

Students' Self-Esteem in an Asian Educational System: Contribution of Parental Involvement and Parental Investment

Esther Sui-chu Ho

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Abstract

The contribution of parental involvement and investment to children's education has been a major topic in current educational reform around the world. The purpose of this study is to identify the parental involvement and investment factors which make the greatest contribution to children's self-esteem in Hong Kong. Data for this study was obtained from questionnaires collected from a sample of about 2100 middle grade students (Grades 6-9) and their parents, as well as parents of first grade students, from 18 schools. The study employed factor analysis and Hierarchical Linear Modeling. First, the different dimensions of parental involvement and investment manifest in Hong Kong were clarified. Secondly, the association between parental involvement and investment and family socioeconomic status was estimated. Finally, whether student self-esteem is related to different types of investment and involvement after controlling the background factors was examined.

Key Words: parental involvement, parental investment, home school collaboration, self-esteem

Background and Aims of the Study

A number of Asian areas, including Singapore, South Korea, Japan, and Hong Kong, have obtained outstanding mathematics achievement in many international achievement tests (e.g., TIMSS, 1995). Although Asian students achieve high scores in international studies, they tend to have relatively lower self-confidence and self-esteem when compared to Western students (e.g., Leung & Wong, 1997). This paper focuses on the nurture of self-esteem in an Asian educational system, Hong Kong. I attempt to examine two important factors, parental involvement and parental investment, that contribute to the nurture of students' self-esteem.

The contribution of parental involvement and investment to children's education has been a major topic of home-school studies. Research in Western countries has shown that promoting parental involvement has significant benefits for the enhancement of students' learning outcomes (e.g., Bourdieu, 1986; Coleman, 1988, 1994; Epstein & Lee, 1995; Ho & Willms, 1996; Hoover-Dempsey & Sandler, 1997). Recent studies conducted in Hong Kong, South Korea, Taiwan, and Singapore have discovered that, instead of participating and intervening in *school* teaching, Asian parents prefer to invest additional resources and time in *home efforts* to help their children (Cheng, 1997; Ho, 2000; Shen et. al., 1994). Previous studies of Asian educational systems focused on academic, rather than non-academic achievement by Asian students, yet little has been done to investigate to what extent and how different types of parental involvement and investment can be implemented to enhance children's self-esteem.

The purpose of this study is to identify the most important factors that affect parental involvement and investment, and how parental effort contributes to children's self-esteem in Asian educational systems. First, I will clarify the different dimensions of parental involvement and investment that manifest themselves in Hong Kong. Secondly, I will estimate to what extent and how family socioeconomic status is associated with parental involvement and investment. Finally, I will examine whether student's self-esteem is related to different types of investment and involvement after controlling for background factors.

Literature Review

Self-esteem or self-concept is an important factor contributing to children's academic outcomes as well as an important outcome in its own right. Battle (1982) defined the concept of self-esteem as a subjective, evaluative phenomenon which determines the individual's characteristic perception of self-worth. The concept of self-esteem and self-concept are often confused. A number of researchers argue

that, conceptually, there are important distinctions between the two concepts. They argue that “self-concept” is a concept that thoroughly “describes” oneself, whereas “self-esteem” differs in being an evaluative judgment of one’s self or “self-worth.”

Despite conceptual claims supporting the distinctiveness of self-esteem and self-concept, Byrne (1996) reminds us that construct validity research has been unsuccessful to date in providing empirical evidence of such discrimination. Although the conceptualization of self-esteem varies among researchers, the general measures of self-esteem in operational definition are usually constructed by students’ psychological and social attitudes towards themselves.

In trying to understand how home and school may impact children’s learning outcomes, researchers have employed two competing theories: family deficiency theory and institutional discrimination theory. “Family deficiency theory” suggests that different outcomes can be explained by the patterns of parental involvement and differences in availability of family resources. Parents from working class or ethnic minority groups are described as “culturally deprived” or “deficient,” in that they lack educational resources at home and do not value education. Implicit in this theory is the belief that working-class parents and the new immigrants are the central problem accounting for low parental involvement and investment, which in turn affect the low achievement and low self-esteem of their children. Another explanation known as the “institutional discrimination theory” traces the inequality of parental involvement and investment back to educational institutions. This theory argues that subtle discriminatory school practices have excluded parents from low socioeconomic status (SES), ethnic minority groups, and single parent families. It argues that the school is the source of the problem, creating low achievement and low self-esteem among disadvantaged children.

