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## The Effects of Academic Self-Concept and Maternal Parenting Behaviors on Children's Academic Delay of Gratification: A Comparison Study of Koreans and Malaysians

*This study examined the effects of academic self-concept (internal factor) and maternal parenting behaviors (external factor) on academic delay of gratification (ADOG). Additionally, models predicting ADOG were compared between Korean and Malaysian children. The participants of this study were 100 Korean third graders and their mothers, and 100 Malaysian third graders and their mothers. The children completed the modified versions of the Academic Delay of Gratification Scale for Children, and Academic Self-Concept Questionnaire. The mothers completed the Parenting Attitude Test. Pearson's correlation tests, independent t-tests, and multiple regression analyses were conducted to test the research hypotheses. The results showed that Korean children reported higher ADOG and academic self-concept scores than that of Malaysian children. Moreover, academic self-concept was found to have a significant positive effect on ADOG among both Korean and Malaysian children. There was no significant gender difference in ADOG for both Korean and Malaysian children. However, the effects of maternal parenting behaviors on ADOG were only detected among the Malaysian children, particularly on Achievement Press. That is, only for the Malaysian children, maternal pressure about academic*

*achievement was found to have a significant positive effect on ADOG. In conclusion, only academic self-concept was found to be a significant predictor explaining the variance in ADOG among Korean children. On the other hand, academic self-concept and maternal parenting behaviors were shown as significant predictors explaining the variance in ADOG among Malaysian children.*

The objective of this study was to examine children's delay of gratification for academic rewards, taking into account the differences in the children's gender, and the effects of academic self-concept (internal factor) and their mothers' parenting behaviors (external factor) as possible influential factors. The model was compared with two different groups from different cultural backgrounds, Korean and Malaysian. The main goals of this research were to assess the factors involved in determining academic delay of gratification (ADOG) in school children in the early grades of elementary school (henceforth referred to as early graders in this study), and to compare the differences when predicting the ADOG between Korean and Malaysian early graders.

During preschool and kindergarten education, children learn how to read, recognize objects, and memorize vocabulary. However, once they enter elementary school, they are required to understand, digest, and learn concepts through many individual readings, homework, and various academic activities.

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This requires great patience for children to sit during a school exam, and to read and understand the content so that they may answer the questions, despite the anxiety of wanting to complete the task within the designated time. Therefore, ADOG plays a very important role in determining children's sustainability in pursuing their academic tasks.

The most significant difference between this research and other earlier works on the delay of gratification is that most research done earlier focused more on the educational aspects, using food as the objects of interest or non-educational oriented tasks (Berk, 2008; Lee *et al.*, 2008) while this research placed special attention on the academic goals. This study contributes to the understanding of delay of gratification, specifically on academic rewards, and it provides a clearer picture on the differences between normal delay of gratification and ADOG.

ADOG has been defined as "students' postponement of immediately available opportunities to satisfy impulses in favor of pursuing chosen important academic rewards or goals that are temporally remote but ostensibly more valuable (Bembenutty & Karabenick, 1998)." Most of the previous studies related to ADOG have been done either on college students (Bembenutty & Karabenick, 1998; Bembenutty, 1999, 2007, 2008, 2009, 2009) or late graders of elementary school children (Zhang *et al.*, 2011). However, it is important to focus on the early graders because this is a transitional period of childhood where the children need to adapt to formal education as well as exams. Unfortunately, to date, there is a lack of study that focuses on ADOG among elementary school children. Therefore, this study complements and contributes a better understanding of ADOG, focusing on middle childhood.

There are also other related factors that affect ADOG in children like academic self-concept and parenting behaviors with ADOG. Self-concept is "a composite of cognitive description of one's attributes and affective evaluation of those attributes in comparison with others (Lent *et al.*, 1997)." Self-concept has a hierarchical construct that includes several components, including academic self-concept. Academic self-concept involves "a mixture of self-beliefs and self-feelings regarding general academic

function (Lent *et al.*, 1997)." Therefore, it is believed that academic self-concept will definitely be an influencing factor on the delay of gratification within academically. This study also investigates the significance of academic self-concept as an influencing factor on ADOG.

Apart from academic self-concept as the internal factor that influences the ADOG, there is also an external factor that will influence ADOG, which is parenting behaviors. Parenting behaviors vary mainly due to factors such as cultural differences, age, socioeconomic status, and educational background (Bocknek, 2009). Authoritative parenting behaviors and parental involvement have been proven to be beneficial to student's goal orientation in academia (Gonzalez-DeHass, Willems, & Holbein, 2005). In addition, Zimmerman (1998) found that academic self-regulation appears to have its origin in the combination of parents' expectations and indirect support for their children's studying and achievement. As ADOG was shown to be a part of academic self-regulation, this finding suggests that parenting behaviors have influential effects on ADOG.

