School Experience in Taiwan: Social Class and Gender Differences

By

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Abstract

Educational attainment has been a central debate in the field of educational research for a long time. Moreover, regarding inequality in educational attainment, social research has been dominated by questioning the association between educational attainment and gender, ethnic and social class inequalities. When considering social class inequality, one universal conclusion can be drawn: the higher family social status, the better academic attainment. This is also true in Taiwan, as is the case elsewhere. However, I want to ask: does social status influence other educational outcomes in addition to academic attainment, and if so, how? With respect to this question, I argue that beside educational attainment, students' school experiences can be considered as an important educational outcome; furthermore, it may be influenced by social status and gender.

The aim of this research is to investigate the experiences of year 8 students in Taiwan: what are their perceptions of school experiences?, and more specifically, what extent family social status and gender are associated with different students' perception of parents' educative capital and their own educational habitus, which in turn influences pupils' school experience. Indeed, this study intends to expand the relationship between social status/gender and education; moreover, to examine a dynamic structure between family social status/gender influence and personal perception.

After the process of data analysis, many meaningful findings are examined. Family socioeconomic status did not make direct impact on students' relationship with peers and teachers; and parents' educative capital did not affect educational attainment directly either. In addition, surprisingly, gender difference made no difference on all measured aspects. By holding such information, it will be possible examine the phenomenon of youth development and secondary education in Taiwan.

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This thesis is dedicated to my mother, Yue-Shiang Lu.

I hereby declare that, except where explicit attribution is made, the work presented in this thesis is entirely my own.

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Chapter 1
Introduction

1.1 Research Background

Educational research has long been dominated by questions regarding educational attainment. Moreover, inequality in educational attainment in relation to gender, ethnicity and social class is a dominant issue in the field of sociological research, with the emphasis traditionally being placed on social inequality.

In the context of Taiwan, the focus has always been on education. Since the Taiwanese not only consider educational achievement to be a mechanism for individuals to achieve upward social mobility, but also a symbol of family honour, it is not surprising that many Taiwanese studies focus on it (i.e. Wang, 2006; Hsu, 2006; Li, 2007; Kuo, 2007; Jou et al., 2009; Lin, 2009; Tzeng & Chen, 2008; Lin, 2011 and Tan, 2010). With regard to social inequality, a universal conclusion can be drawn from these recent studies, i.e. that family social status and academic attainment are positively related in Taiwan, as is the case elsewhere (Tan, 2010; Li, 2007; Lin 2011 and Tu, 2011). Thus, the higher the family's social status, the better the child's academic attainment. However, this fact raises some questions. Firstly, is educational attainment the only outcome of school education, or can school education produce other results? Moreover, what other outcomes of the educational system are influenced by social status, apart from educational attainment? If these questions are combined: does social status influence other educational outcomes in addition to academic attainment, and if so, how?

In terms of the first part of this question, I argue that, apart from educational attainment, students' school experience can be considered to be an important educational outcome, and that this may also be influenced by social status. There is evidence from psychological research that school experience can be equally important, if not more important, as educational attainment in shaping students' long-term well-being, even when they have left school (Willms, 2003; Ding & Hall, 2007; Gutman & Feinstein, 2008; Tadich et al., 2007; Finn & Voelkl, 1993; Brantlinger, 1990 and Taylor & Nelms, 2006). Since most middle-school students in Taiwan usually spend one-third of their time there, school is central to their daily lives, so that their

perception of their school experience is a crucial factor which can affect their behavioural, emotional and cognitive development. Some students enjoy their time at school, while others would not care to re-live the experience. Thus, it can be said that students have different perceptions of their experience at school. Although there is a rich psychological literature about school experience, it places less emphasis on social class differences. Therefore, this thesis seeks to draw on insights from both sociological and psychological literature to examine whether or not there are social class and gender differences in children's school experience, and if so, whether these can be explained by aspects of the cultural resources linked to different social class groups and genders.

1.1.1 Role of School Experience

As mentioned in the beginning of this chapter, the issue of educational attainment in Taiwan has attracted a great deal of attention from researchers (Wang, 2006; Hsu, 2006; Li, 2007; Kuo, 2007; Jou et al., 2009; Lin, 2009; Tzeng et al., 2008; Lin 2011 and Tan, 2010). However, attainment is not all that matters in shaping the school experience of young people. Indeed, the scope of school experience in this research is not limited to educational attainment, but covers the broad experience of schooling. Some recent Taiwanese studies demonstrate that it is not only their educational attainment which construct students' school experience, but their interaction with teachers, relationship with peers, school rules and disciplinary regimes are also particularly significant factors (Chen, 1995; Chen, 1997; Chen, 2001 and Hsa, 2006). It seems that the social relationships they encounter are also central to students' experience; therefore, it is vital to examine school experience as a holistic phenomenon rather than solely in terms of academic attainment. From this perspective, my main interest in school experience concerns both the relationship between students and peers and students and teachers, as well as the issues of students' participation in educational activities and students' educational attainment. Despite the fact that previous studies have extended the meaning of the outcome of schooling from educational attainment (a narrow scope) to school experience (a broad scope), they have only examined the views of school dropouts (Chen, 1995; Chen, 1997; Chen, 2001 and Hsa, 2006). As well as those marginalised groups in the schooling system, the views of other students (the majority) and their perception of education and related needs are also very

important. Therefore, this research seeks to investigate and explore the perception of the school experience of ordinary junior high school-level students in Taiwan within the context of social status and gender. More specifically, it asks the question: does the perception of school experience vary according to social class and gender?

1.1.2 Cultural Capital

Turning to the second question, which asks how social status influences educational outcomes, such as academic achievement and school experience, with regard to the relationship between social class and educational attainment, it is a fact that, on average, the better the family's social status, the better the child's academic attainment. There are many explanations for this phenomenon. For example, French sociologist, Pierre Bourdieu (1930-2002), provides an influential explanation in Reproduction in Education, Society and Culture (Bourdieu and Passeron, 1977), when he claims that cultural capital is a cultural resource which facilitates a harmonious interaction between pupils and the school's educational requirements during the period of schooling. He further states that, since cultural capital is inherited from the family, it is not distributed equally. In fact, it is a social asset, beyond economic factors, which creates opportunities for exclusive advantages, and this result in unequal academic achievement among children (Bourdieu, 1977a). If pupils have adequate cultural capital, which is obtained and accumulated in the home environment, they appear to have a higher potential to excel within the educational system. The cultural capital inherited by upper or middle-class children from their family background makes them more familiar with the knowledge/culture taught in schools. As a result, they exhibit more appropriate behaviour and achieve a better learning outcome than others. Since teachers also tend to favour them, these advantaged children succeed more easily in the educational system. In other words, Bourdieu uses the concept of cultural capital to explain why a family's higher social class background leads to a child's greater educational attainment. Therefore, most research of cultural capital focuses on students' cultural capital, which is inherited from the family environment in tangible forms (such as books, paintings) and invisible forms (language use, familiarity with culture taught in schools), and the centre of the debate is the relationship between students' cultural capital and educational attainment. However, in terms of cultural capital, I would like to make two arguments to distinguish my research from that of

others. Firstly, as mentioned above, Bourdieu emphasises educational achievement without addressing students' psychological development or overall school experience. Therefore, I intend to use the idea of cultural capital in this study to examine students' school experience. In doing so, I will determine whether or not similar principles apply to students' school experience, as stated in the theory of reproduction in education; furthermore, the new findings will enrich the existing research on education. Secondly, I would like to shift the argument of students' cultural capital to parents' educative capital; moreover, I would argue that parents' educative capital is parents' educational investment in their children.

I will examine the second argument in more detail. In addition to the three forms of cultural capital (objectified, embodied and institutionalised) advocated by Bourdieu (1997), Lareau and Weininger (2003) propose an alternative form of cultural capital which "stresses the micro-interactional process through which individuals comply (or fail to comply) with the evaluative standards of dominant institutions such as schools" (2003:568). More precisely, they argue that individuals engage with institutionalised standards of evaluation by the strategic use of knowledge, skills, and competence. For instance, Lareau (2003) observes that middle-class parents have the capacity to express their feelings about school issues (such as school policy), comply or negotiate with school teachers (coaches or administrators) and persuade teachers to make or change decisions in the interests of their children. This special capacity is subject to social possession, which is transmitted across generations and yields advantages or profit, and parents use this specific form of cultural capital to invest in their children's education.

As shown above, on the one hand, cultural capital appears to be the capacity to help people with a certain social origin to effectively interact with a dominant institution (such as a school); on the other hand, it also appears to be regarded as a classified taste or a kind of given cultural privilege which individuals inherit from their social background. Since parents can use this cultural capital to benefit their children's education, I call it parents' educative capital. In this case, in the field of educational research, it seems that there are two aspects of the operation of the concept of parents' educative capital: participation in cultural activities with an elite status, and

compliance with institutionalised standards, such as standards of assessment. Moreover, it is from this perspective that the concept of cultural capital is applied to this study.

Few educational research studies investigate the influence of parents on the school experience of Taiwanese junior high school-level students. A search of the pair of keywords “parents” and “junior high school” in the internet archive of the National Digital Library of Theses and Dissertations in Taiwan found that 80 studies matched this joint requirement (2012.3.6). In these studies, the relationship between school effectiveness and parents’ involvement, parents’ view of particular educational policies and the influence of parents’ involvement on educational attainment are popular issues, while the relationship between parents’ educative capital and children’s school experience has not been discussed so far. In addition, no research has adopted the notion of parents’ educative capital to examine its influence on children’s school experience. Therefore, the importance of parents is emphasised in this study; more precisely speaking, emphasis is placed on how family social status/gender affects students’ perception of the educative capital of their parents and how this perception of parents’ educative capital influences their school experience.

1.1.3 Habitus

In this study, school experience refers to the personal perception of school life with an emphasis on personal feelings. Further, I want to examine the association between social structure, such as family social status and gender difference, and personal perceptions. In other words, I want to discuss individual perceptions within the social context. Traditionally, psychology tends to emphasise the individual, while sociology tends to address the social structure. Therefore, this study needs an approach to account for the interaction between the two spheres of agent and structure.