I posit the argument that neither “family deficiency theory” nor “institutional discrimination theory” can explain the links between parental involvement and children’s achievement in Asian culture. Asian parents, regardless of their social origin, tend to be involved actively *at home*. They spend a great deal of time with their child providing learning support at home (Stevenson & Lee, 1990). Homework is often supervised and extended for long periods; effort is rewarded; and private tutors are hired for enhancement of children’s achievement (Bond, 1991). They attempt to provide a desirable learning environment at home and always emphasize the value of effort, hard work, and endurance to their children. It is the high expectation of their children’s achievement by Asian parents that induces students’ outstanding academic achievement (Ho, 1981).

Many studies have discovered that the involvement and investment of Asian parents at home is not limited by family resources (e.g., Coleman, 1987). Asian parents from lower social class with limited education would maximize their involvement and investment within their limited resources. As Stevenson and Lee (1990)

argued, in Chinese families, even mothers with little education would effectively perform their role in supervising their children's homework. In addition, Chinese families usually had someone available among the siblings and other relatives to assist children when they encountered problems in schoolwork. Coleman (1987) argued that this kind of family involvement was the valuable "social capital" that contributed to the academic success of Asian immigrant students.

The institutional discrimination theory cannot, furthermore, explain the extent of parental involvement in Asian culture. Stevenson and Stigler (1992) found that Japanese and Chinese people appeared to maintain a relatively sharp differentiation between the functions of school and home. Schools are primarily held responsible for developing academic skills and the social skills required for integration into group life; the home is responsible for supporting the school's role and for providing a healthy emotional environment for the child (1992). In brief, there is the teacher's domain and the parent's domain in Asian culture. Asian teachers view parents as the primary educators, monitors, and supporters of their children's schooling *at home*. In Asian parents' view, management and leadership in school affairs rests with the teachers. Teachers want parents to be "distant assistants" and most parents accept this role and find this "separated model" comfortable. In other words, there seems to be no institutional discrimination of parental involvement in Asian culture, or at least, most Asian parents do not feel that they are being discriminated against by schools.

In sum, Asian parents and teachers are used to working in separate domains. They do not duplicate one another's roles. This Asian model of parental involvement and investment appears to be different from the Western one. However, little has been done to examine how the Asian model of parental involvement and investment affects children's self-esteem. This study attempts to capture different dimensions of involvement and investment manifest by Asian parents and to identify how different types of involvement and investment contribute to Asian children's self-esteem.

Data and Method

The data for this study was collected as part of a larger project, which studied the home-school collaboration in elementary and secondary schools in Hong Kong. Since over 95% of Hong Kong residents are of Chinese origin and are influenced by Asian traditional culture, the samples can be considered as Asian ones. The study was conducted in 1997.

Data collection for the study is a two-stage stratified sample design. First, nine primary schools and nine secondary schools were sampled from different school

districts with students from heterogeneous socioeconomic status. Ninety-five percent of the selected schools accepted our invitation. Only one school rejected the invitation and was replaced by another school within the same school district. Then, one class of grade 1 and one class of grade 6 were sampled randomly from the selected primary schools; similarly, one class of grade 7 and one class of grade 9 were randomly sampled from the selected secondary schools. Student questionnaires and parent questionnaires were sent to the 18 sampled schools. According to the trial study, students from grade 1 cannot answer the questionnaire; therefore, only their parents needed to answer the parent questionnaires.

A total of 2100 students and 2500 parents from nine primary schools and nine secondary schools participated in the survey. The return rate at the school level was 95 percent and the return rate at the student level was 98 percent.

About 51% of the students in the sample were boys and 46% were girls. Over 80 percent (82.5%) of the participating students were born in Hong Kong. About 17.5 % were immigrant students. The following tables show the gender, age distribution, and immigrant status of the participating students.