Studies that examine the effect of parenting behaviors on ADOG in young children are hard to be found. To date, most of ADOG-related studies have been done based on adolescents and undergraduate college students (Bembenutty, 1998, 1999, 2007, 2008, 2009) and parenting behaviors was not an appropriate element to be taken into account. There has been one study done by Zhang and colleagues (2011) which focused on sixth graders of elementary school as its sample. However, because the goal of Zhang and colleagues' study (2011) was to find out the relationship between ADOG and the allocation of the children's study time, parenting behaviors were also not included as their study variables. Complementing previous research, this study is important because it examined the effects of an internal factor (academic self-concept) and an external factor (maternal parenting behaviors) that determine the ADOG of children from the early stages of middle childhood.

Ideology from different cultural backgrounds can influence parents' teachings and beliefs as well as children's academic context. Ideologies of learning

and parents' role in it may shape the nature of the parents' involvement. Given the Confucian influences, Chinese and Koreans value effortful, respectful, and pragmatic acquisition of essential knowledge as well as behavioral reform (Cheung & Pomerantz, 2011; Kim & Park, 2006; Li, 2005).

As reported by Mastor and colleagues (2000), in the Malaya archipelago like Malaysia, Brunei, Indonesia, Southern Thailand, Cambodia, and Southern Philippines, people of Malay origin dominate a huge percentage of the population. Among the Malay, Islam constitutes a key element in ethnic identity and therefore, has a critical impact on the development of Malay culture. Almost all Malays are Muslim, and in Malaysia, a Malay who rejects Islam is no longer legally considered as Malay. Since Malaysia's independence from British colonial rule in 1957, Islam has been adopted as the official religion of Malaysia. Not only does Islam influence Malay culture, Malays look on values as being an inseparable from of religious teaching and it is also represented in the basic policies of Malaysian national culture.

In this study, although Malaysia and Korea are both Asian countries, the difference in culture is prominent. This is because Koreans have the influence of Confucianism in their culture; and Malaysia has the influence of Malay and Islam values in their national culture. This study contributes to the understanding that there are also cultural differences among Asian countries and the ideologies from different cultural backgrounds can possibly influence both children and parents in the academic context. Therefore, this study will serve as a pioneering study investigating the effect of academic self-concept and maternal parenting behaviors on ADOG and how it is affected by cultural differences.

This study also examined if there is a gender difference for ADOG as there were some ambiguous results found in previous studies. During the recruitment of random participants in Zhang and colleagues' research (2011), in the high ADOG group, there were only 29.5% boys and in the low ADOG group, 71% were boys. This shows that there is a significant difference in ADOG by gender. However, when gender was included in the analysis

as a control variable, there was no significant main interaction with ADOG. Despite the insignificant result, it was mentioned that further investigation on the relationship of ADOG and gender is needed. On the other hand, in a study by Bembenuity (1998, 2007, 2009), there were significant results that showed that the ADOG differed according to gender and culture. Female students were reported to have higher levels of ADOG compared to male students in college (Bembenuity, 1998, 2007, 2009).

In sum, the aims of this research were to assess the differences in ADOG scores in early graders by culture and gender, to examine the effects of academic self-concept and maternal parenting behaviors on ADOG, and to examine the differences between Korean and Malaysian early graders in factors that explain the variances in ADOG. This study examined the following research questions:

1. Is there a mean difference in ADOG, academic self-concept, and maternal parenting behaviors among Korean and Malaysian early graders?
2. Is there a gender difference in ADOG, academic self-concept, and maternal parenting behaviors?
  - 2-1. among Korean early graders? and,
  - 2-2. among Malaysian early graders?
3. Is ADOG predicted by gender, academic self-concept, and maternal parenting behaviors?
  - 3-1. among Korean early graders? and,
  - 3-2. among Malaysian early graders?

## SUBJECTS AND METHODS

### *Sample*

A total of 200 third graders (Male=102, Female= 98) from four elementary schools participated in the study. There were 100 third graders (Male=54, Female=46) from two elementary schools in Korea and 100 third graders (Male=48, Female=52) from two elementary schools in Malaysia. The two schools were selected from two different provinces in Korea and from two different states in Malaysia. Mothers of the participants were requested to complete *Mother's Questionnaires* and student participants were requested to complete *Student's Questionnaires*.

