

Relationships Between Parenting Styles, Adolescent Academic Achievement, and Behavioral Adjustment among Korean Families[†]

This study examined the relationships between parenting styles, academic achievement, and behavioral adjustment of adolescents in Korea. Using a sample of 181 parents and their children (13-15 years old), parents completed the Parental Authority Questionnaire and adolescents filled out the Youth Behavior Checklist (CBCL) and provided their school grades. Factor analysis was conducted on the PAQ to confirm the psychometric properties. Hierarchical regression analysis was computed to determine the relationship between maternal and paternal parenting styles, academic performance, and children's internalizing and externalizing behaviors. Regression analysis revealed that mother's authoritative parenting style was positively related with adolescents' grades in English. However, father's permissive was negatively related with adolescents' grades in English, Mathematics, and Science. Mother's permissive parenting styles showed negative effects of internalizing and externalizing behavior problems whereas father's permissive parenting styles showed positive effects of internalizing and externalizing behavior problems.

Over the past 40 years, numerous studies have applied Baumrind's parenting framework to explain variations in patterns of academic achievement, psychosocial development, behavior problems, and psychological symptoms in children and adolescents

(e.g., Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Lamborn, Mounts, Steinberg, & Dornbusch, 1991, Steinberg, Lamborn, Dornbusch, & Darling, 1992). Baumrind's parenting framework is particularly pertinent to the present work because it links the components of family interaction to adolescent's cognitive competence.

Basically, the typological framework postulates that family parenting styles can be divided into three main types (authoritarian, permissive, and authoritative) that have different consequences for the development of cognitive and social competence. The three parenting typologies are differentiated by the parental values, behaviors, and standards that are expressed toward children during everyday socialization. Moreover, parents have specific expectations about the behavior of their children while utilizing each parenting style (Dornbusch *et al.*, 1987). For instance, parents who employ an authoritarian style of parenting show strict discipline toward their children, and try to shape, control, and evaluate the behaviors and attitudes of their children within an absolute set of standards. By contrast, parents who adopt a permissive parenting style are more tolerant and accepting of children's behaviors, use minimal punishment while disciplining children, make few demands for mature behavior, and permit a wide degree of self-regulation by children. Finally, parents who use an authoritative parenting style have expectations of mature and appropriate behavior from their children, set clear standards and rules for regulating children's behaviors, encourage independence and individuality in their children, and have

[†]This study was in partial fulfillment of the requirements for a Master's degree from Syracuse University.

Doctoral Candidate, Department of Child and Family Studies, Syracuse University, NY, USA (yochang@syr.edu)

Key Words: Academic achievement, internalizing and externalizing behavior problems, parenting styles

open communications with their children (Baumrind, 1971).

Korea has changed dramatically through globalization, industrialization, and modernization. The changes in Korean society have influenced structural changes in the family, parenting roles, and family members' responsibilities toward one another. For example, the functional structure of the family has changed from the values of a traditional Confucian culture to the values of an individualistic culture (Park & Cho, 1995). Recognizing that Korean women are entering the labor force in increasing numbers and there is greater insistence that fathers become more involved in childrearing, this study takes into account the paternal contributions towards the academic performance and social behaviors of adolescents above and beyond that of mothers. The social changing and evolving parental roles will affect the relationship between parents and adolescents in Korea. This study will show a similar finding in the positive association between authoritative parenting style and adolescent academic and behavior adjustment among European Americans. In addition, Korean society is recognized for the parental emphasis on and high expectations of their children's academic achievement, as well as the competitive and expensive educational systems. Parents encourage their children to do well in school, make substantial sacrifices for the education of their children, and are willing to spend considerable money on extracurricular study programs. In turn, the children work hard to fulfill parental and extended family expectations (Kim, 1999). As education plays an important role in the acquisition and maintenance of a higher social status, Koreans believe that the future success of the family depends on the education of their children and that the children's academic achievements are not only for themselves, but also for their families (Sorensen, 1994).

Baumrind's parenting styles have been used to determine the association between the emotional qualities of parenting and childhood outcomes in some cultural groups around the world (e.g., Baumrind, 1991; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). However, its application

for the assessment of parenting styles as well as adolescent academic and behavioral outcomes in Korean families is not clear. Korean parents utilize childrearing practices based on social and environmental demands. It remains to be seen whether the parenting practices from the past (obedience, respect for authority, and hard work) remain the current driving forces. Due to the lack of studies about this topic within Korean adolescents, this study examines the relationship between Korean parenting styles and adolescent cognitive and social functioning using Baumrind's parenting styles.