Gender of Participating Students	
Boys	51.3%
Girls	46.2%
Missing	2.5%

Immigrant Status of Participating Students	
Born in Hong Kong	81.9%
Not born in Hong Kong	17.3%
Missing	0.8%

Age Distribution of Participating Students	
<i>Age in years</i>	<i>Percentage</i>
12.00	28.5
13.00	29.0
14.00	5.8
15.00	26.4
16.00	6.7
17.00	2.3
18.00	1.3

Methodology and analysis

This study employs factor analysis and Hierarchical Linear modeling (HLM; See Bryk & Raudenbush, 1992) to examine the pattern of parental involvement and investment.

The analysis employed a multilevel design that has been separated into three parts: (1) variation in self-esteem among schools; (2) effects of parental investment on students' self-esteem after controlling for student background variables; and (3) effects of parental involvement after controlling for student background and parental investment.

First, a null model was used to partition the variance of self-esteem into within school and between school portions. The model is represented by equations (1) and (2):

$$\text{Equation (1): } \text{Self-esteem}_{ij} = B_{0j} + R_{ij}$$

$$\text{Equation (2): } B_{0j} = G_{00} + U_{0j}$$

Where Self-esteem_{ij} is the self-esteem score for student i in school j , B_{0j} is the average self-esteem score of class j without any adjustment, and G_{00} is the grand mean of self-esteem score. The $\text{var}(R_{ij})$ is the within-school variance of self-esteem, and $\text{var}(U_{0j})$ is the between-school variance.

The second set of models builds on the null model by adding student background factors and the parental investment. The model examines the relative contribution of different types of parental investment after student background and school background has been taken into account. The models to predict students' self-esteem score are given by Equations (3) and (4).

$$\text{Equation (3): } \text{Self-esteem}_{ij} = B_{0j} + B_{1j}(\text{ses}) + B_{2j}(\text{female}) + B_{3j}(\text{immigrants}) + B_{4j}(\text{age}) + B_{5j}(\text{expensive resource}) + B_{6j}(\text{reading materials}) + B_{7j}(\text{study area}) + B_{8j}(\text{magazine}) + B_{9j}(\text{study aides}) + R_{ij}$$

$$\text{Equation (4): } B_{0j} = G_{00} + G_{0j} + G_{01}(\text{school mean SES}) + G_{02}(\text{Primary school}) + U_{0j}$$

Finally, the models extend to include the eight types of parental involvement: learning support, home enrichment, home supervision, home limitation, school communication, school volunteering, school donation, and school activity participation. Equations (5) and (6) give the final model:

$$\text{Equation (5): } \text{Self-esteem}_{ij} = B_{0j} + B_{1j}(\text{ses}) + B_{2j}(\text{female}) + B_{3j}(\text{immigrants})$$

$$\begin{aligned}
&+B_{4j}(\text{age}) + B_{5j}(\text{expensive resource}) + B_{6j}(\text{reading materials}) + B_{7j}(\text{study area}) + \\
&B_{8j}(\text{magazine}) + B_{9j}(\text{study aides}) + B_{10j}(\text{learning support}) + B_{11j}(\text{home enrichment}) \\
&+ B_{12j}(\text{home supervision}) + B_{13j}(\text{home limitation}) + B_{14j}(\text{school communication}) + \\
&B_{15j}(\text{school volunteering}) + B_{16j}(\text{school donation}) + B_{17j}(\text{school activities participation}) + R_{ij}
\end{aligned}$$

$$\text{Equation (6): } B_{oj} = G_{00} + G_{01}(\text{school mean SES}) + G_{02}(\text{Primary school}) + U_{0j}$$

Definition and Operationalization of Major Constructs

Parental Investment: Parental investment is defined as the economic and cultural resources provided by parents for their children's education. In this study, parental investment is operationalized as material resources provided to children or cultural consumption activities of children with their parents, such as the provision of magazines, encyclopedias, computers, library visits, and regular tutoring. Measures of parental investment are displayed in Table 1. The overall reliability of the 14 items is 0.8968 and is considered to be satisfactory.

Parental Involvement: Parental involvement is defined as a process of mobilizing the potential of parents both at home and in school for the benefit of their children (Ho, 1997). There are two dimensions: home-based and school-based. Home-based involvement was measured by 15 items and school-based involvement was measured by 8 items. Measures of parental involvement and investment are displayed in Table 2. The overall reliability for the 15 items is 0.8426 and is considered satisfactory. Parental involvement in home and school activities can be interpreted as the activation of social capital that is invested by the family.

