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Does Socioeconomic Status Moderate the Relationship between Parental Involvement and Young Children's Literacy Development?

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The difference in family socioeconomic status (SES) is a common fact in modern society. The differentiation of family SES will affect the development of children, this phenomenon has attracted the attention of domestic and foreign researchers. The discussion on the relationship between family socioeconomic status and children's academic achievement has attracted much attention in the academic community, but existing research results are inconsistent. Little research is related to whether family socioeconomic status influences the relationship between parental involvement and children's literacy development. The purpose of the quantitative study is to investigate whether family SES including family income and parents' education level moderates the relationship between parental involvement and children literacy development. Participants comprised 388 children aged 3 to 6 years in Chinese and their parents. The results show family income directly moderated the relationship between parent-child literacy activities and children's literacy achievement. Mother education moderated the relationship between parent-child literacy activities and literacy achievement directly. The relationship between home literacy materials and literacy achievement was moderated by mother education either. However, there is no significant moderating effect of a father's education on the relationship between parental involvement and children's independent literacy practice as well as literacy achievement in this study.

Keywords: literacy development, parental involvement, socioeconomic status, young children, children's literacy

INTRODUCTION

Parents can influence young children directly in daily life. Evidence concerning the important role of parental involvement in early learning is clear (Goodall, &

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Montgomery, 2014; Olayinka, & Adekunle, 2018). Parents' authentic involvement in their child's literacy development in the early years matters for children's academic and social outcomes (Yulianti, et al., 2018; Zhang, 2020).

Family socioeconomic status (SES) plays a determinant role since the resources and services are necessary to sustain the health and wellbeing of family members. Many papers investigate the associations between family SES and children's development (Brooks-Gunn, Han, Waldfogel, 2002; Aughinbaugh, Gittleman, 2003; Taylor, Dearing, McCartney, 2004; Sai San, Jennifer, & Johan, 2019). As the influence of parental socioeconomic on children's literacy development, various opinions exist among researchers (Zhu, et al., 2020; Liu et al., 2020; Sawyer, et al., 2018; Thomas, et al., 2020; Guo, et al., 2018). Although parental SES is important for young children's literacy, there is no unanimous conclusion regarding the relationship between parental SES and children's independent literacy practice and achievement in China. A careful review of related literature found that more of the previous studies examined the relationship between parents' education, parental involvement, and children's literacy development or the relationship between parents' income and children's literacy development without studying the moderating effect of family SES.

Therefore, whether parental income and education level influence the relationship between parental involvement and children's literacy practice and achievement will be investigated in this study. This paper will answer the following research questions: Do family income and parents' education level moderate the relationship between parental involvement (parents' beliefs, parent-child literacy activities, home literacy materials, and parental teaching behaviors) and children's independent literacy practice among preschoolers? Do family income and parents' education level moderate the relationship between parental involvement (parents' beliefs, parent-child literacy activities, home literacy materials, and parental teaching behaviors) and children's literacy achievement among preschoolers?

Literature Review

Some extant research findings revealed that parents in low-SES families read less frequently to their children, own fewer books, parents ask fewer questions of their children, and talk less with their children than do higher SES families (Hoff, 2006; Korat et al., 2007; Lareau, 2011). Mortality during the first five years was related to household wealth (Sai, et al., 2019). Family income affects children's development both directly and indirectly by allowing parents to purchase goods, services like nutritious food, medical care, quality childcare, and homes in safe neighbourhoods.

On the other hand, family SES resources determine, to a great extent, the experiences and opportunities of children's literacy learning such as cognitively stimulating materials, organized recreational activities, and trips to cognitively stimulating places (Chaney, 2014). Elliott, et al., (2021) found that the income of parents was positively related to active literacy activities at home. Iruka, et al. (2019) points out that young child from rural area impacts their learning opportunity. Moreover, Mendive et al. (2020) found that parents from low SES families have lower probability of frequently

displaying the home language and literacy processes, however, parents from low-SES families tend to emphasize literacy-teaching practices. It is interesting that Neumann (2016) did similar research in Australia and found that parents in lower SES families taught their children less frequently about print compared to higher SES parents. Children with lower SES perform more poorly on print skills. Liu et al., (2020) reported that SES has a stronger correlation with academic achievement.