The sample was obtained through random sampling with convenience sampling. The provinces and states, from which the samples of the study were chosen, were selected with accordance to GDP per capita by province/state, in national statistics. The selected provinces/states were ranked average in GDP by province/state, compared to all provinces/states in each country. The schools in the provinces/states were selected by the convenience sampling method. All names of the participants and their mothers were anonymous with only matching mother-child ID numbers used in this study.

The birth order of the students varied from first born to the fifth born. For the Korean sample, 92% were first and second born children. For the Malaysian sample, only 61% were first and second born children. The total number of children in Korean sample ranged from one child to four children per family ( $M=2.17$ ;  $SD=.67$ ) while in Malaysian sample, it ranged from one child up to six children per family ( $M=3.06$ ;  $SD=.99$ ).

The age of the Korean mothers varied from age 32 to age 48 ( $M=39.05$ ,  $SD=3.25$ ) and the age of the Malaysian mothers varied from age 27 to age 56 ( $M=38.73$ ,  $SD=4.97$ ). In terms of the mothers' total years of education, it ranged from 6 years to 21 years of education. The Korean mothers had more total years of education ( $M=14.39$ ,  $SD=2.21$ ) compared to the Malaysian mothers ( $M=10.36$  years,  $SD=1.75$ ). The majority of both Korean (91%) and Malaysian (89%) participants were from middle-class income families. This study focused on middle-class income families in order to avoid the possible bias resulted from the possible extreme differences, in terms of educational resources and home learning environments of low- and high-class income families.

#### Measures

*Academic Delay of Gratification* The Academic Delay of Gratification Scale for Children (ADOG-C) is a student's self-report questionnaire to measure the preference options normally encountered by students throughout their academic life, for situations in which they have to choose either to proceed with their academic activities for their delayed, long-term academic rewards or to give in to their immediate

satisfying alternatives. This ADOG-C is a scale revised by Zhang, Karabenick, Maruno and Lauermaann (2011) from the original 14-items version of Academic Delay of Gratification Scale (ADOGS), developed by Bembenuddy and Karabenick (1998). ADOGS was originally designed for use with college students and ADOG-C was adapted to be relevant for elementary school students.

The questionnaire in this study was re-adapted to match the abilities of the early grades of elementary school students. The 11 scenarios were re-written in simple sentences and the choices were reduced to four options. These options were transformed into A, B, C, and D. Higher scores for ADOG-C indicated that the students were better at suppressing their immediate gratification for delayed, long-term academic rewards. The coefficient alpha estimate of internal reliability was .84. The original questionnaire was available in English and this current adapted version was translated into Korean, Malay, and Simplified Chinese.

*Academic Self-Concept* The Academic Self-Concept Questionnaire is a student's self-report questionnaire to measure the academic self-concept of elementary school students. This questionnaire is a partial adaptation of the Academic Self-Concept Questionnaire developed by Song (1982). This questionnaire originally contained two subscales of *Self-Concept on Grade* and *Self-Concept on Ability*. Only *Self-Concept on Ability* was used in this study. In order to match the abilities of 9 year-olds, this questionnaire was altered to a 4-point Likert scale and the final questionnaire consisted of 18 items. The higher scores indicated that the students have a better self-concept on their own abilities regarding academic matters. The coefficient alpha estimate of internal reliability was .84. This questionnaire was made available in Korean, and for the purpose of this study, it was translated into English, Malay, and Simplified Chinese.

*Maternal Parenting Behaviors* The Parenting Attitudes Test (PAT) is a mother's self-report questionnaire to measure the parenting behaviors. This questionnaire was developed by Lim (2008) and consisted of forty-

three items. The items were divided into eight subscales, which were *Supportive Expression*, *Rational Explanation*, *Achievement Press*, *Punishment*, *Superintendence*, *High Expectation*, *Inconsequence*, and *High Involvement*. All items were scored on a 5-point Likert scale. The coefficient alpha estimate of internal reliability was .86. This questionnaire was available in Korean, and for the purpose of this study, it was translated into English, Malay, and Simplified Chinese.

*Procedures*

A pilot study was done with ten third graders in Korea, ten third graders in Malaysia, and one class teacher each. The results showed that none of the participants had any problems during the pilot study and they understood the instructions and all the items on the questionnaires. It took around 30 minutes on average for both Korean and Malaysian groups to complete all the questionnaires.

The survey was done in both Korea and Malaysia at the same time, during the month of July, 2011. Participants who were willing to participate and who had received the consent of their mothers were allowed to take part in this study. All mothers who participated in this study signed a Letter of Consent. The questionnaire forms were collected and returned two weeks after distribution in the schools in Korea and three weeks after distribution in the schools in Malaysia. In Korea, the participants and their mothers were given questionnaires in Korean. Whereas in Malaysia, to ensure maximum comprehensibility for people of multicultural diversity, the participants and their mothers were given questionnaires in Malay, English, and Simplified Chinese and they were allowed to choose the questionnaire in the language they were more familiar with.