LITERATURE REVIEW

Significant research on parenting styles and children's social functioning and academic achievement has been conducted on North American families (Dornbusch *et al.*, 1987; Lamborn *et al.*, 1991, Steinberg *et al.*, 1992). A review of the empirical literature on authoritative parenting on European American adolescents points to a high level of school and social outcomes for children (Baumrind, 1991; Steinberg *et al.*, 1994). For example, in a study of Caucasian adolescents and their parents, Baumrind (1991) found that adolescents who described their parents as authoritative showed the highest scores in verbal and mathematics achievements. Using a sample of different socioeconomic backgrounds and ethnic groups, Steinberg *et al.* (1994) indicated that an authoritative parenting style was positively related to adolescents' school grades with European- and Hispanic-American high school adolescents, and neglectful parenting was not positively related to school grades with European- and Hispanic-American adolescents. Similar to the findings of authoritative and neglectful parenting, Lamborn *et al.* (1991) supported that adolescents who described their parents as authoritative had higher grades in school while adolescents who described their parents as neglectful performed the poorest in school. On the other hand, a study of Mexican girls and boys by Dumka, Gonzales, Bonds and Millsap (2009) found that harshness and authoritarian parenting by mothers showed a significant positive relationship of

the high school grades of Mexican girls.

Researchers have examined the relationship between parenting styles and school performance among Asian adolescents; however, the findings remain unclear. Generally, authoritarian parenting has positive effect on Asian adolescents' school grades (Dornbusch *et al.*, 1987; Leung, Lau, & Lam, 1998; Steinberg *et al.*, 1994). However, with a focus on Korean American high school adolescents, Kim (1999) indicated that Korean American adolescents increased their school grades when they had authoritative parents while they decreased their school grades with both authoritarian and inconsistent parents. This was consistent with the results showing adolescents raised under authoritative and permissive fathers indicated better grades than those with authoritarian fathers among Korean American families (Kim & Rohner, 2002). Therefore, Chao (2001) suggested that cultural factors are important to examine parenting styles because Baumrind's parenting styles focused on Western countries. The results from her study revealed that European American adolescents raised by authoritative parents had higher school grades compared to Chinese-American adolescents from authoritarian parents. However, the school grades showed no differences between Chinese-American adolescents who had authoritative and those who had authoritarian parents (Chao, 2001).

A number of studies have been conducted to examine the association between parenting styles and children's and adolescents' internalizing and externalizing behaviors. The construct of internalizing behaviors refers to withdrawal, fearfulness, inhibition, and anxiety directed internally rather than externally. By contrast, externalizing behaviors refers to children's external behavior such as disruptive, hyperactive, aggression, and frustration (Roeser, Eccles, & Strobel, 1998). Steinberg *et al.* (1994) found that adolescents who live with either authoritative or authoritarian parents became less involved in externalizing behavior problems, whereas adolescents who live with indulgent parents either increased or remained constant in externalizing behavior problems, and adolescents who had neglectful parents showed increases in externalizing behavior problems over

time. Reitz, Dekovic, and Meijer (2006) also indicated that the perception of adolescents in regards to parental involvement was a predictor of both the internalizing and externalizing behavior problems. By contrast, adolescents' perception of parental strictness decreased the internalizing behavior problems, but not the externalizing behavior problems.

Similar to other Western studies, Milevsky, Schlechter, Netter, and Keehn (2007) found that there was a significant parenting style effect on internalizing behavior problems such as the symptoms of depression. An authoritative parenting style was related to lower depression, whereas adolescents in permissive parental families had relatively higher levels of symptoms of depression. Amato and Rivera (1999) revealed that children whose fathers were highly involved in their children's lives were less involved in behavior problems. Consistent with other studies, Pittman and Chase-Lansdale (2001) found that adolescent girls with authoritative mothers exhibited fewer minor delinquent behaviors than those with permissive mothers, and fewer major delinquent behaviors than those with authoritarian mothers. Additionally, adolescents with disengaged mothers were more likely to be depressed than adolescents with mothers that displayed different parenting style. In other studies on Korean and other Asian adolescents, Oh, Jeon, and Jang (1993) found that children who had less supportive and overprotected mothers showed more internalizing and externalizing behavior problems than those who had authoritative mothers. Analyzing Chinese children, Chen, Rubin, and Li (1997) indicated that maternal acceptance was negatively associated with externalizing behavior problems. Chen, Liu, Li, Cen, Chen, and Wang (2000) also found that a maternal authoritative style was negatively associated with internalizing behavior problems for children.

Acknowledging the differences in the outcomes of parenting styles across cultural and ethnic groups, the Parental Authority Questionnaire (PAQ) used to assess parenting styles, is organized around the definitional typologies developed by Baumrind (1967). Baumrind's typologies are well-known because they have investigated the use of multi-methods,

longitudinal designs, and sophisticated data analyses (Darling & Steinberg, 1993). This study provides an opportunity to further test cultural variations in childhood outcomes based on the emotive qualities within a Korean family. The purpose of the current study was to examine the relationships between parenting styles, academic achievement, and behavioral adjustment in Korean children. This study addresses some key socialization issues among Korean adolescents. They include: (a) what are the associations between parental typology and Korean adolescents' academic achievement? (b) What are the associations between parental typology and Korean adolescents' internalizing and externalizing behavior problems? (c) Do the different parenting typologies have differential effects on male and female Korean adolescents?