Moreover, parents with high education levels can help children with homework and provide appropriate cognitive stimulation when children are at home (Davis-Kean, 2005). Parents with high and low family SES have significant difference levels of understanding of picture books (Zhu, et al., 2020) and parent-child reading frequency (Song, 2017; Guo, et al., 2018). The reading environment of families with high SES is significantly better than that of the families with low SES. Kim (2018) pointed out that parent in a developing country has problems in the aspect of parental involvement due to family poverty. But children with low SES with intervention programs, their language, emergent literacy skills can be improved (Sawyer, et al., 2018; Thomas, et al., 2020). Guo, et al., 2018

Rindermann, & Ceci (2018) state that parents' education is more important than their wealth in shaping children's intelligence. Nineteen samples from seven countries were involved in the research of analyzing the impact of parental education compared with wealth on the cognitive ability of children. Parental education level influences the quantity and quality of parents reading to their children. The quantity of parent-child book reading interactions predicts children's later receptive vocabulary, reading comprehension, and internal motivation to read (Ece Demir-Lira et al., 2019).

As the influence of parents' education on young children's literacy, Guo (2017) pointed out that children's vocabulary levels were indirectly affected by parents' education level, especially maternal education as predictor of children's vocabulary. Choi and Kim (2021) stated that maternal affection is important and reinforced by higher coaching competence. Liu (2016) reported that families with high levels of education and high family income pay more attention to reading and writing support, as well as listening, speaking, and reading. Families with low parent education and low family income pay more attention to writing in family literacy support. Li (2018) found that the purpose of the father's participation in parent-child reading is one-sided, the level is not high, and the parent-child reading is lack effective reading guidance. The main reason is that majority of fathers are busy with work. 76.9% of respondents responded that they need to work and have no time and energy to company children to read. Another reason Li (2018) found that the majority of fathers' education level is not high. 51.1% fathers' education level is junior high school. Similarly, Liu Yuhan and Liu Dan (2021) reported the situation of involvement of fathers in parent-child reading in the current family education of young children in China that fathers often lack time to accompany their children. Coupled with busy work, fathers are not willing to communicate with children during breaks and mothers become the leaders of children's parent-child activities.

However, White (2016) did not find statistically significant correlations between parent involvement in children's literacy and age, or education. He found statistical

significance between family income and parent involvement in children's literacy practice. Can & Ginsburg-Block (2016) found that parental education was not significant in predicting parent-child literacy skill-building activities. Moreover, Elliott, et al., (2021) reported that parents' educational level was negatively associated with active literacy activities.

Theory of the Study

Bronfenbrenner's bioecological theory (Bronfenbrenner, 1979) guides this study. It emphasizes the multiple systems that influence children's development, and each system is embedded within and impacts the others in reciprocal ways (Bronfenbrenner & Evans, 2000). Bronfenbrenner emphasized the interactions between individuals and within multiple environments (Perry & Dockett, 2018). Bioecological Systems influence early childhood education (Navarro, et al., 2020). The family education of young children is inextricably linked with the theory of ecosystems. The home is like a social system, an overall structure composed of interconnected parts of family members, affected by various factors such as environment, society, culture, socio-economic status, and background of each family (Derksen, 2010; Neal & Neal, 2013; Bartolome & Mamat, 2020). Therefore, this study mainly focuses on the influences of theory on early childhood care and education in the field of parents' involvement in children's literacy development.

Conceptual Framework of the Study

Figure 1 presents the conceptual framework of this study. Parent's beliefs, home literacy materials, parent-child literacy activities, and parental teaching behavior are independent variables of this study. There are two dependent variables of children's literacy: children's independent literacy practice and children's literacy achievement. Socioeconomic status has two dimensions in this study: family income and parents' education level. This definition has been widely used in academic research, and researchers used it to measure family SES in the present study. Parental socioeconomic status including family income, mother and father education level will be the moderating variables.