From my perspective, this idea relates to Bourdieu’s other influential concept: habitus. In Bourdieu’s view, habitus is a system of dispositions which generates perception, appreciation and practice, and these dispositions are not only durable in that they last over time, but they are also transposable in that they are capable of becoming active within a wide variety of social activities (Bourdieu, 1990a and 1993). Moreover, habitus is not only shaped by the past, but is also continually being re-shaped by

individuals' encounters with the exterior world; therefore, habitus also seeks to link the social and individual, the objective and subjective, and agent and structure (Reay, 2004). Thus, through the concept of habitus, Bourdieu specifically tries to establish a relationship between the inner personal world and the outer social world, and attempts to examine the way in which individuals think about the world and, in return, how this world influences them. From this perspective, habitus connects individual agents and social structure; it functions as mediator when individuals interact with the social world. In the same vein, in the field of education, students' diverse previous school and family experience results in different educational habitus, which leads them to make particular decisions or adopt certain behaviour. In turn, the sequential influence of these particular decisions or behaviour would reshape students' educational habitus.

As is known, children firstly become immersed in the family environment, and this has a lasting effect on them. Thus, it is inevitable that habitus is influenced by the family environment, and the influence of gender can be understood in a similar way. In this case, habitus is classified by family environment and gender differences; furthermore, this classified habitus generates different actions. In the field of education, I label this specified habitus as 'students' educational habitus'. This is a system of educational dispositions which generates education-related values, beliefs and actions, and forms different school experiences, which in turn, reshapes pupils' educational habitus. In the light of individuals' educational habitus, this is how I assume family social status and gender influence their school experience. Within the context of my study, the concept of students' educational habitus includes their view of education, recognition of the value of the student-role, and conformity to the student-role value. Moreover, as I will discuss in chapter 2, influenced by Confucianism, the Taiwanese recognise the importance of education and emphasise the effect of diligence. In addition, the value of respect for teachers and obeying the rules is ingrained in Taiwanese students' cognition; thus, these Confucian influences are internalised, and shape the schema of Taiwanese students. Therefore, it is expected that students' perception of their own educational habitus in this sense may prove to be more important than their perception of parents' educative capital within the context of the Taiwanese education system.

1.1.4 Gender

Although Bourdieu neglects gender issues, gender difference is another issue of concern, since cultural capital and habitus are not only influenced by social class but also by gender (Reay, 1995; Dumais, 2002, and McLeod, 2005). Therefore, it is important to explore the gender dimension, together with the differences of social class, when studying school experience, since gender, cultural capital, and habitus are all likely to influence school experience. For example, working-class expressions of masculinity may include the rejection of school rules and a strong commitment to the peer group (Willis, 1977 and Frosh et al., 2002). In addition, since elderly parents in Taiwan usually depend on support from sons more than daughters, sons take advantage of this custom to obtain more educational investment from their parents (Chen, 2009). Therefore, Taiwanese boys are expected to have a more positive perception of parental support than girls.

Overall, this study intends to investigate the extent to which gender and social status are related to different students' perception of parents' educative capital and their own educational habitus, which in turn, influences their school experience.

1.2 Definition of Key Concepts

As mentioned above, the following definitions of key concepts are used in the same context:

- Family socio-economic status: Family social status refers to the family's position in society. This term involves students' report of their parents' educational qualifications and occupations, and is expected to reflect the family's economic and social position in relation to others.

- Parents' educative capital: This term refers to parents' educational investment in their children which may yield exclusive advantages and benefit the children at school. This concept involves parenting style (parents' view of parenting, particularly that which refers to cultivation and education), parents' participation in cultural activities with children (how often their parents accompany them in cultural activities, such as

visiting museums), parents' participation in children's educational activities (parents' participation in the classroom and home educational activities) and, parents' involvement in school education (in this study, involvement is positioned at an institutional level, such as parents' intervention in school policy).

• Students' educational habitus: This term refers to students' internalised disposition of education, which shapes their education-related values, beliefs and actions. Therefore, it is sensible to discuss students' educational value in order to examine the habitus which has formed these values. In addition to their general view of education, it is also vital to examine students' view of their role as a student. Habitus is also a principle which generates action, which is to say that individuals' external behaviour can reflect their internal habitus. Therefore, the subsequent aspect of pupils' educational habitus is students' willingness to conform to student-role values.

• School experience: This term comprises educational attainment and school engagement. As for educational attainment, it refers to the score of educational subjects an individual has achieved; it is inferred from the last monthly test results in Chinese, Math and English. In addition, school engagement refers to a sense of belonging at school and behavioural participation in educational activities. From this perspective, this concept mainly focuses on peer relationships, class teacher-student relationships, and pupils' participation in educational activities.

1.3 Aims and Research Questions

The purpose of this study is to understand the effect of social status and gender differences on the school experience of teenagers in Taiwan. The study is innovative in that it combines insights from psychological literature on school experience and sociological literature on social class and gender differences in education. In particular, Bourdieu's concepts of cultural capital and habitus are applied to the issue of school experience, and new measurements of these constructs are developed in order to achieve the purpose of this study. More precisely, in the context of Taiwan, the **aim** of this research is a) to probe how the school experience of male and female adolescents from different social status varies, b) to ascertain whether or not family social background and gender play significant roles in students' perception of parents'

educative capital, students' educational habitus and school experience, and c) to determine whether gender, in addition to socials status, leads to different benefits or disadvantages from students' perception of parents' educative capital and students' educational habitus in terms of school experience.

Overall, this study of school experience investigates the influence of students' perception of their parents' educative capital and their own educational habitus to understand the effect of family socio-economic status, as well as gender, in the context of Taiwan. The relationship between these factors is shown in the conceptual model of this research in Figure 1.1 below.

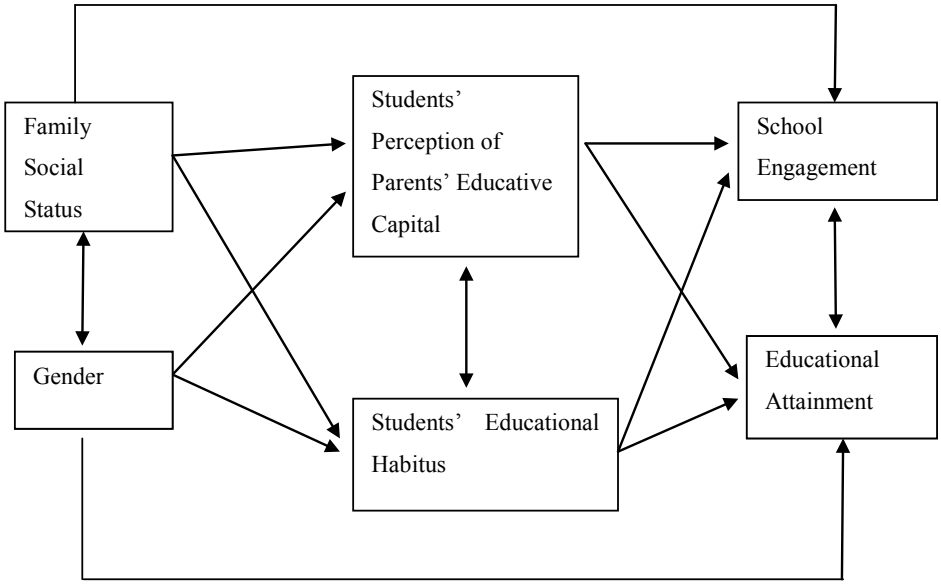


Fig. 1.1. Conceptual model of this research

This diagram shows the relationship between the key categories and concepts of the research. Students' school experience will differ according to different social status and gender. In addition, school experience can be understood to comprise educational attainment and school engagement. Moreover, the arrow between social status and gender runs in both directions, representing the interrelation of these variables: experience of class is gendered and experience of gender is classed (Reay,1995 and Dumais, 2002). Both social status and gender determine both students' perception of their parents' educative capital and their own educational habitus. In turn, the

perception of parents' educative capital and students' educational habitus interact in determining their school experience.

Setting the research questions can transform the abstract research aim into answerable questions; and it is also possible to achieve the research aim by responding to the research questions. The following research questions have been developed based on the aim of this study.

The core question of this research is:
To what extent does school experience vary by family socio-economic status /gender in Taiwan, and why?

The focus of previous Taiwanese research was limited to students' educational attainment. However, this research seeks to broaden the scope by investigating issues of educational attainment, students' participation in educational activities, peer relationships and teacher-student relationships, which are referred to as school experience. Indeed, the intention is to investigate Taiwanese junior high school students' school experience, with a special focus on the extent to which school experiences vary in terms of family socio-economic status and gender, and why. It is anticipated that, by answering this question, a valuable contribution will be made to educational and social research. Armed such information, it will be possible examine the phenomenon of youth development and secondary education in Taiwan.

The following research questions also need to be answered in the context of Taiwan:

1. **Does school experience vary according to family socio-economic status /gender?**

Since the study further intends to examine the phenomenon of youth development and secondary education within the context of Taiwan, it is vital to build a general view of students' school experience. Based on the research results, it will be possible to obtain some general features of school experience, which will not only include the differences, but also the similarities, of school experience in terms of family socio-economic status /gender.

2. **To what extent are family socio-economic status /gender linked to the difference in students' perception of parents' educative capital, students' educational habitus and school experience?**

This question lies at the heart of this research, and without it, the study could not be completed.

3. **If there are differences of social status and gender in school experience, are these mediated by differences in students' perception of parents' educative capital and their own educational habitus?**

The rationale for this question serves to extend questions 1 and 2. since the relationship between family (socio-economic status and gender) and school (school experience) is the basic assumption behind the design of this study, Bourdieu's concept of cultural capital and habitus will be adopted in attempt to explain why family socio-economic status /gender can mediate different school experiences.

4. **Following question 3, to what extent are differences in students' perception of parents' educative capital and their own educational habitus associated with their school experience?**

In addition, the following research hypotheses have been developed to be tested in line with the research questions:

Research question 1*: Does school experience vary according to family socio-economic status /gender?*

Hypotheses related to family socio-economic status:

H1). Students from families with a low socio-economic status may have a worse relationship with teachers than others. Since the 1960s, some sociologists have argued that there is a cultural gap between working-class homes and school, leading to a difficult relationship between working-class pupils and middle-class teachers (Jackson and Marsden, 1986).

H2). Students from families with a low socio-economic status may have a stronger relationship with their peers, since Willis (1977) argues that social class loyalty and positive feelings of group identity and bonds exist among working-class students.

H3). Students from families with a low socio-economic status may less actively participate in educational activities than others. It is argued that, since the educational system is dominated by middle-class interests (Reay, 2001), working-class students may not feel that they fit in with the school curriculum, and thus, are expected to participate less.