RESEARCH METHODS

Sample

Two hundred participants were recruited from the seventh- and eighth- graders of middle schools in the city of Seoul, Korea. These students ranged in age from 13 to 15 years, with a mean age of 14.5 years; 63 were boys and 118 were girls. The sample of seventh graders consisted of 20 boys and 32 girls. The sample of eighth graders consisted of 43 boys and 86 girls. Most adolescents came from two-parent families, and 86.7% live with their biological parents. For parental education, approximately 64.1% of mothers and 47.5% of fathers completed high school, 5.5% of mothers and 9.4% of fathers had some college education, and 22.1% of mothers and 34.2% of fathers had more than four years of college education. Fifty-four percent of families earned between 2,000,000 and 4,000,000 won (\$1US=918 won) per month, and 14.4% of families earned between 4,000,000 and 5,000,000 won per month.

Procedures

The process for recruiting adolescents and their parents was as follows. First, the Seoul School Board was contacted to obtain permission to survey students attending city schools. After the permission

Table 1. *Frequency of Sociodemographic Characteristics of Participants*

	N	Percentage
Gender		
Male	63	34.8%
Female	118	65.2%
Grade		
Seventh	52	28.7%
Eighth	129	71.3%
Marital Status		
Married	157	86.7%
Separated	6	3.3%
Divorced	6	3.3%
Widowed	4	2.2%
Others	8	4.4%
Father's Education		
No High School	16	8.8%
High School Graduate	86	47.5%
Some College	17	9.4%
4-year College Graduate	46	25.4%
Master's Degree	14	7.7%
PhD, J.D., M.D.	2	1.1%
Mother's Education		
No High School	15	8.3%
High School Graduate	116	64.1%
Some College	10	5.5%
4-year College Graduate	38	21.0%
Master's Degree	2	1.1%
PhD, J.D., M.D.	0	0.0%
Family Income		
Less than 1,000,000 won	9	5.0%
1,000,000 to less than 2,000,000 Won	21	11.6%
2,000,000 to less than 3,000,000 Won	43	23.8%
3,000,000 to less than 4,000,000 Won	55	30.4%
4,000,000 to less than 5,000,000 Won	26	14.4%
More than 5,000,000 Won	27	14.9%

was granted, two schools were randomly selected and the principals of these schools were contacted and informed about the content of the study. Second, teachers in the 7th and 8th grades at each school were contacted to recruit their participation. The teachers

that agreed to the survey were given parental and adolescent consent forms and questionnaires to be distributed to parents and children. Students took home the consent form and the questionnaires to their parents to complete and return in a sealed envelope. Students were also asked to provide their consent to participate in the study. Students completed the questionnaires after class hours as suggested by the teachers.

Measures

Parental Authority Questionnaire Mothers and fathers were asked to fill out the Buri' (1991) Parental Authority Questionnaire (PAQ). The Parental Authority Questionnaire (PAQ; Buri, 1989, 1991) consists of 30 items: 10 authoritarian, 10 permissive, and 10 authoritative items on a Likert-type scale. Items were scored from 1 = strongly disagree to 5 = strongly agree. An example item on the authoritarian dimension of the scale includes: "Whenever I told my children to do something as they were growing up, I expected them to do it immediately without asking any questions"; for permissiveness: "I have always felt that what children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want"; and for authoritative: "I gave direction for my children's behavior and activities as they were growing up and I expected them to follow my direction, but I was always willing to listen to their concerns and to discuss that direction with them".

In this study, a factor analysis was conducted to determine whether the PAQ demonstrates the same psychometric properties with Korean adolescents as it has for groups in the other cultures. A Principal Components Factor Analysis was used to determine item loadings and factor structure. Items that did not load well for both mothers and fathers were dropped (below .40 on the primary loading and lower than a .20 difference between the primary and secondary factors). Following these criteria, items that loaded similarly across the two groups (mothers and fathers) were retained as indicators of permissive, authoritarian, and authoritative parenting styles. In this study, the standardized Cronbach's alpha was

determined: for mothers, authoritative = .75, authoritarian = .68, and permissive = .65; for fathers, authoritative = .70, authoritarian = .73, and permissive = .62.

Youth Behavior Checklist The Youth Self-Report (YSR) (Achenbach, 1991b) was used to obtain adolescent reports of problem behavior. The YSR assesses youth behavior problems in the past 6 months. This self-report questionnaire was developed for 11-to 18-year-old children. The inventory contains 112 items that assess 9 behavioral components: withdrawal, anxious/depressed behaviors, social withdrawal, thought problems, somatic complaints, attention problems, self destructivity/identity, aggressive and delinquent behaviors. In this study, 58 items were used to examine internalizing behaviors that included anxious/depressed, social withdrawal, and somatic complaints, as well as externalizing behaviors that included aggressive and delinquent behavior.

All items are rated on a three-point Likert-type scale. The response format is not true (0), somewhat or sometimes true (1), and very true or often true (2). Twenty-nine items measured each internalizing problems and externalizing problems. Examples of the internalizing items were: "I feel worthless or inferior" and "I am unhappy, sad, or depressed." Examples of the externalizing items were: "I lie or cheat" and "I disobey at school" (Achenbach, 1991a). In this study, Cronbach's alphas were .85 for Anxious/Depressed, .72 for Social Withdrawal, .81 for Somatic Complaints, .83 for Aggressive Behaviors, and .66 for Delinquent Behaviors.

