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Home-school collaboration in kindergartens: The effect of socio-economic status on parents' involvement

Abstract

This study aims to examine whether SES, including education level, income and occupation would have an effect on parents' level of involvement in home-school collaboration in terms of quantity and quality, and also the differences in the practices. 65 targeted parents participated in this study. Regression was run to analyze the effect of SES on parents' level of involvement in collaboration and to find out the differences in their involvement. Results showed that SES, including education level, income and occupation showed a greater effect on parents' degree of involvement than that on their number of involvements. Parents with higher SES backgrounds generally showed a higher level of involvement. But in some practices, parents with a comparatively lower SES backgrounds would instead show a higher level of involvement than those who are at a relatively higher level. Some possible reasons were discussed. Suggestions were made to kindergartens to better support parents with low SES backgrounds in home-school collaboration.

Keywords: home-school collaboration, parental involvement, SES, education level, income, occupation

Home-school collaboration refers to parents' and teachers' mutual collaboration, support and participation in different activities at home or at school. Christenson (2004) found that it can positively contribute to children's learning. The Hong Kong government started encouraging parental involvement in schools since 1993 in a bid to promote children's learning and education (Education Commission, 1992). Recently, the government acknowledged the importance of strengthening home-school collaboration in kindergartens with the implementation of Free Quality Kindergarten Education Policy (the Policy) (Education Bureau, 2017). In this Policy, the government points out the mutual interests in building a close collaborative relationship among parents and teachers (Education Bureau, 2018). For example, collaboration can result in parents receiving updated information of their children's learning in kindergartens, while teachers can know more about their students' learning outside kindergartens. The newly released Kindergarten Education Curriculum Guide also echoes the government's emphasis on the necessity of establishing partnerships with parents in kindergartens (Curriculum Development Council, 2017). In response to the promotion of home-school collaboration, the government recommends that kindergartens use various channels to communicate with parents and to set up parent-teacher associations (Education Bureau, 2018). Although the Hong Kong government is putting more emphasis on home-school collaboration, Lau, Li and Rao (2011) found that Hong Kong parents are not welcomed in kindergartens because teachers are reluctant to get parents involved into their practices. With the government's promotion of strengthening home-school collaboration, there is a lack of a study on the most updated home-school collaboration practices in kindergartens. This study was designed to examine the current practices and parents' involvement in home-school collaboration given the advocacy from the government.

When talking about home-school collaboration, researchers tend to focus on the relationship between parental involvement and students' academic achievement (Gikonyo, 2013; Hill & Tyson, 2009). Researchers also tend to focus on socio-economic status (SES) with students' academic achievement (Broer, Bai & Fonseca, 2019; Liu, Peng & Luo, 2019). These researchers found a positive correlation between parental involvement and student's academic achievement, and as well as a positive correlation between SES and learning performance. Yet, limited researches are directly addressing the relation between SES and parents' involvement in home-school collaboration, given that SES and parental involvement have been found to have an effect on student's learning achievement. Dyson, Beresford and Splawnyk (2007) pointed out that low SES might be the barrier that hinders parental involvement in home-school collaboration. Further study on addressing the relation between SES and parents' involvement in collaboration could help find out whether parents with different SES backgrounds are facing different advantages or obstacles that promote or hinder their level of involvement in home-school collaboration. Goodall et al. (2011) also mentioned the importance of understanding the involvement of parents from different backgrounds in different home-school collaboration practices as it can provide directions for kindergartens to implement strategies or interventions to improve parental involvement. With the common goal of promoting children's learning achievement from both parents and kindergartens (Harris & Goodall, 2007), this study was designed to examine the relation of SES and parental involvement in home-school collaboration, which might help give insights to kindergartens that they need to identify the actual needs of parents with different backgrounds and thus to adopt various improvement strategies in order to maximize the effect of collaboration on children's learning achievement.

In short, the government is putting more focus on promoting home-school collaboration in kindergartens.

However, with the gaps of the current practices of home-school collaboration after the implementation of the Policy and whether parents' SES would affect their involvement in the collaboration, this study aims to address these issues.

Aspects of practices for home-school collaboration

Epstein (2018) divided home-school collaboration into home-based and school-based involvement. The former one includes parenting and learning at home, while the later one includes communicating, volunteering and decision making. Referring to the Kindergarten Education Curriculum Guide released in 2017, the government has made recommendations on the implementation modes of home-school collaboration in accordance to the Policy in order to advocate the promotion of home-school collaboration (Curriculum Development Council, 2017). For example, organizing parent education activities, establish communication channels, recruit parent volunteers, set up home-school collaboration associations. Meanwhile, the governments' suggested home-school cooperation activities basically fall into the aspects of Epstein's framework. Therefore, this designed study would use Epstein's framework to examine the practices of parental involvement in home-school collaboration. The following will first review the related practices of different aspects of home-school collaboration in previous research findings.

Parenting is one of the home-based involvement practices. Parents would acquire different knowledge and skills such as parenting styles in supporting children's learning by attending workshops or activities organized by schools (Đurišić & Bunijevac, 2017). However, Chinese parents reported lack the related knowledge and skills on parenting as teachers provide little support to them, which hinders home-school collaboration (Guo & Kilderry, 2018). With the increasing advocacy of home-school collaboration, Lau and

Ng (2019) mentioned that many workshops and seminars on parent education are now available and can be easily accessed to. It is expected that parents could engage more in parent education by joining different activities to improve their parenting skills.

Learning at home is another practice of home-based involvement. Under this practice, parents will for example, help children with homework or bring them to museums to extend children's learning at school (Harris & Goodall, 2008). Although previous study showed that involving parents to children's learning at home is strongly encouraged in the Chinese context, the actual practices of their involvement are not identified (Lau, Li & Rao, 2011).

Communicating is one of the practices of school-based involvement. Formal or informal communication allows parents and teachers to mutually share children's learning or problems at home or in school. Lau and Ng (2019) reported that in Hong Kong, this mutual communication is carried out through traditional approaches such as children's handbooks and phone calls to exchange information. With the technological advancement nowadays, online communication platforms such as Facebook and blogger become more popular for parent-teacher interactions. Because parents and teachers can share children's information in forms of photos and videos instead of only in words, which make the communication more effective (Zhang et al., 2018). Goodall et al. (2011) also acknowledged the advantage of using information and communication technology to improve parental engagement by providing a convenient method for parents and teachers to receive updated information about children's learning. However, whether Hong Kong kindergartens are using online platforms as the assistive tools to facilitate partnerships is unknown, even some kindergartens are utilizing technology in their teaching.

Volunteering is another aspect of school-based involvement. Parents are invited to provide support for children's and school's activities (Đurišić & Bunijevac, 2017). Yet, most of the previous studies just generally stated that teachers do involve parents to volunteer (Ihmeideh & Oliemat, 2015; Lau, Li & Rao, 2011). Little is discussed on how parents volunteer at schools (Pang, 2004). There are different forms of volunteering for parents to engage in to promote children's and school's development. For example, supporting schools through helping in logistic issues of school bus, supporting teachers through helping in graduation day, supporting children through story telling during lessons, and supporting parents through networking parents (Goodall et al., 2011).

Decision making also belongs to school-based involvement. Under this involvement, parents act as representatives and are included in school decisions (Epstein, 2018). However, Lau, Li and Rao (2011) indicated that some Chinese teachers think parents should comply to their decisions as they perceive that their decisions on learning and teaching are the best for children's learning. Yet, Ho (2007) revealed that some Chinese teachers are engaging parents to make decisions with a trusting relationship to promote children's learning as the common goal. It can be concluded that these researchers found inconsistent practices by parents even in the same Chinese context.

The above illustrates the five aspects of practices for home-school collaboration. Based on the above research findings, the aspects of parenting and decision making showed inconsistent practices of parental involvement. While the aspects of learning at home, communicating and volunteering lacked the updated and actual involvement by parents given that the government has increasingly recognized the importance of home-school collaboration. Therefore, this study would like to find out parents' involvement in various aspects of

home-school collaboration practices that suggested by the government.

Relations between socio-economic status and home-school collaboration

SES is defined as the measure of an individual's combined economic and social status, which focuses on the measures of education, income and occupation (Baker, 2014). Some research studies have examined SES, including its elements of educational level, income and occupation as the factors that affect parental involvement in children's learning and home-school collaboration. Particularly, parenting, learning at home and decision making are the most commonly discussed aspects of collaboration with SES or its elements by researchers. These might provide the directions for this study to figure out how SES affects parents' involvement in home-school collaboration.

For the relation between SES and parenting, Roubinov and Boyce (2017) pointed out that families with low SES tend to have poorer parenting. In particular, low income gives rise to frequent family conflicts and parental hostilities and thus cause higher instability in family routines, which affects children's development and their involvement in parent education (Hoffman, 2003). Besides, according to the "knowledge gap hypothesis", Morawska, Winter and Sanders (2009) mentioned that low SES parents lack the resources to acquire and expose to the information relevant to parenting practices. With limited parental knowledge, low SES parents therefore provide poorer parenting or involve less in parenting when educating children.

For the relation between SES and learning at home, Clinton and Hattie (2013) pointed out that under-educated parents are less likely to involve in children's learning at home. Because they do not have the relevant knowledge to guide children finishing homework or facilitate children's exploration in the extension activities that teachers suggested parents to do so. In addition, Lee and Yu (2005) indicated that low income families

lack the financial resources to buy extra storybooks for children or bring them to museums, as the examples, for further learning. As a result, children would miss the opportunities to further discuss on different topics and explore the surroundings with parents, which hindered their learning (van Gelder-Horgan, 2016). However, Ho (2000) showed a different finding. Under the traditional Chinese cultural norm, Chinese parents hold the belief that academic pursuit could benefit their children's future career development. So Chinese parents would maximize their devotion of time and efforts to help children's learning at home in spite of any difficulties or inadequacies of their SES backgrounds.

For the relation between SES and decision making, Wesely and Baig (2012) pointed out that well-educated parents will engage in decision-making processes that are related to their children's learning with teachers more frequent than parents with lower educational levels. It is because parents with high SES believe that participating in schools' decision-making could exert a positive influence on their children's learning and therefore help enhancing children's academic achievement. Meanwhile, McNamara (2010) suggested another reason for the higher participation rate of well-educated parents in decision-making. He explained that parents who attained higher educational level are more likely to possess higher cognitive and literacy skill level, which is in favor of their processing of information and expression of ideas during decision-making meetings. Having the ability to understand the schooling terminology is essential for parents when discussing and deciding various school policies or issues as well (Clinton & Hattie, 2013). Yet, research found that even parents are under-educated, they would still like to participate in making decisions when meetings are made available to them (Verba, Scholzman & Brady, 2000), which showed a different finding from the above.

The above briefly discussed how SES including its elements affect parents' involvement in different

aspects of home-school collaboration. Some researchers reported parents with high SES would involve more while some researchers found that parents with low SES would still actively get involved in home-school collaboration. Therefore, SES should be taken into account to find out whether SES really matters when parents choose to involve in the collaboration or not.

To sum up in brief, there is a variety of practices for home-school collaboration. Parents would involve in the collaboration differently based on the nature of different practices and their SES backgrounds. So this study would like to find out the current practices of collaboration that parents with different SES are engaging in respectively. In addition, this study would also find out whether parents' SES affects their involvement in various aspects respectively.

There are two main research questions:

(1) Does SES affect parents' level of involvement in home-school collaboration?

(2) If there are SES difference, what are the differences in practice?

First, it is hypothesized that SES will have an effect on parents' level of involvement in home-school collaboration. Second, it is hypothesized that parents with high SES level, including high education level, income and more professional occupation will show a higher level of involvement in each aspect of home-school collaboration in terms of quantity and quality than parents with low SES. Researchers believed that parental involvement in home-school collaboration increases with parents' SES (Harris & Goodall, 2008). According to "family resources hypothesis", Ho (2001) explained that families from different SES provide resources such as educational and economic resources differently. With the comparatively abundant provision of resources, it is expected high SES parents can devote more economic capital to support children's learning

such as buying extra exercise books or storybooks in terms of quantity as an example. Also, with their well-educated background, it is expected that high SES parents demonstrate a higher ability and confidence in helping with their children's homework and maintaining an effective communication with teachers in terms of quality as the examples as well (Lee & Brown, 2006).

Methodology

Participants

A total of 65 Hong Kong parents with at least one child who is or are currently studying in kindergarten in this academic year of 2019/2020 were expected to be recruited. Due to the outbreak of Penyakit Virus Corona 2019 (COVID-19), classes have suspended in kindergartens since early February. No purposive sampling could be done to invite parents with different SES backgrounds through kindergartens based on their districts. So convenience sampling and snowball sampling were used to recruit the targeted parents to participate in this study. However, under these sampling methods, the researcher had no control on the recruited participants' SES background. Therefore, the target of recruiting 65 parents were set to avoid an extreme unbalanced ratio of parents with low or high SES if an even smaller targeted sample size was set.

Instruments

Quantitative research method, which was questionnaire, would be used for data collection. An online questionnaire was made in Google Forms. The questionnaire included three sections *(see Appendix 1)*. The first part asked about the personal information of the participants, which helped the researcher to understand the SES background, including the education level, occupation and income of the participants. The second

part aimed to find out participants' level of involvement in home-school collaboration in terms of quantity. Parents were required to enter the number of times that they involved in different aspects of home-school collaboration practices in this academic year. For example, "the number of involvements in attending parenting programmes or seminars organized by kindergartens", "the number of involvements in guiding children to do homework or revision at home". The third part aimed to find out participants' level of involvement in home-school collaboration in terms of quality. Participants were asked to rate their degree of involvement or willingness in different aspects of home-school collaboration practices in the rating scale, which 1 represented totally uninvolved while 5 represented totally involved. Examples of questions include "in what extent you were involved or willing to attend parenting programmes or seminars organized by kindergartens", "in what extent you were involved or willing to guide children to do homework or revision at home".

The home-school collaboration practices listed in the questionnaire were based on Epstein's framework (2018). The practices listed in both the second and the third sections of the questionnaire were the same, which could help identify the level of involvement in terms of quantity and quality by parents in the same practices. These practices would be classified into the aspects of home-school collaboration for later analysis *(Table 1)*. In short, there were 2 practices which belongs to parenting, 4 for learning at home, 3 for communicating, 2 for volunteering and 3 for decision making.

Table 1. Classification of practices into different aspects of home-school collaboration

Aspect of home-school collaboration	**Practices listed in the questionnaire (Questions)**
Parenting	1. Attend parenting programmes or seminars organized by kindergartens
	2. Buy/ read parenting-related books
Learning at home	3. Guide children to do homework or revision at home

	4. Encourage children to study hard at home
	5. Read storybooks/ books with children at home
	6. Bring children out to library/ museums etc. for extended learning/ widen their horizon
Communicating	7. Use traditional communication methods, e.g. face-to-face, student handbooks, phone calls, etc. to discuss children's learning progress/ situation
	8. Use technological communication methods, e.g. social platforms, videos, blogs, etc. to discuss children's learning progress/ situation
	9. Attend parent day
Volunteering	10. Help teachers to lead interest classes/ extra-curricular activities
	11. Participate in parent volunteer activities, e.g. on duty, volunteer in school library
Decision making	12. Participate in parent-teacher association's meetings
	13. Raise opinions on school policies, student affairs, etc.
	14. Help kindergartens to formulate school policy/ set up educational goals

Procedure

The link of the online Google Form including the consent form were sent to the targeted participants by the researcher through social media, including WhatsApp and Facebook. These participants were invited by the researcher to share the Google Form link to other targeted parents through any channels. All participants were suggested to complete the questionnaire within a week after they received the link of the questionnaire.

Data analysis

The data of this study was analyzed to identify the SES background of the participants, and as well as to find out how SES affects parents' level of involvement in home-school collaboration. First, participants'

education level, income and occupation were coded and were represented by corresponding numbers *(Table 2-4)*. Education level and income were directly converted into corresponding numbers based on the options provided in the first section of the questionnaire. For the coding of occupation, the researcher first classified the participants' occupation based on the framework of occupation mentioned in Hollingshead Four-Factor Index of Socioeconomic Status (Hollingshead, 1975), followed by converting different categories of occupation into corresponding numbers.