Self-esteem: Eight items are used to construct this, based on the measures of the Rosenberg Self-esteem Inventory (Rosenberg, 1989). The 8 items measured students' psychological and social attitudes towards themselves and their peers. This was a self-evaluative and general measure of self-esteem. For improving the validity of the instrument, items were modified to suit Asian culture and localized in Hong Kong according the trial study. The reliability of the instrument for measuring students' general self-esteem is 0.8329, which is considered to be very reliable (See Table 5B).

Socioeconomic status: Socioeconomic status (SES) is a composite of four variables denoting occupation and education of mother and father. Data are taken from the parent questionnaire. A principal components analysis with Varimax rotation identified one factor with eigenvalue greater than 1. The factor accounted for 60.9 percent of the variance in the set of four variables: mother's education, mother's occupation, father's education, and father's occupation.

Results and Educational Significance

The Nature of Parental Investment

The study starts from the clarification of different types of parental investment. A principal component analysis with Varimax rotation has been used to examine the dimensions of economic and cultural resources invested by the parents.

Table 1. Factor Analysis of Parental Investment of Economic and Cultural Resources

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	% of Students Have
Capital 1: expensive family resources						
Car	.643	-.129	.060	.116	.112	23.7
Computer	.569	.031	.080	.002	.082	56.3
Travel aboard	.561	.117	.149	.221	.196	47.1
Music class	.540	.274	.012	.049	-.077	25.3
Encyclopedia	.503	.342	.081	-.046	-.085	28.7
Capital 2: reading materials						
Literature	.162	.771	.033	.012	.017	56.8
Fiction	.198	.721	-.016	.048	.073	49.3
Dictionary	.241	.474	.292	.157	.054	97.6
Capital 3: study area						
Study desk	.049	.094	.818	.050	.003	86.0
Study room	.260	.015	.707	-.006	.090	51.00
Capital 4: magazine						
Popular magazine	.020	-.030	-.024	.823	.146	73.7
Academic magazine	.203	.163	.089	.666	-.142	55.7
Capital 5: study aides						
Electronic dictionary	.086	.082	-.040	-.066	.747	63.4
Private Tutoring	.061	-.003	.121	.086	.688	38.9
Cumulative Percentage of (e^2) Variance Explained	19.0%	28.0%	36.0%	43.7%	51.1%	

The factor loading of the principal component analysis of parental investment is shown in Table 1, which identifies five factors with eigenvalues greater than one. These five factors account for 51 percent of variance in the set of 14 items. They

are categorized as five types of family resource: expensive family resources, reading materials, study area, magazines, and study aides. The study has also found that cultural consumption is loaded into the same factor as economic resource. It appears that economic and cultural consumption cannot be separated into discrete items. In fact, reading an encyclopedia and attending music class both require economic resources.

The Extent of Parental Involvement

This study has measured four types of home-based involvement and four types of school-based involvement. A total of 2500 students reported the extent to which their parents have been involved in these two aspects of parental activities. Table 2 shows the descriptive analysis of the fifteen items of home-based involvement, with responses ranging from never (coded as “0”), through seldom (coded as “1”), sometimes (coded as “2”), and often (coded as “3”). Overall, the level of “Learning Support” was the highest among the four types of home-based involvement. Among the 15 items of home-based involvement, “parents’ concern about their children’s study progress,” “parents’ supervision of their children’s homework,” and “parents’ provision of an ideal study environment” were the three most common parental activities during the school year.

Table 2. Four Types of Home-based Involvement Reported by Students

Home-based Involvement	Often	Sometimes	Seldom	Never
<i>Learning Support</i>				
1. Concern about study progress	51.7%	39.2%	8.1%	1.0%
2. Supervise your homework	33.8%	34.0%	24.5%	7.7%
3. Provide ideal study environment for you	40.7%	35.1%	17.8%	6.4%
4. Explore more new things (e.g., go to Ocean Park or Science Museum)	15.8%	37.4%	32.6%	14.2%
5. Watch and discuss TV programs with you	18.5%	35.0%	28.2%	18.2%
<i>Home Enrichment</i>				
6. Bring you along to libraries	13.1%	22.3%	31.9%	32.7%
7. Join courses about children teaching	2.9%	9.1%	27.7%	60.4%
8. Read books about children teaching	5.2%	13.1%	29.0%	52.6%
9. Reading with you	4.3%	14.8%	34.3%	46.6%