Academic Achievement Each adolescent was asked to provide information on his/her end of the school year grades. Students were asked to furnish the actual number of points he/she received in Korean, Mathematics, English, and Science. These points were then converted into letter grades. The following ranges were used to determine letter grades: A = more than 90, B = from 80 to 89, C = from 70 to 79, D = from 60 to 69, and F = less than 60. For coding purposes, an A is equivalent to 4 points, B = 3 points, C = 2 points, D = 1 point, and F = 0 point.

ANALYSES

Initially, a Pearson Correlation analysis was computed to determine the association between parenting style typologies, academic achievement, internalizing and externalizing behavior problems, and sociodemographic variables (adolescents' age and total family income). In this study, total family income was selected to control variables based on the correlation coefficients obtained. Next, an additive regression model was used to analyze the relationships between each parenting style (authoritative, authoritarian, and permissive), four different measures of academic performance (Korean, English, Math, and Science), and two dimensions of behavioral problems. To determine the associations between parenting styles, academic achievement, and internalizing and externalizing problems, control behaviors were entered in Step 1, maternal parenting styles were entered in Step 2, and paternal parenting styles were entered in Step 3.

RESULTS

To determine whether there were gender-of-parent

differences in parenting styles and gender-of-child differences on the academic and behavioral measures, a series of independent T-tests were conducted. There were no significant differences between mothers and fathers on the permissive and authoritarian dimensions of parenting styles. However, there was a significant difference between mothers and fathers on the authoritative parenting typology. Moreover, there were no significant differences between boys and girls on any of the six outcome variables. Accordingly, data for boys and girls were combined in all subsequent analyses.

Relationships between Parenting Styles and Academic Performance

Table 2 presents the correlation coefficients for the associations between the different measures. The results of correlation coefficients for the associations between parenting styles, adolescent behavioral and school variables indicated that father's authoritative parenting style was positively associated with total family income, student grades in Korean, Mathematics, and English, and negatively correlated with externalizing behavior problems. Father's permissive parenting style was positively associated with externalizing behavior problems and negatively with

Table 2. *Correlation Matrix for Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 FAT	1.00	-.03	-.09	.77**	.07	-.09	.41**	.06	.17*	.17*	.18*	.10	-.15	-.18*
2 FAR		1.00	.13	-.07	.86*	.07	-.08	-.08	-.08	.02	.02	-.02	.01	.04
3 FPM			1.00	-.08	.02	.85*	.00	.11	-.04	-.12*	-.15	-.12	.11	.17*
4 MAT				1.00	-.017	-.11	.38**	-.01	.18*	.20**	.27**	.16*	-.13	-.17*
5 MAR					1.00	-.01	-.05	-.01	-.12	-.15*	-.11	-.10v	.10	-.08
6 MPM						1.00	-.11	.11	-.03	-.17*	-.03	-.08	-.06	.01
7 INCOME							1.00	.13	.34**	.33**	.30**	.35**	.04	.09
8 AGE								1.00	.13	-.02	-.07	.06	.11	-.03
9 KOREAN									1.00	.64**	.68**	.73**	.08	-.13*
10 MATH										1.00	.79**	.74**	-.03	-.19*
11 ENGLISH											1.00	.76**	-.06	-.21**
12 SCIENCE												1.00	.01	-.17*
13 IBP													1.00	.35**
14 EBP														1.00

*P<.05, **P<.01 FAT: Father's Authoritative; FAR: Father's Authoritarian; FPM: Father's Permissive; MAT: Mother's Authoritative; MAR: Mother's Authoritarian; MPM: Mother's Permissive; IBP: Internalizing Behavior Problems; EBP: Externalizing Behavior Problems

student grades in Mathematics. Mother's authoritative parenting style was positively associated with total family income, student grades in Korean, Mathematics, English, and Science, and negatively associated with externalizing behavior problems. Mother's permissive parenting style was negatively associated with student grades in Mathematics. Total family income was positively associated with student grades in Korean, Mathematics, English, and Science.

A series of hierarchical regression analyses was conducted to examine the relationships between the three parenting styles (authoritative, authoritarian, and permissive) and children's academic performance and behavior problems. The first set of models examined the association between parenting styles and academic achievement. Each model was created using three Steps. In this study, the first set of models included total family income in Step 1; maternal parenting styles in Step 2, and paternal parenting styles in Step 3, with school grades as the dependent variables.

Table 3 presents the hierarchical regression analysis of adolescents' grades in Korean and English on parenting styles. For Korean, in Step 1, the demographic variable (total family income) was positively associated with adolescents' grades in Korean ($\beta=.34, p<.01$) and this model explained 12% of the variance. In Step 3, adolescents' grades in Korean were positively associated with total family income ($\beta=.33, p<.01$) and 11% of the variance was explained. However, none of the parenting styles was associated with adolescents' grades in Korean. For English, in Step 1, total family income was associated with adolescents' grades in English ($\beta=.30, p<.01$) and this model explained 9% of the variance. In Step 3, mother's authoritative parenting style was positively associated with adolescents' grades in English ($\beta=.27, p<.05$) and father's permissive parenting style was negatively associated with adolescents' grades in English ($\beta=-.30, p<.05$) and this model explained 12% of the variance.