*Data Analysis*

The data were analyzed with descriptive statistics, independent *t*-tests, Pearson correlation, and multiple regression analysis using SPSS 18.0. Descriptive statistics and independent *t*-test were done to examine the mean difference and gender difference of the study variables for the Korean and Malaysian samples. Pearson correlation analysis was done to

Table 1. Mean Differences of the Study Variables by Culture

	Koreans (n=100)	Malaysians (n=100)	<i>t</i> -test
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>t</i>
Academic Delay of Gratification	3.31 (.49)	3.17 (.54)	2.03*
Academic Self-Concept	2.80 (.43)	2.56 (.45)	3.76**
Maternal Parenting Behaviors:			
Supportive Expression	4.13 (.46)	3.51 (.60)	8.20**
Rational Explanation	3.83 (.57)	3.63 (.68)	2.19*
Achievement Press	2.74 (.72)	2.64 (.84)	.94
Punishment	2.75 (.66)	2.33 (.63)	4.57**
Superintendence	4.01 (.46)	3.96 (.64)	.69
High Expectation	2.51 (.73)	2.76 (.68)	-2.47*
Inconsequence	2.55 (.55)	2.22 (.80)	3.35**
High Involvement	3.18 (.50)	2.69 (.74)	5.38**

\* *p*<.05, \*\* *p*<.01

examine the correlations between the study variables. Then, multiple regression analysis was done to examine the prediction of the study variables on ADOG.

RESULTS

*Demographic Characteristics*

*Mean Differences between Koreans and Malaysians* Descriptive statistics and independent *t*-test were done to examine the mean differences of ADOG, academic self-concept and maternal parenting behaviors between Koreans and Malaysians. As shown in Table 1, there was a significant difference in the ADOG of Korean and Malaysian early graders (*t* (198)=2.03, *p*<.05), in which Korean early graders had a higher ADOG (*M*=3.31, *SD*=.49) than Malaysian early graders (*M*=3.17, *SD*=.54). There was a significant difference in the academic self-concept of Korean and Malaysian early graders (*t* (198)=3.76, *p*<.01), in which Korean early graders had a higher academic self-concept (*M*=2.80, *SD*=.43) than Malaysian early graders (*M*=2.56, *SD*=.45).

Among all the subscales of maternal parenting behaviors, Korean mothers tended to express their

support and encouragement the most (*Supportive Expression*,  $M=4.13$ ,  $SD=.46$ ) and they often monitored their children's activities (*Superintendence*,  $M=4.01$ ,  $SD=.46$ ). They also tended to have sufficient expectations of their children (*High Expectation*,  $M=2.51$ ,  $SD=.73$ ). Among all the subscales, Malaysian mothers tended to monitor their children the most (*Superintendence*,  $M=3.96$ ,  $SD=.64$ ) and they provided rational explanations to their children (*Rational Explanation*,  $M=3.63$ ,  $SD=.68$ ). They also tended to have consequences in their standards for scolding or punishment (*Inconsequence*,  $M=2.22$ ,  $SD=.80$ ).

The Korean mothers tended to express their support (*Supportive Expression*,  $t(198)=8.20$ ,  $p<.01$ ) and provide rational explanations (*Rational Explanation*,  $t(198)=2.19$ ,  $p<.05$ ) more frequently than the Malaysian mothers, and at the same time, they reported to practice more punishment (*Punishment*,  $t(198)=4.57$ ,  $p<.01$ ), have high involvement in their children's matters (*High Involvement*,  $t(198)=5.38$ ,  $p<.01$ ), and have more inconsistency in their parenting (*Inconsequence*,  $t(198)=3.35$ ,  $p<.01$ ) compared to the Malaysian mothers. However, Malaysian mothers reported to put higher expectations on their children's academic performance (*High Expectation*,  $t(198)=-2.47$ ,  $p<.05$ ) compared to the

Korean mothers. However, Korean and Malaysian mothers had no differences in *Achievement Press* and *Superintendence*.

In sum, Korean early graders had higher ADOG and academic self-concept than Malaysian early graders. Korean mothers had higher mean scores in most maternal parenting behaviors subscales than Malaysian mothers, except for *High Expectation*. Mothers from both cultures had no differences in *Achievement Press* and *Superintendence*.

