

The Mediating Effects of Parents' Encouragement and Reading Motivation on the Relationship Between Family Socioeconomic Status and a Child's Pre-Reading Activities

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ABSTRACT The aim of this study was to investigate the mediating effects of parents' encouragement and reading motivation on the relationship between family socioeconomic status and a child's pre-reading activities. The cluster random sampling method was used to first select a total of 280 children from four preschools to complete the questionnaire survey. After excluding invalid questionnaires, 260 valid questionnaires were obtained. Among them, 140 are boys (53.82%), 120 are girls (46.2%). Questionnaires were used to collect data. This study shows that family socioeconomic status affects preschoolers' pre-reading activities through the mediating role of parental encouragement. Family socioeconomic status can affect preschoolers' pre-reading activities directly through the mediating effect of reading motivation, or through the chain mediating effect of parental encouragement and reading motivation.

INTRODUCTION

Reading is a necessary means for individuals to understand the external world (Eissa 2015, 2017; Özkan 2022; Pamuk et al. 2023; Yurtbakan and Batmaz 2023). Reading ability is the basis of student learning and a basic skill necessary for individual survival and development (Tepetas and Erol 2021). The 'Project for International Student Assessment' (PISA) hosted by the OECD (Organisation for Economic Cooperation and Development) regards reading ability as one of the most important abilities in the era of knowledge economy. One of the important reasons is 'successful intellectual operations'. It is obviously based on reading ability (Dohn 2007; Eissa 2013; Sawi 2013).

Previous research has found that family factors such as parents' occupation, parents' education level, and household possessions play an important role in the formation and development of students' reading ability (York 2006; Senechal and Young 2008; Yeo et al. 2014). It is believed that parents' education and social occupation will affect children's reading success, and children from middle-class and upper-class families acquire reading skills earlier (Steiner 2014). Research results on the progress of international reading literacy also show that the more

children's books a family has, the better the children's reading performance (Tepetas and Erol 2021).

The impact of family economic status on children's development mainly works through a series of mediating variables, such as parent-child interaction, learning investment, to mention the least (Gao et al. 2022; Shi et al. 2013). The family stress model and the family investment model provide theoretical explanations. The family stress model believes that low family socioeconomic status (that is, financial difficulties, parents' unemployment) will aggravate parents' economic pressure, and stress will lead to family conflicts and the occurrence of parents' negative emotions (that is, depression, anxiety, hostility), which will lead to poor parenting behaviour, ultimately leading to low academic achievement in children (Masarik and Conger 2017). The family investment model believes that parents with high socioeconomic status will provide more material investment (for example, creating a good learning environment for their children) and emotional investment (including more communication and interaction with their children, and enjoying educating their children). Existing research has shown that families with upper-middle-class socioeconomic status, or parents with high education, often encourage reading at home (Mueller and Dweck 1998; Pfost and Heyne 2023). Children who are often encour-

aged by their parents have better reading preferences, autonomy, and reading abilities than children who lack encouragement (Clark and Hawkins 2010). Therefore, family economic status may affect children's reading performance through the mediating effect of parental encouragement (Cimpian et al. 2007; Chen et al. 2018).

In recent years, researchers have focused on the mediating variables between family economic status and students' reading performance, which are not limited to parental characteristics, but have also begun to turn to individual student characteristics, such as reading motivation and reading engagement (Barber and Klauda 2020). For example, Anmarkrud and Bråten (2009) used Norwegian students as research subjects and found that reading motivation, including reading task value, can predict reading performance. Parental encouragement has a positive impact on the improvement of reading motivation (Xia et al. 2019). Parental participation and encouragement can stimulate children's reading motivation (Yeo et al. 2014).

Therefore, the researchers speculate that parental encouragement and reading motivation are mediating variables that influence family economic status on pre-reading activities. The family investment model can better explain the process mechanism of family socioeconomic status affecting children's academic achievement (Deng et al. 2016). This study focuses on the impact of family socioeconomic status on pre-reading activities, and is therefore more based on the family investment model.

Based on the above analysis, this study intends to use family socioeconomic status as the independent variable, pre-reading activities as the dependent variable, and parental encouragement and reading motivation as mediating variables to explore the mechanism by which family socioeconomic status affects pre-reading activities. The hypotheses of this study include:

- H1: Family SES affects pre-reading activities.
- H2: Family SES affects pre-reading activities through parental encouragement and reading motivation.
- H3: Family SES affects reading motivation through parental encouragement, and then affects pre-reading activities.