Table 4 presents the hierarchical regression analysis of adolescents' grades in mathematics and science for parenting styles. For mathematics, in Step 1, total family income was associated with adolescents' grades in mathematics ($\beta=.33, p<.01$)

Table 3. Summary of Hierarchical Multiple Regression Analysis for Parenting Styles on Adolescents' Grades in Korean and English

Variable	Korean		English	
	β	SE	β	SE
Step 1				
Family Income	.34**	.07	.30**	.08
Step 2				
Family Income	.31**	.07	.23**	.09
MAuthoritative	.06	.03	.18*	.04
MAuthoritarian	-.10	.03	-.02	.04
MPermissive	.01	.04	-.03	.05
Step 3				
Family Income	.33**	.07	.28**	.10
MAuthoritative	.05	.04	.27*	.05
MAuthoritarian	-.25	.06	-.18	.07
MPermissive	.14	.07	.22	.09
FAuthoritative	.02	.04	-.13	.05
FAuthoritarian	.18	.06	.21	.07
FPermissive	-.17	.07	-.30*	.09

Korean: $R^2=.12$ for Step 1; $R^2=.13$ for Step 2; $\Delta R^2=.11$ for Step 3. ** $P<.01$

English: $R^2=.09$ for Step 1; $R^2=.12$ for Step 2; $\Delta R^2=.12$ for Step 3. * $P<.05$, ** $P<.01$

and this model explained 11% of the variance. In Step 3, mother's parenting style was not associated with adolescents' grades in mathematics. However, father's permissive parenting style was negatively associated with adolescents' grades in mathematics ($\beta=-.30, p<.05$) and this model explained 13% of the variance. For science, in Step 1, total family income was associated with adolescents' grades in science ($\beta=.35, p<.01$) and this model explained 12% of the variance. In Step 3, mother's parenting style was not associated with adolescents' grades in science while father's permissive parenting style was negatively associated with adolescents' grades in science ($\beta=-.26, p<.05$) and this model explained 13% of the variance.

Relationships between Parenting Styles and Behavioral Adjustment

As in the previous analyses, the second set of models

Table 4. Summary of Hierarchical Multiple Regression Analysis for Parenting Styles on Adolescents' Grades in Mathematics and Science

Variable	Mathematics		Science	
	β	SE	β	SE
Step 1				
Family Income	.33**	.08	.35**	.08
Step 2				
Family Income	.30**	.09	.33**	.08
MAuthoritative	.08	.04	.03	.03
MAuthoritarian	-.01	.04	-.05	.04
MPermissive	-.13	.05	-.07	.04
Step 3				
Family Income	.33**	.10	.39**	.09
MAuthoritative	.11	.05	.16	.05
MAuthoritarian	-.20	.08	-.18	.07
MPermissive	.08	.09	.14	.08
FAuthoritative	-.05	.05	-.18	.05
FAuthoritarian	.24	.07	.18	.07
FPermissive	-.30*	.09	-.26*	.09

Mathematics: $R^2=.11$ for Step 1; $R^2=.13$ for Step 2; $\Delta R^2=.13$ for Step 3. * $P<.05$, ** $P<.01$

Science: $R^2=.12$ for Step 1; $R^2=.13$ for Step 2; $\Delta R^2=.13$ for Step 3. * $P<.05$, ** $P<.01$

included total family income in Step 1, maternal parenting styles in Step 2, and paternal parenting styles in Step 3, with levels of internalizing and externalizing behavior problems as the dependent variables. Table 5 presents the hierarchical regression analysis between adolescents' internalizing and externalizing behavior problems and parenting styles. For internalizing behavior problems, in Step 1, total family income was not associated with adolescents' internalizing behavior problems and this model explained 1% of the variance. In Step 3, mother's permissive parenting style was negatively associated with and father's permissive parenting style was positively associated with adolescents' internalizing behavior ($\beta=-.29$, $p<.05$; $\beta=.31$, $p<.05$) and this model explained 1% of the variance. For externalizing behavior problems, in Step 1, total family income was not associated with adolescents' externalizing behavior problems and this model explained 1% of the variance. In Step 3, mother's

Table 5. Summary of Hierarchical Multiple Regression Analysis for Parenting Styles on Internalizing Behavior Problems and Externalizing Behavior Problems

Variable	Internalizing Behavior Problems		Externalizing Behavior Problems	
	β	SE	β	SE
Step 1				
Family Income	.08	.40	-.08	.38
Step 2				
Family Income	.13	.44	-.02	.41
MAuthoritative	-.06	.17	-.16	.16
MAuthoritarian	.01	.19	.04	.17
MPermissive	-.03	.23	.04	.21
Step 3				
Family Income	.08	.45	-.06	.42
MAuthoritative	-.02	.26	-.09	.24
MAuthoritarian	-.01	.37	.16	.34
MPermissive	-.29*	.43	-.34*	.40
FAuthoritative	-.05	.26	-.09	.24
FAuthoritarian	.02	.36	-.15	.33
FPermissive	.31*	.45	.46**	.42

Internalizing behavior problems $R^2=.01$ for Step 1; $R^2=.01$ for Step 2; $\Delta R^2=.01$ for Step 3. * $P<.05$, ** $P<.01$

Externalizing behavior problems $R^2=.01$ for Step 1; $R^2=.10$ for Step 2; $\Delta R^2=.55$ for Step 3. * $P<.05$, ** $P<.01$

permissive parenting style was negatively associated with and father's permissive parenting style was positively associated with adolescents' externalizing behavior problems ($\beta=-.34$, $p<.05$; $\beta=.46$, $p<.01$) and this model explained 55% of the variance.