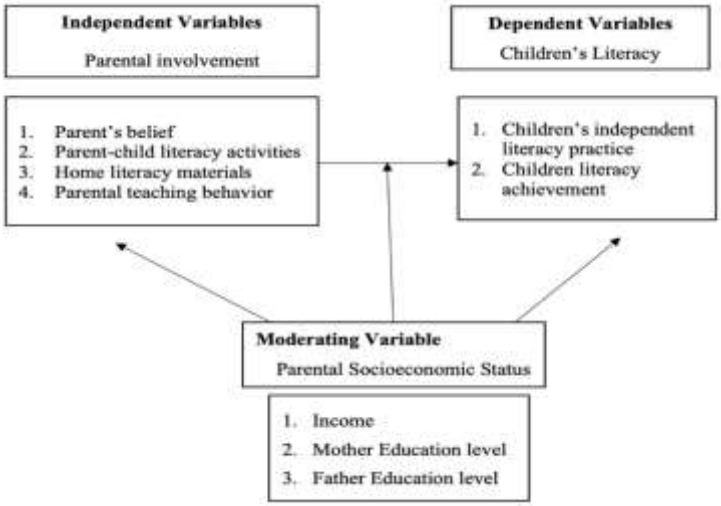

Figure 1
Conceptual framework of this study

Hypothesis of Study

$H_0$1: There are no significant moderating effects of family income on the relationships between parental involvement and children's independent literacy practice among preschoolers.

$H_0$2: There are no significant moderating effects of family income on the relationships between parental involvement and children's literacy achievement among preschoolers.

$H_0$3: There are no significant moderating effects of parents' education level on the relationship between parental involvement and children's independent literacy practice among preschoolers.

$H_0$4: There are no significant moderating effects of parents' education level on the relationship between parental involvement and children's literacy achievement among preschoolers.

METHOD

Participants

This research employed a non-experimental correlational design. Participants consist of 388 preschoolers including 197 (50.8%) girls and 191 (49.2%) boys and their parents including 246 (50.8%) mothers and 142 (49.2) fathers. The sample was selected from a cluster sampling method to choose six preschools and selected young children and their parents with a stratified sampling method in Lianyungang city, Jiangsu Province, China. The sample size was determined based on the Krejcie and Morgan Table (1970) with the level of significance $P<0.5$.

Assessment Instruments

Parent Involvement Questionnaire

A questionnaire was constructed based on other Parent Involvement Questionnaire from Martini & Seěneěchal (2012). White (2016) used the questionnaire in the pre-existing survey. The researcher contacted the original designer of the questionnaire and obtained permission from them to use the questionnaire. The first section of the questionnaire has a list of demographic profiles that are able to understand parents' and children's basic information. It includes six items to collect participants' gender, education level, and family income as well as their child's gender, language and type of school. The researcher added three new items in the second part of the questionnaire. There are 37 items in the second part of the questionnaire including five domains: parents' belief in children's literacy development (PB), parent-child literacy activities (PCA), home literacy materials (LM), parental teaching behaviors (PT), and children's independent literacy practice (CLP). A 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was employed to measure respondents' opinions based on the wording of each item.

Literacy Test

The literacy test of children survey was adapted from a pre-existing survey in the research of Wu Xiaojun (2009). There are two parts to the test including reading words and writing Chinese characters. The first step is to record and calculate the marks for the reading test. There are 98 Chinese characters and one word recording one score in the first part. The second step is to record and calculate the score of the writing test. There are six Chinese characters writing test. The total score is 27 points, and the points are given according to the standardization of the copied Chinese word. The total score of the test is 115, and the researcher recorded scores based on the two tests of each child.

Procedure

The researcher obtained approval from the Ministry of Education in Lianyungang city in China. After that, the researcher contacted the principals of preschools in Lianyungang city and get approval to collect the data from preschools. The permission of the principal from preschools to approach the children and parents to participate in the study will be obtained. Before data collection, the researcher sought the permission of parents to approach parents and the children to participate in the study. Parents were asked to complete the questionnaire individually and children took part in the literacy tests individually. In a pilot study, the researcher collected 60 valid questionnaires and 60 children took part in a literacy test. The purpose of the pilot study is to re-test the reliability of the instruments. On the other hand, data collection and procedures were tested to make sure whether the questionnaire and test are suitable or not.

The overall reliability of the questionnaire is 0.936, and the reliability of the variables PB, PCA, LM, PT, and CLP are respectively 0.891, 0.924, 0.933, 0.951, and 0.900, which are all greater than the 0.7 standards, indicating that the variables have good internal consistency degree (Chua, 2020). The content validity of the questionnaire was

verified by six experts in the field of early childhood care and education. Based on test-retest Pearson Correlation Test results, the test-retest correlation values for the reading and writing in the literacy test are .994 and .836, respectively at the significance level of $p<.05$. It means that the instrument of the children's literacy test in this study is suitable.

Data Analysis

Following are the preliminary analysis, descriptive analysis, and inferential analysis. Missing data, sample size, normality, outlier, and multicollinearity were analyzed in the first step of the assumptions of SEM analysis. SEM analysis with Amos has several assumptions including the dataset is complete with no missing data. The dependent variable has a multivariate normal distribution (Chua, 2020). The normality of the data set was tested. After that confirmatory factor analysis was employed as it assesses the individual construct of the instrument by testing the model fit of each construct in the whole proposal (Roxana, 2018).