Hypotheses relating to gender:

H4). Boys may have a worse educational attainment than girls, following the observation of increased educational attainment among girls (Arnot, 2002 and Schoon, 2010).

H5). Boys may have a worse relationship with teachers than girls. For example, Ding and Hall (2007) suggest that male students reported a lower degree of teacher care than female students.

H6). Since males have a more negative attitude toward school (Van Houtte, 2004 and Ding & Hall, 2007), they may less actively participate in educational activities than female students.

Research question 2: *To what extent are family socio-economic status /gender linked to the difference in students' perception of parents' educative capital, students' educational habitus and school experience?*

Hypotheses related to family socio-economic status:

H7). International research has shown a higher level of cultural capital among parents of a higher social class (Lareau, 2003; Gillies, 2005 and Harris et al., 2009). I hypothesise that this is also true in Taiwan.

H8). Educational expectations have been shown to be constrained by the socio-economic resources available to the family (Schoon, 2010). Therefore, students from families with a low socio-economic status are expected to have a less positive educational habitus.

H9). Students from families with a low socio-economic status may also have a less positive school experience.

Hypotheses relating to gender:

H10). Since sons are expected to obtain more educational investment from their parents (Chen, 2009), boys may more perceive parents' educational investment than girls.

H11). Schoon (2010) points out that girls are more ambitious in terms of their attitude toward education than boys, and this may suggest that boys have a less positive educational habitus than girls.

H12). Boys have a less positive school experience than girls.

A hypothesis relating to both family socio-economic status and gender:

H13) In Taiwan, the value of gender equity is gradually being accepted, while the gap between rich and poor is widening (Shiang, 2007). Therefore, the difference in school experience will be determined more strongly by social status than by gender in the Taiwanese context.

Research question 3: *If there are social status and gender differences in school experience, are these mediated by differences in students' perception of parents' educative capital and their own educational habitus?*

Following the previous hypotheses, there are some hypotheses of this question in the same context:

H14). Family socio-economic status is associated with school experience.

H15). Gender is associated with school experience.

H16) Differences in family socio-economic status and school experience can be mediated by differences in the students' perception of parents' educative capital and students' educational habitus.

H17). Gender differences in school experience can be mediated by differences in the students' perception of parents' educative capital and students' educational habitus.

Research question 4: Following question 3, *to what extent are differences in students' perception of parents' educative capital and their own educational habitus associated with their school experience?*

H18) Traditional cultural beliefs, such as Confucianism, have a substantial influence on Taiwanese educational values. Moreover, since Taiwanese students are immersed in these traditional educational values all their lives, the effect of family socio-economic status and gender on school experience will be mediated more strongly by students' educational habitus than by their perception of parents' educative capital.

1.4 Thesis Outline

This study of school experience seeks to investigate the influence of the perception of parents' educative capital and students' educational habitus, in order to explore the effect of family socio-economic status, as well as gender, in the context of Taiwan. The thesis consists of nine chapters, an outline of which is presented below. The assumptions underlying the research questions and hypotheses are outlined in more detail in chapters 2 and 4.

• Chapter 1. Introduction

This chapter will introduce the research, including the research background, research aims and research questions.

• Chapter 2. The State Junior High School Education System in Taiwan

Since this research intends to examine the school experience of State junior high school students in Taiwan, a brief introduction to the Taiwanese junior high school educational system will be provided in this chapter.

• Chapter 3. School Experience

This chapter will examine the concept of school experience. I will argue that the outcome of schooling should not be limited to educational attainment. In other words, school experience should be seen to be an outcome of schooling in its own right. In this study, school experience not only refers to students' academic achievement, but also their level of engagement with school life.

• Chapter 4. An Integrated Approach: Application of Parents' Educative Capital and Students' Educational Habitus

This chapter will discuss the concept of parents' educative capital and students' educational habitus to guide the study. I will argue that parents' educative capital is an educational investment which parents make on behalf of their children. In addition, I will suggest that the concept of educational habitus refers to the internalised disposition of education, and that both of these concepts are capable of mediating between social status and school experience. This perspective enables us to investigate students' personal feelings about their school experience under the influence of social structural factors, such as family background and gender.

• Chapter 5. Methodology

This chapter will describe the questionnaire design, sample, data collection, and methods of data analysis.

• Chapter 6. Results I: Exploration of Data

This chapter will test the validity and reliability of the questionnaire. After conducting an exploratory factor analysis, a new factorial structure of the data will be obtained.

• Chapter 7. Results II: Different School Experience in Terms of Social Status and Gender

This chapter will illustrate the results of the data analysis to answer questions about the features of students' school experience and whether the family's socio-economic status /gender difference are linked to different perceptions of parents' educative capital, students' educational habitus and school experience. I will conclude that, overall, students have a positive perception of their school experience, moreover, pupils from families with a higher social status have a more positive perception than those from families with a lower social status. However, gender makes no significant difference to students' perception in all measured aspects; that is, pupils' perception of all the measured aspects only varies by family social status.

• Chapter 8. Results III: How Does Social Status Affect School Experience?

This chapter will address the extent to which social status is associated with the perception of parents' educative capital, students' educational habitus and students'

school experience. I will conclude that family social status and all the aspects measured are positively connected, and that family social status particularly has the strongest direct positive association with educational attainment. Furthermore, this association can be more strongly mediated by the difference in students' educational habitus than by their perception of parents' educative capital in the Taiwanese context.

• Chapter 9. Conclusion

This chapter will present my findings and provide some recommendations for future research in this field.

Chapter 2
The State Junior High School Education System in Taiwan

As this research intends to examine the school experiences of the State junior high school students in Taiwan, a brief introduction to the Taiwanese junior high school education system is necessary. In this regard, three issues are highlighted: 1) the structure of the State junior high school education system, 2) the particular characteristics of the State junior high school education, and 3) the psychological characteristics of the Taiwanese (Chinese- orientation) students.

2.1 The Structure of The State Junior High School Education System

2.1.1The System

Junior high school education is a part of compulsory education which includes Grade 1-9 in Taiwan. After completion of six years of primary school education (Grade1-6, 7-12 years old), pupils have the choice to study in State junior high schools which are located in their home districts without any entrance examination. In contrast to this only a few students will take entrance examinations for entrance into private schools. In the academic year 2009-2010, the numbers of state and private junior high schools were 723 and 17 respectively (The Ministry of Education, 2010). On completion of three years (Grade 7-9, 13-15 years old), in the third and final year students are required to take an entrance examination called the Core Competence Testing (CCT) which facilitates the transition to secondary education. Although most students (97.63%) are able to enter secondary education (The Ministry of Education, 2010), it is more difficult to study at prestigious senior high schools. Indeed, at the secondary education stage, there are two kinds of school: academic- orientation (senior high schools, 335 schools) and vocational- orientation schools (senior vocational schools, 156 schools). However, the most prestigious senior high schools are academic-orientated schools, particularly, for State senior high schools (190 schools, 39%). Studying in excellent senior high schools is considered an honourable affair by not only parents but also by teachers and society in general because it also opens opportunities to attend prestigious universities and obtain wealth and high social

position (Huang, 2003). Thus, the reputation of the State junior high schools is determined by the number of students who obtain higher scores at this CCT entrance examination and continue to study in senior high schools. Accordingly, the challenge and priority for these schools, is how to increase the rate of admission of senior high schools.

2.1.2 The Curriculum

In 1996, the Educational Reform Act was introduced in Taiwan, and it set four goals. These included: modernising educational process and ends, meeting individual as well as societal needs, establishing a lifelong learning society and promoting an extensive and innovative educational system. Since that time, a series of educational changes were introduced which included deregulation of governmental control over education, exemption of education from necessary constraints, promotion and safeguard of the students' learning rights, respect for the teachers' professional autonomy amongst others etc. In comparison with the past, it appeared that the Taiwanese central government was trying to empower local government through decentralisation and devolving more authority to govern local schools in their districts. In their turn, local schools were given more freedom to determine how they 'educated' pupils. However, the central government through the Ministry of Education, (MoE) retained overall control over decisions relating to national education aims, and national curriculum guidelines, and accordingly, every education activity in both private and public school sought to be administered under these guidelines and government supervision. For example in Grades 1-9 this included the curriculum, and the eight subjects approved by the MoE for the junior high school are: Mandarin, English, Mathematics, Science and Technology, Social Science, Health and Physical Education, Arts and Humanities, and Integrative Activities, which includes home economics, counselling program and outdoor activity. In addition to specifying subjects, the hours allocated to each subject are also specified by the MoE, so for instance, because the first five subjects are part of the subjects examined under the CCT, these subjects must have the most time allocated to them and the last three subjects are regarded as subordinate.

2.1.3 School Life

Taiwanese students can expect to be in school for about 40 weeks a year and utilise about 50% of their time in school towards academically oriented activities. For junior high school students, the school day starts at 7:30am and finishes at 4:05pm. Students generally have seven lessons a day; with each lesson lasting approximately 45 minutes. In between classes some time is given to students to take a break in the playground for 10 minutes. However, under delegation from local government, most junior high schools add one more lesson from 4:15 pm to 5:00 pm because of high pressure of entrance competition. In addition, every school has a school trip and a school festival once a year, respectively.

There is an assumption in the schools that generally, students' learn most efficiently in the morning, and therefore morning hours are generally allocated towards the learning of the more "test-orientation" subjects, such as Mandarin, Math and English. A regular school day also allocates time for the students to take lunch break, an afternoon nap and clean up time which includes cleaning the campus and the classroom area. State regulations require that class teachers always accompany and supervise students during school hours. This means that consequently, class teachers and students spend a lot of time interacting within the school environment and therefore, these relationships between peers, students and class teachers tend to influence the entire learning experience of the student. The students' experience of school life is one that is meaningful and important. A typical daily timetable is illustrated below in Table 2.1.

Table 2.1 A typical daily timetable of a State junior high school

am7:30-7:45	7:45-8:10	8:10-8:25	8:25-9:10	9:20-10:05	10:15-11:00	11:10-11:55
Cleaning Time	Self-Study	Morning Rally	Lesson 1	Lesson 2	Lesson 3	Lesson 4
11:55-pm12:40	12:40-13:20	13:25-14:10	14:20-15:05	15:05-15:20	15:20-16:05	16:15-17:00
Lunch Time	Afternoon Nap	Lesson 5	Lesson 6	Cleaning Time	Lesson 7	Lesson 8

2.1.4 The Role of Teacher

The Chinese tradition of teaching and learning has always honoured educators. This custom is shown in an old saying written in the ancient classic "Xun Zi" (Wang, 2009), the heaven, the earth, the rulers, the parents and the teachers. In this case, the position of teachers is lifted to the one of five most important relationships. It clearly shows, for Chinese traditional value, how much Chinese people respect teachers.