*Mean Differences by Gender: ADOG, Academic Self-concept, Maternal Parenting Behaviors* Descriptive statistics and independent t-test were done to investigate if there were any gender differences in ADOG, academic self-concept, and maternal parenting behaviors among boys and girls in Korea and Malaysia, respectively. In this study, a .10 level of significance was used. The  $p$ -values below .10 were considered a trend toward significance (Bangalore & Messerli, 2006).

As shown in Table 2, the  $t$ -test results showed that the means for the ADOG scores did not have any significant differences between genders for both Korean and Malaysian samples. This result shows that the ADOG scores of early graders were not determined by their gender in both cultures. In the

Table 2. Mean Differences of the Study Variables by Gender

	Koreans ( $n=100$ )			Malaysians ( $n=100$ )		
	Boys ( $n=54$ )	Girls ( $n=46$ )	$t$ -test	Boys ( $n=48$ )	Girls ( $n=52$ )	$t$ -test
	$M(SD)$	$M(SD)$	$t$	$M(SD)$	$M(SD)$	$t$
Academic Delay of Gratification	3.28	3.35	-.74	3.14	3.19	-.43
Academic Self-Concept	2.79	2.81	-.17	2.48	2.64	-1.74 <sup>i</sup>
Maternal Parenting Behaviors:						
Supportive Expression	4.11	4.15	-.44	3.54	3.48	.53
Rational Explanation	3.89	3.76	1.12	3.70	3.57	.94
Achievement Press	2.68	2.82	-.97	2.68	2.60	.42
Punishment	2.73	2.77	-.30	2.41	2.26	1.13
Superintendence	3.94	4.10	-1.67	4.01	3.91	.78
High Expectation	2.53	2.49	.31	2.91	2.62	2.20 <sup>*</sup>
Inconsequence	2.53	2.57	-.31	2.28	2.17	.74
High Involvement	3.18	3.17	.09	2.81	2.59	1.46

<sup>i</sup> $p<.10$ , <sup>\*</sup> $p<.05$

Korean sample, both academic self-concept and maternal parenting behaviors also did not have any significant gender differences. However, Malaysian girls were shown to have higher academic self-concept compared to Malaysian boys ( $t(98)=-1.74, p<.10$ ) whereas Malaysian mothers tended to put higher expectations on boys than girls (*High Expectation*,  $t(98)=2.20, p<.05$ ).

In sum, there was no significant gender difference found in the Korean sample for all the variables. On the other hand, in the Malaysian sample, there was no gender difference found in ADOG, but there were slight gender differences for academic self-concept and one of the maternal parenting behavior subscales, *High Expectation*.

*Correlations of the Study Variables*

Pearson correlation was used to examine the correlations between ADOG, academic self-concept, and maternal parenting behaviors and all its subscales. As shown in Table 3 and Table 4, in terms of correlations between ADOG and academic self-concept, there were significant results found for both Korean ( $r=.41, p<.01$ ) and Malaysian ( $r=.49, p<.01$ ) early graders. There was no correlation between academic self-concept and maternal parenting behaviors and all its subscales for both cultures. This result indicates that the independent variables were non-related to each other.

In terms of ADOG and maternal parenting

behaviors, there was only two significant correlations found between ADOG and maternal parenting behavior subscales for Korea, which were *Achievement Press* ( $r=.19, p<.10$ ) and *Superintendence* ( $r=.18, p<.10$ ). For Malaysia, there was only one significant correlation found between ADOG and maternal parenting behavior subscales, which was *Achievement Press* ( $r=.20, p<.05$ ). However, there was a significant correlation between two maternal parenting behavior subscales, which was a correlation between *Achievement Press* and *Superintendence* for the Korean sample ( $r=.20, p<.01$ ). According to the basic principle of statistics, as a general rule of thumb, multicollinearity may be present if absolute values of the correlation coefficients between the independent variables are between .60 and .80 or larger (Grewal, Cote, & Baumgartner, 2004). Since the correlation between *Achievement Press* and *Superintendence* for the Korean sample was .18 and this value did not exceed .70, and the VIF of all the variables in this study were less than 4.0, the multicollinearity between all variables was considered acceptable and was not considered as problematic for multiple regression analysis.