The result of the CFA model for the overall latent variables is displayed in Figure 2 which is the outputs of the measurement model for parents' belief in children's literacy development (PB), parent-child literacy activities (PCA), home literacy materials (LM), parental teaching behaviors (PT), and children's independent literacy practice (CLP).

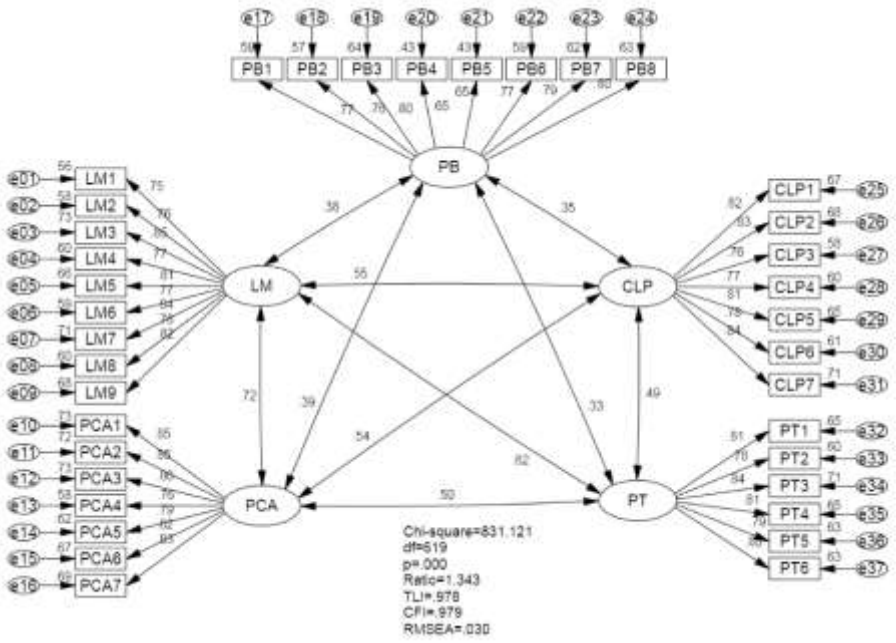

Figure 2
CFA of five latent variables together

In the measurement model of CFA for the overall latent variables, goodness fit index was achieved to be fit (Chi-square =831.121, df = 619, p = 0.000, Ratio=1.343, TLI = 0.978, CFI = 0.979, and RMSEA = 0.030). All factor loadings in the five-factor CFA were statistically significant, and there were no cross loadings. Thus, the model fit achieved.

FINDINGS AND DISCUSSIONS

Descriptive Analysis Results

The frequency and percentage of parents' education levels were presented in Table 1. Since variables of mother and father education level were classified into many categories, the researcher carried out integration from primary school to college labeled as low education level and marked university college, master's degree, and doctoral degree as high education level. Of a total of 388 mothers, there were 242 (62.4%) respondents belonged to low education level, and 146 (37.6%) belong to high education level. At the same time, father's education level, there were 223 (57.5%) respondents who rank at a low education level, and 165 (42.5%) respondents who rank at a high education level.

Table 1
Distribution of parents by education level

		Frequency	Total	Percent	Total
Mothers' Education Level					
Low Education Level	Primary School	4	242	1.0	62.4
	Middle School	47		12.1	
	High School	50		12.9	
	College or Diploma	141		36.3	
High Education Level	University Degree	128	146	33.0	37.6
	Master's degree	18		4.6	
	Doctoral Degree	0		0	
	Total	388	388	100.0	100.0
Fathers' Education Level					
Low Education Level	Primary School	6	223	1.5	57.5
	Middle School	25		6.4	
	High School	53		13.7	
	College or Diploma	139		35.8	
High Education Level	University Degree	155	165	39.9	42.5
	Master's degree	9		2.3	
	Doctoral Degree	1		.3	
	Total	388	388	100.0	100.0

Table 2 presents the descriptive statistics of the respondents' family income. the researcher classified the income level as low-income level (below 5500 RMB), medium-income level (5501 to 12000 RMB), high-income level (above 12001 RMB) based on the report of Statistical on the National Economic and Social Development of Lianyungang City (2020). Therefore, 98 (25.2%) respondents were from low-income

level families, 178 (45.9%) respondents were from medium income level families, and 112 (28.9%) respondents from high-income level families.