Table 2. Coding of education level

Education level	**Code**
Primary or below	1
Junior Secondary	2
Senior Secondary	3 #
Post-secondary/ University	4
Post-graduate or above	5
	# = Cut-off point

Table 3. Coding of income

Monthly income (HKD)	**Code**
$5000 or below	1
$5001 - $10000	2
$10001 - $20000	3
$20001 - $30000	4 #
$30001 - $40000	5
$40001 - $50000	6
$50001 or above	7
	# = Cut-off point

Table 4. Coding of occupation

Occupation	**Code**
Farm laborers, menial service workers, students, **housewives**, (dependent on welfare, no regular occupation)	1
Unskilled workers - E.g. **Waiters, Laundry operatives**	2
Machine operators, semi-skilled workers - E.g. **Deliverymen, Drivers**	3
Smaller business owners (smaller than small), skilled manual laborers, craftsmen, tenant farmers - E.g. **Cement/concrete finishers, Receptionists**	4
Clerical and sales workers, small farm and business owners - E.g. **Cashiers, Clerks**	5 #
Technicians, semi-professionals, small business owners - E.g. **Secretaries, Therapists**	6
Smaller business owners (smaller than medium-sized), farm owners, managers, minor professionals - E.g. **Insurance agents, Managers**	7
Administrators, lesser professionals, proprietor of medium-sized business - E.g. **Registered nurses, Teachers**	8
# = Cut-off point	

After coding the elements of SES, participants were classified into low or high SES based on the combined consideration of their education level, income and occupation. For each of the element, which included education level, income and occupation, there were cut-off points respectively. If participants fell into the categories that under the cut-off point, they were considered to have a low level in that element. If participants fell into the categories that were equal to or higher than the cut-off point, they were considered to have a high level in that element. Examples of classification of SES were illustrated in *Table 5*. Once SES levels were classified, SES levels would be coded in the way that 1 represented low SES while 2 represented

high SES. The reason of not simply using low or high level in education level, income and occupation for analysis was that dividing these elements into more detailed categories could provide a more detailed findings on how specifically a particular group of parents would involve differently.

Table 5. Classification and coding of SES level

Education level	**Income**	**Occupation**	**SES level**	**Code**
1 (Low)	2 (Low)	3 (Low)	Low	1
2 (Low)	4 (High)	4 (Low)	Low	1
2 (Low)	4 (High)	5 (High)	High	2
4 (High)	6 (High)	8 (High)	High	2

For the second section of the questionnaire, which was the number of times of involvement in home-school collaboration, regression was carried out to find out whether SES, including education level, income and occupation have an effect on parents' number of involvements in every single practice of collaboration listed in the questionnaire. If so, to see how the number of practices differed between parents with different SES backgrounds.

For the third section of the questionnaire, which was the degree of involvement in home-school collaboration, the scores of the degree of involvement in corresponding practices were summed up to represent parents' degree of involvement in various aspects of collaboration. However, different aspects of home-school collaboration consisted a different number of questions, resulting in a different total score in different aspects. So when calculating the overall degree of involvement in all aspects of collaboration for later analysis, each aspect would take different percentage. For example, parenting would take around 14.3% while learning at home would take around 28.6%. To avoid the misinterpretation that the aspect of learning at home was more

important or took a heavier weight that parenting in the overall degree of involvement in collaboration, scaling was carried out *(Table 6)*. Then, the total scores of the degree of involvement in each aspect of collaboration were summed up to obtain the total score, which with the maximum of 500, of parents' overall degree of involvement in home-school collaboration. After scaling the score in every aspect, regression was carried out to find out whether SES, including education level, income and occupation have an effect on parents' degree of involvement in each aspect of and the overall home-school collaboration.

Table 6. Scaling of the total score of different aspects of home-school collaboration

Aspect of home-school collaboration	**Number of questions**	**Total score of particular aspect**	**Scaling**	**Total score of each aspect after scaling**
Parenting	2	10	10	100
Learning at home	4	20	5	100
Communicating	3	15	6.66666667	100
Volunteering	2	10	10	100
Decision making	3	15	6.66666667	100

The independent variables in this study, including SES level, education level, income and occupation were categorical variables. They had to be transferred to dummy variables before carrying out regression *(Table 7-10)*. For dummy variables, they only have a value of either 0 or 1, which indicates the category that the response belonged to. Take the dummy variable of education level as the example *(Table 8)*. Dummy variables X_1, X_2, X_3, X_4 and X_5 represented the five categories of education level respectively. If a record belonged to the first category, which was primary or below, then the value of X_1 would be 1 and the rest of the dummy variables would be 0 ($X_1 = 1$, X_2 - $X_5 = 0$). If a record belonged to the second category, which was

junior secondary, then the value of X_2 would be 1 while the values of X_1 and other dummy variables would be 0 ($X_2 = 1$, X_1 and X_3 - $X_5 = 0$).

When using dummy variables in a regression model, only n-1 dummy variables were included (n refers to the number of categories of an independent variable). In this case, only four dummy variables were included. It is because if the first four dummy variables had the value of 0, it indicated that this record would belong to the fifth category (as only if X_5 has a value of 1, then X_1, X_2, X_3 and X_4 will have a value of 0). The formula of the regression model between the level of involvement in home-school collaboration and education level could be stated as the follow:

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4$$

When X_1, X_2, X_3 and X_4 had a value of 0, it indicated that this record belonged to the fifth category. In this case, $Y = B_0$. The value of B_0, which was the intercept, would represent the predicted number of involvements or degree of involvement in home-school collaboration by parents who fell into the fifth category. The fifth category could be called as the reference level. The values of B_1, B_2, B_3, and B_4 represented the differences of the predicted number or degree of involvement between the fifth category and another corresponding category. Take B_1 as an example. If B_1 had a value of 1, then B_2, B_3, and B_4 would have a value of 0. The formula would then be $Y = B_0 + B_1X_1$. Since Y represented the predicted number or degree of involvement of a respondent who belonged to the first category of education level, then B_1 could be interpreted as the difference between the predicted number or degree of involvement of parents who belonged to the fifth category and that of the first category. As in this study, it was hypothesized that parents with higher education level would show a higher number or degree of involvement in collaboration, it was expected that the values of B_1, B_2, B_3, and B_4

were negative in order to support the hypothesis.

The above interpretation applied to other dummy variables and the number of involvements or degree of involvement in home-school collaboration by parents in the later regression analysis.

Table 7. Dummy coding: Transferring SES level to dummy variable

SES level	X_1	X_2
1 (Low SES)	1	0
2 (High SES)	0	1

Table 8. Dummy coding: Transferring Education level to dummy variable

Education level	X_1	X_2	X_3	X_4	X_5
1 (Primary or below)	1	0	0	0	0
2 (Junior Secondary)	0	1	0	0	0
3 (Senior Secondary)	0	0	1	0	0
4 (Post-secondary/ University)	0	0	0	1	0
5 (Post-graduate or above)	0	0	0	0	1

Table 9. Dummy coding: Transferring income to dummy variable

Income	X_1	X_2	X_3	X_4	X_5	X_6	X_7
1 ($5000 or below)	1	0	0	0	0	0	0
2 ($5001 - $10000)	0	1	0	0	0	0	0
3 ($10001 - $20000)	0	0	1	0	0	0	0
4 ($20001 - $30000)	0	0	0	1	0	0	0
5 ($30001 - $40000)	0	0	0	0	1	0	0
6 ($40001 - $50000)	0	0	0	0	0	1	0
7 ($50001 or above)	0	0	0	0	0	0	1

Table 10. Dummy coding: Transferring occupation to dummy variable

Occupation	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8

1 (Farm laborers, menial service workers, students, housewives, (dependent on welfare, no regular occupation))	1	0	0	0	0	0	0	0
2 (Unskilled workers)	0	1	0	0	0	0	0	0
3 (Machine operators, semi-skilled workers)	0	0	1	0	0	0	0	0
4 (Smaller business owners (smaller than small), skilled manual laborers, craftsmen, tenant farmers)	0	0	0	1	0	0	0	0
5 (Clerical and sales workers, small farm and business owners)	0	0	0	0	1	0	0	0
6 (Technicians, semi-professionals, small business owners)	0	0	0	0	0	1	0	0
7 (Smaller business owners (smaller than medium-sized), farm owners, managers, minor professionals)	0	0	0	0	0	0	1	0
8 (Administrators, lesser professionals, proprietor of medium-sized business)	0	0	0	0	0	0	0	1

Results

The aim of this study is to examine whether SES has an effect on parents' level of involvement in home-school collaboration in terms of quantity and quality, and also the differences in the practices. The following results have addressed the research questions.

Demographic characteristics

A total of 65 targeted participants completed the online questionnaire *(Table 11)*. The participants included 54 females (83.1%) and 11 males (16.9%). Among the participants, 29 (44.6 %) of them aged 30-39,

25 (38.5%) and 9 (13.8%) of them aged 40-49 and 20-29 respectively. There were 2 (3.1%) of them aged 50-59.

Regarding the participants' SES level, 36 (55.4%) of them belonged to high SES while the remaining 29 (44.6%) belonged to low SES.

For the participants' education level, 28 (43.1%) of them reached post-secondary or university level. The number of participants who attained the level of primary or below and post-graduate or above were the same, which was 11 (16.9%). There were 8 (12.3%) and 7 (10.8%) participants who attained senior secondary and junior secondary respectively.

Regarding the income, the distribution was quite even. 15 (23.1%) of the participants earned $10001-$20000 per month. 10 (15.4%) participants earned $5000 or below and $5001-$10000 respectively while 9 (13.8%) earned $20001-$30000. 8 (12.3%) earned $30001-$40000 and $40001-$50000 respectively while only 5 (7.7%) of the participants earned $50001 or above.

For the occupation, 13 (20%) of the participants fell into the second category of unskilled workers. There were both 11 (16.9%) of them fell into the seventh and the eighth categories respectively. The numbers of participants who belonged to the first and the fifth were similar, there were 10 (15.4%) and 9 (13.8%) of them respectively. There were respectively 5 (7.7%), 4 (6.2%) and 2 (3.1%) participants who fell into the sixth, fourth and the third categories of occupation.

Table11. Demographic characteristics

Variables	**N=65**	**Percentage**
Gender		
Male	11	16.9%

Female	54	83.1%
Age group		
20-29	9	13.8%
30-39	29	44.6%
40-49	25	38.5%
50-59	2	3.1%
Education		
Primary or below	11	16.9%
Junior Secondary	7	10.8%
Senior Secondary	8	12.3%
Post-secondary/ University	28	43.1%
Post-graduate or above	11	16.9%
Income		
$5000 or below	10	15.4%
$5001 - $10000	10	15.4%
$10001 - $20000	15	23.1%
$20001 - $30000	9	13.8%
$30001 - $40000	8	12.3%
$40001 - $50000	8	12.3%
$50001 or above	5	7.7%
Occupation		
Farm laborers, menial service workers, students, housewives, (dependent on welfare, no regular occupation)	10	15.4%
Unskilled workers	13	20%
Machine operators, semi-skilled workers	2	3.1%
Smaller business owners (smaller than small), skilled manual laborers, craftsmen, tenant farmers	4	6.2%
Clerical and sales workers, small farm and business owners	9	13.8%
Technicians, semi-professionals, small business owners	5	7.7%
Smaller business owners (smaller than medium-sized), farm owners, managers, minor professionals	11	16.9%
Administrators, lesser professionals, proprietor of medium-sized business	11	16.9%
SES level		
Low SES	29	44.6%
High SES	36	55.4%

Relations between SES and the number of times of parental involvement in home-school collaboration

Regression was carried out to examine whether SES, including education level, income and occupation have an effect on parents' number of involvements in different practices of home-school collaboration respectively *(see Appendix 2)*. Most of the results of regression models ran were insignificant *(Table 12-16)*. Particularly, all models ran in the aspect of volunteering were statistically insignificant. As a result, in many collaboration practices, it could not be concluded that SES, education level, income and occupation have an effect on parents' number of times involving in home-school collaboration.

Yet, the statistical results of the following models indicated a significant finding ($p<.05$) *(Table 12-14, 16)*. In the aspect of parenting, SES and occupation showed an effect on the number of parental involvements in attending parenting workshops or seminars organized by kindergartens. In addition, SES showed an effect on parents' number in involvement in buying or reading parenting-related books. In the aspect of learning at home, both education level, income and occupation showed an effect on the number of parental involvements in reading storybooks with children at home. Income also showed the effect on the number of involvements in bringing children out to library or museums for extended learning. In the aspect of communicating, education showed an effect on the number of parental involvements in attending parent day. In the aspect of decision making, SES level showed an effect on the number of parental involvements in raising opinions on school policies or student affairs.

Table 12. Significance of SES, education level, income and occupation on the number of parental involvements in parenting

Parenting		
Practice / **F**	**1. Attend parenting programmes or seminars organized by kindergartens**	**2. Buy/ read parenting-related books**
SES level	8.856*	6.920*
Education	1.717	1.718
Income	2.115	1.115
Occupation	2.300*	1.491

* indicates a significant result ($p<.05$)

Table 13. Significance of SES, education level, income and occupation on the number of parental involvements in learning at home

Learning at home				
Practice / **F**	**3. Guide children to do homework or revision at home**	**4. Encourage children to study hard at home**	**5. Read storybooks/ books with children at home**	**6. Bring children out to library/ museums etc. for extended learning/ widen their horizon**
SES level	.136	.038	2.368	2.698
Education	1.118	1.971	7.243*	1.124
Income	.813	1.517	2.514*	2.445*
Occupation	1.430	1.709	4.637*	1.314

* indicates a significant result ($p<.05$)

Table 14. Significance of SES, education level, income and occupation on the number of parental involvements in communicating

Communicating			
Practice / F	**7. Use traditional communication methods, e.g. face-to-face, student handbooks, phone calls, etc. to discuss children's learning progress/ situation**	**8. Use technological communication methods, e.g. social platforms, videos, blogs, etc. to discuss children's learning progress/ situation**	**9. Attend parent day**
SES level	.001	1.183	2.411
Education	1.426	.366	3.711*
Income	.546	1.473	.483
Occupation	.532	1.793	.952

* indicates a significant result ($p<.05$)

Table 15. Significance of SES, education level, income and occupation on the number of parental involvements in volunteering

Volunteering		
Practice / F	**10. Help teachers to lead interest classes/ extra-curricular activities**	**11. Participate in parent volunteer activities, e.g. on duty, volunteer in school library**
SES level	.447	.965
Education	1.432	1.287
Income	.541	.665
Occupation	1.236	.756

* indicates a significant result ($p<.05$)

Table 16. Significance of SES, education level, income and occupation on the number of parental involvements in decision making

Decision making			
Practice / F	**12. Participate in parent-teacher association's meetings**	**13. Raise opinions on school policies, student affairs, etc.**	**14. Help kindergartens to formulate school policy/ set up educational goals**
SES level	2.093	5.546*	.083
Education	.932	2.181	.337
Income	1.199	2.057	1.041
Occupation	.681	1.313	1.879

* indicates a significant result ($p<.05$)

As SES, including its elements of education level, income and occupation have been found to have an effect on parents' level of involvement in some specific practices, further analysis was done based on the values of beta of those significant regression models to find out the differences of practices between parents with different SES backgrounds *(see Appendix 2)*. Referring to the significant models, in general, it could be concluded that parents with a higher level of SES, education, income and occupation would involve more in the home-school collaboration practices. Take the model of SES and the number of times involving in attending parenting workshop or seminars as an example *(Figure 1)*. As the independent variable which was the SES level had been transferred to dummy variable, the value of intercept represented parents' number of involvements in the reference level. In this case, it referred to high SES level. Meanwhile, beta represented the differences in the number of times involving in attending parenting workshop between different SES levels. As the value of beta was negative, it indicated that parents with low SES involved less in this collaboration practices when compared to those with high SES. In other words, parents with high SES would show in a

higher number of parental involvements in this home-school collaboration practice.