*Effects of Gender, Academic Self-concept, and Maternal Parenting Behaviors on ADOG: Koreans and Malaysians*

Multiple regression analysis was done to examine the relationship of the dependent variable, ADOG, with

Table 3. Pearson Correlation Among the Study Variables: Koreans (n =100)

	1	2	3	4	5	6	7	8	9
1 Academic Delay of Gratification	--								
2 Academic Self-Concept	.41**	--							
Maternal Parenting Behaviors:									
3 Supportive Expression	.07	-.10	--						
4 Rational Explanation	.07	.03	.74**	--					
5 Achievement Press	.19 <sup>f</sup>	.13	.09	-.04	--				
6 Punishment	.09	-.06	-.46**	-.46**	.36**	--			
7 Superintendence	.18 <sup>f</sup>	.14	.47**	.37**	.33**	.01	--		
8 High Expectation	-.03	-.21 <sup>*</sup>	-.07	-.12	.43**	.30**	.12	--	
9 Inconsequence	-.01	.05	-.44**	-.45**	.28**	.47**	-.23 <sup>*</sup>	.21 <sup>*</sup>	--
10 High Involvement	.07	.01	-.28**	-.26**	.45**	.61**	.23 <sup>*</sup>	.31**	.44**

<sup>f</sup> $p<.10$ , <sup>\*</sup> $p<.05$ , <sup>\*\*</sup> $p<.01$

Table 4. Pearson Correlation among the Study Variables: Malaysians (n =100)

	1	2	3	4	5	6	7	8	9
1 Academic Delay of Gratification	--								
2 Academic Self-Concept	.49**	--							
Maternal Parenting Behaviors:									
3 Supportive Expression	-.02	.01	--						
4 Rational Explanation	.11	.09	.67**	--					
5 Achievement Press	.20*	.07	.16	-.02	--				
6 Punishment	-.14	-.19'	.11	.04	.30**	--			
7 Superintendence	-.06	-.09	.57**	.49**	.19'	.14	--		
8 High Expectation	.00	-.05	-.00	.01	.34**	.39**	.16	--	
9 Inconsequence	-.10	-.07	.02	-.04	.30**	.57**	.00	.41**	--
10 High Involvement	.02	.01	.16	.12	.31**	.57**	.18'	.26**	.43**

' $p < .10$ , \* $p < .05$ , \*\* $p < .01$

the independent variables, academic self-concept and maternal parenting behaviors in early graders in Korea and Malaysia, respectively. Initially, gender, birth order of student, household income, total number of children in the family, mother's age, and mother's total years of education were included as control variables. However, there were no significant results for all these control variables, indicating that the control variables did not contribute to the prediction of ADOG among Korean and Malaysian early graders.

Because none of the control variables were significant, multiple regression analysis was done again to examine the relationship of ADOG and the independent variables, without including any control variable. The results in Table 5 showed that academic self-concept and maternal parenting behaviors explained 22% of the variance in ADOG of Korean early graders ( $R^2 = .22$ ,  $F(9, 90) = 2.78$ ,  $p < .01$ ) and 32% of the variance in ADOG of Malaysian early graders ( $R^2 = .32$ ,  $F(9, 90) = 4.63$ ,  $p < .01$ ).

There was a positive effect of academic self-concept on ADOG for both the Korean ( $= .43$ ,  $p < .01$ ) and Malaysian samples ( $= .43$ ,  $p < .01$ ). This result indicates that when early graders of both cultures had an increase in academic self-concept, they tended to have higher ADOG. Thus, this suggests that if an early grader has a high academic self-concept, he is more willing to postpone his immediate

impulse to gratify his immediate sensation or desire to perform non-educational tasks, and would be more willing to work on educational rewards.

There was no significant effect of any of the maternal parenting behavior categories on ADOG in the Korean sample. However, there were positive effects of maternal parenting behavior subscales, called *Rational Explanation* ( $= .22$ ,  $p < .10$ ) and *Achievement Press* ( $= .26$ ,  $p < .05$ ) on ADOG in the Malaysian sample. *Rational Explanation* subscale measures the tendency of mothers to give rational and understandable explanation when they scold their children for misbehaviors. Thus, this indicates that the Malaysian mothers tend to explain rational reasons for their scolding more frequently. And, the more Malaysian mothers provided rational explanations to their children, the higher their children's ADOG increased. Whereas, *Achievement Press* subscale measures the tendency of mothers to give pressure to their children about the needs for achievement. Thus, this indicates that the Malaysian mothers tend to highly emphasize achievement towards their children. And, the more Malaysian mothers put pressure on achievement towards their children, the higher the ADOG in their children increased.