Table 2
Distribution of respondents by family income

Family Income		Frequency	Total	Percent	Total
Low-income level	<RMB2000	14	98	3.6	25.2
	2001-5500	84		21.6	
Medium Income Level	5501-8500	86	178	22.2	45.9
	8501-12000	92		23.7	
High-Income Level	12001-15000	60	112	15.5	28.9
	15001-20000	24		6.2	
	>20000	28		7.2	
	Total	388	388	100.0	100.0

Table 3 presents the different means of parental involvement and children's literacy independent practice and literacy achievement according to maternal education. For Mothers with a low education level, the mean of parental involvement and children's literacy independent practice as well as children's literacy achievement test are lower than that of mothers with high education level.

Table 3
Mean of variables by mother education

Mother education		PB	PCA	LM	PT	CLP	Test
Low	Mean	3.7515	3.1665	2.9399	2.7590	3.1287	49.93
	N	242	242	242	242	242	242
	SD	.60817	.79072	.75793	.89552	.84908	52.525
High	Mean	3.9015	3.4403	3.1377	2.9600	3.3611	79.64
	N	146	146	146	146	146	146
	SD	.60408	.75079	.89788	.82590	.89194	52.930

Table 4 shows the different mean of parental involvement and children's literacy independent practice and literacy achievement according to father education. The results indicate that for fathers with low education levels the mean of parental involvement and children's literacy independent practice as well as children's literacy achievement test is lower than that of fathers with high education levels.

Table 4
Mean of variables by father education

Father education		PB	PCA	LM	PT	CLP	Test
Low	Mean	3.7595	3.1499	2.9013	2.7481	3.1153	55.47
	N	223	223	223	223	223	223
	SD	.61853	.76394	.77046	.85715	.84704	50.387
High	Mean	3.8735	3.4312	3.1670	2.9515	3.3524	68.73
	N	165	165	165	165	165	165
	SD	.59437	.78934	.85695	.88633	.88830	59.016

Table 5 depicts descriptive data for a different mean variable according to family income. The results show that the mean of parental involvement (i.e., PB, PCA, LM, PT) and children's literacy independent practice (CLP) , as well as children's literacy achievement (Test), is highest in families with high family income level. The following is in a family with medium family income level. In low-income family, mean of parental involvement (i.e., PB, PCA, LM, PT) and children's literacy independent practice (CLP) as well as children's literacy achievement (Test) are lowest in three groups.

Table 5
Mean of variables by family income

Family Income		PB	PCA	LM	PT	CLP	Test
Low	Mean	3.6671	3.0860	3.0136	2.6701	3.0758	44.54
	N	98	98	98	98	98	98
	SD	.58738	.73925	.77232	.75299	.85326	45.066
Medium	Mean	3.8157	3.2504	3.0713	2.8446	3.1846	62.46
	N	178	178	178	178	178	178
	SD	.60955	.77885	.78905	.88788	.84364	55.734
High	Mean	3.8237	3.4605	3.0833	2.9628	3.3890	71.71
	N	112	112	112	112	112	112
	SD	.61571	.80212	.90039	.93393	.91024	57.809

Inferential Analysis Results

To examine the hypotheses of this study, Structural Equation Modeling (SEM) was employed to investigate the multiple relations between the latent variables (Hair et al., 2010). Figure 3 presents the standardized coefficients of the Structure Equation Model. Results of the SEM analysis in the present study showed the structural equation model at $\chi 2 = 904.415$, Ratio= 1.387, TLI = 0.974, CFI = 0.976, and RMSEA = 0.032. Based on the model fit criteria (Chua, 2020), all the indices are acceptable. Furthermore, all factor loadings of constructs ranged from .65 to .85. The value of factor loadings all exceeded the 0.50 desirable standard (Hair et al., 2010). Hence, the proposed structural model has a good fit.