<i>Homework Supervision</i>				
10. Help you to pack school bag	1.7%	4.1%	15.1%	79.1%
11. Check your homework	8.5%	14.6%	29.4%	47.5%
12. Guide you to do homework and study	12.4%	23.6%	30.3%	33.7%
13. Set schedules for you	10.9%	18.7%	32.2%	38.2%
<i>Home Limitation</i>				
14. Restrict time of watching TV	17.9%	26.9%	28.0%	27.1%
15. Restrict time of going outside	51.1%	17.3%	11.3%	20.4%

Table 3 shows the percentages of parental participation in four types of school activity. “School communication” is the most popular school-based activity participated in by parents. Over half of the students reported that their parents have kept contact with the teachers. About half of their parents have attended PTA conferences or joined another parent organization. Less than 10 percent of the parents have served as volunteers at the school. This percentage is much less than that of Epstein’s study in the United States (20%; reported in Epstein & Lee, 1995). Yet about one-third of the parents have donated money or gifts to the school, and a similar number of parents have attended some of the school events. Overall, the four forms of school-based involvement levels were lower than reported levels of home-based involvement.

Table 3. Four Types of School-based Involvement Reported by Students

	Percentage of ‘Yes’
<i>School Communication</i>	
Attend PTA conference or join parents organization	47.3%
Keep contact with school and teachers	67.6%
<i>Volunteering</i>	
Teach interest class	3.2%
Lead extra-curricular activities	4.9%
Do voluntary services	6.2%
<i>Donation</i>	
Fund raising	34.3%
Gifts donation	25.3%
<i>School Activities</i>	
Parents’ day	28.4%
Other school events	4.2%

The Association between SES and Parental Investment and Involvement

In the next analysis, I attempt to investigate to what extent and how family socio-economic status (SES) is related to different dimensions of parental investment and involvement. The results in Table 4 indicate that SES is significantly related to three types of parental investment: expensive family resources, reading materials, and study area. Parents of higher SES are more likely to provide “expensive resources” such as encyclopedias, a computer, a car, overseas travel, and music classes. Upper-class parents also tend to provide independent study rooms or desks for their children. They are more likely to possess reading materials such as dictionaries, reference works, and fiction.

In addition, upper class parents are more likely to have higher level of parental involvement both at home and in school. Upper class parents are more likely to support learning, enrich the learning environment, spend more time supervising their children’s homework, and set disciplinary rules at *home*. Parents of higher SES also tend to keep contact with the teachers, be volunteers in school activities, donate resources, and participate in a variety of school activities.

Overall, the findings support the “family resources hypothesis” of Harker et al. (1993). The hypothesis suggests that socioeconomic status is likely to affect parental involvement and investment by providing different amounts of cultural, social, and economic capital. In other words, upper-class parents are likely to have more competence and confidence (cultural capital), a better social network (social capital), and more income and material resources (economic capital) to invest in their children’s education.

Table 4. Correlation Between SES And Parental Investment And Involvement

Correlations:	Father Education	Mother Education	Father Occupation	Mother Occupation	SES
<i>Parental Investment</i>					
Expensive resources	.4437**	.4323**	.3260**	.2614**	.4788**
Reading materials	.1666**	.1557**	.0840**	.0898**	.1639**
Study place	.1079**	.1303**	.0676*	.1061**	.1340**
Magazine	.0143	.0315	.0661*	.0393	.0470
Study aides	-.0172	-.0260	.0155	-.0051	-.0120
<i>School-based Involvement</i>					
School communication	.1578**	.1838**	.1349**	.0751*	.1813**
School volunteering	.0902**	.0884**	.0669*	.0250	.0897**
School donation	.1152**	.0929**	.0624*	.0282	.0996**
School activity	.0545	.0636*	.0554	.0333	.0674*
<i>Home-based Involvement</i>					
Learning support	.1479**	.1938**	.1237**	.1151**	.1895**

Home enrichment	.1696**	.1997**	.1475**	.1069**	.2039**
Homework supervision	.1814**	.2244**	.1612**	.1355**	.2290**
Home limitation	.0740*	.1017**	.0494	.0231	.0828**

1-tailed Significance: * p< .01 **p< .001

The Effect of Parental Investment and Involvement on Students’ Self-esteem

In the final set of analyses, I examine the relative contribution of parental investment and involvement to students’ self-esteem after controlling for the students’ background factors (including SES, gender, immigrant status, and age) and the school level factors (including the primary vs. secondary school and school mean SES). Three models of HLM analysis were used to explain the variation of students’ self-esteem.