Figure 1. Regression model of SES and the number of times of parental involvement in attending parenting workshop or seminars organized by kindergartens

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	36.601[a]	1	36.601	8.856	.004
Intercept	292.601	1	292.601	70.795	.000
SESlelvel	36.601	1	36.601	8.856	.004
Error	260.383	63	4.133		
Total	616.000	65			
Corrected Total	296.985	64			

a. R Squared = .123 (Adjusted R Squared = .109)

Parameter Estimates

Dependent Variable: Time_Parenting 1

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.889	.339	8.526	.000	2.212	3.566
[SESlelvel=1]	-1.510	.507	-2.976	.004	-2.523	-.496
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Meanwhile, few models showed a special result that parents with higher SES, education level, income and occupation did not necessarily involve more in home-school collaboration. Take the model of occupation and the number of times involving in reading storybooks with children at home as an example *(Figure 2)*. As occupation had been coded into dummy variables, the value of intercept represented the number of involvements of parents who fell into the eighth category of occupation. Beta represented the differences in the number of times involving in reading storybooks with children at home between parents with different categories of occupation. It was noticeable that there were both positive and negative values in beta of different categories of occupation. For those negatives, parents who belonged to those categories involved less in reading storybooks with children at home when compared to parents who belonged to the highest level of

occupation. However, positive values of betas appeared in the first and the sixth categories of occupation. For parents who belonged to these two groups, they would instead involve more with the number of around 86 and 38 respectively when compared to parents who engaged in the most professional occupation. These results showed that although parents who attainted a high occupation level would generally involve more in home-school collaboration practice when compared to those with low level, parents attained the middle level might instead involve more in collaboration practice when compared to parents with high attainment of occupation.

Figure 2. Regression model of occupation and the number of times of parental involvement in reading storybooks with children at home

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 5

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	273682.916[a]	7	39097.559	4.637	.000
Intercept	360514.740	1	360514.740	42.754	.000
Occupationscore	273682.916	7	39097.559	4.637	.000
Error	480642.100	57	8432.318		
Total	1351830.000	65			
Corrected Total	754325.015	64			

a. R Squared = .363 (Adjusted R Squared = .285)

Parameter Estimates

Dependent Variable: Time_Learning at home 5

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	120.455	27.687	4.351	.000	65.012	175.897
[Occupationscore=1]	86.045	40.122	2.145	.036	5.702	166.389
[Occupationscore=2]	-105.839	37.619	-2.813	.007	-181.171	-30.508
[Occupationscore=3]	-97.955	70.588	-1.388	.171	-239.306	43.396
[Occupationscore=4]	-94.705	53.616	-1.766	.083	-202.068	12.659
[Occupationscore=5]	-55.455	41.273	-1.344	.184	-138.103	27.194
[Occupationscore=6]	37.545	49.528	.758	.452	-61.633	136.724
[Occupationscore=7]	-17.818	39.155	-.455	.651	-96.226	60.589
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Relations between SES and parents' degree of involvement in home-school collaboration

Regression was carried out to examine whether SES, including education level, income and occupation

have an effect on parents' degree of involvements in the five aspects of and the overall home-school collaboration respectively *(see Appendix 3)*. Most of the results of regression models ran were significant ($p<.05$), except the models of education level, income and occupation on the degree of involvement in the aspect of learning at home *(Table 17)*. Based on the results, in general, it could be concluded that SES, education level, income and occupation have an effect on parents' degree of involvement in different aspects of home-school collaboration.

Table 17. Significance of SES, education level, income and occupation on parents; degree of involvements in different aspects of and the overall home-school collaboration

Degree of involvement / **F**	**Parenting**	**Learning at home**	**Communic-ating**	**Volunteeri-ng**	**Decision making**	**Overall**
SES level	33.501*	5.513*	13.475*	17.321*	22.263*	23.841*
Education	12.348*	2.451	6.954*	4.680*	7.131*	7.975*
Income	6.879*	1.600	2.507*	4.013*	4.059*	4.681*
Occupation	9.569*	1.460	3.044*	4.641*	3.556*	5.264*

* indicates a significant result ($p<.05$)

Among the significant models, further analysis was done based on the values of beta in the models to find out the differences in the degree of involvement between parents with different SES backgrounds *(see Appendix 3)*. In general, it could be concluded that parents with a higher level of SES, education, income and occupation showed a higher degree of involvement in home-school collaboration. Take the model of education level and parents' degree of involvement in the aspect of volunteering of home-school collaboration as an

example *(Figure 3)*. As the independent variable, that is the education level, had been transferred to dummy variable, the value of intercept represented the degree of involvement of parents who attained the education level of post-graduate or above. As the values of beta were negative in other categories of education level, it indicated that parents with higher education level would perform a higher degree of involvement in volunteering when compared to parents with lower education level.

Figure 3. Regression model of education level and parents' degree of involvement in the aspect of volunteering

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Volunteering weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8974.589[a]	4	2243.647	4.680	.002
Intercept	138256.970	1	138256.970	288.397	.000
Educationscore	8974.589	4	2243.647	4.680	.002
Error	28763.872	60	479.398		
Total	226200.000	65			
Corrected Total	37738.462	64			

a. R Squared = .238 (Adjusted R Squared = .187)

Parameter Estimates

Dependent Variable: Involvement_Volunteering weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	67.000	6.924	9.677	.000	53.150	80.850
[Educationscore=1]	-36.091	9.567	-3.773	.000	-55.227	-16.955
[Educationscore=2]	-18.667	9.375	-1.991	.051	-37.419	.086
[Educationscore=3]	-7.000	11.992	-.584	.562	-30.989	16.989
[Educationscore=4]	-7.370	8.105	-.909	.367	-23.583	8.843
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Meanwhile, few models showed a special result that parents with high SES, education level, income and occupation did not necessarily show a higher degree of involvement in home-school collaboration when compared to parents with poorer SES backgrounds. Take the model of income and parents' degree of involvement in the aspect of communicating as an example *(Figure 4)*. As income had been coded into dummy

variables, the value of intercept referred to the degree of involvement of parents with the income of $50001 or above. As the values of beta in the categories of income that coded with 1-3 were negative, it showed that parents with lower income would have a lower degree of involvement in communicating. However, the values of beta in the categories of income that coded with 4-6 were positive, which indicated that parents who earned $20001-$50000 would instead show a higher degree of involvement than those who earned more than $50001. Based on these findings, it could be concluded that although parents who earned below $20001 would generally show a lower degree of involvement in communicating when compared to others, parents who earned between $20001 and $50000 showed a higher degree of involvement than those who earned the most instead.

Figure 4. Regression model of income and parents' degree of involvement in the aspect of communicating

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Communicating weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2868.218[a]	6	478.036	2.507	.032
Intercept	164222.201	1	164222.201	861.182	.000
Incomescore	2868.218	6	478.036	2.507	.032
Error	11060.243	58	190.694		
Total	188650.000	65			
Corrected Total	13928.462	64			

a. R Squared = .206 (Adjusted R Squared = .124)

Parameter Estimates

Dependent Variable: Involvement_Communicating weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	55.000	6.176	8.906	.000	42.638	67.362
[Incomescore=1]	-6.667	7.702	-.866	.390	-22.085	8.751
[Incomescore=2]	-12.500	7.564	-1.653	.104	-27.640	2.640
[Incomescore=3]	-7.813	7.075	-1.104	.274	-21.975	6.350
[Incomescore=4]	7.222	7.702	.938	.352	-8.196	22.640
[Incomescore=5]	3.125	7.872	.397	.693	-12.633	18.883
[Incomescore=6]	1.875	7.872	.238	.813	-13.883	17.633
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Discussion

Effect of SES, education level, income and occupation on parents' level of involvement in home-school collaboration

It was hypothesized that SES, including education level, income and occupation would affect parents' level of involvement in different home-school collaboration practices in terms of quantity and quality. According to the results, in many collaboration practices, it could not be concluded that SES, education level, income and occupation have an effect on parents' number of times involving in home-school collaboration. In other words, it did not support the hypothesis that SES backgrounds would affect parents' number of involvements in every single practice of home-school collaboration. However, for the findings regarding parents' degree of involvement, the results generally showed that SES, education level, income and occupation would have an effect on their involvement in different aspects of home-school collaboration. These results basically matched with the hypothesis that SES and its elements would affect parents' level of involvement in terms of quality.

Some researchers found that parents' SES would affect their number of times involving in the practices of home-school collaboration (Clinton & Hattie, 2013; Thompson et al., 2014). The results in this study showed inconsistent findings that SES backgrounds only affected parents' number of involvements in a few practices. The inconsistent findings might subject to the limitation of this study, for example, the small sample size. As a result, the results might not be significant enough to find out the relations between SES backgrounds and parents' number of involvements in collaboration.

In addition, the inconsistent findings on the effect of SES on parents' number of involvements in this

study might imply that SES, including education level, income and occupation might not be the most important factors that affect their number of times involving in home-school collaboration. One of the possible factors that might exert a greater influence than that of SES backgrounds on parents' number of involvements is parents' attitude. If parents hold a positive attitude of involving in home-school collaboration, it is believed that they would engage in different collaboration practices despite any difficulties or inadequacies. For example, for parents with low SES, they will choose to engage in guiding children with homework at home daily. Although these parents might attain a relatively low education level than other high SES parents, they treasure the opportunities to spend time and effort to help with their children's homework (Wanat, 2010). Because they believe that guiding children with homework can improve their children's academic achievement. Besides, although it was reported that low SES parents lack confidence in language expression during parent-teacher association meetings, their positive attitude towards engaging in these meetings might affect their number of involvements (Crozier & Davies, 2007). Wanat (2010) reported low SES parents believe that parents from different backgrounds could make positive contributions during parent-teacher conferences with the common goal of improving children's learning and school's development. Also, low SES parents acknowledge their values in involving in meetings as they can share their unique talents and resources. On the other hand, for parents with high SES, time constraint owing to work commitment is one of the barriers that hinder their number of times involving in different home-school collaboration practices (Russell & Granville, 2005). However, researchers pointed out that for parents who value the importance of home-school collaboration will try their best to arrange their working schedules to make them available to participate in different collaboration practices. From the above examples, these might help explain why inconsistent results

were found between this study and the previous research findings when examining the effect of SES on parents' number of involvements in different collaboration practices.

Although inconsistent results were found in parents' quantitative involvement in home-school collaboration, the findings of parents' degree of involvement in collaboration were consistent with other researchers' findings that SES would affect parents' degree of involvement. According to Cooper, Lindsay and Nye (2000), parents with high SES possess the knowledge, skills and resources required to involve in different aspects of home-school collaboration effectively. For example, parents who are well-educated can guide their children with homework more effectively and thoroughly to make sure their children understand the topics. The "family resources hypothesis" mentioned in Ho (2001) also supported that parents with high SES can provide more resources that enhance parental involvement in different collaboration practices. Besides, Chen (2008) pointed out that high SES parents will support their children's reading at home by providing a stimulating literacy environment, and as well as pair-reading with their children. These practices showed the quality involvement in collaboration by parents with high SES to support their children's learning at home. The above examples illustrated that SES will have an effect on parents' degree of involvement in home-school collaboration. The results in this study were consistent with the above research findings.

Differences in in the level of involvement by parents with different SES, education level, income and occupation backgrounds in home-school collaboration

It was hypothesized that parents with high SES, including high education level, income and more professional occupation would show a higher level of involvement in home-school collaboration in terms of quantity and quality. Generally, the results showed that parents with a higher level of SES, education level,

income and occupation showed a higher number and degree of involvement in home-school collaboration, which supported the hypothesis. Meanwhile, the literature discussed in previous sections also matched with the findings. Because parents with high SES backgrounds can provide and access to necessary learning materials and resources to support children and kindergartens easily (Grolnick et al., 1997). As they have enough resources or spare money to support children's learning at home or outside school, it is understandable that these parents will participate more and involve more actively in home-school collaboration when compared to other parents. Besides, their cognitive levels, communication skills or other abilities further enhance their level of involvement in home-school collaboration as well, such as communicating with teachers or joining parent-teacher conferences (Sheldon, Epstein & Galindo, 2010).

However, in this study, some results showed that parents with a comparatively lower level of education, income and occupation would instead show a higher level of involvement in home-school collaboration than those who are at a relatively higher level. The possible reasons might attribute to the factors of home culture and availability of time of parents.

First, home culture might affect the level of involvement by parents with different SES backgrounds. Corno (1996) reported that parents with low SES involved more in children's learning at home. However, they were involving in the way that directly providing the correct answers to children or even simply helping them finish the homework themselves. For some low SES parents, they would show a comparatively frequent involvement in guiding children's learning at home as they perceived homework as a task or commitment of children's learning or they wanted to make children's progress of doing homework go faster (Cooper, Lindsay & Nye, 2000; Xu & Corno, 1998). In contrast, it was reported that parents with high SES would give a higher

level of autonomy in children's homework. According to Cooper, Lindsay and Nye (2000), they pointed out that parents with high SES understand that overly involved or directly interfered in their children's homework might lead to excessive pressure on their learning, which might result in an opposite effect on children's learning achievement. So they would only help children with homework if their children need help. Besides, nowadays, under the competitive learning environment, parents with high income or good economic condition would tend to send their children to tutorial classes for further learning rather than teaching their children themselves at home (Melaragno, 2013). As a result, differences in the home culture might result in a higher level of involvement in parents with low SES backgrounds than those with high SES, which might help explain the findings in this study.

Second, time availability might affect the level of involvement by parents with different SES backgrounds. Researchers reported the availability of time was a common barrier that hinders parental involvement in home-school collaboration (Goodall et al., 2011; Peter et al., 2008). Wanat (2010) pointed out that the working schedule of parents with a professional occupation such as nurse was very demanding. Although they wanted to volunteer or participate in different collaboration activities, it was difficult for them to shift or rearrange their working schedule to join, which resulted in a low level of involvement. In contrast, parents with lower level of income and occupation might instead show a higher level of involvement. For example, parents with lower income might imply that they are having a part-time job which has a shorter working hour. Therefore, the higher flexibility of time schedule might allow these parents to engage more in different home-school collaboration practices. As a result, the differences between the time availability might result in a higher level of involvement in parents with low SES backgrounds than those with high SES, which

might help explain the findings in this study.

Suggestion

Based on previous research findings and the findings in this study, it is noticeable that parents with higher SES, education level, income and occupation would generally show a higher level of involvement in home-school collaboration. Because they are in privilege of having different resources or skills to help them get well-involved in different home-school collaboration practices. Therefore, the following will suggest how kindergarten can do to support parents with low SES backgrounds to involved better in home-school collaboration.

First, kindergartens need to pay more attention to the needs of parents with low SES backgrounds. Based on the "family resources hypothesis", parents with low SES backgrounds generally do not have adequate and relevant knowledge, resources or skills for them to involve in home-based collaboration activities (Ho, 2001). As Altschul (2011) emphasized the importance of providing educational resources on the effect of parent-child engagement in learning at home, kindergartens can help parents to build up an enriching learning environment at home by providing supportive learning materials to them. For example, Thompson et al. (2014) suggested kindergartens to assign parent-child collaborative homework such as joint reading to increase parents' level of involvement in collaboration. Meanwhile, it is important to provide them with relevant learning materials by lending storybooks to them to alleviate their economic burden, as an example. Besides, as parents with low SES backgrounds lack the knowledge and skill on how to better support children's learning at home, kindergartens can provide parents with guidance and organize workshops on

topics such as how to effectively facilitate and engage in children's learning at home (Sheldon & Epstein, 2005). When organizing workshops, kindergartens need to take parents' working schedules into consideration to make these workshops as available to all parents as possible. To avoid crushing with parents' working hours and working days, workshops scheduled for evenings or weekends are recommended (Adeyemo, 2005).