In sum, academic self-concept had a positive effect on early graders in both the Korean and Malaysian samples. Therefore, there was no difference



Table 5. Multiple Regression Analysis Predicting ADOG: Koreans and Malaysians

Variables	Koreans (n = 100)		Malaysians (n = 100)	
	B (SE)	$\beta$	B (SE)	$\beta$
(Constant)	.91 (.84)		1.80 (.49)	
<b>Independent Variables:</b>				
Academic Self-Concept	.48 (.12)	.43**	.51 (.11)	.43**
Maternal parenting behaviors:				
Supportive Expression	.18 (.18)	.17	-.15 (.12)	-.16
Rational Explanation	-.02 (.13)	-.02	.18 (.10)	.22 <sup>†</sup>
Achievement Press	.05 (.09)	.07	.17 (.07)	.26*
Punishment	.15 (.10)	.21	-.07 (.11)	-.08
Superintendence	.02 (.13)	.02	-.07 (.10)	-.08
High Expectation	-.00 (.07)	-.00	.01 (.08)	.01
Inconsequence	-.06 (.11)	-.07	-.08 (.08)	-.11
High Involvement	-.03 (.13)	-.03	.03 (.08)	.04
	R <sup>2</sup>	.22	.32	
	F	2.78**	4.63**	

<sup>†</sup>p<.10, \*p<.05, \*\*p<.01

in predicting the effect of academic self-concept on ADOG in both cultures. However, there was a difference in predicting the effect of maternal parenting behaviors on ADOG between the two cultures. In other words, maternal parenting behaviors did not predict ADOG among the Korean early graders but maternal parenting behaviors, namely *Rational Explanation* and *Achievement Press* predicted ADOG among the Malaysian early graders.

## DISCUSSION

### *ADOG, Gender, Academic Self-concept, and Maternal Parenting Behaviors*

In terms of the relationship between academic self-concept and ADOG, the results of this study are consistent with the results of previous research in which there is a positive effect of academic self-concept on ADOG (Bembenutty & Karabenick, 1998; Guay *et al.*, 2010; Ommundsen *et al.*, 2005; Zhang *et al.*, 2011). There are also similarities between the study by Zhang and colleagues (2011) and this study in terms of the positive effects of

academic self-concept on children's ADOG. Although the previous study (Zhang *et al.*, 2011) was based on children of late childhood (age 10-12) whereas this study was based on middle childhood (age 7-9), the effect of academic self-concept on ADOG were found positive in both developmental stages. This result suggests that academic self-concept plays an important role in determining ADOG in children.

In the relationship between gender and ADOG, there was no difference between gender and this result indicates that gender did not have any effect in determining ADOG. The results of this study are in agreement with those by Zhang and colleagues (2011) but not with the results by Bembenutty (1998, 2007, 2009). As previously mentioned, there were significant effects of gender in predicting ADOG among college students, ranged from age 17 to 44 (Bembenutty, 1998). However, there was no significant effect of gender when predicting ADOG among children of age 10 to 12 (Zhang *et al.*, 2011). This study differentiated from previous studies by showing the effect of gender on ADOG is no longer significant among early graders. By comparing the results between this study and Bembenutty's research

(1998, 2007, 2009), there is a possibility that gender may be an influential factor as children grow older. However, further investigation on ADOG is still needed taking into account the possible differences between children from different developmental stages (such as middle childhood, late childhood, adolescence, and adulthood).

Regarding gender difference in academic self-concept, the results of this study showed that there was no significant difference between Korean boys and girls. However, there was a significant gender difference in academic self-concept between Malaysian boys and girls. This result is in agreement with findings from previous research (Naderi *et al.*, 2009) that was done in Malaysia. Just like the findings of this study, the previous research found that Malaysian girls had higher scores in self-esteem than boys.

Looking closely at the maternal parenting behaviors, it can be concluded that the mothers from both cultures practiced all the parenting behaviors depicted in the subscales of this study, but with different amount. This may be due to cultural differences in maternal parenting behaviors. That is, Korean mothers prefer to provide more supportive expression to encourage their children whereas Malaysian mothers tend to put higher expectations on their children. However, both Koreans and Malaysian mothers similarly pay attention to the achievement of their children and in monitoring their children's activities.

#### *Predicting ADOG: Differences between Koreans and Malaysians*

The ADOG and academic self-concept in Korean early graders were significantly higher than their Malaysian counterparts. However, maternal parenting behaviors did not significantly influence the ADOG of Korean early graders compared to their Malaysian counterparts. The possible reason for these differences is because of the differences in ideologies or cultural beliefs. In Korean culture, there is a strong influence of Confucian values (Kim & Park, 2006; Lew *et al.*, 2011, Ryu & Cervero, 2011) and these Confucian values may have shaped their self-concept and lifestyles in many aspects, including their academic

self-concept, work ethic, academic achievement and their strong zeal for education (Lew *et al.*, 2011, Ryu & Cervero, 2011). This cultural background may influence the enthusiasm for education among Korean early graders and this may indirectly influence their ADOG as well.