Furthermore, there is another old Chinese saying, a teacher in one day, is a father all the life (Han, 2008) which elevates the role of teachers to parents and this implies and expresses the special values and respect that are assigned to teachers as role models, educators and care givers and as a result, the relationship between teachers and their pupils in Taiwan is especially significant and influential.

Indeed, this traditional custom is based on the view that a teacher can inspire and make it possible for a child to become anything he or she desires and therefore the teaching/learning process at school is the most important channel for a child to become successful (Lee, 1996). Consequently, teachers are viewed with the utmost reverence and respect. For students, the teacher is more than an academic tutor. Moreover, sometimes teachers fall into playing the role of "parent" for their students and not surprisingly, teachers become "temporary parents" as they show concern about their pupils' clothing, health, the child's daily life at home, and especially his or her potential for success in the future. What is more, although both Chinese and Western teachers feel that they have to promote academic development, Chinese teachers believe that they are also responsible for 'cultivating students' and promoting development in non-academic areas (Rao and Chan, 2009). For Taiwanese, high social status and a strong commitment to teaching and to involvement in their students' overall developments are significant features of being teachers (Huang, 2003).

2.1.5 Parent's Influence

Without doubt, parents play a critical role in the education of their children. In particular, Asian parents hold high expectations and are involved in their children's education (Li, 2009). On the one hand, parents are strongly influenced by traditional

cultural values which emphasise education and striving for academic success, on the other hand, they are also motivated by their personal love and concern to see the success in the personal life and professional career of their children. The traditional reverence for scholarship, coupled with the Taiwanese centuries-old tradition of a scholar's aspiration through competition for academic success in the imperial examination system, is equated with a family's success and pride, so consequently, parents emphasize from early on in a child's life the importance of education and also the necessity to honour one's ancestors and family name by exhibiting good behaviour and acquiring proper study habits (Lee, 1996 and Smith, 1997). However, it is necessary to point out that, compare to academic education, Taiwanese parents do not value vocation education. Moreover, Taiwanese parents, whether wealthy or poor, stress the importance of education on not only learning literacy and numeracy skills but also becoming knowledgeable about the world, able to function well in social relations, and most important of all, morally cultivated (Cheng, 1996). Therefore, a high degree of parental involvement in and commitment to the education of children are held by parents.

With regard to participation in school activities, parents are encouraged by the system to visit schools, meet with teachers, and attend sporting and cultural activities in which their children participate. However, students report that their parents paid more attention to achievement-oriented activities and school work than their social and cultural activities (Xu, 2005). Usually, parent-teacher conferences are rare (twice a year); however, teachers often discuss issues on an ongoing basis with parents whose children have behavioural problems or are not achieving at the expected level. In addition, parents and teachers are also required to sign off their children's homework and record of daily behaviour in their learning journals or diaries on a daily basis. This is based on the view that it is important for both teachers and parents, to keep abreast of the learning and this also acts as a bridge between schools and families.

Needless to say, Taiwanese parents are required to make some sacrifices in order that they can support their children appropriately when they are at the junior high school level, and the motivation for this comes from the child's success as well as the family glory which they hope will come in the future as a result. However, it has been seen that the expectations of parents with regard to the education achievement and success

of children has acted as concomitantly, both a pressure and basis of encouragement for the student.

2.1.6 Peer Relationships

In the school system, every class has a class leader who is elected by student peers and, has the responsibility to maintain classroom order in the absence of the teacher and assist with basic administrative tasks. In addition to this, some students, are designated roles such as subject-teachers' helpers and class cadres, and other positions of leadership and responsibility. This situation contributes to fostering leadership and responsibility in the students and, these students learn how to become team leaders in this microcosmic societal setting. This has the effect of creating a hierarchy in the pupils' relationship with each other. Therefore, it offers us another angle to examine the interactions between students.

Having examined the structure of the State junior high school system in Taiwan, the next section highlights some of the most important influences and distinguishing characteristics. This is done with the aim to illustrate the cultural context of Taiwan education.

2.2 Two Main Philosophical Underpinnings of the State Junior High School Education Are As Follows: Confucianism and Credentialism

2.2.1 The Influence of Confucianism

Confucius believed and emphasised that fundamental to learning at any level were the values of discipline and respect and these values permeate the current education system. The legacy of Confucius remains with the people of Taiwan even today. As Smith (1997) points out that the educational institutions such as the MoE, although not explicitly stating that Confucianism is a major part of the curriculum, in fact tries to model and temper Taiwanese society along the sage's moral and ethical teachings. In this case, children are encouraged to have a respect for learning and for their teachers, in other words, "To show respect to teachers and value the truth from teachers' teaching is a basic principle to be a student" (Wang, 2009). Moreover, it can be

believed that respect is a kind of attitude that Chinese ideal learners express toward knowledge and teachers. However, respect does not mean blind obedience and acceptance of what is taught but rather personal receptivity and sincerity toward teachers (Li, 2009). The attitude of respect will reflect on students' behaviour. Consequently severe problems of discipline, vandalism, and violence are not usually apparent in Taiwanese schools. Indeed, good behaviour is expected and not rewarded. Furthermore, traditional authority can be explicitly seen in the pattern of teaching and the format of classroom. For instance, the organisation of the classroom is very formal and desks are arranged row by row and pupils are asked to keep their desks in order. This classroom arrangement implies the authoritarian position of the teacher and consequently teachers must be obeyed unquestioningly. However, it does not mean that Taiwanese students are passive learners; rather they take a different approach to learning. That is to say, Taiwanese students are influenced by humility, a kind of the traditional value; they believe that humility ensures better learning (Li, 2003 and 2009). Like Confucius said "If you know a thing, say that you know; and if you do not, admit that you do not, that is knowledge" (Analects II. 17). For junior high school students, they believe that they enrich their knowledge from their teachers' teaching; moreover, they should question only after they have understood all (Li, 2003). Respect and humility go hand in hand. Therefore, because of their belief in humility, children are encouraged to respect knowledge and teachers; this behavioural tendency is often taken as a sign of obedience though.

Another feature which is apparent today which is the result of the influence of Confucius is the attitude of diligence (Wen, 1992 and Li, 2006). In a survey, when parents were asked, "What is the most important factor in determining a child's performance in school?", parents gave the highest rating to "effort" (Wen, 1992). Parents and pupils also, were more likely to believe that if students did not do well in class or in an examination, it was mainly due to the behaviour of the students such as either laziness or a failure to try hard enough. Parents seldom blamed their academic failure on the quality of teaching or school's learning environment.

Finally, one more essential feature influenced by Confucius is that the pedagogical process can only be accomplished by ongoing practice and repetition. Memorizing is usually seen as a bad approach to learning for Western educators; however, for

Chinese students, memorization is a way to become familiar with the text, and then, to understand, reflect and question the text. It is the basic component of learning. It is worth mentioning here that memorization is seen as a significant part of learning in the Confucian tradition and is for deeper understanding (Lee, 1996). Additionally, in Analects II. 15 “Seeing knowledge without thinking is labour lost, thinking without seeking knowledge is perilous”. This is to say that learning and thought must be combined. If students just learn without thinking, inspecting and examining, the knowledge which they learned is useless. Moreover, as personal experience is limited, if students just think without learning, it is easy to be mired in difficulties. In addition, Confucius also said “If a man keeps cherishing his old knowledge, so as continually to be acquiring new, he may be a teacher of others" (Analects II. 11). All of these words clearly show us that thinking and practicing repetitively are very important for learning. Accordingly, ongoing practice and repetition and “teacher say-student listen” are the dominant pedagogical styles (Wen, 1992). Furthermore, although new instructional models are being used, such as the cooperative learning method and group activities, they are considered complementary approaches. Traditional teaching is still the dominant method because it is considered an efficient method of instruction for systematically transmitting a large amount of knowledge to students in a short time (Salili, Zhou and Hoosain, 2003).

Since Confucianism is seen as orthodoxy in Chinese society, going back more than two thousand years, it permeates every level of Chinese life. Indeed, the common set of values and beliefs about education that have been transmitted through the generations, and these beliefs and values as they relate to education influence students who have been exposed to them. As mentioned above, the role of teachers, the relationship between students, teachers and parents also carry implicit influences of Confucianism.

We turn now to a brief examination in the next section of the second distinguishing feature of the junior school system which is credentialism.

2.2.2 The Sequel of Credentialism

Competition and examination are very important features of the educational system in Taiwan. Generally speaking, passing the entrance examination to obtain places in senior high schools is the most important chance for students to have an opportunity to become successful in society. On this basis parents and teachers alike are all aware of the need for pupils in the junior high school to study diligently and succeed in the CCT examinations.

In the past, primary and secondary education students in Taiwan were required to use only the textbooks published by the National Institute for Compilation and Translation (NICT) and students could generally expect do well in the senior high school entrance exams through memorisation of the contents of the textbooks (MoE, 2008). In other words, in this way, the purpose of teaching and learning was focussed and limited to the preparation for the senior high school entrance examinations, and "memory" was thus the most important ability which students be trained and developed in the classroom. It is not surprising therefore that this kind of school education assumed that the achievement of learning ought to be assessed by testing the amount of knowledge memorised, i.e. how much children could reproduce or repeat from memory (Wen, 1992).

However, more recently, there has been an increasing criticism of the examination system for two reasons:

a) the first, that it causes undue stress on both the mental and physical well-being of teenagers, and
b) the second, that the goal of curriculum and the pedagogy of the middle school teachers are directed towards only one objective- which is "pushing as many children as possible through the narrow gate" that will allow them to matriculate to an academic high school and then go on to a good college or university.

The criticism highlights the fact that the personal development of the child, e.g., the establishment of a value system, autonomous capacity and disposition etc., are as a consequence, neglected in the current school education (Smith, 1997). Particularly, critics argue, 'soft' subjects are ignored such as Health and Physical Education, Arts

and Humanities which are important aspects of the students' development process. Although these subjects are not tested in the examination, they are essential to develop students' integrative personality and appreciating ability.