Second, kindergartens need to establish a comfortable and welcoming environment and atmosphere when engaging parents with low SES backgrounds in home-school collaboration. For example, encouraging parents to feel comfortable when they come to kindergartens. Because Goodall et al. (2011) revealed that parents were reluctant to participate in parenting workshops as they would perceive the attendance as an admission of inadequacy on their parenting-related knowledge and skills. Meanwhile, O'mara, Jamal and Llewellyn (2010) also reported parents' fear of being stigmatized if they were seen to be accessing these activities by other parents. In addition, Russell and Granville (2005) explained the reason for the low level of involvement by low SES parents, which is the forbiddingly formal atmosphere in kindergartens during school-based involvement. Therefore, kindergartens need to make an effort to eliminate the labelling effect of inadequacy on parents and to minimize the negative perception of the atmosphere by parents when they are involving in different collaboration practices.

Limitation

There are mainly two limitations in this study. First, the sample size is small. As only 65 participants were recruited in this study, so it might have a higher probability to include bias data or extreme values in the responses, especially the number of times parents involved in the practices of home-school collaboration. Due

to the small sample size, there was an uneven distribution of participants in different categories of education level, income and occupation. As a result, this small sample size might not enough to represent the effect of SES on parents' level of involvement in home-school collaboration.

Second, this study asked parents' level of involvement in the academic year of 2019/2020. However, in this academic year, there were unexpected social circumstances including protests and the outbreak of COVID-19. These might affect parents' involvement in home-school collaboration, especially for those activities that were limited by kindergartens and were less frequently held. For example, volunteering in school activities, decision making in school conferences. As a result, these might affect their level of involvement given that some parents were willing to participate in.

Conclusion

To be concluded, SES, including education level, income and occupation generally had no effect on the number of times of parental involvement in home school collaboration. However, they showed an effect on the degree of parental involvement in collaboration. For both the number of times and parents' degree of involvement in collaboration, parents with higher SES backgrounds would show a higher level of involvement. But in some practices, parents with a comparatively lower SES backgrounds would instead show a higher level of involvement than those who are at a relatively higher level of SES backgrounds. Possible factors that explained this finding include attitude of parents, home culture and availability of time. Suggestions were made to kindergartens to better support parents with low SES backgrounds in home-school collaboration, including pay more attention to parents' needs and establish a comfortable and welcoming environment for

collaboration. However, due to the limitations of this study, further research is needed to examine the effect of SES on parents' level of involvement in home-school collaboration.

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Appendix 1 – Online questionnaire for the participants

幼稚園的家校合作：社經地位對家長參與家校合作的影響

誠邀閣下參加由香港教育大學幼兒教育學系李敬廉教授負責監督，學生何宝怡負責執行的研究計劃。

研究背景

香港政府自推出免費優質幼稚園教育計劃後，便致力推廣在幼稚園的家校合作，強調家長參與的重要性。因此，此研究的目的之一是找出現時家長參與家校合作的方式。此外，由於以往較少有研究探討家長的社經地位與參與家校合作活動之間的關係，所以此研究亦將以此為另一研究目的。由於家長在家校合作上承擔重要角色，因此家長亦是此研究的對象。

研究方法

每位參加者需完成一份問卷。問卷內容會問及閣下曾參與的家校合作活動，以及就各有關家校合作的陳述評分。回答問卷大概需時15-20分鐘。

是次研究沒有任何潛在風險。而閣下的參與純屬自願性質。閣下享有充分的權利在任何時候決定退出這項研究，更不會因此引致任何不良後果。凡有關閣下的資料將會保密，一切資料亦只有研究人員得悉及存取。經此研究所得的結果會以畢業論文的方式呈交香港教育大學。

如閣下想獲得更多有關這項研究的資料，請以電話　　或電郵　　與何宝怡聯絡。

如閣下對這項研究的操守有任何意見，可隨時與香港教育大學人類實驗對象操守委員會聯絡(電郵:　　；地址：香港教育大學研究與發展事務處)。

謝謝閣下有興趣參與這項研究。

何宝怡
首席研究員

* Required

*

- [ ] 本人同意參與以上由李敬廉教授負責監督，學生何宝怡負責執行的研究計劃。
- [ ] 本人理解此研究所獲得的資料會用於未來的學術發表，而本人有權保護個人的私隱，本人的個人資料將不能洩漏。
- [ ] 研究者已將所附資料的有關步驟向本人作解釋。本人是自願參與是次研究。
- [ ] 本人理解本人有充分的權利在任何時候決定退出是次研究，且不會因此引致任何不良後果或附上任何責任。

幼稚園的家校合作：社經地位對家長參與家校合作的影響

您好！首先感謝閣下抽空協助是次研究，本問卷為學術性質研究，內容與家校合作有關，問題答案無分對錯，請根據閣下的情況和第一反應作答。所有經問卷提供的資料只供學術研究之用，內容絕對保密，請放心回答。

【第一部分：基本資料】

你的性別是 *

- ○ 男
- ○ 女

你的年齡是 *

- ○ 20-29歲
- ○ 30-39歲
- ○ 40-49歲
- ○ 50-59歲
- ○ 60歲或以上

你的教育程度是 *

- ◯ 小學或以下
- ◯ 初中
- ◯ 高中
- ◯ 大專/大學學位
- ◯ 碩士或以上

你的職業是 *

Your answer

你的每月平均收入是 *

- ◯ $5000或以下
- ◯ $5001 - $10000
- ◯ $10001 - $20000
- ◯ $20001 - $30000
- ◯ $30001 - $40000
- ◯ $40001 - $50000
- ◯ $50001或以上

【第二部分：有關曾參與的家校合作活動】

此部分將問及閣下在本學年（即2019-2020年度）開始至今，在子女所就讀的幼稚園，曾否參與過下列所述的家校合作的活動？
請根據以下各項活動填寫自己曾參與的次數。如從未參與，請輸入0；若曾參與100次，則輸入100。

1. 參加學校舉辦的家長課程/親職講座的次數 (以一學年計) *

Your answer

2. 購買/閱讀有關育兒/如何教導子女的書籍的次數 (以一學年計) *

Your answer

3. 在家中指導子女做功課/溫習的次數 (以一學年計) *

Your answer

4. 在家中鼓勵子女努力學習的次數 (以一學年計) *

Your answer

5. 在家中和子女一起閱讀圖書/故事書的次數 (以一學年計) *

Your answer

6. 空閒時帶子女到圖書館/博物館等地方進行延展學習/增廣見聞的次數 (以一學年計) *

Your answer

7. 與校方或老師透過傳統溝通方法，如面對面、學生手冊、打電話等方式，討論有關子女的學習進度/在校情況的次數 (以一學年計) *

Your answer

8. 與校方或老師透過較科技化的溝通方法，如社交平台、短片、網誌等方式，討論有關子女的學習進度/在校情況的次數 (以一學年計) *

Your answer

9. 出席家長日的次數 (以一學年計) *

Your answer

10. 協助學校老師帶領興趣班活動/課外活動的次數 (以一學年計) *

Your answer

11. 參與學校家長義工工作，如當值、處理圖書館借還書工作等的次數 (以一學年計) *

Your answer

12. 參與「家長教師會」會議的次數 (以一學年計) *

Your answer

13. 就校務政策、學生事務等向校方提出意見的次數 (以一學年計) *

Your answer

14. 協助學校制訂政策/教育目標的次數 (以一學年計) *

Your answer

【第三部分：有關曾參與的家校合作活動的投入度】

以下請根據閣下參與相關家校合作活動的經驗，就每項活動，選出在1-5中最能表示閣下對參與該項家校合作活動的投入程度或願意度（1表示十分不投入/十分不願意；5表示十分投入/十分願意）。請閣下根據真實情況回答問題。 *

	1(十分不投入/十分不願意)	2	3	4	5(十分投入/十分願意)
1. 參加學校舉辦的家長課程/親職講座	○	○	○	○	○
2. 購買/閱讀有關育兒/如何教導子女的書籍	○	○	○	○	○
3. 在家中指導子女做功課/溫習	○	○	○	○	○
4. 在家中鼓勵子女努力學習	○	○	○	○	○
5. 在家中和子女一起閱讀圖書/故事書	○	○	○	○	○
6. 空閒時帶子女到圖書館/博物館等地方進行延展學習/增廣見聞	○	○	○	○	○
7. 與校方或老師透過傳統溝通方法，如面對面、學生手冊、打電話等方式，討論有關子女的學習進度/在校情況	○	○	○	○	○

8. 與校方或老師透過較科技化的溝通方法，如社交平台、短片、網誌等方式，討論有關子女的學習進度/在校情況	○	○	○	○	○
9. 出席家長日	○	○	○	○	○
10. 協助學校老師帶領興趣班活動/課外活動	○	○	○	○	○
11. 參與學校家長義工工作，如當值、處理圖書館借還書工作等	○	○	○	○	○
12. 參與「家長教師會」會議	○	○	○	○	○
13. 就校務政策、學生事務等向校方提出意見	○	○	○	○	○
14. 協助學校制訂政策/教育目標	○	○	○	○	○

Appendix 2 – Regression models of SES, education level, income, occupation and the number of times of parental involvement in each practice of home-school collaboration

2.1 Regression models of SES, education level, income, occupation and the number of times of parental involvement in attending parenting programmes or seminars organized by kindergartens

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	36.601[a]	1	36.601	8.856	.004
Intercept	292.601	1	292.601	70.795	.000
SESlelvel	36.601	1	36.601	8.856	.004
Error	260.383	63	4.133		
Total	616.000	65			
Corrected Total	296.985	64			

a. R Squared = .123 (Adjusted R Squared = .109)

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	30.509[a]	4	7.627	1.717	.158
Intercept	218.299	1	218.299	49.152	.000
Educationscore	30.509	4	7.627	1.717	.158
Error	266.476	60	4.441		
Total	616.000	65			
Corrected Total	296.985	64			

a. R Squared = .103 (Adjusted R Squared = .043)

Parameter Estimates

Dependent Variable: Time_Parenting 1

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Intercept	2.889	.339	8.526	.000	2.212	3.566
[SESlelvel=1]	-1.510	.507	-2.976	.004	-2.523	-.496
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Time_Parenting 1

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Intercept	3.100	.666	4.652	.000	1.767	4.433
[Educationscore=1]	-2.191	.921	-2.379	.021	-4.033	-.349
[Educationscore=2]	-1.100	.902	-1.219	.228	-2.905	.705
[Educationscore=3]	-1.100	1.154	-.953	.344	-3.409	1.209
[Educationscore=4]	-.544	.780	-.698	.488	-2.105	1.016
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	53.319[a]	6	8.887	2.115	.065
Intercept	334.500	1	334.500	79.622	.000
Incomescore	53.319	6	8.887	2.115	.065
Error	243.665	58	4.201		
Total	616.000	65			
Corrected Total	296.985	64			

a. R Squared = .180 (Adjusted R Squared = .095)

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	65.412[a]	7	9.345	2.300	.039
Intercept	174.744	1	174.744	43.012	.000
Occupationscore	65.412	7	9.345	2.300	.039
Error	231.573	57	4.063		
Total	616.000	65			
Corrected Total	296.985	64			

a. R Squared = .220 (Adjusted R Squared = .124)

Parameter Estimates

Dependent Variable: Time_Parenting 1

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Intercept	3.200	.917	3.491	.001	1.365	5.035
[Incomescore=1]	-1.756	1.143	-1.536	.130	-4.044	.533
[Incomescore=2]	-2.100	1.123	-1.871	.066	-4.347	.147
[Incomescore=3]	-1.513	1.050	-1.440	.155	-3.615	.590
[Incomescore=4]	-.422	1.143	-.369	.713	-2.711	1.866
[Incomescore=5]	.675	1.168	.578	.566	-1.664	3.014
[Incomescore=6]	-.575	1.168	-.492	.625	-2.914	1.764
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Time_Parenting 1

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Intercept	3.455	.608	5.684	.000	2.238	4.672
[Occupationscore=1]	-1.755	.881	-1.992	.051	-3.518	.009
[Occupationscore=2]	-2.455	.826	-2.973	.004	-4.108	-.801
[Occupationscore=3]	-3.455	1.549	-2.230	.030	-6.557	-.352
[Occupationscore=4]	-1.955	1.177	-1.661	.102	-4.311	.402
[Occupationscore=5]	-1.121	.906	-1.238	.221	-2.935	.693
[Occupationscore=6]	-1.055	1.087	-.970	.336	-3.232	1.122
[Occupationscore=7]	-.091	.859	-.106	.916	-1.812	1.630
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.2 Regression models of SES, education level, income, occupation and the number of times of parental involvement in buying or reading parenting-related books

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 2

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	563.358[a]	1	563.358	6.920	.011
Intercept	922.251	1	922.251	11.328	.001
SESlelvel	563.358	1	563.358	6.920	.011
Error	5128.888	63	81.411		
Total	6789.000	65			
Corrected Total	5692.246	64			

a. R Squared = .099 (Adjusted R Squared = .085)

Parameter Estimates

Dependent Variable: Time_Parenting 2

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	6.750	1.504	4.489	.000	3.745	9.755
[SESlelvel=1]	-5.922	2.251	-2.631	.011	-10.421	-1.423
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 2

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	584.905[a]	4	146.226	1.718	.158
Intercept	1015.092	1	1015.092	11.925	.001
Educationscore	584.905	4	146.226	1.718	.158
Error	5107.341	60	85.122		
Total	6789.000	65			
Corrected Total	5692.246	64			

a. R Squared = .103 (Adjusted R Squared = .043)

Parameter Estimates

Dependent Variable: Time_Parenting 2

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	4.400	2.918	1.508	.137	-1.436	10.236
[Educationscore=1]	-4.400	4.031	-1.091	.279	-12.464	3.664
[Educationscore=2]	-2.900	3.950	-.734	.466	-10.802	5.002
[Educationscore=3]	7.000	5.053	1.385	.171	-3.108	17.108
[Educationscore=4]	1.081	3.415	.317	.753	-5.750	7.913
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 2

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	588.634[a]	6	98.106	1.115	.365
Intercept	914.521	1	914.521	10.393	.002
Incomescore	588.634	6	98.106	1.115	.365
Error	5103.613	58	87.993		
Total	6789.000	65			
Corrected Total	5692.246	64			

a. R Squared = .103 (Adjusted R Squared = .011)

Parameter Estimates

Dependent Variable: Time_Parenting 2

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	5.600	4.195	1.335	.187	-2.797	13.997
[Incomescore=1]	-4.600	5.232	-.879	.383	-15.073	5.873
[Incomescore=2]	-5.300	5.138	-1.032	.307	-15.585	4.985
[Incomescore=3]	1.837	4.806	.382	.704	-7.783	11.458
[Incomescore=4]	-3.933	5.232	-.752	.455	-14.407	6.540
[Incomescore=5]	-1.850	5.348	-.346	.731	-12.555	8.855
[Incomescore=6]	2.275	5.348	.425	.672	-8.430	12.980
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Parenting 2

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	881.020[a]	7	125.860	1.491	.189
Intercept	620.930	1	620.930	7.356	.009
Occupationscore	881.020	7	125.860	1.491	.189
Error	4811.227	57	84.407		
Total	6789.000	65			
Corrected Total	5692.246	64			

a. R Squared = .155 (Adjusted R Squared = .051)

Parameter Estimates

Dependent Variable: Time_Parenting 2

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	4.909	2.770	1.772	.082	-.638	10.456
[Occupationscore=1]	-.209	4.014	-.052	.959	-8.247	7.829
[Occupationscore=2]	-4.755	3.764	-1.263	.212	-12.292	2.782
[Occupationscore=3]	-4.909	7.062	-.695	.490	-19.051	9.233
[Occupationscore=4]	-3.909	5.364	-.729	.469	-14.651	6.833
[Occupationscore=5]	7.202	4.129	1.744	.087	-1.067	15.471
[Occupationscore=6]	-.909	4.955	-.183	.855	-10.832	9.014
[Occupationscore=7]	-2.091	3.918	-.534	.596	-9.936	5.754
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.3 Regression models of SES, education level, income, occupation and the number of times of parental involvement in guiding children to do homework or revision at home