The results of descriptive analysis of the eight items are displayed in Table 5A. Students’ responses to 8 items in the student questionnaire have been used to measure student’s self-esteem. We used a four point scale with “strongly disagree” coded as 1; “disagree” coded as 2; “agree” coded as 3 and “strongly agree” coded as 4. The mean score of each item ranged from a low of 1.67 to a high of 2.67. These mean scores, displayed in the fifth column of Table 5A, indicate that the general self-esteem of Hong Kong school children is quite low. In other words, Hong Kong students generally do not feel good or only feel marginally good about themselves.

Table 5A. Descriptive Analysis of Students’ General Self-Esteem

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1	Mean	Standard Deviation
1. I get along with kids easily.	39.2%	55.5%	4.4%	0.9%	1.67	0.60
2. In general, I like being the way I am	19.5%	63.8%	15.0%	1.7%	1.99	0.64
3. Other kids like me to be their friend.	24.1%	66.2%	8.5%	1.2%	1.87	0.60
4. I like myself in general.	23.1%	55.0%	19.2%	2.7%	2.02	0.73
5. I have many friends.	28.2%	55.2%	14.8%	1.9%	1.90	0.70
6. Other kids feel I am a good person	9.6%	55.1%	32.2%	3.1%	2.29	0.68
7. I am popular among kids of my age.	4.5%	32.5%	54.7%	8.3%	2.67	0.69
8. A lot of things about me are good.	16.5%	48.8%	28.7%	6.1%	2.24	0.80

A principal component analysis with varimax rotation was conducted, which found the 8 items loaded into the same factor. The results of factor analysis and reliability analysis of the construct, self-esteem, are displayed Table 5B. The single factor of self-esteem accounted for 46.2 percent of variance in the set of 8 items. The reliability of the 8 items of self-esteem was assessed using Cronbach's alpha. The alphas ranged from .6196 to .7385 for the eight items and the overall alpha was .8329. These are considered satisfactory for further analysis. The score of self-esteem has been standardized on the sample of 2066 students from grade 1 to grade 9 in further analysis.

Table 5B. Factor Matrix of Responses to the General Self-Esteem Items

Self-Esteem Items	Factor Loadings
1. I get along with kids easily.	0.7135
2. In general, I like being the way I am	0.6435
3. Other kids like me to be their friend.	0.7192
4. I like myself in general.	0.6533
5. I have many friends.	0.7385
6. Other kids feel I am a good person	0.7174
7. I am popular among kids of my age.	0.6235
8. A lot of things about me are good.	0.6196
<i>Eigenvalue</i>	3.6999
<i>Percentage of Variance Explained</i>	46.2%
<i>Reliability</i>	Standardized Alpha = .8329

Model 1

Model 1 is a null model, which was constructed with self-esteem as the predicted variable. This model determines the overall percentage of variation in self-esteem that lies among schools before controlling for the individual and school level predictors. This model answers the question: Does self-esteem vary significantly among schools in Hong Kong?

The result displayed in table 5B indicates that the school grand mean of self-esteem in the null model is .045 with a standard error .046. The self-esteem variable was standardized to a mean of zero and a standard deviation on the entire sample, therefore, the grand mean (intercept) was close to zero. The between school variability for self-esteem is .056, with an estimated reliability of .746 and a significance level at $p < .01$. The proportion of the total self-esteem variation that is within and between schools is 94.4% and 5.58%, respectively. Although there is significant variation of self-esteem between schools, the variation is relatively small. This finding was consistent with most research on self-esteem in previous studies (e.g.,

Buller-Taylor & Willms, 1995). In other words, it is difficult to distinguish schools with a particularly high or low average level of self-esteem. This implies that it is not meaningful to compare self-esteem score among schools, and that the family factors, rather than school factors, are more likely to be essential predictors for students’ self-esteem.