In response to this criticism and in order to correct the imbalance, the MoE implemented "the One Standard, Multiple Textbooks Policy" in 1999. The "Multiple Textbook" policy meant that the textbook market was no longer monopolized by the NICT, and schools could now organise an autonomous committee of teachers to select the appropriate textbooks to be used by the students in their schools. The "One standard" policy meant that the MoE allowed students to take the CCT that could test their academic ability and level and this was done by asking students comprehensive general questions which were set according to the MoE's standards (MoE, 2008). This would enable, for the MoE, to reduce the pressure from public opinions and it also meant that, for pupils, it can relieve studying stress. However, unfortunately the great demand for high school education and the competitive process seemed to work against any liberalization of educational reform and the pressure of competition and examination has not been moderated by this policy. That is to say, despite modernization of education in Taiwan, traditional values continue to have great influence on education. At the societal and school levels, they have shaped the nature, goals, and the content of education. At the individual level, they have influenced the attitudes of parents, teachers and students toward learning. Moreover, it is also reflected in meanings that students have for achievement and the strategies they use in learning, as well as teacher-students interactions (Salili et al., 2003).

Having examined the cultural context of Taiwan education, I now turn to the next section which highlights some of distinguishing psychological characteristics of the Taiwan learners which are Chinese- orientation in order to have the preliminary understanding of psychology of learning of Taiwan learners.

With regard to Taiwan learners, it refers to Chinese learners as they share the same culture, particularly Confucian-heritage culture, indeed, they are influenced by Confucian values that emphasize academic achievement, diligence in academic pursuits, the belief that all children regardless of innate ability can do well through the exertion of effort, and the significance of education for personal improvement and

moral self-cultivation (Biggs & Watkins, 1996; Lee, 1996; Li, 2003 and Gieve & Clark, 2005). Although there are many traditional educational values, it can be concluded two significant characteristics: effort and strong commitment to education.

2.3 The Psychological Characteristics of the Chinese Learners: Effort and Strong Commitment to Education

2.3.1 Effort

To the Confucianist, education and learning are always associated with effort (Lee, 1996).

> "If another man succeeds by one effort, he will use a hundred efforts. If another man succeeds by ten efforts, he will use a thousand. Let a man proceed in this way, and, though dull, he will surely become intelligent; though weak, he will surely become strong" (The *Mean*, XX.20-21)

It is clear to tell that, with a traditional view, effort constituted the art of study, and paying effort manifested the quality of the human. Furthermore, for Chinese students, parents and teachers, intelligence differences do not restrain one's educability, but the incentive and attitude to learn does (Lee, 1996 and Li, 2003). Similarly, Li and Wang (2004) also point out that Chinese children do not start out focusing on the idea of intelligence or ability; hence the theory of intelligence is not central, and could possibly be quite irrelevant to Chinese children's learning beliefs. In support of Li and Wang's opinion, Ran and Chan (2009) state that Chinese students believe that effort is more important for success than ability, and that ability itself can be improved by working hard; whereas Western psychologists tend to consider effort and ability attributions to be at odds with each other. This makes an assumption that, for Chinese students, it is effort rather than innate ability which yields rewards in schooling.

There is a stereotype: Chinese learners are passive, respect authority, are less creative and extrinsically motivated. However, this is not how Chinese learners describe what they see themselves as a good learner. For Chinese learners, they believe that learning is a long process that requires extensive personal effort, and that memorization and repetition are two concrete ways of making such effort. During the learning process, five virtues emerge: resolve, diligence, endurance of hardship, perseverance and

identified concentration (Li, 2009). That is, to believe that these five learning virtues form a coherent whole in the concept of effort. Furthermore, not only students themselves but also parents and teachers consider that it is "effort" which makes different learning results, just like I mention above. Moreover, effort is held as highly positive disposition and an internal quality of the learner that all students are believed not only to be able to acquire, but they also ought to acquire (Li, 2006). Therefore, effort is actively fostered by parents, teachers and students themselves.

2.3.2 Strong Commitment to Education

Asian students are not only diligent, but they also have high achievement motivation; invariably they have a high regard for education (Ho, 1986). In other words, Chinese students have strong commitment to education. The constructs of individualism and collectivism have been used to contrast the behaviours of individuals from Chinese collectivist cultures and those from Western individualist societies. For the Chinese, collectivist cultures emphasize group goals and connectedness and ways of behaviour that promote harmony among in-group members by helping each other, thus, Chinese students want to do well to please their families as well as themselves (Yu, 1996; Lee, 1996; Salili et al., 2003 and Rao & Chan, 2009).

Furthermore, education is conceived as important from both internal and external perspectives. Internally, education is important for personal development, and associated with it is the notion of human perfectibility, which is believed to be achievable by everyone. Externally, education is important for social mobility, and the occupational system values education as appropriate preparation. In addition, education is also believed to be achievable by whosoever aims to do so. With a traditional Confucian view, everyone is educable without class or ability distinction. The concept that everyone is educable, and everyone is perfectible forms the basic optimism and dynamism towards education in the Confucian tradition. Therefore, this explains why education is viewed to be so significant in such a tradition.

This chapter has provided a brief introduction of the context of Taiwan State junior high school system. Under the cultural influences, high education expectation, high academic competition, firm teacher-student relationships and competitive-cooperative

peer relationships, these special features play important roles in pupils' school life. In addition, they offer us different aspects to look at Taiwan students' school experiences. This background information is important to put the results reported in subsequent chapters in context, especially those results which may seem surprising from a Western perspective.

2.4 Conclusion

In the first section of this chapter, I presented a brief but essential introduction of Taiwanese junior high school educational system, so as to give people a preliminary knowledge of education scenes where Taiwanese students are located. In the second section, I examined not only the philosophical underpinnings of Taiwanese education, namely, Confucianism and Credentialism but also the particular psychological characteristics, namely, effort and strong commitment to education, of the Chinese students. Research had told us Confucian ethics have permeated through Chinese people from a man's intrinsic value to overt behavior (Ji, 2007, Li, 2011 and Li, 2012). In other words, Confucian ethics have become a kind of cultural gene. From this perspective I think there is a similar character between Confucian ethics and habitus (see 4.3.2): both of them are a long-lasting schemes of perception, conception and action. This is also why Confucianism and habitus can be incorporated into my research. Although Confucian ideology could not be empirically tested, Chinese people was indeed affected by it. Moreover, education is very closely related to Taiwanese people. The Confucian philosophy underpins the whole educational context that Taiwanese students face, and also their responses to it.

Chapter 3
School Experience

This chapter examines the concept of school experience, which is the central topic of this study. It will be argued that school experience can be understood to comprise students' engagement with school (their relationships with peers, class teacher, and participation in school activities), and their academic attainment. Then, these specific aspects of school experience are discussed within the Taiwanese school context. Finally, the focus of the present study on the experience of students in Grade 8 is explained and the importance of school experience is discussed in the light of its wider implications.

3.1 The Concept of School Experience

School experience is a broad and abstract concept, which varies in the extent to which the research addresses students' experience in relation to school (Thiessen, 2007). It can comprise any experience which is related to school, such as experience of the curriculum, experience of the school environment, experience of assessment, etc. Therefore, it is impossible and problematic to provide a universal definition of school experience. However, it is necessary to clearly state the nature of school experience in empirical research, as researchers studying school engagement have done, by dividing it into two or three components (Finn, 1989; Fullarton, 2002; Willms, 2003; Fredricks et al., 2004 and Jimerson et al., 2003). In addition, Thiessen (2007: 9-10) points out that four themes are prevalent in research which emphasises students' life at school, namely, how students relate to and interact with other students and with their teachers in different contexts inside and outside the classroom; what students do during the course of the day at school; what qualities or characteristics students do and do not value in schools; and how students react during changes or transition from one school to another. The first two themes will be addressed in this present study, with a focus on the social integration or feelings of belonging of students in the school context. Since class teacher and peers are *significant others* for Taiwanese students (see chapter 2), how they feel about their connection with the class teacher and their peers in school is worth investigating in the Taiwanese context; additionally, what students do at school,

where they spend most of their day is also worth exploring. Moreover, I suggest that students' perception of their school experience should be considered as an outcome of schooling; indeed, it is an integrated outcome which reflects students' academic, social, and psychological development. Therefore, my approach expands the current views of school outcomes, which tend to focus only on academic achievement.

3.1.1 School Experience and School Engagement

I suggest that the notion of school experience as I use it overlaps with the concept of school engagement to a great degree in this study. In terms of school engagement, most researchers agree that students' engagement with their school has a number of facets (Finn, 1989; Fullarton, 2002; Willms, 2003; Fredricks et al., 2004 and Jimerson et al., 2003). Three classifications are commonly accepted in studies related to school engagement, the first of which is addressed by Fredricks et al (2004:60), who believe that engagement consists of a behavioural component (involvement in academic, social and extra-curricular activities), an emotional component (affective reaction with class teacher, classmates, and school), and a cognitive component (investment to exert the effort to understand complex problems and master skills), and that these three components intersect. Secondly, school engagement is also classified into three dimensions: a) an affective dimension, which includes students' feelings about school, peers, and teachers, b) a behavioural dimension, which includes students' observable actions, and c) a cognitive dimension, which includes students' perceptions and beliefs related to self, school, teachers and classmates (Jimerson et al., 2003). In the light of these two classifications, both authors state that school engagement has three dimensions, namely, affective, behavioural and cognitive; moreover, they share a similar view about the notion of affective and behavioural dimensions, although their definition of the cognitive dimension is different. Furthermore, another approach outlined by Finn (1989) defines engagement in school "as having both a behavioural component termed participation and an emotional component termed identification". In this context, participation is the extent to which a youngster regularly participates in classroom and school activities at the most basic level, such as attending school and classes, paying attention to teachers, and taking part in curricular activities. Identification occurs when students internalise the feeling that they "belong" at school, that they are a conspicuous part of the school environment, and the school is an

important aspect of their own experience (Finn & Voelkl, 1993:249-250). Therefore, this classification defines student engagement in both behavioural and psychological terms, although it does not include the cognitive dimension. Acknowledging Finn's view, in his OECD report, Willms (2003:8) considers school engagement in terms of a sense of belonging and participation. Its definition usually comprises "a psychological component pertaining to students' sense of belonging at school and acceptance of school values, and a behavioural component pertaining to participation in school activities". On this basis, the emotional and behavioural components are found in all the key definitions. Therefore, it can be believed that school engagement involves students' psychological and behavioural dimensions. Following the view expressed by Finn (1989), Finn & Voelkl (1993) and Willms (2003), I consider that school engagement comprises affective and behavioural dimensions, and this notion of school engagement is compatible with my idea of school experience. They both look at two aspects of students' perception of school: the **affective dimension**, which includes students' perception of peer and class teacher relationships and the **behavioural dimension**, which indicates that students regularly participate in educational activities which take place in the classroom and at school. The aforementioned passage clearly illustrates that, to a great degree, the notions of school experience and school engagement overlap in this study.