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2831.231[a]	1	2831.231	.136	.714
Intercept	2234614.308	1	2234614.308	107.032	.000
SESlelvel	2831.231	1	2831.231	.136	.714
Error	1315309.754	63	20877.933		
Total	3561676.000	65			
Corrected Total	1318140.985	64			

a. R Squared = .002 (Adjusted R Squared = -.014)

Parameter Estimates

Dependent Variable: Time_Learning at home 3

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	179.861	24.082	7.469	.000	131.737	227.985
[SESlelvel=1]	13.277	36.054	.368	.714	-58.771	85.324
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	91407.004[a]	4	22851.751	1.118	.357
Intercept	2062335.751	1	2062335.751	100.870	.000
Educationscore	91407.004	4	22851.751	1.118	.357
Error	1226733.981	60	20445.566		
Total	3561676.000	65			
Corrected Total	1318140.985	64			

a. R Squared = .069 (Adjusted R Squared = .007)

Parameter Estimates

Dependent Variable: Time_Learning at home 3

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	191.000	45.217	4.224	.000	100.553	281.447
[Educationscore=1]	35.364	62.476	.566	.573	-89.607	160.334
[Educationscore=2]	-19.250	61.224	-.314	.754	-141.716	103.216
[Educationscore=3]	91.000	78.318	1.162	.250	-65.659	247.659
[Educationscore=4]	-35.259	52.932	-.666	.508	-141.139	70.621
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	102261.783[a]	6	17043.631	.813	.564
Intercept	2087422.962	1	2087422.962	99.574	.000
Incomescore	102261.783	6	17043.631	.813	.564
Error	1215879.201	58	20963.435		
Total	3561676.000	65			
Corrected Total	1318140.985	64			

a. R Squared = .078 (Adjusted R Squared = -.018)

Parameter Estimates

Dependent Variable: Time_Learning at home 3

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	186.000	64.751	2.873	.006	56.387	315.613
[Incomescore=1]	27.333	80.759	.338	.736	-134.323	188.989
[Incomescore=2]	78.500	79.303	.990	.326	-80.243	237.243
[Incomescore=3]	-39.063	74.182	-.527	.600	-187.553	109.428
[Incomescore=4]	-29.889	80.759	-.370	.713	-191.545	131.767
[Incomescore=5]	-11.000	82.542	-.133	.894	-176.225	154.225
[Incomescore=6]	-7.875	82.542	-.095	.924	-173.100	157.350
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 3

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	196942.120[a]	7	28134.589	1.430	.211
Intercept	1171058.013	1	1171058.013	59.535	.000
Occupationscore	196942.120	7	28134.589	1.430	.211
Error	1121198.865	57	19670.156		
Total	3561676.000	65			
Corrected Total	1318140.985	64			

a. R Squared = .149 (Adjusted R Squared = .045)

Parameter Estimates

Dependent Variable: Time_Learning at home 3

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	164.091	42.287	3.880	.000	79.413	248.769
[Occupationscore=1]	36.509	61.280	.596	.554	-86.202	159.220
[Occupationscore=2]	75.909	57.457	1.321	.192	-39.146	190.964
[Occupationscore=3]	-74.091	107.811	-.687	.495	-289.979	141.797
[Occupationscore=4]	-144.091	81.889	-1.760	.084	-308.070	19.888
[Occupationscore=5]	68.687	63.038	1.090	.280	-57.544	194.918
[Occupationscore=6]	-2.091	75.645	-.028	.978	-153.568	149.386
[Occupationscore=7]	15.909	59.803	.266	.791	-103.844	135.662
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.4 Regression models of SES, education level, income, occupation and the number of times of parental involvement in encouraging children to study hard at home

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 4

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	887.837[a]	1	887.837	.038	.845
Intercept	3128252.145	1	3128252.145	135.027	.000
SESlelvel	887.837	1	887.837	.038	.845
Error	1459556.716	63	23167.567		
Total	4613929.000	65			
Corrected Total	1460444.554	64			

a. R Squared = .001 (Adjusted R Squared = -.015)

Parameter Estimates

Dependent Variable: Time_Learning at home 4

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	216.944	25.368	8.552	.000	166.250	267.639
[SESlelvel=1]	7.435	37.979	.196	.845	-68.461	83.330
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 4

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	169651.965[a]	4	42412.991	1.971	.110
Intercept	2998047.125	1	2998047.125	139.358	.000
Educationscore	169651.965	4	42412.991	1.971	.110
Error	1290792.589	60	21513.210		
Total	4613929.000	65			
Corrected Total	1460444.554	64			

a. R Squared = .116 (Adjusted R Squared = .057)

Parameter Estimates

Dependent Variable: Time_Learning at home 4

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	221.000	46.382	4.765	.000	128.222	313.778
[Educationscore=1]	51.727	64.086	.807	.423	-76.465	179.919
[Educationscore=2]	-.167	62.802	-.003	.998	-125.789	125.456
[Educationscore=3]	128.000	80.337	1.593	.116	-32.697	288.697
[Educationscore=4]	-46.481	54.296	-.856	.395	-155.091	62.128
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 4

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	198085.665[a]	6	33014.277	1.517	.189
Intercept	2850981.476	1	2850981.476	130.990	.000
Incomescore	198085.665	6	33014.277	1.517	.189
Error	1262358.889	58	21764.808		
Total	4613929.000	65			
Corrected Total	1460444.554	64			

a. R Squared = .136 (Adjusted R Squared = .046)

Parameter Estimates

Dependent Variable: Time_Learning at home 4

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	150.000	65.977	2.274	.027	17.933	282.067
[Incomescore=1]	51.667	82.288	.628	.533	-113.050	216.383
[Incomescore=2]	158.500	80.805	1.962	.055	-3.249	320.249
[Incomescore=3]	26.375	75.586	.349	.728	-124.927	177.677
[Incomescore=4]	46.111	82.288	.560	.577	-118.606	210.828
[Incomescore=5]	153.125	84.104	1.821	.074	-15.228	321.478
[Incomescore=6]	56.875	84.104	.676	.502	-111.478	225.228
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 4

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	253318.236[a]	7	36188.319	1.709	.125
Intercept	1976423.026	1	1976423.026	93.326	.000
Occupationscore	253318.236	7	36188.319	1.709	.125
Error	1207126.318	57	21177.655		
Total	4613929.000	65			
Corrected Total	1460444.554	64			

a. R Squared = .173 (Adjusted R Squared = .072)

Parameter Estimates

Dependent Variable: Time_Learning at home 4

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	168.636	43.878	3.843	.000	80.773	256.500
[Occupationscore=1]	37.864	63.585	.595	.554	-89.462	165.190
[Occupationscore=2]	100.594	59.618	1.687	.097	-18.788	219.977
[Occupationscore=3]	113.864	111.866	1.018	.313	-110.145	337.872
[Occupationscore=4]	-135.636	84.969	-1.596	.116	-305.783	34.510
[Occupationscore=5]	68.586	65.409	1.049	.299	-62.393	199.565
[Occupationscore=6]	30.364	78.491	.387	.700	-126.811	187.538
[Occupationscore=7]	110.455	62.052	1.780	.080	-13.803	234.712
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.5 Regression models of SES, education level, income, occupation and the number of times of parental involvement in reading storybooks/ books with children at home

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 5

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	27320.828[a]	1	27320.828	2.368	.129
Intercept	563533.258	1	563533.258	48.834	.000
SESlelvel	27320.828	1	27320.828	2.368	.129
Error	727004.188	63	11539.749		
Total	1351830.000	65			
Corrected Total	754325.015	64			

a. R Squared = .036 (Adjusted R Squared = .021)

Parameter Estimates

Dependent Variable: Time_Learning at home 5

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	114.278	17.904	6.383	.000	78.500	150.056
[SESlelvel=1]	-41.243	26.804	-1.539	.129	-94.807	12.321
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 5

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	245628.749[a]	4	61407.187	7.243	.000
Intercept	459340.166	1	459340.166	54.179	.000
Educationscore	245628.749	4	61407.187	7.243	.000
Error	508696.266	60	8478.271		
Total	1351830.000	65			
Corrected Total	754325.015	64			

a. R Squared = .326 (Adjusted R Squared = .281)

Parameter Estimates

Dependent Variable: Time_Learning at home 5

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	225.000	29.117	7.727	.000	166.756	283.244
[Educationscore=1]	-210.182	40.232	-5.224	.000	-290.657	-129.707
[Educationscore=2]	-147.500	39.425	-3.741	.000	-226.362	-68.638
[Educationscore=3]	-151.000	50.433	-2.994	.004	-251.881	-50.119
[Educationscore=4]	-131.704	34.086	-3.864	.000	-199.885	-63.522
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 5

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	155704.763[a]	6	25950.794	2.514	.031
Intercept	675840.030	1	675840.030	65.482	.000
Incomescore	155704.763	6	25950.794	2.514	.031
Error	598620.253	58	10321.039		
Total	1351830.000	65			
Corrected Total	754325.015	64			

a. R Squared = .206 (Adjusted R Squared = .124)

Parameter Estimates

Dependent Variable: Time_Learning at home 5

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	199.000	45.434	4.380	.000	108.055	289.945
[Incomescore=1]	-51.778	56.666	-.914	.365	-165.206	61.651
[Incomescore=2]	-159.700	55.645	-2.870	.006	-271.085	-48.315
[Incomescore=3]	-131.500	52.051	-2.526	.014	-235.691	-27.309
[Incomescore=4]	-144.556	56.666	-2.551	.013	-257.984	-31.127
[Incomescore=5]	-99.125	57.917	-1.712	.092	-215.058	16.808
[Incomescore=6]	-55.250	57.917	-.954	.344	-171.183	60.683
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 5

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	273682.916[a]	7	39097.559	4.637	.000
Intercept	360514.740	1	360514.740	42.754	.000
Occupationscore	273682.916	7	39097.559	4.637	.000
Error	480642.100	57	8432.318		
Total	1351830.000	65			
Corrected Total	754325.015	64			

a. R Squared = .363 (Adjusted R Squared = .285)

Parameter Estimates

Dependent Variable: Time_Learning at home 5

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	120.455	27.687	4.351	.000	65.012	175.897
[Occupationscore=1]	86.045	40.122	2.145	.036	5.702	166.389
[Occupationscore=2]	-105.839	37.619	-2.813	.007	-181.171	-30.508
[Occupationscore=3]	-97.955	70.588	-1.388	.171	-239.306	43.396
[Occupationscore=4]	-94.705	53.616	-1.766	.083	-202.068	12.659
[Occupationscore=5]	-55.455	41.273	-1.344	.184	-138.103	27.194
[Occupationscore=6]	37.545	49.528	.758	.452	-61.633	136.724
[Occupationscore=7]	-17.818	39.155	-.455	.651	-96.226	60.589
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.6 Regression models of SES, education level, income, occupation and the number of times of parental involvement in bringing children out to library/ museums etc. for extended learning/ widen their horizon

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 6

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3038.327[a]	1	3038.327	2.698	.105
Intercept	44874.204	1	44874.204	39.843	.000
SESlelvel	3038.327	1	3038.327	2.698	.105
Error	70954.811	63	1126.267		
Total	121974.000	65			
Corrected Total	73993.138	64			

a. R Squared = .041 (Adjusted R Squared = .026)

Parameter Estimates

Dependent Variable: Time_Learning at home 6

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	33.306	5.593	5.955	.000	22.128	44.483
[SESlelvel=1]	-13.754	8.374	-1.642	.105	-30.488	2.980
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 6

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5156.219[a]	4	1289.055	1.124	.354
Intercept	32587.782	1	32587.782	28.404	.000
Educationscore	5156.219	4	1289.055	1.124	.354
Error	68836.920	60	1147.282		
Total	121974.000	65			
Corrected Total	73993.138	64			

a. R Squared = .070 (Adjusted R Squared = .008)

Parameter Estimates

Dependent Variable: Time_Learning at home 6

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	41.500	10.711	3.874	.000	20.075	62.925
[Educationscore=1]	-26.682	14.800	-1.803	.076	-56.285	2.922
[Educationscore=2]	-22.583	14.503	-1.557	.125	-51.594	6.427
[Educationscore=3]	-19.100	18.552	-1.030	.307	-56.210	18.010
[Educationscore=4]	-10.056	12.539	-.802	.426	-35.137	15.026
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 6

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	14936.395[a]	6	2489.399	2.445	.036
Intercept	48136.683	1	48136.683	47.275	.000
Incomescore	14936.395	6	2489.399	2.445	.036
Error	59056.743	58	1018.220		
Total	121974.000	65			
Corrected Total	73993.138	64			

a. R Squared = .202 (Adjusted R Squared = .119)

Parameter Estimates

Dependent Variable: Time_Learning at home 6

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	16.000	14.270	1.121	.267	-12.565	44.565
[Incomescore=1]	8.667	17.798	.487	.628	-26.961	44.294
[Incomescore=2]	.500	17.478	.029	.977	-34.485	35.485
[Incomescore=3]	.562	16.349	.034	.973	-32.163	33.288
[Incomescore=4]	4.222	17.798	.237	.813	-31.405	39.849
[Incomescore=5]	37.375	18.191	2.055	.044	.961	73.789
[Incomescore=6]	37.125	18.191	2.041	.046	.711	73.539
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Learning at home 6

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	10280.638[a]	7	1468.663	1.314	.261
Intercept	28250.713	1	28250.713	25.274	.000
Occupationscore	10280.638	7	1468.663	1.314	.261
Error	63712.501	57	1117.763		
Total	121974.000	65			
Corrected Total	73993.138	64			

a. R Squared = .139 (Adjusted R Squared = .033)

Parameter Estimates

Dependent Variable: Time_Learning at home 6

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	27.273	10.080	2.706	.009	7.087	47.458
[Occupationscore=1]	1.627	14.608	.111	.912	-27.625	30.879
[Occupationscore=2]	-12.965	13.697	-.947	.348	-40.392	14.462
[Occupationscore=3]	-9.773	25.700	-.380	.705	-61.236	41.691
[Occupationscore=4]	-9.273	19.521	-.475	.637	-48.362	29.817
[Occupationscore=5]	-2.828	15.027	-.188	.851	-32.919	27.263
[Occupationscore=6]	-9.873	18.032	-.547	.586	-45.982	26.237
[Occupationscore=7]	25.182	14.256	1.766	.083	-3.365	53.729
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.7 Regression models of SES, education level, income, occupation and the number of times of parental involvement in using traditional communication methods, e.g. face-to-face, student handbooks, phone calls, etc. to discuss children's learning progress/ situation

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 7

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.733[a]	1	.733	.001	.976
Intercept	16724.856	1	16724.856	21.177	.000
SESlelvel	.733	1	.733	.001	.976
Error	49754.283	63	789.751		
Total	66652.000	65			
Corrected Total	49755.015	64			

a. R Squared = .000 (Adjusted R Squared = -.016)

Parameter Estimates

Dependent Variable: Time_Communicating 7

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	16.028	4.684	3.422	.001	6.668	25.388
[SESlelvel=1]	.214	7.012	.030	.976	-13.799	14.226
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 7

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4319.573[a]	4	1079.893	1.426	.236
Intercept	19592.771	1	19592.771	25.873	.000
Educationscore	4319.573	4	1079.893	1.426	.236
Error	45435.442	60	757.257		
Total	66652.000	65			
Corrected Total	49755.015	64			

a. R Squared = .087 (Adjusted R Squared = .026)

Parameter Estimates

Dependent Variable: Time_Communicating 7

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	24.000	8.702	2.758	.008	6.593	41.407
[Educationscore=1]	1.909	12.024	.159	.874	-22.142	25.960
[Educationscore=2]	-11.667	11.783	-.990	.326	-35.235	11.902
[Educationscore=3]	5.400	15.072	.358	.721	-24.749	35.549
[Educationscore=4]	-15.556	10.187	-1.527	.132	-35.932	4.821
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 7

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2658.071[a]	6	443.012	.546	.771
Intercept	16213.111	1	16213.111	19.966	.000
Incomescore	2658.071	6	443.012	.546	.771
Error	47096.944	58	812.016		
Total	66652.000	65			
Corrected Total	49755.015	64			

a. R Squared = .053 (Adjusted R Squared = -.044)