Aims

The aim was to investigate the mediating effects of parents' encouragement and reading moti-

vation on the relationship between family SES and child's pre-reading activities.

METHODOLOGY

Sample

The cluster random sampling method was used to first select a total of 280 children from four preschools to complete the questionnaire survey. After excluding invalid questionnaires, 260 valid questionnaires were obtained, with an effective recovery rate of 92.8 percent. Among them, 140 are boys (53.8%) and 120 are girls (46.2%). The mean age of the participants was 5.21 years (SD = 0.88).

Research Tools

The research tools for this study included the following.

Family socioeconomic status by Al-Hussaini et al. (2022) wherein parental SES was measured by collecting data on four main indicators of parents' educational level, family income, type of residence, and parents' jobs. The scale can be scored between 1 to 20 with educational level attaining 6 points, monthly family income 6 points, type of residence 4 points, and type of work 4 points.

The *home literacy environment questionnaire (HLEQ)* by Marjanovi-Umek et al. (2005) contains 32 statements describing the ways in which parents talk to their children (for example, "When talking to my child I use grammatically correct sentences" or "I try to explain things which I believe my child understands") and involve in different literacy activities with them (for example, "I visit the library with my child" or "I read to my child whenever she wants me to").

The Pre-Reading Activities test is developed particularly for this study. It contains three subtests of picture- word matching (6 items), fixing picture puzzles (15 items), and sorting letters of the alphabet (9 items) (see Fig. 1). The total score of the test is 30, where the correct answer is given one point while the incorrect one is given zero.

Procedure

The questionnaire was filled anonymously. It took about 20 minutes for the parents to complete the entire test, and all questions were col-

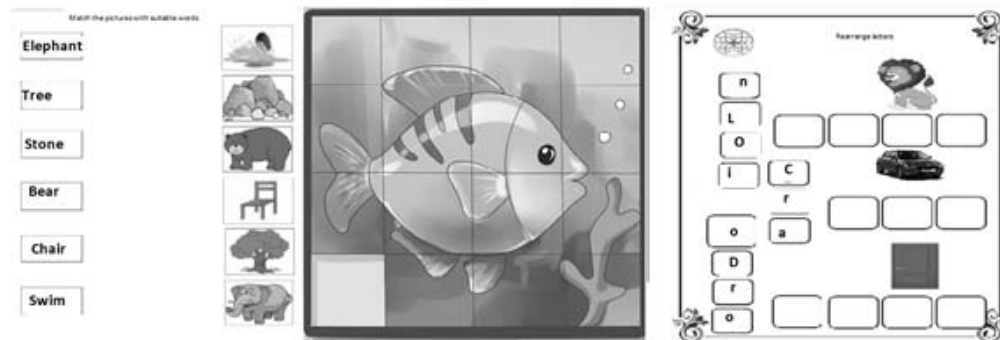


Fig.1. Pre-reading activities test

Source: The author

lected. Data analysis was performed using SPSS 20.0 and Mplus 7.0. Since the distribution of mediation effect estimates is usually not normally distributed, the bias-corrected bootstrap method was used to test the significance of the mediation effect. This study set up 2000 bootstrap samples in Mplus 7.0. If the 95 percent confidence interval of bootstrap does not include 0, it means that the parameter estimate is significant, otherwise, it means that the parameter estimate is not significant (O'Keefe and Rodgers 2020).

RESULTS

Common Method Bias

This study used the self-report method to collect data, so common method bias may exist.

In order to control the impact of common method bias on the research results, this study set different response sentences for each measurement questionnaire question, some of which are degree of compliance, some of which are frequency, and some of which are quantity.

The Mean, Standard Deviation and Correlation Matrix of Each Variable

Table 1 lists the mean, standard deviation, and Pearson product-difference correlation matrix for each variable. As indicated, there is a significant positive correlation between the indicators of family socioeconomic status, that is, parents' education level, parents' occupation, family belongings and variables such as parental encouragement, reading motivation, and pre-reading activities ($r=0.11-0.67, p < 0.05$).