Moreover, as far as students' school experience is concerned, the particular issue of students' academic achievement has come to occupy a leading position, since students' academic achievement is usually measured in a numerical form; in other words, it is measurable and comparable. Indeed, in this aspect, educational attainment is less abstract and more accessible than other educational outcomes. However, an excessive focus on academic achievement results in neglecting other important aspects of education, such as the ability to get along with other people (Newmann, 1992; Fullarton, 2002 and Campbell et al., 2009). The purpose of school education is not limited to the transmission of knowledge; rather, it is about the harmonious development of all human faculties. According to Kant, "the end of education is to develop, in each individual, all the perfection of which he is capable" (cited from Durkheim, 1956:62). Therefore, educational outcomes should be considered in a broad sense in order to designate the totality of the influences of education. Following this belief, the aim of this study is not to focus only on academic performance but, more

importantly, on qualities such as social skills and active learning. It is also considered that the promotion of students' experience should benefit their quality of life, which is more fundamental than academic performance.

For the above-mentioned reasons and in response to Finn and Voelkl (1993) and Willms (2003), the concept of school experience in this research is composed of school engagement and educational attainment. The whole concept of school experience is presented in Figure 3.1, from which it can be seen that the conceptualisation of school experience comprises both academic attainment and school engagement in the school context. In turn, students' engagement has three components, the first of which is how they participate in school. The second is how they relate to and interact with their peers, and the third is how they relate to and interact with their class teacher. Thus, students' perception of school experience is conceptualised by their view of these two specific themes. This perception or feeling is derived from what they have experienced in school. Therefore, my argument is that the notion of school experience comprises students' participation in school, their relationship with their peers and class teacher, and their academic achievement.

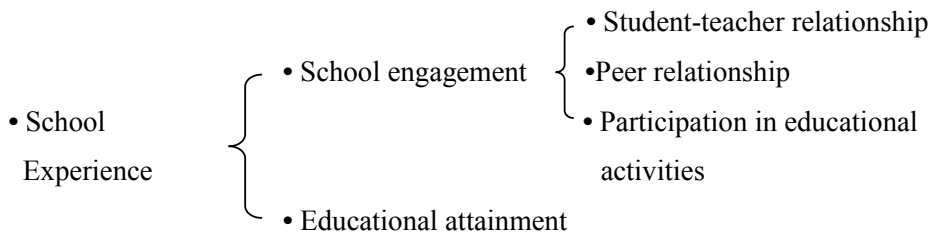


Figure 3.1 The concept of school experience of this research

Moreover, I would like to re-emphasise this point: I aim to examine the issues of school engagement and academic attainment separately. Students who demonstrate a high level of disengagement are variously characterised as being bored, lacking confidence, having a poor attitude, exhibiting absenteeism and disruptive behaviour, and a lack of understanding of the need to prepare for the future by developing post-school goals (Tadich et al., 2007 and Finn, 1993). Therefore, the most immediate and persistent issue for students and teachers is not only low achievement, but also student disengagement. From this aspect, even if the concept of student engagement is related

to academic achievement and is usually treated in analyses as a predictor of academic performance (Fredricks et al, 2004), it should be considered to be an important school outcome in its own right. Indeed, engagement is an important construct, not only in terms of its effect on a variety of other educational outcomes, but also because it is a valuable outcome in itself (Fullarton, 2002 and Willms, 2003).

3.1.2 The Factors that Influence School Experience

Another issue which needs to be considered are the factors which can influence student engagement. Although students with home backgrounds that more closely resemble the dominant school culture are more likely to develop and engage in positive school relationships (Finn, 1989 and Fullarton, 2002), many researchers view student engagement as being something that teachers can organise for students, particularly for students at risk (Cumming & Owen, 2001; Davies, 2002; Finn, 1989; Fullarton, 2002; Linnenbrink & Pintrich, 2003 and Zyngier, 2008). Therefore, the focus of these researchers is how to improve or enhance the level of student engagement in the context of the classroom or at school level. In other words, how classroom factors or school factors make a difference to pupils' engagement is explored by these studies. However, it is important to discuss whether structural factors, such as different gender and family backgrounds, influence students' experience, and, if they do, to what extent students' school experiences vary because of different gender or family social statuses. For instance, if students find curriculum pedagogy and assessment regimes to be inconsistent with their own culture and family-influenced expectations, then familial and cultural values will be likely to influence school engagement among diverse groups (Jimerson et al., 2003, Martin & Marsh, 2006; Dweck, 2000; Sullivan, McDonough & Prain, 2005 and Delpit, 1988). In their review, Fredricks et al (2004) does not explore the impact of family and community on school engagement, although they emphasise the importance of exploring these factors, and the need to know more about cultural differences in terms of how individuals respond. It is true that the socio-cultural orientations students bring to school not merely are the most important factors to affect student educational attainment, but also affect students' school engagement. In this case, students' beliefs, values, and orientations toward schooling are critical, and educators must take them seriously (Eccles et al., 1989; Newmann, 1992; Mann, 2001; Eccles & Wigfield, 2002 and Eccles, 2009).

In summary, this current research aims to investigate how adolescents feel about specific aspects of their school experience (see Fig.3.1). Indeed, the scope of student experience could be divided into two sections: one section is on school engagement, which includes psychological dimension (peer relations and student- class teacher relationship) and behavioural dimension (participation in educational activities), and the other section is on academic attainment. It aims to determine whether or not students of different genders and social backgrounds differ in their evaluation of these aspects. Moreover, related measures tend not to be situation-specific; rather, they ask students to generalise their perceptions and actions across situations and contexts.

In the next passage, I will discuss these different aspects of school experience: student-class teacher relationship, peer relationship, participation in educational activities and academic achievement, in detail.

3.2 Specific Aspects of School Experience of This Study

As has already been mentioned (see chapter 2), the Taiwanese educational system is heavily based on examinations. In such a system, educational transition across most schooling levels significantly depends upon educational performance, particularly the mastery of basic academic subjects, such as maths, science and languages. In addition, because of the particular importance attributed to effort by the Confucian heritage, and parents' elevation of the teacher's role, certain characteristics have become salient features of Taiwanese education, such as high expectation of academic performance, spending long hours at school, showing great respect for teachers, and a close interaction between teachers and students (Broaded, 1997 and Yamamoto & Brinton, 2010). As a result, academic achievement and relationships with teachers and peers are a significant part of students' daily school lives. Moreover, it can be understood that academic and social development inherently flourish in the school environment. Therefore, in the following section Taiwanese students' school experience will be discussed in response to the points stated above.

3.2.1 Educational Attainment

For students, the fundamental purpose of going to school is to gain knowledge. How students fulfil this purpose is mainly examined by their academic achievement. In particular, as has been mentioned in chapter 2, educational success is a very important achievement for Taiwanese students. Therefore, it is feasible to believe that educational attainment is an essential dimension of Taiwanese students' school experience.

Various reasons have been proposed to explain the differences in educational attainment, for example, personal intelligence, effort, motivation, family social background, pedagogy, curriculum, classroom climate, school climate, and so on. However, from Coleman's report "Equality of Educational Opportunity" (1968), Sewell and Hauser's "Wisconsin Longitudinal Study" (1980) to the gradually-accepted concept of "capital" all these famous theories, that try to examine educational attainment have indicated one salient point: family socioeconomic background is a noteworthy factor that affects educational attainment. Indeed, both Western and Taiwanese research find that, on average, the more privileged the family social background, the higher the educational attainment (Bourdieu & Passeron, 1977; Dimaggio & Mohr, 1985; Dumais, 2002; Lareau, 2002; Wu,1997, 2005; Chen, 2004; Hsieh, 2002 and Feinstein, et al., 2008). In addition, Delpit (1988) also addresses that the most direct experience students may have is discrepancies between the school environment and their own family-influenced culture. In terms of this aspect, it would be useful to understand the extent to which family level factors affect students' educational performance. If more could be known about the connection between these two specific social environments (family and school), the discrepancies between family and school environment could be improved. In doing so, it would be possible to improve students' achievement in school; furthermore, the whole of society would benefit from this enhancement. Although family level factors influence educational attainment in many ways, in this study, I would like to focus on educational investment from parents who come from different social backgrounds. In the case that Taiwanese parents normally emphasize the importance of education, the investigation into parents' educational investiments in their children can help us to understand to what extent parents' educational investments affect children' educational attainments and

how educational investment differs between parents. Moreover, in addition to parents' educational investments, the role of children themselves deserves scrutiny. Specifically, differences in individuals' educational beliefs and actions do not come out of nothing. The rationale behind particular choices is shaped by individuals' past and present circumstances (Maton, 2008). For young adolescents, their family environments definitely have impacts on how they embrace particular educational beliefs, choices or action. That is to say, in this study, to what extent family factors underlines students' propensity or inclination to education is another notable indicator to examine the importance of family's social background.

Apart from family social background, another focus is gender difference. Girls typically attribute more importance to academic achievement, and have a higher academic performance than boys (Buchmann et al., 2008; Kiuru et al., 2009 and Ashby & Schoon, 2010); moreover, the effects of family disadvantage appear stronger for boys than for girls (Mensah & Kiernan, 2010). However, whether or not there are differences between genders in the context of Taiwan is worth investigating, particularly in the case of pursuing higher educational attainment, which is the norm for Taiwanese students.