Table 6. Variation of Students’ Self-esteem Within and Between Schools (HLM Regression Results for Model 1)

Fixed Effects		<i>Estimate</i>	<i>SE</i>
Grand Mean		.045	.046
Random Effects	<i>Reliability</i>	<i>Estimate</i>	<i>Chi-square</i>
Grand Mean	.746	.056***	143.60
Within School		.948	
Variance partitioning			
Between Schools		5.6%	
Within Schools		94.4%	

There are 35 degree of freedom for Chi square test. ***p<.001

Model 2

Model 2 builds on the null model by adding six background variables and the five types of parental investment. Students’ SES, gender, age, immigration, and school mean SES, and the type of school (primary vs. secondary) is the background variable included in the model. The coefficient estimates of the first two columns of Table 6 indicate that primary school students tend to have higher self-esteem than secondary school students. However, SES at the school level does not have significant impact on student’ self-esteem. Moreover, SES at the student level has only a very small positive effect on students’ self-esteem. Immigrant students are more likely to have much lower self-esteem than those who are born in Hong Kong. For the construct of “immigrant,” students who are not born in Hong Kong are coded as 1, and those who are born in Hong Kong are coded as 0.

Results from Model 2 also indicated that, of the five types of parental investment, four types of capital have significant positive contribution to students’ self-esteem. Only study aides (such as electronic dictionaries and private tuition) have no significant impact on student’s self-esteem. This model accounts for 67.86 percent of the between-school variance and 3.06 percent of the within-school variance. Clearly, secondary school students and immigrant students are more likely to have lower self-esteem than primary school students and native students. Students who

process abundant material and cultural resources at home tend to have higher self-esteem. However, it is very interesting to find that study aides such as the hiring of tutors outside school have negative association with children's self-esteem. Since after-school tutoring appears to be a very popular enrichment activity in many Asian countries with the goal of enhancing children's academic outcomes, it would be particularly worthwhile to do further in-depth study to explore how and why tutoring appears to be detrimental to children's non-academic outcomes.

Model 3

In Model 3, the eight types of parental involvement are added to model 2. Results of the third and fourth column in Table 6 indicate that "Learning Support," "Home Limitation" and "School Donation" significantly predict students' self-esteem. Students with strong learning support from parents (such as concern about their study progress, supervising their homework, providing ideal study environment, and discussing TV programs with them) are more likely to have higher self-esteem. The coefficient estimate of "Learning Support" is the highest among all the predictors. Its prediction power is even greater than those of student background, school background, and parental investment. "Home Limitation," including restricting student time for watching TV or going outside, has a negative impact on students' self-esteem. Donation of gifts or money to the school by students' parents has a moderately positive impact on student self-esteem. The drop in the regression coefficient of SES and parental investment in the last two columns indicate something of an overlap with the impact of parental involvement. This final model accounts for 69.64 percent of the between-school variance and 7.70 percent of the within-school variance.

Table 7. Effect of Parental Involvement and Parental Investment on Students' General Self-Esteem

	Model 2		Model 3	
	Coefficient	SE	Coefficient	SE
Adjusted School Mean	-.003	.324	-1.411	0.359
<i>Effect of School Level Factors</i>				
Primary school	.324**	.083	.246**	.083
Mean School SES	.012	.058	.002	.057
<i>Effect of Student Level Factors</i>				
SES	.060*	.028	.057*	.027
Females	.016	.046	.039	.046
Immigrant	-.193**	.066	-.193**	.064
Age	-.020	.021	.003	.021
<i>Effect of Parental Investment</i>				
Expensive resources	.120**	.026	.069*	.026
Reading materials	.076**	.023	.015	.023
Study area	.064**	.022	.010	.023
Magazine	.081**	.022	.048*	.022
Study aides	.031	.022	.000	.021
<i>Effect of Parent-Involvement</i>				
Learning Support			.387***	.050
Home Enrichment			-.003	.046
Homework Supervision			.063	.045
Home Limitation			-.055*	.025
School Communication			-.033	.061
School Volunteering			.013	.153
School Donation			.150*	.066
School Activities Participation			-.053	.094
<i>Final Estimation of Variance Component</i>				
Between Schools	.018		.017	
Within Schools	.919		.875	
<i>Percentage of Variance Explained</i>				
Between Schools	67.86%		69.64%	
Within Schools	3.06%		7.70%	

