale Netzwerk in der fruehen Adoleszenz: Eine kulturvergleichende Untersuchung zweier Generationen aus Korea und Deutschland. Unpublished doctoral dissertation, Universitaet zu Koeln, Koeln, Germany.
- Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Developmental Psychology, 29*, 611-62.
- Peterson, D. R. (1983). Conflict. In H. H. Kelley, E. Berscheid, A. Christensen, J. H. Harvey, T. L. Huston, G. Levinger, et al. (Eds.), *Close relationships* (pp. 360–396). New York: W. H. Freeman and Company.
- Peterson, G. W., Steinmetz, S. K., & Wilson, S. M. (2005). Macro-Level Influences on Parent-Youth Relations. *Marriage & Family Review, 36*, 1-5.
- Pettengill, S. M., & Rohner, R. P. (1985). Korean-American adolescents' perceptions of parental control, parental acceptance-rejection and parent-adolescent conflict. In I. R. Lagunes & Y. H. Poortinga (Eds.), *From different perspective: Studies of behavior across cultures* (pp. 241-249). Lisse: Swets & Zeitlinger.
- Piaget, J. (1932). *The moral judgment of the child*. Glencoe, IL: Free Press.
- Ramos, M. C., Guerin, D. W., Gottfried, A. W., Bathurst, K., Oliver, P. H. (2005). Family Conflict and Children's Behavior Problems: The Moderating Role of Child Temperament. *Structural Equation Modeling, 12*(2), 278-298.

- Richardson, R. A., Galambos, N. L., Schulenberg, J. E., & Petersen, A. C. (1984). Young adolescents' perceptions of the family environment. *Journal of Early Adolescence, 4*, 131-153.
- Rogoff, B. (2003). *The cultural nature of human development*. New York, NY: Oxford University Press, Inc.
- Rohner, R. P., & Pettengill, S. M. (1985). Perceived parental acceptance-rejection and parental control among Korean adolescents. *Child Development, 56*(2), 524-528.
- Rose, A. J., & Asher, S. R. (2000). Children's friendships. In C. Hendrick & S. Hendrick (Eds.), *Close relationships: A sourcebook* (pp. 47–69). California: Sage.
- Rothbaum, F., Kakinuma, M., Nagaoka, R., & Azuma, H. (2007). Attachment and amae: Parent-child closeness in the United States and Japan. *Journal of Cross-Cultural Psychology, 38*, 465-486.
- Rubin, K.H. & Chung, O. B. (Eds.) (2006) *Parental Beliefs, Parenting, and Child Development in Cross-Cultural Perspective*. London, UK: Psychology Press.
- Rubin, K. H., & Coplan, R. J. (1992). Peer relationships in childhood. In M. H. Bornstein & M. E. Lamb (Eds.), *Developmental psychology: An advanced textbook* (3rd ed., pp. 519–578). Hillsdale, NJ: Erlbaum.
- Rubin, K.H., Bukowski, W., & Parker, J. (2006). Peer interactions, relationships, and groups. In N. Eisenberg (Ed), *Handbook of Child Psychology (6th edition): Social, emotional, and personality development*. (pp. 571-645) New York: Wiley.

- Rubin, K.H., Dwyer, K.M., Booth, C.L., Kim, A.H., Burgess, K.B., & Rose-Krasnor, L. (2004) Attachment, friendship, and psychosocial functioning in early adolescence, *Journal of Early Adolescence*, 24, 326-356.
- Russell, A., & Russell, G. (1992). Child effects in socialization research: Some conceptual and data analysis issues. *Social Development*, 2, 163–184.
- Russell, A., Pettit, G. S., & Mize, J. (1998). Horizontal Qualities in Parent–Child Relationships: Parallels with and Possible Consequences for Children’s Peer Relationships. *Developmental Review*, 18, 313–352.
- Schneider, B. H., Atkinson, L., & Tardif, C. (2001). Child-parent attachment and children’s peer relations. *Developmental Psychology*, 37, 86-100.
- Schwarz, B., Trommsdorff, G., Kim, U., & Park, Y.-S. (2006). Intergenerational support: Psychological and cultural analyses of Korean and German women. *Current Sociology*, 54(2), 315-340.
- Seiffge-Krenke, I., Shulman, S., & Klessinger, N. (2001). Adolescent precursors of romantic relationships in young adulthood. *Journal of Social and Personal Relationships*, 18, 327-346.
- Shin, H. B., & Bruno, R. (2003, October). Language use and English speaking ability: 2000. *Census 2000 brief*. U.S. Census Bureau.
- Shrauger, J. S., & Schoeneman, T. J. (1979). Symbolic interactionist view of self-concept: Through the looking glass darkly. *Psychological Bulletin*, 86, 549–573.