Parameter Estimates

Dependent Variable: Time_Communicating 7

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	19.000	12.744	1.491	.141	-6.509	44.509
[Incomescore=1]	-9.778	15.894	-.615	.541	-41.594	22.038
[Incomescore=2]	10.000	15.608	.641	.524	-21.243	41.243
[Incomescore=3]	-7.750	14.600	-.531	.598	-36.975	21.475
[Incomescore=4]	-1.889	15.894	-.119	.906	-33.705	29.927
[Incomescore=5]	-6.500	16.245	-.400	.691	-39.018	26.018
[Incomescore=6]	-.750	16.245	-.046	.963	-33.268	31.768
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 7

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3053.482[a]	7	436.212	.532	.806
Intercept	10097.523	1	10097.523	12.324	.001
Occupationscore	3053.482	7	436.212	.532	.806
Error	46701.533	57	819.325		
Total	66652.000	65			
Corrected Total	49755.015	64			

a. R Squared = .061 (Adjusted R Squared = -.054)

Parameter Estimates

Dependent Variable: Time_Communicating 7

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	9.636	8.630	1.117	.269	-7.646	26.918
[Occupationscore=1]	.364	12.507	.029	.977	-24.681	25.408
[Occupationscore=2]	16.517	11.726	1.409	.164	-6.964	39.999
[Occupationscore=3]	6.364	22.003	.289	.773	-37.697	50.425
[Occupationscore=4]	-6.386	16.713	-.382	.704	-39.853	27.080
[Occupationscore=5]	5.697	12.865	.443	.660	-20.066	31.460
[Occupationscore=6]	9.364	15.439	.607	.547	-21.552	40.279
[Occupationscore=7]	10.727	12.205	.879	.383	-13.713	35.168
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.8 Regression models of SES, education level, income, occupation and the number of times of parental involvement in using technological communication methods, e.g. social platforms, videos, blogs, etc. to discuss children's learning progress/ situation

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 8

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2452.255[a]	1	2452.255	1.183	.281
Intercept	4629.239	1	4629.239	2.232	.140
SESlelvel	2452.255	1	2452.255	1.183	.281
Error	130638.207	63	2073.622		
Total	138537.000	65			
Corrected Total	133090.462	64			

a. R Squared = .018 (Adjusted R Squared = .003)

Parameter Estimates

Dependent Variable: Time_Communicating 8

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	14.667	7.590	1.932	.058	-.500	29.833
[SESlelvel=1]	-12.356	11.362	-1.087	.281	-35.062	10.350
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 8

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3171.145[a]	4	792.786	.366	.832
Intercept	2720.382	1	2720.382	1.256	.267
Educationscore	3171.145	4	792.786	.366	.832
Error	129919.317	60	2165.322		
Total	138537.000	65			
Corrected Total	133090.462	64			

a. R Squared = .024 (Adjusted R Squared = -.041)

Parameter Estimates

Dependent Variable: Time_Communicating 8

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	7.600	14.715	.516	.607	-21.834	37.034
[Educationscore=1]	-7.600	20.332	-.374	.710	-48.270	33.070
[Educationscore=2]	-6.350	19.924	-.319	.751	-46.204	33.504
[Educationscore=3]	4.400	25.487	.173	.864	-46.582	55.382
[Educationscore=4]	8.844	17.226	.513	.610	-25.612	43.301
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 8

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	17597.560[a]	6	2932.927	1.473	.204
Intercept	5602.427	1	5602.427	2.814	.099
Incomescore	17597.560	6	2932.927	1.473	.204
Error	115492.901	58	1991.257		
Total	138537.000	65			
Corrected Total	133090.462	64			

a. R Squared = .132 (Adjusted R Squared = .042)

Parameter Estimates

Dependent Variable: Time_Communicating 8

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	4.600	19.956	.231	.819	-35.347	44.547
[Incomescore=1]	1.733	24.890	.070	.945	-48.089	51.556
[Incomescore=2]	-3.600	24.441	-.147	.883	-52.525	45.325
[Incomescore=3]	-4.162	22.863	-.182	.856	-49.927	41.602
[Incomescore=4]	45.289	24.890	1.820	.074	-4.533	95.111
[Incomescore=5]	-2.475	25.439	-.097	.923	-53.397	48.447
[Incomescore=6]	-.600	25.439	-.024	.981	-51.522	50.322
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 8

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	24022.560[a]	7	3431.794	1.793	.106
Intercept	6414.101	1	6414.101	3.352	.072
Occupationscore	24022.560	7	3431.794	1.793	.106
Error	109067.901	57	1913.472		
Total	138537.000	65			
Corrected Total	133090.462	64			

a. R Squared = .180 (Adjusted R Squared = .080)

Parameter Estimates

Dependent Variable: Time_Communicating 8

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	5.273	13.189	.400	.691	-21.138	31.683
[Occupationscore=1]	1.427	19.113	.075	.941	-36.845	39.700
[Occupationscore=2]	-1.427	17.920	-.080	.937	-37.312	34.458
[Occupationscore=3]	-5.273	33.626	-.157	.876	-72.607	62.062
[Occupationscore=4]	-5.273	25.541	-.206	.837	-56.417	45.871
[Occupationscore=5]	-3.606	19.661	-.183	.855	-42.977	35.765
[Occupationscore=6]	70.127	23.593	2.972	.004	22.882	117.372
[Occupationscore=7]	-2.727	18.652	-.146	.884	-40.078	34.623
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.9 Regression models of SES, education level, income, occupation and the number of times of parental involvement in attending parent day

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 9

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	31.369[a]	1	31.369	2.411	.125
Intercept	241.830	1	241.830	18.588	.000
SESlelvel	31.369	1	31.369	2.411	.125
Error	819.616	63	13.010		
Total	1115.000	65			
Corrected Total	850.985	64			

a. R Squared = .037 (Adjusted R Squared = .022)

Parameter Estimates

Dependent Variable: Time_Communicating 9

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.639	.601	4.390	.000	1.438	3.840
[SESlelvel=1]	-1.398	.900	-1.553	.125	-3.196	.401
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 9

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	168.787[a]	4	42.197	3.711	.009
Intercept	351.745	1	351.745	30.936	.000
Educationscore	168.787	4	42.197	3.711	.009
Error	682.197	60	11.370		
Total	1115.000	65			
Corrected Total	850.985	64			

a. R Squared = .198 (Adjusted R Squared = .145)

Parameter Estimates

Dependent Variable: Time_Communicating 9

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.800	1.066	1.688	.097	-.333	3.933
[Educationscore=1]	-1.164	1.473	-.790	.433	-4.111	1.783
[Educationscore=2]	.033	1.444	.023	.982	-2.855	2.921
[Educationscore=3]	5.600	1.847	3.032	.004	1.906	9.294
[Educationscore=4]	-.059	1.248	-.047	.962	-2.556	2.438
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 9

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	40.469[a]	6	6.745	.483	.819
Intercept	206.069	1	206.069	14.746	.000
Incomescore	40.469	6	6.745	.483	.819
Error	810.515	58	13.974		
Total	1115.000	65			
Corrected Total	850.985	64			

a. R Squared = .048 (Adjusted R Squared = -.051)

Parameter Estimates

Dependent Variable: Time_Communicating 9

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.600	1.672	.957	.343	-1.746	4.946
[Incomescore=1]	-.044	2.085	-.021	.983	-4.218	4.129
[Incomescore=2]	-.800	2.048	-.391	.697	-4.899	3.299
[Incomescore=3]	1.588	1.915	.829	.411	-2.246	5.421
[Incomescore=4]	.622	2.085	.298	.766	-3.552	4.796
[Incomescore=5]	.400	2.131	.188	.852	-3.866	4.666
[Incomescore=6]	.150	2.131	.070	.944	-4.116	4.416
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Communicating 9

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	89.102[a]	7	12.729	.952	.474
Intercept	157.579	1	157.579	11.789	.001
Occupationscore	89.102	7	12.729	.952	.474
Error	761.882	57	13.366		
Total	1115.000	65			
Corrected Total	850.985	64			

a. R Squared = .105 (Adjusted R Squared = -.005)

Parameter Estimates

Dependent Variable: Time_Communicating 9

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.545	1.102	1.402	.166	-.662	3.753
[Occupationscore=1]	.455	1.597	.285	.777	-2.744	3.653
[Occupationscore=2]	-.622	1.498	-.416	.679	-3.622	2.377
[Occupationscore=3]	-1.045	2.810	-.372	.711	-6.673	4.582
[Occupationscore=4]	-.295	2.135	-.138	.890	-4.570	3.979
[Occupationscore=5]	3.121	1.643	1.899	.063	-.169	6.412
[Occupationscore=6]	.255	1.972	.129	.898	-3.694	4.203
[Occupationscore=7]	.727	1.559	.467	.643	-2.394	3.849
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.10 Regression models of SES, education level, income, occupation and the number of times of parental involvement in helping teachers to lead interest classes/ extra-curricular activities

Tests of Between-Subjects Effects

Dependent Variable: Time_Volunteering 10

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.481[a]	1	1.481	.447	.506
Intercept	49.296	1	49.296	14.876	.000
SESlelvel	1.481	1	1.481	.447	.506
Error	208.765	63	3.314		
Total	262.000	65			
Corrected Total	210.246	64			

a. R Squared = .007 (Adjusted R Squared = -.009)

Tests of Between-Subjects Effects

Dependent Variable: Time_Volunteering 10

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	18.322[a]	4	4.581	1.432	.234
Intercept	35.082	1	35.082	10.968	.002
Educationscore	18.322	4	4.581	1.432	.234
Error	191.924	60	3.199		
Total	262.000	65			
Corrected Total	210.246	64			

a. R Squared = .087 (Adjusted R Squared = .026)

Parameter Estimates

Dependent Variable: Time_Volunteering 10

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.028	.303	3.388	.001	.421	1.634
[SESlelvel=1]	-.304	.454	-.668	.506	-1.211	.604
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Time_Volunteering 10

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.400	.566	2.475	.016	.269	2.531
[Educationscore=1]	-1.400	.781	-1.792	.078	-2.963	.163
[Educationscore=2]	.183	.766	.239	.812	-1.348	1.715
[Educationscore=3]	-1.000	.980	-1.021	.311	-2.959	.959
[Educationscore=4]	-.548	.662	-.828	.411	-1.872	.776
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Volunteering 10

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11.141[a]	6	1.857	.541	.775
Intercept	52.273	1	52.273	15.227	.000
Incomescore	11.141	6	1.857	.541	.775
Error	199.106	58	3.433		
Total	262.000	65			
Corrected Total	210.246	64			

a. R Squared = .053 (Adjusted R Squared = -.045)

Tests of Between-Subjects Effects

Dependent Variable: Time_Volunteering 10

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	27.704[a]	7	3.958	1.236	.299
Intercept	39.320	1	39.320	12.278	.001
Occupationscore	27.704	7	3.958	1.236	.299
Error	182.542	57	3.202		
Total	262.000	65			
Corrected Total	210.246	64			

a. R Squared = .132 (Adjusted R Squared = .025)

Parameter Estimates

Dependent Variable: Time_Volunteering 10

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	.800	.829	.965	.338	-.859	2.459
[Incomescore=1]	-.467	1.033	-.452	.653	-2.535	1.602
[Incomescore=2]	.200	1.015	.197	.844	-1.831	2.231
[Incomescore=3]	-.300	.949	-.316	.753	-2.200	1.600
[Incomescore=4]	.422	1.033	.409	.684	-1.646	2.491
[Incomescore=5]	.825	1.056	.781	.438	-1.289	2.939
[Incomescore=6]	.325	1.056	.308	.759	-1.789	2.439
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Time_Volunteering 10

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	.818	.540	1.516	.135	-.262	1.899
[Occupationscore=1]	.682	.782	.872	.387	-.884	2.248
[Occupationscore=2]	-.741	.733	-1.011	.316	-2.209	.727
[Occupationscore=3]	-.818	1.376	-.595	.554	-3.573	1.936
[Occupationscore=4]	1.182	1.045	1.131	.263	-.911	3.274
[Occupationscore=5]	-.596	.804	-.741	.462	-2.207	1.015
[Occupationscore=6]	.582	.965	.603	.549	-1.351	2.515
[Occupationscore=7]	.636	.763	.834	.408	-.892	2.164
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.11 Regression models of SES, education level, income, occupation and the number of times of parental involvement in participating in parent volunteer activities, e.g. on duty, volunteer in school library

Tests of Between-Subjects Effects

Dependent Variable: Time_Volunteering 11

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	173.876[a]	1	173.876	.965	.330
Intercept	1336.953	1	1336.953	7.420	.008
SESlelvel	173.876	1	173.876	.965	.330
Error	11351.509	63	180.183		
Total	12775.000	65			
Corrected Total	11525.385	64			

a. R Squared = .015 (Adjusted R Squared = -.001)

Parameter Estimates

Dependent Variable: Time_Volunteering 11

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.917	2.237	1.304	.197	-1.554	7.387
[SESlelvel=1]	3.290	3.349	.982	.330	-3.403	9.983
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Volunteering 11

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	910.540[a]	4	227.635	1.287	.285
Intercept	1232.239	1	1232.239	6.965	.011
Educationscore	910.540	4	227.635	1.287	.285
Error	10614.844	60	176.914		
Total	12775.000	65			
Corrected Total	11525.385	64			

a. R Squared = .079 (Adjusted R Squared = .018)

Parameter Estimates

Dependent Variable: Time_Volunteering 11

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	4.500	4.206	1.070	.289	-3.913	12.913
[Educationscore=1]	-1.409	5.812	-.242	.809	-13.034	10.216
[Educationscore=2]	7.417	5.695	1.302	.198	-3.975	18.809
[Educationscore=3]	-.500	7.285	-.069	.946	-15.073	14.073
[Educationscore=4]	-2.907	4.924	-.590	.557	-12.756	6.942
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Volunteering 11

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	741.979[a]	6	123.663	.665	.678
Intercept	1118.506	1	1118.506	6.016	.017
Incomescore	741.979	6	123.663	.665	.678
Error	10783.406	58	185.921		
Total	12775.000	65			
Corrected Total	11525.385	64			

a. R Squared = .064 (Adjusted R Squared = -.032)

Parameter Estimates

Dependent Variable: Time_Volunteering 11

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	.600	6.098	.098	.922	-11.606	12.806
[Incomescore=1]	11.733	7.605	1.543	.128	-3.491	26.957
[Incomescore=2]	2.300	7.468	.308	.759	-12.650	17.250
[Incomescore=3]	1.900	6.986	.272	.787	-12.084	15.884
[Incomescore=4]	3.622	7.605	.476	.636	-11.602	18.846
[Incomescore=5]	2.275	7.773	.293	.771	-13.285	17.835
[Incomescore=6]	4.525	7.773	.582	.563	-11.035	20.085
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Volunteering 11

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	979.489[a]	7	139.927	.756	.626
Intercept	1200.149	1	1200.149	6.487	.014
Occupationscore	979.489	7	139.927	.756	.626
Error	10545.896	57	185.016		
Total	12775.000	65			
Corrected Total	11525.385	64			

a. R Squared = .085 (Adjusted R Squared = -.027)

Parameter Estimates

Dependent Variable: Time_Volunteering 11

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.818	4.101	.443	.659	-6.394	10.031
[Occupationscore=1]	9.282	5.943	1.562	.124	-2.619	21.183
[Occupationscore=2]	.259	5.572	.046	.963	-10.900	11.417
[Occupationscore=3]	14.182	10.456	1.356	.180	-6.756	35.120
[Occupationscore=4]	-1.818	7.942	-.229	.820	-17.722	14.085
[Occupationscore=5]	1.848	6.114	.302	.763	-10.394	14.091
[Occupationscore=6]	-.018	7.336	-.002	.998	-14.709	14.673
[Occupationscore=7]	3.000	5.800	.517	.607	-8.614	14.614
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.12 Regression models of SES, education level, income, occupation and the number of times of parental involvement in participating in parent-teacher association's meetings