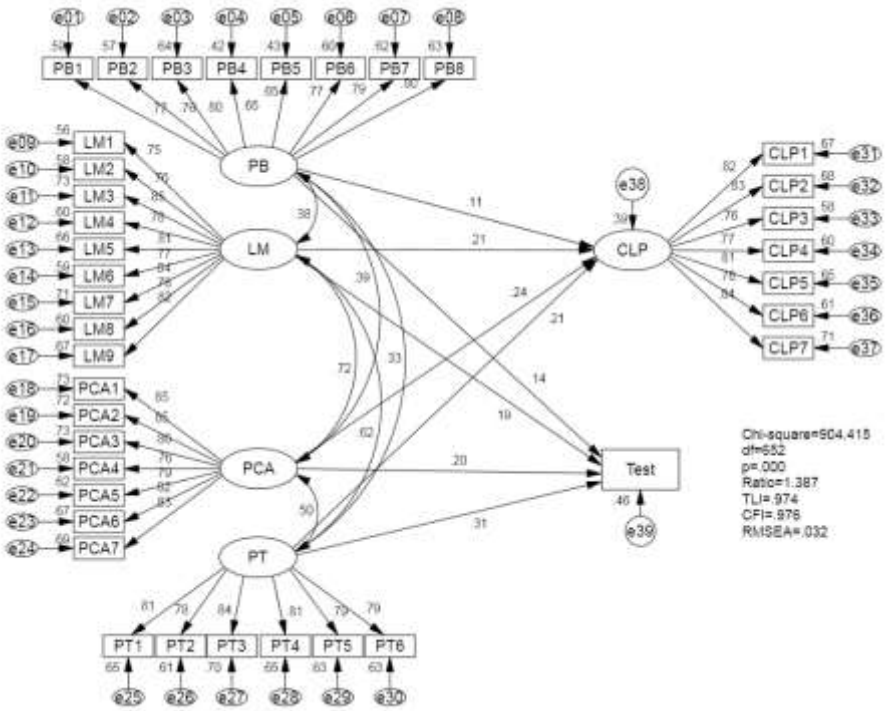

Figure 3
Standardized coefficients of the structure equation model

As Figure 3 illustrates, parental involvement has a significant relationship with children's independent literacy practice and the literacy achievement test.

Moderating Effect of Parental Socioeconomic Status

In statistical terms, moderation is where a relationship between an independent variable and a dependent variable changes according to the value of moderating variables which are essential to assess whether two variables have the same relation across groups (Memon et al., 2019). Awang (2015) points out that before analyzing the moderating variable effect, the influence of an independent variable on its correspondent dependent variable must exist and be significant. The relationship between parental involvement and children's independent literacy practice as well as children's literacy achievement has been investigated to be positive in previous context.

To understand whether parental socioeconomic status moderate the relationship between dependent and independent variables in this study, family income and parents' education level were considered as moderating variables on the relationship between parental involvement and children's independent literacy practice and literacy test.

Table 6
The moderation test for family income (Model Comparison)

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho1	TLI rho2
Constrained	16	40.516	.001	.003	.004	.002	.002

Assuming model Unconstrained to be correct；*p<0.05

Table 6 presents the moderation test for family income. The results show that the P value of the difference between the restricted model and the unrestricted model is 0.001, which is less than the 0.05 significance level, indicating that there is a significant difference between the two models, that is, household income has a moderating effect.

Table 7
Differences between low income, medium and high income

			Low1	Medium2	High3	C.R.		
						1-2	1-3	2-3
CLP	<---	PB	-0.01	0.165*	0.218	1.355	1.1880	-0.001
CLP	<---	LM	0.172	0.250*	0.315	0.247	0.022	-0.284
CLP	<---	PCA	0.085	0.216*	0.179**	0.619	1.189	0.746
CLP	<---	PT	0.365*	0.149	0.728	-1.704	-1.448	0.260
Test	<---	PB	0.021	0.158*	0.255**	1.277	1.611	0.469
Test	<---	LM	-0.057	0.322***	0.329*	1.946	1.414	-0.813
Test	<---	PCA	-0.007	0.157	0.289***	0.970	2.054	1.475
Test	<---	PT	0.247	0.304***	0.772***	0.125	0.004	-0.218

****P<.001; **P<.01; *p<.05*

Table 7 shows the differences between low income, medium, and high income. The results indicate that household income plays a moderating role on the path "PCA→Test", and the absolute value of the difference comparison C.R. is greater than 1.96. In the case of a high family income, the impact of PCA on the Test (0.289) is significantly greater than that of a low family income (-0.007), that is, the higher the family income, the greater the positive impact of parent-child literacy activities (PCA) on the Test. Thus, family income plays a role in positive regulation of the relationship between parent-child activities and children's literacy achievement.

Thus, the null hypothesis "There are no significant moderating effects of family income on the relationships between parental involvement and children's independent literacy practice among preschoolers" is accepted. But null hypothesis "There are no significant moderating effects of family income on the relationships between parental involvement and children's literacy achievement among preschoolers" is rejected. However, only the relationship between parent-child activities and children's literacy achievement was moderated by family income level.