- Sroufe, L.A., Jacobvitz, D., Mangelsdorf, S., DeAngelo, E., & Ward, M.J. (1985).
Generational boundary dissolution between mothers and their preschool
children: A relationship systems approach. *Child Development*, 56, 316-325.
- Steinberg, L., & Silk, J. S. (2002). Parenting adolescents. In M. H. Bornstein (Ed.),
Handbook of parenting: Children and parenting (2nd ed., Vol. 1, pp. 103-133).
Mahwah, NJ: Lawrence Erlbaum Associates.
- Steinberg, L. & Silverberg, S. (1986). The vicissitudes of autonomy in early
adolescence. *Child Development*, 57, 841-851.
- Stolz, H. E., Barber, B. K., & Olsen, J. A. (2005). Toward disentangling fathering and
mothering: An assessment of relative importance. *Journal of Marriage and
the Family*, 67, 1076-1092.
- Sullivan, H.S. (1953). *The interpersonal theory of psychiatry*. New York: Norton.
- Super, C., & Harkness, S. (1999). The environment in cultural and developmental
research. In S. Friedman & T. D. Wachs (Eds.), *Measuring environment
across the lifespan* (pp. 279–336). Washington, DC: American Psychological
Association.
- Swann, W. B., Jr. (1987). Identity negotiation: Where two roads meet. *Journal of
Personality and Social Psychology*, 53, 1038-1051.
- Takahashi, K., Ohara, N., Antonucci, T. C., & Akiyama, H. (2002). Commonalities
and differences in close relationships among the Americans and Japanese: A
comparison by the individualism/collectivism concept. *International Journal
of Behavioral Development*, 26, 453–465.

- Teresi, J. A., Fleishman, J. A. (2007) Differential item functioning and health assessment. *Quality of Life Research*, 16,33-42.
- Thompson, R. A. (1999). Early attachment and later development. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment* (pp. 265-286). New York: Guilford.
- Thompson, R.A., & Raikes, H.A. (2003). Toward the next quarter-century: Conceptual and methodological challenges for attachment theory. *Development and Psychopathology*, 15, 691-718.
- Triandis, H. C. (1995). *Individualism & collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality & Social Psychology*, 74(1), 118-128.
- Troy, M., & Sroufe, L. A. (1987). Victimization among preschoolers: Role of attachment relationship history. *Journal of the American Academy of Child and Adolescent Psychiatry*, 26, 166–172.
- Umberson, D. (1992). Relationships between adult children and their parents: Psychological consequences for both generations. *Journal of Marriage and the Family*, 54, 664-674.
- Wainryb, C. (2004). Is and ought: Moral judgments about the world as understood. In B. Sokol & J. Baird (Eds.), *New directions for child development: Mind, morals, and action: The interface between children's theories of mind and socio-moral development*. San Francisco: Jossey-Bass.

- Way, N., & Robinson, M. G. (2003). A longitudinal study of the effects of family, friends, and school experiences on the psychological adjustment of ethnic minority, low-SES adolescents. *Journal of Adolescent Research, 18*, 324–346.
- Weiss, R. S. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others* (pp. 17-26). Englewood Cliffs, NJ: Prentice-Hall.
- Yamada, H. (2004). Japanese mothers' views of young children's areas of personal discretion. *Child Development, 75* (1), 164–180.
- Youniss, J. (1980). Parents and peers in social development: A Sullivan-Piaget perspective. Chicago, IL: University of Chicago Press.
- Youniss, J., & Smollar, J. (1985). *Adolescent relations with mothers, fathers, and friends*. Chicago, IL: The Univ. of Chicago Press.