*** p<.001 ** p<0.01 * p<0.05

Conclusion and Implications for Future Study

This paper may provide some insights useful to academics in understanding the nature and impact of parental involvement and investment on Asian students. In examining the nature of parental investment manifest in Hong Kong, the study identified five types, namely expensive family resources, books, study space, magazines, and other study aides. Of the two dimensions of parental involvement, it is obvious that home-based involvement is more popular in Asian context. This finding is consistent with many previous studies in the Western societies. "Learning support" provided by parents at home appears to be the most common parental assistance for their children. School-based involvement, such as volunteering or participating in school PTAs, is not common in Hong Kong. Of the four types of school-based parent activities, school communication appears to be the most popular one, yet more than 30 percent of families did not have any contact with the school in the whole school year.

In examining the possible impact of SES on the level of parental involvement and investment, the study has found that family SES, as measured by parent's education and occupation, has significant association with parental involvement and investment. However, the impact of SES on students' self-esteem, though statistically significant, is not very important in Hong Kong. This finding challenges the family deficiency thesis. It can be argued tentatively that SES does not have strong direct effect on student's self-esteem. However, it is more likely to have an indirect effect on students' self-esteem through parental involvement and investment.

In exploring the effect of different types of parental involvement and investment on students' self-esteem, the study has found that there is significant impact by four types of parental investment even after controlling for family backgrounds and other school background factors. In the final analysis, the model extended to include different types of parental involvement. The effect of parental involvement on children's self-esteem is even greater than that of parental investment. Of the two dimensions of parental involvement, home-based involvement appears to have the strongest effect on students' self-esteem.

Consistent with the arguments of Bourdieu (1986), the results indicate that cultural and economic resources invested by the family are significantly associated with children's self-esteem. However, social capital nurtured by parental involvement appears to be more important, especially the home-based involvement. The findings support both Bourdieu and Coleman's (1987, 1988, 1994) thesis that certain types of parental investment and parental involvement at home and in school are of great value for children. These results point to the gap in Bourdieu's structural view of cultural capital and Coleman's rational view of social capital, and support an inclusive model. By integrating resources both from home mainly

through “learning support” and from school mainly through parent donation, parents and teachers cooperate effectively to enhance children’s self-esteem. Further studies may need to investigate whether “cultural capital” and “economic capital” made available by parents to the child may be multiplied if the social connection among children, parents, and teachers is sufficiently strong.

This paper briefly summarizes the possible impacts of parental involvement and investment on students’ self-esteem. At the individual level, it delineates the importance of providing “learning support” for students’ learning. It is recommended that parents should create the time and space at home and be active “concerning their children’s study progress,” “supervising their children’s homework,” “providing an ideal study environment,” “extending their children’s learning experience by cultural activities such as going to museums,” as well as “discussing TV programs with their children.” Parents need to understand that their involvement is more important than their investment in creating a caring learning environment for their children.

At the school level, it is recommended that pre-service and in-service training should be provided for teachers, administrators, and parent educators on the skills and knowledge of working with parents on how to provide learning support at home and in school. Previous parent education programs focused mainly on general parent-child relationships or parent-child communication. More specified programs are needed to nurture parents’ knowledge and skills for providing educational support to their children in different stages of schooling. Moreover, teachers, administrators, and parent educators should not only empower individual parents, but also build a resourceful network among parents for mutual support and mutual help. Too often parent education programs serve upper class parents that are already highly motivated in supporting their children’s learning. The present study also found that parents from lower socioeconomic classes are less likely to be involved or invested in their children’s education. Therefore, how to motivate the unmotivated parents and reach the hard-to-reach groups is an issue of concern for future research and practice.

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Esther Ho, Sui-chu is an assistant professor in the Department of Educational Administration and Policy of The Chinese University of Hong Kong. She is also a project director for an international student assessment program in Hong Kong, and involved with research projects in South China. She may be reached at: Faculty of Education, The Chinese University of Hong Kong, Shatin, Hong Kong or by e-mail at: estherho@cuhk.edu.hk