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 12

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	12.636[a]	1	12.636	2.093	.153
Intercept	87.590	1	87.590	14.508	.000
SESlelvel	12.636	1	12.636	2.093	.153
Error	380.349	63	6.037		
Total	489.000	65			
Corrected Total	392.985	64			

a. R Squared = .032 (Adjusted R Squared = .017)

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 12

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	22.988[a]	4	5.747	.932	.452
Intercept	78.361	1	78.361	12.707	.001
Educationscore	22.988	4	5.747	.932	.452
Error	369.996	60	6.167		
Total	489.000	65			
Corrected Total	392.985	64			

a. R Squared = .058 (Adjusted R Squared = -.004)

Parameter Estimates

Dependent Variable: Time_Decision making 12

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.611	.410	3.934	.000	.793	2.429
[SESlelvel=1]	-.887	.613	-1.447	.153	-2.112	.338
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Time_Decision making 12

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.900	.785	2.420	.019	.329	3.471
[Educationscore=1]	-1.900	1.085	-1.751	.085	-4.070	.270
[Educationscore=2]	-.567	1.063	-.533	.596	-2.694	1.560
[Educationscore=3]	-.100	1.360	-.074	.942	-2.821	2.621
[Educationscore=4]	-.604	.919	-.657	.514	-2.443	1.235
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 12

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	43.369[a]	6	7.228	1.199	.320
Intercept	91.810	1	91.810	15.231	.000
Incomescore	43.369	6	7.228	1.199	.320
Error	349.615	58	6.028		
Total	489.000	65			
Corrected Total	392.985	64			

a. R Squared = .110 (Adjusted R Squared = .018)

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 12

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	30.333[a]	7	4.333	.681	.687
Intercept	70.162	1	70.162	11.028	.002
Occupationscore	30.333	7	4.333	.681	.687
Error	362.651	57	6.362		
Total	489.000	65			
Corrected Total	392.985	64			

a. R Squared = .077 (Adjusted R Squared = -.036)

Parameter Estimates

Dependent Variable: Time_Decision making 12

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	.200	1.098	.182	.856	-1.998	2.398
[Incomescore=1]	1.022	1.369	.746	.458	-1.719	3.763
[Incomescore=2]	4.441E-16	1.345	.000	1.000	-2.692	2.692
[Incomescore=3]	.488	1.258	.388	.700	-2.030	3.005
[Incomescore=4]	2.244	1.369	1.639	.107	-.497	4.986
[Incomescore=5]	1.800	1.400	1.286	.204	-1.002	4.602
[Incomescore=6]	1.800	1.400	1.286	.204	-1.002	4.602
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Time_Decision making 12

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.545	.761	2.032	.047	.023	3.068
[Occupationscore=1]	-.245	1.102	-.223	.825	-2.452	1.961
[Occupationscore=2]	-1.469	1.033	-1.421	.161	-3.538	.601
[Occupationscore=3]	-1.545	1.939	-.797	.429	-5.428	2.337
[Occupationscore=4]	.455	1.473	.309	.759	-2.495	3.404
[Occupationscore=5]	-.323	1.134	-.285	.777	-2.593	1.947
[Occupationscore=6]	.655	1.360	.481	.632	-2.070	3.379
[Occupationscore=7]	.091	1.076	.085	.933	-2.063	2.245
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.13 Regression models of SES, education level, income, occupation and the number of times of parental involvement in raising opinions on school policies, student affairs, etc.

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 13

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	15.452[a]	1	15.452	5.546	.022
Intercept	34.406	1	34.406	12.349	.001
SESlelvel	15.452	1	15.452	5.546	.022
Error	175.533	63	2.786		
Total	231.000	65			
Corrected Total	190.985	64			

a. R Squared = .081 (Adjusted R Squared = .066)

Parameter Estimates

Dependent Variable: Time_Decision making 13

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.222	.278	4.393	.000	.666	1.778
[SESlelvel=1]	-.981	.417	-2.355	.022	-1.813	-.149
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 13

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	24.244[a]	4	6.061	2.181	.082
Intercept	33.655	1	33.655	12.110	.001
Educationscore	24.244	4	6.061	2.181	.082
Error	166.741	60	2.779		
Total	231.000	65			
Corrected Total	190.985	64			

a. R Squared = .127 (Adjusted R Squared = .069)

Parameter Estimates

Dependent Variable: Time_Decision making 13

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.000	.527	3.794	.000	.946	3.054
[Educationscore=1]	-2.000	.728	-2.746	.008	-3.457	-.543
[Educationscore=2]	-1.667	.714	-2.335	.023	-3.094	-.239
[Educationscore=3]	-1.000	.913	-1.095	.278	-2.826	.826
[Educationscore=4]	-1.185	.617	-1.921	.060	-2.420	.049
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 13

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	33.507[a]	6	5.584	2.057	.072
Intercept	44.092	1	44.092	16.239	.000
Incomescore	33.507	6	5.584	2.057	.072
Error	157.478	58	2.715		
Total	231.000	65			
Corrected Total	190.985	64			

a. R Squared = .175 (Adjusted R Squared = .090)

Parameter Estimates

Dependent Variable: Time_Decision making 13

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	.400	.737	.543	.589	-1.075	1.875
[Incomescore=1]	.044	.919	.048	.962	-1.795	1.884
[Incomescore=2]	-.400	.903	-.443	.659	-2.207	1.407
[Incomescore=3]	-.150	.844	-.178	.860	-1.840	1.540
[Incomescore=4]	.822	.919	.895	.375	-1.018	2.662
[Incomescore=5]	1.350	.939	1.437	.156	-.530	3.230
[Incomescore=6]	1.600	.939	1.703	.094	-.280	3.480
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 13

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	26.512[a]	7	3.787	1.313	.261
Intercept	19.716	1	19.716	6.833	.011
Occupationscore	26.512	7	3.787	1.313	.261
Error	164.473	57	2.885		
Total	231.000	65			
Corrected Total	190.985	64			

a. R Squared = .139 (Adjusted R Squared = .033)

Parameter Estimates

Dependent Variable: Time_Decision making 13

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	1.455	.512	2.840	.006	.429	2.480
[Occupationscore=1]	-1.055	.742	-1.421	.161	-2.541	.432
[Occupationscore=2]	-1.455	.696	-2.090	.041	-2.848	-.061
[Occupationscore=3]	-1.455	1.306	-1.114	.270	-4.069	1.160
[Occupationscore=4]	-1.455	.992	-1.467	.148	-3.441	.532
[Occupationscore=5]	-.455	.763	-.595	.554	-1.983	1.074
[Occupationscore=6]	-.655	.916	-.714	.478	-2.489	1.180
[Occupationscore=7]	.182	.724	.251	.803	-1.269	1.632
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

2.14 Regression models of SES, education level, income, occupation and the number of times of parental involvement in helping kindergartens to formulate school policy/ set up educational goals

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 14

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.050[a]	1	.050	.803	.374
Intercept	.050	1	.050	.803	.374
SESlelvel	.050	1	.050	.803	.374
Error	3.889	63	.062		
Total	4.000	65			
Corrected Total	3.938	64			

a. R Squared = .013 (Adjusted R Squared = -.003)

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 14

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.087[a]	4	.022	.337	.852
Intercept	.011	1	.011	.167	.684
Educationscore	.087	4	.022	.337	.852
Error	3.852	60	.064		
Total	4.000	65			
Corrected Total	3.938	64			

a. R Squared = .022 (Adjusted R Squared = -.043)

Parameter Estimates

Dependent Variable: Time_Decision making 14

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	.056	.041	1.342	.185	-.027	.138
[SESlelvel=1]	-.056	.062	-.896	.374	-.179	.068
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Time_Decision making 14

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	2.776E-17	.080	.000	1.000	-.160	.160
[Educationscore=1]	-1.388E-17	.111	.000	1.000	-.221	.221
[Educationscore=2]	-2.082E-17	.108	.000	1.000	-.217	.217
[Educationscore=3]	-2.082E-17	.139	.000	1.000	-.278	.278
[Educationscore=4]	.074	.094	.790	.433	-.114	.262
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 14

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.383[a]	6	.064	1.041	.408
Intercept	.059	1	.059	.965	.330
Incomescore	.383	6	.064	1.041	.408
Error	3.556	58	.061		
Total	4.000	65			
Corrected Total	3.938	64			

a. R Squared = .097 (Adjusted R Squared = .004)

Tests of Between-Subjects Effects

Dependent Variable: Time_Decision making 14

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.738[a]	7	.105	1.879	.090
Intercept	.113	1	.113	2.007	.162
Occupationscore	.738	7	.105	1.879	.090
Error	3.200	57	.056		
Total	4.000	65			
Corrected Total	3.938	64			

a. R Squared = .188 (Adjusted R Squared = .088)

Parameter Estimates

Dependent Variable: Time_Decision making 14

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	5.829E-17	.111	.000	1.000	-.222	.222
[Incomescore=1]	-5.829E-17	.138	.000	1.000	-.276	.276
[Incomescore=2]	-5.829E-17	.136	.000	1.000	-.271	.271
[Incomescore=3]	-5.829E-17	.127	.000	1.000	-.254	.254
[Incomescore=4]	.222	.138	1.609	.113	-.054	.499
[Incomescore=5]	-5.829E-17	.141	.000	1.000	-.283	.283
[Incomescore=6]	-5.829E-17	.141	.000	1.000	-.283	.283
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Time_Decision making 14

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	-8.201E-17	.071	.000	1.000	-.143	.143
[Occupationscore=1]	8.201E-17	.104	.000	1.000	-.207	.207
[Occupationscore=2]	8.201E-17	.097	.000	1.000	-.194	.194
[Occupationscore=3]	8.201E-17	.182	.000	1.000	-.365	.365
[Occupationscore=4]	8.201E-17	.138	.000	1.000	-.277	.277
[Occupationscore=5]	8.201E-17	.106	.000	1.000	-.213	.213
[Occupationscore=6]	.400	.128	3.130	.003	.144	.656
[Occupationscore=7]	8.074E-17	.101	.000	1.000	-.202	.202
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Appendix 3 – Regression models of SES, education level, income, occupation and parents' degree of involvement in different aspects of and the overall home-school collaboration

3.1 Regression models of SES, education level, income, occupation and parents' degree of involvement in the aspect of parenting

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Parenting weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9923.408[a]	1	9923.408	33.501	.000
Intercept	244883.408	1	244883.408	826.723	.000
SESlelvel	9923.408	1	9923.408	33.501	.000
Error	18661.207	63	296.210		
Total	287200.000	65			
Corrected Total	28584.615	64			

a. R Squared = .347 (Adjusted R Squared = .337)

Parameter Estimates

Dependent Variable: Involvement_Parenting weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	74.167	2.868	25.856	.000	68.435	79.899
[SESlelvel=1]	-24.856	4.294	-5.788	.000	-33.438	-16.275
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Parenting weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	12906.147[a]	4	3226.537	12.348	.000
Intercept	181273.260	1	181273.260	693.715	.000
Educationscore	12906.147	4	3226.537	12.348	.000
Error	15678.468	60	261.308		
Total	287200.000	65			
Corrected Total	28584.615	64			

a. R Squared = .452 (Adjusted R Squared = .415)

Parameter Estimates

Dependent Variable: Involvement_Parenting weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	78.000	5.112	15.259	.000	67.775	88.225
[Educationscore=1]	-42.545	7.063	-6.024	.000	-56.674	-28.417
[Educationscore=2]	-20.500	6.921	-2.962	.004	-34.345	-6.655
[Educationscore=3]	-16.000	8.854	-1.807	.076	-33.711	1.711
[Educationscore=4]	-6.519	5.984	-1.089	.280	-18.488	5.451
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Parenting weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11884.754[a]	6	1980.792	6.879	.000
Intercept	252320.172	1	252320.172	876.329	.000
Incomescore	11884.754	6	1980.792	6.879	.000
Error	16699.861	58	287.929		
Total	287200.000	65			
Corrected Total	28584.615	64			

a. R Squared = .416 (Adjusted R Squared = .355)

Parameter Estimates

Dependent Variable: Involvement_Parenting weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	78.000	7.589	10.279	.000	62.810	93.190
[Incomescore=1]	-23.556	9.465	-2.489	.016	-42.501	-4.610
[Incomescore=2]	-37.000	9.294	-3.981	.000	-55.604	-18.396
[Incomescore=3]	-21.125	8.694	-2.430	.018	-38.527	-3.723
[Incomescore=4]	-6.889	9.465	-.728	.470	-25.834	12.056
[Incomescore=5]	3.250	9.674	.336	.738	-16.114	22.614
[Incomescore=6]	-1.750	9.674	-.181	.857	-21.114	17.614
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Parenting weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	15442.762[a]	7	2206.109	9.569	.000
Intercept	161433.801	1	161433.801	700.185	.000
Occupationscore	15442.762	7	2206.109	9.569	.000
Error	13141.853	57	230.559		
Total	287200.000	65			
Corrected Total	28584.615	64			

a. R Squared = .540 (Adjusted R Squared = .484)

Parameter Estimates

Dependent Variable: Involvement_Parenting weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	80.000	4.578	17.474	.000	70.832	89.168
[Occupationscore=1]	-14.000	6.634	-2.110	.039	-27.285	-.715
[Occupationscore=2]	-40.769	6.221	-6.554	.000	-53.226	-28.313
[Occupationscore=3]	-50.000	11.672	-4.284	.000	-73.373	-26.627
[Occupationscore=4]	-27.500	8.866	-3.102	.003	-45.253	-9.747
[Occupationscore=5]	-13.333	6.825	-1.954	.056	-27.000	.333
[Occupationscore=6]	-12.000	8.190	-1.465	.148	-28.400	4.400
[Occupationscore=7]	-3.636	6.475	-.562	.577	-16.601	9.329
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

3.2 Regression models of SES, education level, income, occupation and parents' degree of involvement in the aspect of learning at home

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Learning at home weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1416.711[a]	1	1416.711	5.513	.022
Intercept	382001.327	1	382001.327	1486.600	.000
SESlelvel	1416.711	1	1416.711	5.513	.022
Error	16188.673	63	256.963		
Total	409175.000	65			
Corrected Total	17605.385	64			

a. R Squared = .080 (Adjusted R Squared = .066)

Parameter Estimates

Dependent Variable: Involvement_Learning at home weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	81.806	2.672	30.620	.000	76.467	87.144
[SESlelvel=1]	-9.392	4.000	-2.348	.022	-17.385	-1.399
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Learning at home weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2472.838[a]	4	618.210	2.451	.056
Intercept	287835.909	1	287835.909	1141.259	.000
Educationscore	2472.838	4	618.210	2.451	.056
Error	15132.546	60	252.209		
Total	409175.000	65			
Corrected Total	17605.385	64			

a. R Squared = .140 (Adjusted R Squared = .083)

Parameter Estimates

Dependent Variable: Involvement_Learning at home weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	88.000	5.022	17.523	.000	77.954	98.046
[Educationscore=1]	-18.000	6.939	-2.594	.012	-31.880	-4.120
[Educationscore=2]	-16.750	6.800	-2.463	.017	-30.352	-3.148
[Educationscore=3]	-14.000	8.698	-1.609	.113	-31.399	3.399
[Educationscore=4]	-7.630	5.879	-1.298	.199	-19.389	4.130
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Learning at home weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2499.899[a]	6	416.650	1.600	.164
Intercept	361645.979	1	361645.979	1388.599	.000
Incomescore	2499.899	6	416.650	1.600	.164
Error	15105.486	58	260.439		
Total	409175.000	65			
Corrected Total	17605.385	64			

a. R Squared = .142 (Adjusted R Squared = .053)