3.2.2 Participation In Educational Activities

With regard to learning approaches, there is a significant difference between Western and Taiwanese school education. For Western students, the best way to learn is by engagement through participation, and good lessons provide scope for a variety of activities. In other words, learning by participating in educational activities is a typical Western learning experience. However, in traditional Taiwanese classrooms, the typical teaching-learning method is that teachers speak and students listen; this is a one-way instruction without interaction. This learning approach does not require visible involvement, such as question and discussion, and the whole process of learning seems to operate solely in students' minds. Certainly, it also requires active previews, intensive learning and reviewing, so as to have good educational attainment. However, if students lack interest in learning, they can hide themselves in this learning approach. Indeed, in this case, educational performance seems to become the only way to judge the degree of students' academic engagement. In recent years, because of the

influence of Western educational views, the way of teaching and learning has changed. For instance, group discussion, group presentation and cooperative learning are gradually being accepted by teachers and students. This approach emphasises not only internal cognitive development, but also involvement in external behaviour. In other words, it requires students to show more interests in learning. Indeed, Deci (1992) argues that observing the degree to which students actually persist and engage in classroom activities is the way to distinguish a student's level of interest. Moreover, students' interest in activities tends to reflect how much time and effort they will invest to achieve goals related to that activity (Wentzel, 1998). In other words, the two features of Western learning approach are activity and enthusiasm. Furthermore, these features also offer the way of judging students' behavioural engagement at school.

In the case of the traditional learning approach in Taiwan, students' individual efforts and intelligence are more emphasised and learning is a personal business. In this way, Taiwanese students with a poor academic performance may avoid asking or answering questions in front of group members due to their fear of losing face, and they become more passive and disengaged from group learning. Furthermore, it cannot be denied that classroom-specific effort and engagement have been significantly related to academic performance (Deci, 1992). Therefore, I believe that, compared to the traditional method in Taiwan, the western learning approach facilitates a stronger connection between students' school engagement and their family environment, since students have to show their abilities and willingness, which are associated with their family background, to participate in learning activities.

As has been noted, in this current study, participation in educational activities includes going to school and attending class on time, participating in group discussions, and actively resolving learning difficulties, etc. In other words, the key point to explore is whether or not the degree of activity and enthusiasm for learning of students with different social backgrounds and different genders also become indicators of students' academic experience.

3.2.3. Teacher-Student Relationships

When students are asked what they enjoyed most about their time at school, the most

common answers highlight social life rather than what they are studying or learning (Newmann, 1992 and Koepke et al., 2008). Indeed, Koepke & Harkins (2008) address that students pursue both social and academic goals at school. When exploring students' social experience at school, there is no doubt that teachers and peers are central figures. Students face some specific challenges, particularly in the case of the Taiwanese middle school educational environment. These include long hours spent at school, heavy pressure to pass the high school entrance examination, and traditional Confucian beliefs, all of which have an impact on teacher-pupil relationships and peer relationships. In addition, the social environment of the classroom is important to motivate and engage students, and this may be particularly important for early adolescents (Wentzel, 1998 and Ryan & Partick, 2001). Indeed, the interpersonal relationships that provide students with a sense of belonging is a strong motivator of students' engagement in school (Wentzel, 1998). Therefore pupils' perception of their social experiences is worth investigating further. In terms of this research, social experience specifically refers to students' perception of their capability to interact successfully with their peers and teachers.

The classroom environment is the epitome of a social environment, and the teacher-student relationship represents social interaction. Goard and See (2011:679) point out: "one factor that helps creates a sense of shared enjoyment is a good relationship with teachers… in education". Moreover, Pianta and Walsh (1996) argue that teacher-child and peer relationships are the core of the classroom system. Indeed, students' perceptions of interpersonal teacher support will facilitate their social efficacy, reduce disruptive behaviour in the classroom, predict their well-being, as well as their ability to engage in working and learning (Wentzel, 1998; Pomeroy, 1999; Ryan & Patrick, 2001; Crosnoe et al., 2004; Van Petegem, et al., 2008 and Koepke & Harkins, 2008). In addition, Wallace (1996) and Garner (1995) find that, rather than various approaches to subject teaching, teachers' interactive relationships established with students are the substantive components of school experience. Therefore, it can be said that student-teacher relationships are a key feature of school experience. However, since teacher-pupil relationships are a kind of interaction, the process and results of the interaction will vary due to different responses (Lin, 2000; Pan, 1993; Ryan & Patrick, 2001; Wubbels & Brekelmans, 2005 and Wubbels et al., 2006). Many research results point out that teachers' gender, students' gender and students' social class are

closely related to teacher-student interaction (Duffy et al., 2001; Sun et al., 2007; Dollar et al., 2004 and Howell et al., 2011). Furthermore, some research results also show that male students have more interaction with teachers than female students (Barba & Cardinale, 1991; Fisher, 1997 and Sun et al., 2007). However, other researchers have not obtained the same results (Marsh, et al., 2008; Buchmann, et al., 2008 and Koepke & Harkins, 2008). Additionally, the fact that male students interact more with teachers does not necessarily mean that boys have a better perception of their relationship with teachers. With regard to students' social class, many studies have found that teachers have different educational expectations of students from different social backgrounds. More specifically, teachers usually show more favour to students from higher social class, and build closer relationships with them (Sun et al., 2007). This result seems to coincide with Bourdieu's influential argument of educational reproduction; moreover, such educational reproduction seems to have been taken for granted. As a result, the variable of students' family background is seldom examined in recent Taiwanese educational research of teacher-pupil relationships. Indeed, as far as Taiwanese educational research of teacher-student relationships in the middle school stage is concerned, researchers have more interests in the teacher-pupil relationships differe between different grades and by gender (Lee, 2005; Tzou, 2009 and Hung, 2011). However, since the gap between rich and poor has become wider and wider, it may be a good time to explore the relationship between students' family background and teacher-pupil relationships in the context of Taiwan.

This study mainly seeks to explore students' perceptions of how their teachers support them. It includes students' perception of teachers' caring, understanding, encouraging, and trust. In other words, teacher support refers to the extent to which students believe their teachers have an effort to establish a personal relationship with them. Little research related to this issue has been done in Taiwan, particularly for middle school education. Most of this limited research focuses on the degree to which teachers support students with special needs and delinquencies, or particular subject learning, such as Maths and Physics (Wang, 2000; Lu, 2009; Chang, 2007 and Chan, 2006). However, the general relationship between class teacher and students needs careful investigation. For example, Deci (1992) addresses the fact that perceived support from teachers is unique in its relationship to outcomes, especially in terms of classroom functioning, interest in class, and pursuit of goals to adhere to classroom rules and

norms. Therefore, considering the significance and importance of the teacher-student relationship, students' perception of this relationship is the key aspect of their school social experience.

3.2.4 Peer Relationships

Wei (2008) and Deci (1992) argue that students' relationships with their teachers and peers are the important school-level factors which influence students' well-being. Additionally, interpersonal relationships which provide students with a sense of belongingness can be powerful motivators of children's interest at school (Gorard, et al., 2011). Students in Taiwanese junior high schools are organised into "class-groups" of 30 to 35 students, who remain together in the same class all day and throughout all years in school, visited by teachers of different subjects in succession during the school day. Because of these salient features, it can be believed that peer relationships are more significant and important for Taiwanese students.

Typically, adolescents make friends with those who share similar attitudes and interests (Simons-Morton & Chen, 2009 and Giordano, 2003). Moreover, early adolescence is a period of transition in terms of social influences, where the influence of peers tends to increase and parents' influence on behaviour tends to decline in importance (Giordano, 2003). In this case, it is worth to examining the students' perception of peer relationship. Based on these reasons, although much research sees peer relationships as a factor which influences students' educational attainment or pro-social behaviour (Wentzel & Caldwell, 1997; Ma et al., 2007 and Simons-Morton & Chen, 2009), I suggest that peer-relationship should be seen as an outcome in its own value. In other word, in this study, peer relationship is not a predictive factor but an outcome. Furthermore, this study also seeks to examine whether or not families' social backgrounds and gender influence peer relationships.

Together, these academic and social experiences provide an overview of students' experience at school.

3.3 Why Grade 8 Students' School Experience?

3.3.1 Grade 8

In the Taiwanese educational system, Grade 8 is the second year of junior high school. It is neither the first year, when students may have difficulty in transitioning from elementary school to middle school, nor the final year, when they may face huge pressure to prepare for the senior high school entrance examination. Therefore, experiences during this year are less well studied than experiences at school entry or leaving age (Rudduck & Flutter, 2004 and Hand & Bryson, 2008). However, Grade 8 is a crucial year, since it is the year when students may finally become used to middle school life and start to become familiar with the people around them. In particular, one notorious characteristic of Taiwanese middle school education is its test-orientation. Grade 8 students start to have more and more tests to enhance their academic abilities; students' confidence in learning is greatly affected by the results of tests. For pupils, Grade 8 is the year that they need to be helped, given a positive learning-orientated identity, and admitted into a group of friends whom they want to belong to.

Although pupils generally begin their secondary education with enthusiasm in Grade 7, there is a tendency of declining commitment and motivation in following years (Eccles et al., 1989; Wigfield et al., 1991; Wigfield & Eccles, 2000 and Wang & Eccles, 2012). When early adolescents deal with school transition, they may also experience rapid physical, social and cognitive development. However, the poor fit between the middle school environment and personal individuality may cause some problems (Eccles et al., 1993a and Barber & Olsen, 2004). Furthermore, these struggles may undermine students' positive orientations to school. Therefore, many schools see Grade 8 as a difficult year in which pupils' commitments to learning can waver and poor behaviour begins to appear (Rudduck & Flutter, 2004 and Tadich et al., 2007). That is, pupils' perceptions of Grade 8 definitely affect their academic and social performance the following year. Therefore, it is important to examine pupils' perceptions of Grade 8. In particular, the Taiwanese educational system is characterised by an emphasis on rules, controls, and disciplines, and these features conflict with early adolescents' development, including their need to experiment and assert their individuality. In this case, Taiwan Grade 8 students' perception of their school experiences deserves careful attention.

In addition, there are two practical reasons to explain why Grade 8 students are chosen as participants for this study. First, Grade 7 students are new to the school and I thus prefer to focus on young people who have had a more experience at school. Second, for the convenience of students and teachers, it is better to avoid doing research on young people who are in their exam year. Therefore, Grade 8 students are appropriate participants for this study.