Table 8
The moderation test for mother education (Model Comparison)

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho1	TLI rho2
Constrained	8	17.100	.029	.001	.002	.001	.001

Assuming model Unconstrained to be correct; *p<0.05

Table 8 depicts the model comparison of moderation test for mother education level. The P-value of the difference between the restricted model and the non-restricted model is 0.029, which is less than the 0.05 significance level. It indicates that there is a significant difference between the two models, that is, the mother's educational level plays a moderating role.

To further analyze which paths are specifically adjusted, Critical Ratios for Differences between Parameters are analyzed and shown in Table 9. If the absolute value of C.R. value is greater than 1.96, it is considered that the path has a significant difference, that is, the path is adjusted, otherwise, there is no significant difference, that is not adjusted.

Table 9
Differences between low mather education and high mather education

			Low	High	C.R.
CLP	<---	PB	0.128	0.092	-0.156
CLP	<---	LM	0.271**	0.068	-1.354
CLP	<---	PCA	0.133	0.420***	2.172
CLP	<---	PT	0.214**	0.219*	0.285
Test	<---	PB	0.146*	0.084	-0.639
Test	<---	LM	0.048	0.434***	2.414
Test	<---	PCA	0.172*	0.230**	0.509
Test	<---	PT	0.381***	0.188*	-1.726

****P<.001; **P<.01; *p<.05*

Based on Table 9, the mother's educational level plays a regulatory role on the paths "PCA→ CLP" and "LM→ Test", and the absolute value of the difference in C.R. is greater than 1.96. In the case of mothers with high education, the impact of PCA on CLP (0.420) is significantly greater than that of mothers with low education (0.133). It indicates that the higher the mother's education is, the greater the positive impact of PCA on CLP. Thus, the mother's education plays a positive moderating role on the relationship between parent-children literacy activities and children's independent practice. However, the mother's education level did not play moderating role on "PB→CLP", "LM→CLP". Moreover, in the case of mothers with high education, the impact of LM on the Test (0.434) is significantly greater than that of mothers with low education (0.048). It reveals that the higher the mother's education, the greater the positive impact of LM on the test. Therefore, the mother's education plays a positive moderating effect on the relationship between home literacy materials and children's literacy achievement.

Table 10 below presents the model comparison of moderation test for father education level. It can be seen from the results that the P-value of the difference between the restricted model and the unrestricted model is 0.152, which is greater than the 0.05 significance level, indicating that there is no significant difference between the two models. It indicates that the father's education does not play a moderating role.

Table 10
The moderation test for father education (Model Comparison)

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho1	TLI rho2
Constrained	8	11.99	.152	.001	.001	0	0

*Assuming model Unconstrained to be correct; *p<0.05*

In conclusion, mother education moderated the relationship between parental involvement and children's independent literacy practice and literacy achievement. Thus, the null hypothesis "There are no significant moderating effects of parents' education level on the relationships between parental involvement and children's independent literacy practice among preschoolers" and "There are no significant moderating effects of family income and parents' education level on relationship between parental involvement and children's literacy achievement among preschoolers" are rejected.

However, only the mother's education level moderated the relationship between parental involvement in parent-child literacy activities and children's independent literacy practice. Moreover, mother's education level moderated the relationship between home literacy materials in the process of parental involvement and children's literacy achievement test. Father's education does not play a moderating role.

DISCUSSIONS

Based on the results of descriptive analysis, family with higher income levels, the mean of parental involvement is higher and the mean of children's literacy development including children's literacy independent practice and literacy achievement is higher. This partially aligns with the study of Elliott, et al. (2021) who found that the income of parents was positively related to active literacy activities at home. For parents with higher education levels, the mean of parental involvement is higher, and the mean of children's literacy development is higher. It is obvious that family SES influences parental involvement for young children. The results support the studies of Liu (2016) that families with high levels of education and high family income pay more attention to children's literacy development and SES has a stronger correlation with academic achievement (Liu et al., 2020).

According to moderation analysis, family income direct high moderated the relationship between children's literacy achievement (P=0.001, C.R.=2.054). This finding partially consistent with the previous studies. Sai San, Jennifer, & Johan (2019) points that family SES resources determine, to a great extent, the experiences, and opportunities of children's literacy learning. Elliott, et al., (2021) found that income of parents was positively related to active literacy activities at home. But the findings cannot

demonstrate whether children with low SES intervention programs, their language, emergent literacy skills can be improved (Sawyer, et al., 2018; Thomas, et al., 2020).