DISCUSSION

This study examined the relationships between parenting styles, academic achievement, and behavioral adjustment among Korean adolescents. This study examined which types of parenting styles were related to school performance and internalizing and externalizing behavior problems in Korean adolescents. The research was based on Baumrind's (1971) typological approach to parenting style, which is, the most widely used approach to investigate the nature of parenting in relation to adolescent social and

cognitive development (Holden, 1997). Education is an important factor for personal success in Korea and it is crucial to examine how Korean parenting styles affect school performance among Korean adolescents. Although the typology of parenting styles was initially developed for research with middle-class European American families, the framework and its relationship to childhood and adolescence outcomes have not been assessed sufficiently in diverse ethnic/cultural groups (Sorkhabi, 2005).

Some studies have assessed the parenting styles of both mothers and fathers. However, there is limited knowledge regarding the extent to which mothers and fathers show similar parenting styles (Simons & Conger, 2007; Steinberg *et al.*, 1992). The parenting styles of mother and father are intertwined; as a result, determining the relationship between mother's and father's parenting practices has important implications for understanding adolescence outcomes. Therefore, this study assessed both mother's and father's parenting to examine behavioral and school outcomes among Korean adolescents. The results of differences in mothers' and fathers' self-reported assessments of parenting styles revealed that permissive and authoritarian parenting styles had no significant differences whereas authoritative parenting style showed a difference between mothers and fathers. This latter finding is consistent with previous research (Hombek, Paikoff & Brooks-Gunn, 1995; Tein, Rossa & Michaels, 1994) that found that mothers viewed themselves as more authoritative than fathers, and that fathers viewed themselves as more authoritarian and permissive than mothers. Research on mother-father differences in parenting styles is emerging and it remains inconclusive as to what the differences on the authoritative dimension of parenting styles means in the Korean context. Traditionally, Korean fathers were viewed as authority figures and mothers as nurturers. It is possible that mothers are still the ones who are emotionally accessible to children and discipline them in democratic ways, despite the current socioeconomic changes in Korean society.

The findings on the associations between parenting styles and adolescent academic performance and behavioral adjustments in Korean families were

consistent with much of the research in this area of inquiry. That is, the authoritative parenting style seems to be more beneficial for the positive development of children than the authoritarian or permissive style (Holden, 1997; Steinberg *et al.*, 1994). In the current study a mother's authoritative parenting style was positively associated with adolescents' grades in English, whereas a father's permissive parenting style was negatively associated with adolescents' grades in English, Mathematics, and Science. Korean society emphasizes the importance of children's education and Korean mothers are more likely to be involved in their children's education. Therefore, mothers' authoritative parenting styles showed a positive relationship of Korean adolescents' academic achievement. These associations are also supported by previous research (Chen, Dong & Zhou, 1997; Heaven & Ciarrochi, 2008; Kim & Rohner, 2002; Lamborn *et al.*, 1991). For example, Kim and Rohner (2002) revealed that the authoritative parenting style was associated with academic achievement among Korean American adolescents. Chen, Dong & Zhou (1997) also found that the authoritative parenting in both mothers and fathers was positively related to children's school achievement in families in Hong Kong. Contrary to previous research (Kim, 1999; Leung *et al.*, 1998; Steinberg *et al.*, 1994), this study found that father's permissive parenting style appears to negatively influence school grades (in English, Mathematics, and Science) among Korean adolescents. The finding indicates that fathers perform significant roles for their adolescent school performance in modern Korean society.

As in other groups in diverse cultural communities (Chao, 2001; Leung *et al.*, 1998) socioeconomic status did have a significant influence on academic achievement. This finding is supported by previous research showing that Korean adolescents reared by underemployed parents or in lower socioeconomic families had a difficult time obtaining good school grades (Kim & Hurh, 1983). At the same time, most well-educated Korean parents with good economic resources seem to pay more attention to their children's school activities and performance. These parents can better afford to spend more money on

their children's educational experiences compared to less economically endowed parents (Min, 1996).

As was the case with the academic performance data, the findings showed that a mother's permissive parenting style was negatively associated with internalizing and externalizing behavior problems among Korean adolescents. However, a father's permissive parenting style was positively related with adolescents' internalizing and externalizing behavior problems. Korean fathers need to have appropriate discipline and limitations toward their children because they are more likely to be involved in the activities of children and adolescents that will influence the outcome of adolescent behavior problems. Similar relationships between parenting styles and children's behavior problems have been reported in previous studies (Aunola & Nurmi, 2005; Chang, Schwartz, Dodge & McBride-Chang, 2003; Chen *et al.*, 1997; Steinberg *et al.*, 1994). According to Steinberg and his colleagues (1994), children that reported their parents using a permissive parenting style showed increases in behavior problems and it appears that a permissive parenting style has an influence on children's behavior problems in diverse cultural groups. The results of this study showed that family income level was not associated with parenting typologies and adolescents' behavior problems. Previous studies have generally found a significant negative association between family income and children's behavior problems (Eamon & Mulder, 2005). Children who exhibited higher levels of behavior problems came from families with lower incomes; however, in the current study, the range of family income was limited and this may account for the lack of significant associations.