Table 1: Mean, standard deviation and correlation matrix of each variable

Variable	1	2	3	4	5	6	7	8
1. Father's education level								
2. Mother's education level	0.55***	-						
3. Father's occupation	0.38***	0.40***	-					
4. Mother's occupation	0.37***	0.47***	0.60***	---				
5. Household belongings	0.50***	0.49***	0.53***	0.52***	-			
6. Parents encouragement	0.43***	0.47***	0.38***	0.37***	0.39***	-		
7. Reading motivation	0.19**	0.19**	0.30***	0.27***	0.19**	0.30***	-	
8. Pre-reading activities	0.28***	0.18*	0.31***	0.29***	0.20**	0.40***	0.49***	-
<i>M</i>				0.002	2.41	4.17	3.79	
<i>SD</i>					0.543	0.94	0.76	0.72

Note:

(1) Parents' educational level and parents' occupation are standardised scores

(2) * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Source: The author

Mediation Effect Test

Family socioeconomic status, parental encouragement, reading motivation, and pre-reading activities are latent variables, and the questions corresponding to each variable are indicators. First, the total effect of family SES on pre-reading activities was tested, and the path coefficient was found to be significant, $\alpha = 0.32$, $p < 0.01$. The model fit was good with $\chi^2/df = 2.05$, $TLI = 0.90$, $CFI = 0.91$, $RMSEA = 0.063$, $SRMR = 0.053$. Then the mediating variables of parental encouragement and reading motivation were added to the model to obtain the path model shown in Figure 2. The results show that except for the direct effect of family socioeconomic status on pre-reading activities and reading motivation, which is not significant ($p > 0.05$), other path coefficients have reached statistically significant levels ($p < 0.05$). In addition, each fitting

index of the model reached the standard of good fit of $\chi^2/df = 1.39$, $TLI = 0.93$, $CFI = 0.94$, $RMSEA = 0.038$, $SRMR = 0.052$. Finally, the bias-corrected bootstrap method was used to test the significance of the effect. It can be seen from Table 2 that the 95 percent confidence interval of the path coefficient of family socioeconomic status on pre-reading activities is (0.116, 0.061), including 0, and the unique mediating effect of parental encouragement, the unique mediating effect of reading motivation, and the chain relationship between the two. The 95 percent confidence intervals of the mediation effect are (0.060, 0.210), (0.004, 0.139) and (0.012, 0.107) respectively, all of which do not include 0. Therefore, the direct effect of family socioeconomic status on pre-reading activities is not significant, but the three mediating effects are significant (accounting for 50.5%, 26.6% and 22.9% of the indirect effects respectively).

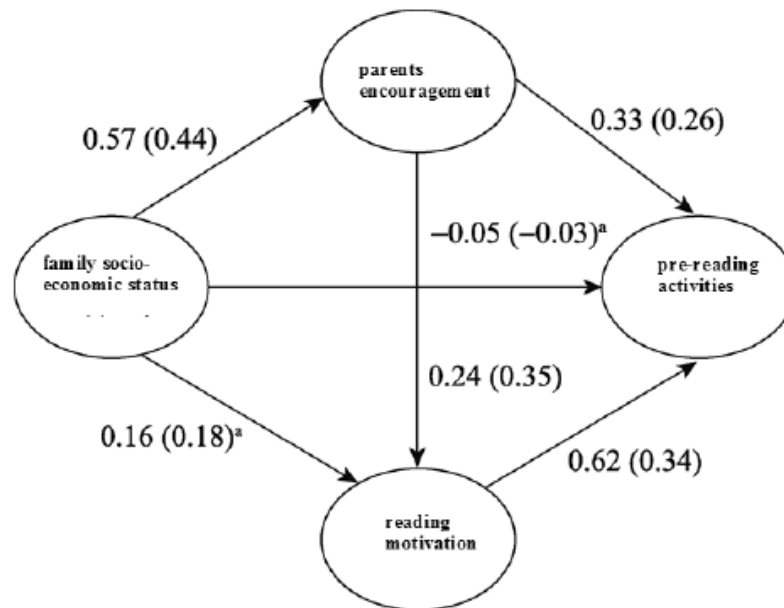


Fig. 2. Path diagram of multiple mediating effects

Note:

- (1) a $p > 0.05$
- (2) The numbers in brackets are unstandardised path coefficients
- (3) For simplicity, only the structural model is presented here.

Source: The author

Table 2: Effect decomposition and bias correction bootstrap 95% confidence interval

Path	Standardisation effect	Unstandardised effect	95% confidence Interval	
			lower limit	upper limit
Family SES → pre-reading activities	0.05	0.03	0.116	0.061
Family SES → parental encouragement → pre-reading activities	0.57×0.33=0.188	0.44×0.26=0.115	0.060	0.210
Family SES → reading motivation → pre-reading activities	0.16×0.62=0.099	0.18×0.34=0.061	0.004	0.139
Family SES →Parental encouragement →reading motivation → pre-reading activities	0.57×0.24×0.62=0.085	0.44×0.35×0.34=0.051	0.012	0.107
Total indirect effect	0.372	0.226	0.139	0.358

Source: The author

DISCUSSION

The cultivation of preschoolers' pre-reading activities is of great significance to their physical and mental development, and is closely related to the individual's family economic environment. Existing research often focuses on the role of material conditions or time investment in family economic status of preschoolers' pre-reading activities. In contrast, this study selected parental encouragement and reading motivation as mediating factors to systematically examine the impact of family economic status on preschoolers' pre-reading activities through non-material factors and its mechanism of action, and obtained some meaningful results.