Parameter Estimates

Dependent Variable: Involvement_Learning at home weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	80.000	7.217	11.085	.000	65.553	94.447
[Incomescore=1]	-10.556	9.001	-1.173	.246	-28.574	7.463
[Incomescore=2]	-8.000	8.839	-.905	.369	-25.694	9.694
[Incomescore=3]	-6.250	8.268	-.756	.453	-22.801	10.301
[Incomescore=4]	6.111	9.001	.679	.500	-11.907	24.129
[Incomescore=5]	4.375	9.200	.476	.636	-14.041	22.791
[Incomescore=6]	3.750	9.200	.408	.685	-14.666	22.166
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Learning at home weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2676.206[a]	7	382.315	1.460	.200
Intercept	268043.768	1	268043.768	1023.398	.000
Occupationscore	2676.206	7	382.315	1.460	.200
Error	14929.178	57	261.915		
Total	409175.000	65			
Corrected Total	17605.385	64			

a. R Squared = .152 (Adjusted R Squared = .048)

Parameter Estimates

Dependent Variable: Involvement_Learning at home weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	82.727	4.880	16.954	.000	72.956	92.499
[Occupationscore=1]	-6.727	7.071	-.951	.345	-20.887	7.433
[Occupationscore=2]	-15.420	6.630	-2.326	.024	-28.696	-2.143
[Occupationscore=3]	-10.227	12.441	-.822	.414	-35.139	14.685
[Occupationscore=4]	-5.227	9.449	-.553	.582	-24.149	13.695
[Occupationscore=5]	.606	7.274	.083	.934	-13.960	15.172
[Occupationscore=6]	-9.727	8.729	-1.114	.270	-27.207	7.752
[Occupationscore=7]	1.818	6.901	.263	.793	-12.000	15.637
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

3.3 Regression models of SES, education level, income, occupation and parents' degree of involvement in the aspect of communicating

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Communicating weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2454.156[a]	1	2454.156	13.475	.000
Intercept	168289.541	1	168289.541	923.998	.000
SESlelvel	2454.156	1	2454.156	13.475	.000
Error	11474.306	63	182.132		
Total	188650.000	65			
Corrected Total	13928.462	64			

a. R Squared = .176 (Adjusted R Squared = .163)

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Communicating weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4412.039[a]	4	1103.010	6.954	.000
Intercept	132090.646	1	132090.646	832.817	.000
Educationscore	4412.039	4	1103.010	6.954	.000
Error	9516.423	60	158.607		
Total	188650.000	65			
Corrected Total	13928.462	64			

a. R Squared = .317 (Adjusted R Squared = .271)

Parameter Estimates

Dependent Variable: Involvement_Communicating weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	57.361	2.249	25.502	.000	52.866	61.856
[SESlelvel=1]	-12.361	3.367	-3.671	.000	-19.090	-5.632
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Involvement_Communicating weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	63.500	3.983	15.945	.000	55.534	71.466
[Educationscore=1]	-25.773	5.503	-4.684	.000	-36.780	-14.766
[Educationscore=2]	-17.667	5.392	-3.276	.002	-28.453	-6.880
[Educationscore=3]	-5.500	6.898	-.797	.428	-19.298	8.298
[Educationscore=4]	-8.685	4.662	-1.863	.067	-18.011	.640
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Communicating weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2868.218[a]	6	478.036	2.507	.032
Intercept	164222.201	1	164222.201	861.182	.000
Incomescore	2868.218	6	478.036	2.507	.032
Error	11060.243	58	190.694		
Total	188650.000	65			
Corrected Total	13928.462	64			

a. R Squared = .206 (Adjusted R Squared = .124)

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Communicating weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3789.867[a]	7	541.410	3.044	.009
Intercept	112322.840	1	112322.840	631.488	.000
Occupationscore	3789.867	7	541.410	3.044	.009
Error	10138.595	57	177.870		
Total	188650.000	65			
Corrected Total	13928.462	64			

a. R Squared = .272 (Adjusted R Squared = .183)

Parameter Estimates

Dependent Variable: Involvement_Communicating weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	55.000	6.176	8.906	.000	42.638	67.362
[Incomescore=1]	-6.667	7.702	-.866	.390	-22.085	8.751
[Incomescore=2]	-12.500	7.564	-1.653	.104	-27.640	2.640
[Incomescore=3]	-7.813	7.075	-1.104	.274	-21.975	6.350
[Incomescore=4]	7.222	7.702	.938	.352	-8.196	22.640
[Incomescore=5]	3.125	7.872	.397	.693	-12.633	18.883
[Incomescore=6]	1.875	7.872	.238	.813	-13.883	17.633
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Involvement_Communicating weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	58.182	4.021	14.469	.000	50.130	66.234
[Occupationscore=1]	-4.182	5.827	-.718	.476	-15.851	7.487
[Occupationscore=2]	-17.797	5.464	-3.257	.002	-28.738	-6.856
[Occupationscore=3]	-28.182	10.252	-2.749	.008	-48.711	-7.652
[Occupationscore=4]	-6.932	7.787	-.890	.377	-22.525	8.661
[Occupationscore=5]	-3.737	5.994	-.623	.535	-15.741	8.266
[Occupationscore=6]	-6.182	7.193	-.859	.394	-20.586	8.223
[Occupationscore=7]	.909	5.687	.160	.874	-10.479	12.297
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

3.4 Regression models of SES, education level, income, occupation and parents' degree of involvement in the aspect of volunteering

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Volunteering weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8138.078[a]	1	8138.078	17.321	.000
Intercept	177984.232	1	177984.232	378.813	.000
SESlelvel	8138.078	1	8138.078	17.321	.000
Error	29600.383	63	469.847		
Total	226200.000	65			
Corrected Total	37738.462	64			

a. R Squared = .216 (Adjusted R Squared = .203)

Parameter Estimates

Dependent Variable: Involvement_Volunteering weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	63.889	3.613	17.685	.000	56.670	71.108
[SESlelvel=1]	-22.510	5.409	-4.162	.000	-33.318	-11.701
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Volunteering weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8974.589[a]	4	2243.647	4.680	.002
Intercept	138256.970	1	138256.970	288.397	.000
Educationscore	8974.589	4	2243.647	4.680	.002
Error	28763.872	60	479.398		
Total	226200.000	65			
Corrected Total	37738.462	64			

a. R Squared = .238 (Adjusted R Squared = .187)

Parameter Estimates

Dependent Variable: Involvement_Volunteering weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	67.000	6.924	9.677	.000	53.150	80.850
[Educationscore=1]	-36.091	9.567	-3.773	.000	-55.227	-16.955
[Educationscore=2]	-18.667	9.375	-1.991	.051	-37.419	.086
[Educationscore=3]	-7.000	11.992	-.584	.562	-30.989	16.989
[Educationscore=4]	-7.370	8.105	-.909	.367	-23.583	8.843
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Volunteering weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11070.962[a]	6	1845.160	4.013	.002
Intercept	183855.250	1	183855.250	399.873	.000
Incomescore	11070.962	6	1845.160	4.013	.002
Error	26667.500	58	459.784		
Total	226200.000	65			
Corrected Total	37738.462	64			

a. R Squared = .293 (Adjusted R Squared = .220)

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Volunteering weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	13700.280[a]	7	1957.183	4.641	.000
Intercept	119585.632	1	119585.632	283.565	.000
Occupationscore	13700.280	7	1957.183	4.641	.000
Error	24038.182	57	421.722		
Total	226200.000	65			
Corrected Total	37738.462	64			

a. R Squared = .363 (Adjusted R Squared = .285)

Parameter Estimates

Dependent Variable: Involvement_Volunteering weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	58.000	9.589	6.048	.000	38.805	77.195
[Incomescore=1]	-8.000	11.960	-.669	.506	-31.941	15.941
[Incomescore=2]	-23.000	11.745	-1.958	.055	-46.509	.509
[Incomescore=3]	-13.000	10.986	-1.183	.242	-34.991	8.991
[Incomescore=4]	2.000	11.960	.167	.868	-21.941	25.941
[Incomescore=5]	19.500	12.224	1.595	.116	-4.969	43.969
[Incomescore=6]	8.250	12.224	.675	.502	-16.219	32.719
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Parameter Estimates

Dependent Variable: Involvement_Volunteering weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	62.727	6.192	10.131	.000	50.328	75.126
[Occupationscore=1]	-3.727	8.973	-.415	.679	-21.695	14.240
[Occupationscore=2]	-32.727	8.413	-3.890	.000	-49.574	-15.881
[Occupationscore=3]	-27.727	15.786	-1.756	.084	-59.338	3.884
[Occupationscore=4]	-22.727	11.990	-1.895	.063	-46.738	1.283
[Occupationscore=5]	.606	9.230	.066	.948	-17.877	19.089
[Occupationscore=6]	-10.727	11.076	-.968	.337	-32.907	11.452
[Occupationscore=7]	7.273	8.757	.831	.410	-10.262	24.807
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

3.5 Regression models of SES, education level, income, occupation and parents' degree of involvement in the aspect of decision making

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Decision making weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11388.742[a]	1	11388.742	22.263	.000
Intercept	146773.357	1	146773.357	286.913	.000
SESlelvel	11388.742	1	11388.742	22.263	.000
Error	32228.352	63	511.561		
Total	201155.556	65			
Corrected Total	43617.094	64			

a. R Squared = .261 (Adjusted R Squared = .249)

Parameter Estimates

Dependent Variable: Involvement_Decision making weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	61.111	3.770	16.211	.000	53.578	68.644
[SESlelvel=1]	-26.628	5.644	-4.718	.000	-37.906	-15.351
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Decision making weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	14053.892[a]	4	3513.473	7.131	.000
Intercept	119613.671	1	119613.671	242.762	.000
Educationscore	14053.892	4	3513.473	7.131	.000
Error	29563.202	60	492.720		
Total	201155.556	65			
Corrected Total	43617.094	64			

a. R Squared = .322 (Adjusted R Squared = .277)

Parameter Estimates

Dependent Variable: Involvement_Decision making weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	63.333	7.019	9.023	.000	49.292	77.374
[Educationscore=1]	-42.727	9.699	-4.405	.000	-62.128	-23.327
[Educationscore=2]	-21.111	9.504	-2.221	.030	-40.123	-2.100
[Educationscore=3]	2.000	12.158	.165	.870	-22.320	26.320
[Educationscore=4]	-7.531	8.217	-.916	.363	-23.968	8.906
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Decision making weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	12899.440[a]	6	2149.907	4.059	.002
Intercept	157248.247	1	157248.247	296.911	.000
Incomescore	12899.440	6	2149.907	4.059	.002
Error	30717.654	58	529.615		
Total	201155.556	65			
Corrected Total	43617.094	64			

a. R Squared = .296 (Adjusted R Squared = .223)

Parameter Estimates

Dependent Variable: Involvement_Decision making weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	57.333	10.292	5.571	.000	36.732	77.935
[Incomescore=1]	-14.370	12.836	-1.120	.268	-40.065	11.324
[Incomescore=2]	-28.667	12.605	-2.274	.027	-53.898	-3.435
[Incomescore=3]	-18.167	11.791	-1.541	.129	-41.769	5.435
[Incomescore=4]	2.667	12.836	.208	.836	-23.028	28.361
[Incomescore=5]	13.500	13.120	1.029	.308	-12.762	39.762
[Incomescore=6]	6.000	13.120	.457	.649	-20.262	32.262
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Involvement_Decision making weighted*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	13257.453[a]	7	1893.922	3.556	.003
Intercept	96274.633	1	96274.633	180.755	.000
Occupationscore	13257.453	7	1893.922	3.556	.003
Error	30359.641	57	532.625		
Total	201155.556	65			
Corrected Total	43617.094	64			

a. R Squared = .304 (Adjusted R Squared = .218)

Parameter Estimates

Dependent Variable: Involvement_Decision making weighted*

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	60.606	6.958	8.710	.000	46.672	74.540
[Occupationscore=1]	-6.606	10.084	-.655	.515	-26.799	13.586
[Occupationscore=2]	-33.939	9.455	-3.590	.001	-52.872	-15.007
[Occupationscore=3]	-40.606	17.741	-2.289	.026	-76.131	-5.081
[Occupationscore=4]	-23.939	13.475	-1.777	.081	-50.923	3.044
[Occupationscore=5]	-5.791	10.373	-.558	.579	-26.563	14.981
[Occupationscore=6]	-7.273	12.448	-.584	.561	-32.199	17.653
[Occupationscore=7]	3.030	9.841	.308	.759	-16.676	22.736
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

3.6 Regression models of SES, education level, income, occupation and parents' degree of involvement in overall home-school collaboration

Tests of Between-Subjects Effects

Dependent Variable: Overall involvement weighted

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	147244.350[a]	1	147244.350	23.841	.000
Intercept	5420247.427	1	5420247.427	877.634	.000
SESlelvel	147244.350	1	147244.350	23.841	.000
Error	389086.590	63	6175.978		
Total	6216580.556	65			
Corrected Total	536330.940	64			

a. R Squared = .275 (Adjusted R Squared = .263)

Parameter Estimates

Dependent Variable: Overall involvement weighted

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	338.333	13.098	25.831	.000	312.159	364.507
[SESlelvel=1]	-95.747	19.609	-4.883	.000	-134.933	-56.561
[SESlelvel=2]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Overall involvement weighted

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	186164.723[a]	4	46541.181	7.975	.000
Intercept	4175440.524	1	4175440.524	715.450	.000
Educationscore	186164.723	4	46541.181	7.975	.000
Error	350166.217	60	5836.104		
Total	6216580.556	65			
Corrected Total	536330.940	64			

a. R Squared = .347 (Adjusted R Squared = .304)

Parameter Estimates

Dependent Variable: Overall involvement weighted

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	359.833	24.158	14.895	.000	311.510	408.157
[Educationscore=1]	-165.136	33.379	-4.947	.000	-231.905	-98.368
[Educationscore=2]	-94.694	32.710	-2.895	.005	-160.124	-29.264
[Educationscore=3]	-40.500	41.843	-.968	.337	-124.198	43.198
[Educationscore=4]	-37.735	28.280	-1.334	.187	-94.303	18.834
[Educationscore=5]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Overall involvement weighted

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	174980.381[a]	6	29163.397	4.681	.001
Intercept	5448756.336	1	5448756.336	874.574	.000
Incomescore	174980.381	6	29163.397	4.681	.001
Error	361350.559	58	6230.182		
Total	6216580.556	65			
Corrected Total	536330.940	64			

a. R Squared = .326 (Adjusted R Squared = .257)

Parameter Estimates

Dependent Variable: Overall involvement weighted

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	328.333	35.299	9.301	.000	257.674	398.992
[Incomescore=1]	-63.148	44.026	-1.434	.157	-151.276	24.979
[Incomescore=2]	-109.167	43.233	-2.525	.014	-195.706	-22.627
[Incomescore=3]	-66.354	40.440	-1.641	.106	-147.304	14.596
[Incomescore=4]	11.111	44.026	.252	.802	-77.016	99.239
[Incomescore=5]	43.750	44.998	.972	.335	-46.323	133.823
[Incomescore=6]	18.125	44.998	.403	.689	-71.948	108.198
[Incomescore=7]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

Tests of Between-Subjects Effects

Dependent Variable: Overall involvement weighted

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	210575.584[a]	7	30082.226	5.264	.000
Intercept	3650991.473	1	3650991.473	638.843	.000
Occupationscore	210575.584	7	30082.226	5.264	.000
Error	325755.356	57	5715.006		
Total	6216580.556	65			
Corrected Total	536330.940	64			

a. R Squared = .393 (Adjusted R Squared = .318)

Parameter Estimates

Dependent Variable: Overall involvement weighted

Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Intercept	344.242	22.794	15.103	.000	298.599	389.886
[Occupationscore=1]	-35.242	33.031	-1.067	.290	-101.386	30.901
[Occupationscore=2]	-140.653	30.970	-4.542	.000	-202.670	-78.636
[Occupationscore=3]	-156.742	58.112	-2.697	.009	-273.110	-40.374
[Occupationscore=4]	-86.326	44.140	-1.956	.055	-174.714	2.062
[Occupationscore=5]	-21.650	33.979	-.637	.527	-89.691	46.391
[Occupationscore=6]	-45.909	40.774	-1.126	.265	-127.558	35.740
[Occupationscore=7]	9.394	32.235	.291	.772	-55.155	73.943
[Occupationscore=8]	0[a]	.	.	.	.	.

a. This parameter is set to zero because it is redundant.