A primary contribution of the current study is the finding that Baumrind's conceptualization of parenting styles may be adequate for describing and understanding Korean parenting. The result of parenting styles on adolescents' performance and behavior problems Partly fits into Baumrind's parenting typologies. However, several cross-cultural studies did not support the finding of the present study that Baumrind's parenting typologies are differentiated among cultures because each culture emphasizes interdependence and independence

differently (Chao, 1994, 2001; Dombusch *et al.*, 1987; Leung *et al.*, 1998). Researchers must be careful when they apply Baumrind's parenting typologies across various cultures. There is a need to take into consideration that different parenting styles may best be understood by examining culturally unique parenting beliefs and goals because parenting styles are based on cultural values and goals (Darling & Steinberg, 1993).

Limitations

There are several limitations to the current study. The first limitation was that the sample was fairly homogenous because it was drawn from a small geographic area of Korea and unbalanced based on gender. This will influence a general application of the findings to the wider population of Korean adolescents who live in rural settings and come from middle and upper-socioeconomic backgrounds.

A second limitation of the current study was that the data gathered on behavior problems and school performance were based on self-reports. This makes it difficult to untangle the contribution of method variance. At the same time, adolescents may under-report behavioral difficulties because of the embarrassment and discomfort associated with self-reporting. Thus, results obtained using assessments by adolescents may differ from those obtained using parent or teacher reports. There is need for future research to gather information using multiple informants such as parents, teachers, and children. Likewise, the current study relied on maternal and paternal reports of parenting styles. However, some research shows that parental perceptions of their parenting styles differ from adolescents' perceptions of parenting styles (Carton-Ford, Paikoff & Brooks-Gunn, 1991). Given the hierarchical nature of parent-child relationships, it is possible that adolescents see their parents as more authoritarian than authoritative (Aquilino, 1990). In future studies, it will be necessary to compare parenting styles as they are perceived by both children and parents.

Finally, the purpose of this research was to examine gender and age effects of parenting styles on child outcomes. However, some of the male students targeted for participation in this study

opted not to bring the parents' survey back because they felt it was annoying or sometimes they forgot. In addition, parents may not have wanted to answer the questionnaire. The smaller number of male participants did not permit meaningful comparisons or interaction effects due to the gender of children.

This study remains meaningful because the findings of this study suggest that parenting styles increase our understanding of the relationships between children's academic achievement and their internalizing and externalizing behavior problems in Korean families. Family dynamics and cultural perspective are also important factors to describe parenting styles. This study adds to the growing body of literature on the impact of parenting styles on children's school performance and behavior problems in various ethnic groups and cultures.

REFERENCES

- Achenbach, T. M. (1991a). *Manual for the child behavior checklist/4-18 and 1991 profile*. Burlington: Department of Psychiatry, University of Vermont.
- Achenbach, T. M. (1991b). *Manual for the youth self-report form and 1991 profile*. Burlington: Department of Psychiatry, University of Vermont.
- Amato, P. R., & Rivera, F. (1999). Paternal involvement and children's behavior problems. *Journal of Marriage and the Family*, *61*, 375-384.
- Aquilino, W. S. (1990). The likelihood of parent-adult child coresidence: Effects of family structure and parental characteristics. *Journal of Marriage and the Family*, *52*, 405-419.
- Aunola, K., & Nurmi, J. E. (2005). The role of parenting styles in children's problem behavior. *Child Development*, *76*, 1144-1159.
- Baumrind, D. (1967). Childcare practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, *75*, 43-88.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monograph*, *4*, 1-103.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, *11*, 56-95.
- Buri, J. R. (1989). Self-esteem and appraisals of parental behavior. *Journal of Adolescent Research*, *4*, 33-49.
- Buri, J. R. (1991). Parental Authority Questionnaire. *Journal of Personality Assessment*, *57*, 110-119.
- Carlton-Ford, S. L., Paikoff, R. L., & Brooks-Gunn, J. (1991). Methodological issues in the study of divergent views of the family. In R. L. Paikoff (Ed.), *New directions for child development* (Vol. 51, pp. 87-102). San Francisco: Jossey-Bass.
- Chang, L., Schwartz, D., Dodge, K., & McBride-Chang, C. (2003). Harsh parenting in relation to child emotion regulation and aggression. *Journal of Family Psychology*, *17*, 598-606.
- Chao, R. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development*, *65*, 1111-1120.
- Chao, R. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development*, *72*, 1832-1843.
- Chen, X., Dong, Q., & Zhou, H. (1997). Authoritative and authoritarian parenting practices and social and school performance in Chinese children. *International Journal of Behavioral Development*, *21*, 855-873.
- Chen, X., Rubin, K. H., & Li, D. (1997). Relation between academic achievement and social adjustment: Evidence from Chinese children. *Developmental Psychology*, *33*, 518-525.
- Chen, X., Liu, M., Li, B., Cen, G., Chen, H., & Wang, L. (2000). Maternal authoritative and authoritarian attitudes and mother-child interactions and relationships in urban China. *International Journal of Behavioral Development*, *24*, 119-126.
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, *113*, 487-496.
- Dornbusch, S., Ritter, P., Leiderman, P., Roberts, D., & Fraleigh, M. (1987). The relation of parenting style of adolescent school performance. *Child Development*