Parental Encouragement

Parental involvement in their children education is vital and has been widely studied (Hossain et al. 2023; Nakijoba et al. 2024). Cheng et al. (2019) found out that parental factors positively impact students' achievement. The most strongly associated aspects were home- and school-based involvement, parental learning support, academic emphasis, and parent teacher communication.

This study shows that family socioeconomic status affects preschoolers' pre-reading activities through the mediating role of parental encouragement, which is consistent with the hypothesis of the family investment model (Gündogdu 2022 ; Qiu and Ye 2023). On the one hand, a higher family socioeconomic status can provide more material investment for children (Vasqu-

ez et al. 2016; Zhang et al. 2017). On the other hand, it can provide richer emotional investment. There has been a large amount of research on the role of parental encouragement in children's development. Children's performance on tasks can be improved by setting independent learning goals and encouraging children to achieve them (Cimpian et al. 2007).

Reading Motivation

In addition to the mediating role of parental encouragement, this study also verified the mediating role of reading motivation. Motivation is called a prerequisite for autonomous learning (Dasdemir et al. 2023; Gündogdu 2022; Özka 2022; Sengül and Baris 2022). Current research shows that family socioeconomic status can affect preschoolers' pre-reading activities directly through the mediating effect of reading motivation, or through the chain mediating effect of parental encouragement and reading motivation. This result is consistent with the inference of the household investment model (Gu et al. 2024; He et al. 2023; Sohr-Preston et al. 2013). The family investment model points out that family socioeconomic status affects children's behavioural development through material investment and emotional investment. Taking family belongings as a material investment indicator of family socioeconomic status needs to influence children's development through the intermediary of reading motivation, and parents encourage as emotional investment indicators of family socioeconomic status can also have an impact on children's development through the mediation of reading motivation.

CONCLUSION

In summary, this study conducted an in-depth examination of the mechanism by which family economic status affects preschoolers' pre-reading activities, and demonstrated that family economic status does not directly affect preschoolers' pre-reading activities, but through the mediating role of parental encouragement and reading motivation. Moreover, there is also a mediating effect between parental encouragement and preschoolers' pre-reading activities. Parental encouragement can not only directly affect pre-reading activities, but also affect pre-reading activities through the mediating effect of reading motivation. This finding supports the family investment model and theoretically enriches the research on the impact of family economic status on pre-reading activities.

RECOMMENDATIONS

This study verified the important role of parental encouragement and reading motivation in improving preschoolers' pre-reading activities. It may be difficult for a family to change its socioeconomic status for a while, but it can intentionally improve its level of 'parental encouragement' to improve children's reading motivation, stimulate children's interest in reading, and achieve the effect of improving children's pre-reading activities. From the perspective of parental encouragement, an effective strategy should be to establish a dynamic view of ability, believing that ability can be improved through hard work. In daily life, parents can share their experiences of extracurricular reading with their children, recommend extracurricular reading materials suitable for them, and create a good family reading atmosphere for their children. At the same time, parents need to encourage and praise children's efforts and reading strategies to form children's positive adaptive responses and avoid simply praising the individual as a whole (for example, "You are a good child") or their abilities ("You are smart"), because the latter can easily lead to helpless reactions when individuals face failure. It can be said that these "encouragements" from parents have an important and long-term impact on children's motivation and behavioural development.

LIMITATIONS

This study only examined samples from some preschools in one geographical area. Future research needs to use convergent cross-research to study the relationship between various aspects of the family environment (such as parent-child reading, parents' reading habits) and the development of children's pre-reading activities from a developmental perspective, and explore appropriate intervention measures. Secondly, this study mainly used a questionnaire method and there is still a lack of observational data. Although the scale used in the study has good reliability and validity, the social desirability effect that may be caused by the questionnaire method may affect the accuracy of the results to a certain extent. In future research, it is recommended to use a variety of research methods, such as combining questionnaires and observation methods.

CONFLICT OF INTERESTS

The author declares no conflict of interest.

AUTHORS' CONTRIBUTIONS

The author is the only person who contributed to all parts of this paper, and agreed to be published in this journal.

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