The moderating effect analysis revealed that mother education high moderated the relationship between parent-child literacy activities (P=0.029, C.R.=2.172) directly. Mother education also high moderated the relationship between home literacy materials and literacy achievement (P=0.029, C.R.=2.414). The finding partially supports the previous study of Guo (2017) who pointed out that children's vocabulary levels were indirectly affected by parents' education level. Rindermann, & Ceci (2018) state that parents' education is more important than their wealth in shaping children's intelligence.

However, the findings of this study contradict the previous study by White (2016) who found that there was no statistically significant correlation between parental education level and the parent involvement variables. It contradicts the previous study of Elliott, et al., (2021) who reported that parents' educational level was negatively associated with active literacy activities.

Furthermore, an interesting discovery is that there is no significant moderating effect of a father's education on the relationship between parental involvement and children's independent literacy practice as well as literacy achievement in this study. The main reason is that fathers lack involvement in young children's literacy activities. Li (2018) found that the level of father involvement in China is not high. The main reason is that majority of fathers are busy with work. Fathers often lack time to accompany their children (Liu Yuhan and Liu Dan, 2021).

The findings are consistent with the theory of Ecological System Theory (Bronfenbrenner, 1979) proposed by Bronfenbrenner who recognized there are multiple aspects of a developing child's life that interacts with and affects the child. Parental socioeconomic status including family income and parents' educational level is immediate factor that influence young children's literacy development.

This study verifies and recognizes the role of the family background and biological factors such as the influence of parental involvement on young children's literacy development which is consistent with the theory of Ecological System Theory (Bronfenbrenner, 1979). Moreover, it adds to the literature on the influence of family SES on children's literacy development in important ways.

Furthermore, the results indicate that family SES moderating the relationship between parental involvement and children's literacy development. It suggests that the amount of SES parents provide influences how they structure their home environment for their children and how they interact with their children in promoting literacy development. However, the results show that only the relationship between parent-child literacy activities and children's literacy achievement is moderated by family income. Although poverty certainly is a threat to child development, other factors of parental involvement such as parental belief, home literacy materials, and parental literacy teaching behavior were not moderated by family income. Children from low SES with intervention program, their language, emergent literacy skills can be improved (Sawyer, et al., 2018; Thomas, et al., 2020). Thus, it is possible that parents can improve their beliefs and

provide more teaching behavior in the home may find a better psychological balance of stimulation and demand for the literacy development of their child, and the negative effects of financial restrictions can be minimized.

According to the results in this study, only the mother's education level moderates the relationship between parent-child literacy activities and children's literacy independent practice as well as the relationship between home literacy materials and literacy achievement tests. Father's education level did not moderate the relationship between parental involvement and children's literacy practice. Parents with high education levels can help children with homework and provide appropriate cognitive stimulation when children are at home (Davis-Kean, 2005). Thus, it is possible that fathers can do more home literacy activities with their children or do other literacy activities like going to science museums or libraries, which will have stronger relations with literacy achievement.

CONCLUSION

Parental involvement in their child's literacy development in the early years matters for children's later academic and social outcomes. The differentiation of family SES will affect parental involvement in children's literacy development. However, little research related to whether family socioeconomic status influences the relationship between parental involvement and children's literacy development. This study found that family income direct moderated the relationship between parent-child literacy activities and children's literacy achievement. Mother education moderated the relationship between parent-child literacy activities and literacy achievement directly. Mother education also moderated the relationship between home literacy materials and children's literacy achievement. However, there is no significant moderating effect of fathers' education on the relationship between parental involvement and children's independent literacy practice as well as children's literacy achievement in this study.

This study has implications for parents and teachers. It is possible that parents can improve their literacy belief, provide rich literacy materials and do more home literacy activities as well as enhance their teaching behavior to find a better psychological balance of stimulation and demand for the literacy development of their child, and minimize the negative effects of financial restrictions. Moreover, mother should acquire the knowledge and improve the teaching behavior of young children's literacy. Teachers can encourage parents to promote family literacy by spending time doing parent-child literacy activities. Teachers also can assist parents to provide them with suitable methods of teaching young children's literacy. The researcher suggests that preschools can set up parent consultation offices to receive parents on a regular basis to understand and communicate children's literacy in family life.

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