According to Lew and colleagues (2011), the Confucian virtue of *filial piety* (the act of respect, obedience, and care for one's ancestors), which consists of *Remembrance* and *Representation*, strengthens motives for children's education. There is an internal psychological mechanism in which *filial piety* instill responsibilities into family members in both education and labor ethics. Lew and colleagues (2011) also mentioned that in Confucianism's *Developmental Representation*, the offsprings are obliged to have the improvement in life over that led by the ancestors and "a declining living standard is dereliction of obligation, a failure in representation, and therefore a failure in *filial piety*." This may indirectly explain the reason why Korean children, compared to their Malaysian children, are more enthusiastic in pursuing education; have higher academic self-concept; and are better in handling their delay of gratification for their academic achievement, regardless of how their mother's parenting behaviors are. This may also be a possible reason for the insignificant effect of maternal parenting behaviors when predicting ADOG in Korean early graders.

As Malaysia is an Islamic country, in Malaysia's national culture (also known as *Kebudayaan Malaysia*), there is a strong influence of Malay and Islamic virtues (Mastor *et al.*, 2000). In Islam, the pursuit of knowledge, which plays the main role of education, is a kind of *jihad* (religious duty of Muslims or literally means "striving in the way of Allah") and this earns *pahala* (rewards) from Allah (Mansur *et al.*, 2009). Therefore, in Islam, every Muslim is required to acquire knowledge and pursue for education. However, the cultural differences do not make any of the values better than another but merely shows a possible difference in values, beliefs, and parenting practices between parents from different cultures. Furthermore, as this study focused only on Malaysia's national culture (which is heavily

influenced by its national religion, Islam), it is also important to note that there are also other major cultures such as the unique cultures of Chinese Malaysian and Indian Malaysian, which are regarded as a part of Malaysian cultures.

Academic self-concept was found to be an influential factor on ADOG for both Korean and Malaysian early graders. These results are in agreement with the results found in a study done by Guay and colleagues (2010), which pointed out that academic self-concept had a high effect on student's academic motivation. Thus, it could be considered as an independent influential factor in predicting most aspects of academic-related achievement.

Because the questionnaires used to measure academic self-concept and maternal parenting behaviors in this study were developed by Koreans, there is a possibility that the questionnaires were created to meet the criteria of Korean children and their mothers as well as features of Korean social expectations. Thus, this can be a possible reason why the results for the Korean sample were higher than the results for the Malaysian sample in both academic self-concept scores and in seven out of the eight subscales in maternal parenting behavior scores. If these questionnaires were developed by Malaysians for Malaysian society, cultural differences will be covered and thus, a more accurate result for Malaysians can be obtained.

#### *Limitations and Implications for Future Studies*

The limitation of this study is the small size of the sample population. A more accurate effect of maternal parenting behaviors may be obtained if there were larger numbers of students and mothers in both the Korean and Malaysian sample groups. The number of mothers involved in this study might not be adequate to cover and explain each of the eight different maternal parenting behaviors and therefore a limited result is obtained in relation to maternal parenting behaviors and ADOG.

Malaysia is a multi-ethnic country with three major ethnic groups, which are comprise of about 49.6% Malays, 22.8% Chinese, 6.8% Indians, and 10.7% other tribal groups (Department of Statistics Malaysia, 2011). All ethnicities have their own

unique cultures, languages, and beliefs that shape the thinking, priorities, and behaviors of both the mothers and their children. Furthermore, this study focused only on Malaysian national culture, without taking into account of other unique cultures of Chinese-Malaysian and Indian-Malaysian. This study has its limitation because it did not cover all the major cultures of Malaysia and because it used the convenient sampling method. Therefore, a more accurate result could be obtained with equal numbers of samples from each cultural group residing in all the states in Malaysia. As for the Korean sample, the study can be improved in future by taking into account recent trends in the modern Korean society such as the inter-cultural marriages; and samples should be taken from all different provinces in Korea.

Future research should also include the study of paternal parenting behaviors and to check the influence of fathers' parenting behaviors on ADOG in children and adolescents. Because fathers usually have a different parenting approach from mothers, many interesting results can be anticipated from children raised by stay-at-home fathers and working fathers.

Despite these limitations, this study represents an initial step towards understanding early graders' tendency to delay gratification for academic rewards, by culture and gender, and the internal and external factors that contribute to the growth of ADOG in the early stages of middle childhood. This study hopes to be a pioneer in comparing the ADOG between early graders from different cultures and to provide parents, teachers, educators, and/or school administrators a better understanding of early graders and their long-term pursuit of academic achievements.

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