- ment, 58, 1244-1257.
- Dumka, L. E., Gonzales, N. A., Bonds, D. D., & Mill-sap, R. E. (2009). Academic success of Mexican origin adolescent boys and girls: The role of mothers' and fathers' parenting and cultural orientation. *Sex Roles, 60*, 588-599.
- Eamon, M. K., & Mulder, C. (2005) Predicting anti-social behavior among Latino young adolescents: An ecological systems analysis. *American Journal of Orthopsychiatry, 75*, 117-127
- Heaven, P. C. L., & Ciarrochi, J. (2008). Parental styles, conscientiousness, and academic performance in high school: A three-wave longitudinal study. *Personality and Social Psychology Bulletin, 34*, 451-462.
- Holden, G. W. (1997). *Parents and the dynamics of child rearing*. Boulder, CO: Westview Press.
- Hombeck, G., Paikoff, R., & Brooks-Gunn, J. (1995). Parenting adolescents. In M. Bornstein (Eds.). *Handbook of parenting* (Vol. 1, pp. 91-118). New Jersey: Lawrence Erlbaum Associates.
- Kim, H. S. (1999). *Relationship between parenting styles and self-perception academic competence, morality, and self-reliance among Korean-American college students*. Unpublished doctoral dissertation, University of Southern California, CA, USA.
- Kim, K., & Hurh, W. (1983). Korean Americans and the success image: A critique. *Amerasia, 10*, 3-21.
- Kim, K., & Rohne, R. P. (2002). Parental warmth, control, and involvement in school: Predicting academic achievement among Korean American adolescents. *Journal of Cross-Cultural Psychology, 33*, 127-140.
- Lamborn, S., Mounts, N., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment from authoritative, authoritarian, indulgent, and neglectful families. *Child Development, 62*, 1049-1065.
- Leung, K., Lau, S., & Lam, W. L. (1998). Parenting styles and academic achievement: A cross-cultural study. *Merrill-Palmer Quarterly, 44*, 157-172.
- Milevsky, A., Schlechter, M., Netter, S., & Keehn, D. (2007). Maternal and paternal parenting styles in adolescents: Associations with self-esteem, depression and life-satisfaction. *Journal of Child and Family Studies, 16*, 39-47
- Min, P. G. (1996). The entrepreneurial adaptation of Korean immigrants. In S. Pedraza & R. G. Rumbaut (Eds.), *Origins and destinies: Immigration, race, and ethnicity in American history* (pp. 302-314). New York: Wadsworth.
- Oh, D. J., Jeon, S. I., & Jang, H. I. (1993). A study of the relationship between parenting styles and adolescents' psychopathology. *Neuropsychiatric association, 32(6)*, 896-903.
- Park, I. H., & Cho, L. (1995). Confucianism and the Korean family. Special issues: Families in Asia: Beliefs and realities. *Journal of Comparative Family Studies, 26*, 117-136.
- Pittman, L. D., & Chase-Lansdale, P. L. (2001). African American adolescent girls in impoverished communities: Parenting style and adolescent outcomes. *Journal of Research on Adolescence, 11*, 199-224.
- Reitz, E., Dekovic, M., & Meijer, A. M. (2006). Relations between parenting and externalizing and internalizing problem behaviour in early adolescence: Child behaviour as moderator and predictor. *Journal of Adolescence, 29*, 419-436.
- Roeser, R., Eccles, J., & Strobel, K. (1998). Linking the study of schooling and mental health: Selected issues and empirical illustrations at the level of the individual. *Educational Psychologist, 33*, 153-176.
- Simons, L. G., & Conger, R. D. (2007). Linking mother-father differences in parenting to a typology of family parenting styles and adolescent outcomes. *Journal of Family Issues, 28*, 212-241.
- Sorensen, C. W. (1994). Success and education in South Korea. *Comparative Education Review, 38*, 10-35.
- Sorkhabi, N. (2005). Applicability of Baumrind's parent typology to collective cultures: Analysis of cultural explanations of parent socialization effects. *International Journal of Behavioral Development, 29*, 552-563.
- Steinberg, L., Lamborn, S. D., Dornbusch, S. M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to suc-

ceed. *Child Development*, 63, 1266-1281.

Steinberg, L., Lamborn, S. D., Darling, N., Mounts, N. S., & Dornbusch, S. M. (1994). Over-time changes in adjustment and competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Development*, 65, 754-770.

Tein, J. Y., Rossa, M. W., & Michaels, M. (1994). Agree-

ment between parent and child reports on parental behaviors. *Journal of Marriage and the Family*, 56, 341-355.

Received October 4, 2010

Revised November 25, 2010

Accepted November 27, 2010