3.3.2 The Importance of School Experience

Taiwan middle school students usually spend one-third of their time at school, so for most of them school is central to their daily lives. Consequently, students' perception of their school life lead to differences not only in their cognitive development but also in their behavioural and emotional development. As has been mentioned above, in my view, students' perception of school life are their views of school experience. Therefore, how students perceive their school life is a crucial factor which not only affects their development but also probably affects their willingness to stay in post-compulsory education and their future life trajectory (Tadich et al., 2007 and Finn & Voelkl, 1993). Indeed, there is no doubt that school is the focal point of daily life for young adolescents who spend most of their time there, and school is believed to have a significant influence on their long term well-being, even when they have left school (Brantlinger, 1990; Taylor & Nelms, 2006 and Wang & Eccles, 2012). Thus, their views of school experience are of considerable importance. In addition, students' views of school experience influences their subjective evaluations of school education in many ways (Ding & Hall, 2007 and Gorard & See, 2011). In the short term, if pupils do not feel that they are involved in the school, their enthusiasms for learning may be diminished and they may feel that school life is boring. More seriously, they may have problems related to self-discipline, or exhibit anti-learning behaviour. Furthermore, in the long term, if young people cannot perceive the importance of school education for enhancing their future, they may lose sight of the necessity to accept education, and drop out from school. Certainly, students' views of school experience affects not merely their enjoyment at school but also their faith in education. Therefore, as Hand and Bryson (2008) state, it is of vital importance to understand individuals' perceptions of their school experience.

Another important aspect of school experience, as has been mentioned above, is that school experience is an integrated aspect of education. It is true that, in terms of the outcomes of schooling, focus on educational attainment is relatively straight forward, since academic achievement is regularly measured. Indeed, this has become the most visible indicator of educational outcomes. Pupils' educational attainment is always a dominant issue in educational research. However, some researchers have recently extended their interest to a comprehensive view of school experience (Willms, 2003; Crosnoe et al., 2004; Ding & Hall, 2007 and Gutman & Feinstein, 2008). The findings of these studies highlight the fact that a positive school experience may be more important than a high academic performance, since a positive school experience not only has an effect on better educational achievement, but also on positive social development and long term well-being. In other words, the influence of educational experience is significant for students. Indeed, it could be said that for pupils, school experience does not simply affect their cognitive development. Rather, it also affects pupils' psycho-social development. Truly, pupils' view of themselves and the world differ mainly because of their school experience, such as the interaction with their teachers and the influence of their peers. That is, adolescents' self-esteem and identity development are associated with the received feedback from significant others who surround them (Coleman, 2011). More importantly, how pupils shape their school experience depends on how they interpret their perception of life at school (Roeser et al., 2000). In the case of school experience, therefore, subjective experiences are particularly important.

Further, since a significant body of research has shown that students from different social and cultural backgrounds see schooling in vastly different ways (Eckert, 1989; Farrell, 1990 and Weis, 1990), this study seeks to investigate whether there are differences in the evaluation of school experiences between male and female students, and between students of different social backgrounds. Indeed, the degree to which students' perception is consistent across different genders and social origins is theoretically and practically important, since it may suggest that some students tend to be served less well than others by their school system.

3.4 Conclusion

As good school experiences have a positive impact not only on students' learning but also on their overall well-being, it is vital to find out what factors influence students' school experiences. From this point of view, in this study, I want to examine how family and gender factors influence school experience; more specifically, I want to investigate the mechanism by which structural factors influence school experience.

Chapter 4

An Integrated Approach: Application of Parents' Educative Capital and Students' Educational Habitus

In this chapter, the integrated approach of this research will be stated. Firstly, the concept of habitus will be examined, and then it will be followed by a discussion of cultural capital. In addition, the notion and applications of both concepts to this study will also be examined.

4.1 An Integrated Approach

As has been mentioned in chapter 3, school experience is the main topic of this study. It is a personal perception of lived experiences at school and it lays emphasis on personal feelings. However, I want to examine this topic from the perspective of social structures, such as family social status and gender. In other words, I want to examine individuals within the social context. Traditionally, however, psychology tends to emphasize the individual, and sociology tends to concentrate on social structure (Swartz, 1997). Therefore, for this study, an integrated theory is needed to account for the interaction between these two spheres: individuals and society. Bourdieu's theory is valuable here. In particular, his two influential concepts: habitus and cultural capital. As far as habitus is concerned, it integrates the psychology and sociology approaches. In brief, habitus is a system of dispositions which adjust individuals' belief, attitude, value, aspirations and furthermore, and action. That is, to some degree, the concept of habitus involves some psychological concepts, such as motivation, value, and dispositions. Indeed, at the beginning, Bourdieu uses the word "mental habit," and "mental and corporeal schemata of perceptions, appreciations, and actions" to develop his own conception of habitus (Swartz, 1997:101). It shows that habitus is partly derived from psychology. Moreover, it is well known that Bourdieu intends to break the traditional individuals/society dualism which has existed in Western academia (Bourdieu, 1977b and 1990a). He uses habitus to evoke a system of dispositions which are deeply internalized into individuals' minds and generate actions to the world; furthermore, he suggests that individuals and society do not oppose to each other but are constructed relationally (Swartz, 1997). In other words, habitus enables us to make

connection between individuals and society, specifically; it has a mediating function when individuals interact with social structure. Therefore, habitus enables us to understand how social structure influences individuals and vice versa. From this aspect, habitus can be seen as an integrated idea to connect the two fields of psychology and sociology.

Moreover, with regard to the specific issue of relation between family factor and educational attainment, Bourdieu's another well-known concept, cultural capital, has made significant contributions. Indeed, it offers a special aspect, the aspect of culture, to look at this relationship. However, the focus of this research is not limited to educational attainment. Rather, I will extend the use of cultural capital from reproduction of educational attainment to comprehensive school experience and school engagement in particular. That is, the concept of cultural capital is applied in this current study to investigate students' school experience.

In the first section, the concept of habitus will be explored. First, I will explain how I understand this concept, then, I will discuss how I apply the concept of habitus and what it adds to this study.

Section I-Students' Educational Habitus

4.2 An Introduction to Habitus

For many academics, "habitus" has often been considered as Bourdieu's most controversial concept; however, for Bourdieu, it is a very important concept. He has once stated that "all of my thinking started from this point: how can behaviour be regulated without being the product of obedience to rules?" (Bourdieu, 1990b: 65). In other words, he seeks to understand how objective social structure and subjective individual agency could be reconciled and made compatible with each other. Therefore, Bourdieu advocates the concept of habitus to explain his theoretical arguments of this fundamental question. Through the concept of habitus, he specifically tries to establish a relationship between the inner personal world and the outer social world, and to examine the way in which individuals think about the world and, in return, how this world influences them. Unlike structural functionalists, Bourdieu does not believe that

the behaviour of individuals is guided by outer rules or norms. Instead, he proposes a "system" which he believes can govern an individual's behaviours and eventually becomes an intrinsic part of the individual. This *system* is what the concept of habitus intends to explain.

4.2.1 The Definition of Habitus

When referring to the concept of habitus, Bourdieu has defined it as

> A system of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them. (Bourdieu 1990a:53)

This definition tells that, on the one hand, habitus emerges from early socialization experiences and set out the principles for action. On the other hand, the practices generated by habitus correspond to the structuring properties of social experiences. In other words, habitus is a set of dispositions; moreover, it constructs individuals' actions/thought towards the social world, and vice versa. From this perspective, habitus makes a connection between individuals and social structure; moreover, habitus has a mediating function when individuals interact with social world. In the same vein, in the field of education, students' different previous school and family experiences result in different educational habitus that lead to particular decisions or behaviours. In turn, the sequential influence of these particular decisions or behaviours reshape students' educational habitus. The process proceeds circularly.

4.2.2 The Features of Habitus

In this section, the features of habitus are examined. More importantly, I think that, because of these features, habitus can function strategically in the social practice and turn itself into an integrated concept or approach to be used in empirical research. Further explanations are shown in details as follow.

Connecting the Past, the Present and the Future

Bourdieu has addressed that the notion of habitus is "a property of social agents that comprises a structured and structuring structure" (1990b: 170). It is interesting to consider what Bourdieu means by this. On the one hand, habitus, as Bourdieu claims, is shaped by an individual's past and present situations; for example, family life and school inculcation that *have been experienced in the past* all cast their influences on habitus, and therefore reflects the "structure*d*-ness" of habitus. On the other hand, however, an individual's habitus also helps to form and shape the present moment and future and therefore reveals the other quality of habitus, that is, a quality of *ever-being-in-progress* or, in Bourdieu's words, "structur*ing*". It is very obvious that habitus refers to a set of dispositions being created and reformulated through the interactions between objective structures and individual history. In other words, habitus is influenced by past and present events and affects future situations at the same time. Indeed, in Bourdieu's view, habitus is a system of dispositions which generates perceptions, appreciations and practices; these dispositions are not only durable in that they last over time, but also transposable in that they are capable of becoming active within a wide variety of social action (Bourdieu, 1990a and1993). Therefore, habitus is not only a connection between the past, the present and the future but also a dynamic system of change. Moreover, this system is not only a process of passive generation but also a process of active invention.

Transcending the Dualism of Structure and Agency

As has been pointed out, habitus not only has been shaped by the past, but also is continually being re-shaped by individuals' encounters with the exterior world; therefore, habitus also seeks to link the social and individual, the objective and subjective, and structure and agency (Reay, 2004). In other words, habitus brings together both objective social structures and subjective personal experiences. In Bourdieu's words (1977b:72), habitus is "the dialectic of the internalization of externality and the externalization of internality". That is, what are produced by habitus are also structured in the sense that habitus unavoidably reflects the social conditions within which it has been acquired. Furthermore, Bourdieu often employs an analogy to express this dynamic relation (Harker *et al*., 1990): every social individual

tends to maximize their positions in each social field (as a competitive game) with their habitus and capital; however not everyone has the same feel for the game. For instance, working class students might not have the same feel about studying in higher education with their middle class competitors. If an individual does not have an "appropriate" habitus to match with a particular social field, it means s/he does not have a feel for the game; consequently, the agent will not win this game. Here Bourdieu, via the concept of habitus, makes a connection between the social structure and the individual agent. In other words, social structure and person are not opposite or separate or hierarchical; rather, they are complementary to each other.

In addition, Reay (2004:432) points out that the concept of habitus "demonstrates the ways in which not only is the body in the social world, but also the ways in which the social world is in the body". That is, through habitus, both the ways are reflected in which people exist in this social world and how the social world frames our living and becomes manifested. That is, habitus is socially embodied. In Bourdieu's words, habitus is "a socialised body. A structured body, a body which has incorporated the immanent structures of a world or a particular sector of that world- a field- and which structures the perception of that world as well as action in that world" (Bourdieu, 1998:81).

Viewed in this light, habitus offers us a special perspective to transcend the dualism of social structure and individual agency.

Both Disposition and Action

In this passage, it will be argued that habitus is not only a set of dispositions setting our thinking and feeling but also a set of action of decision-making shown in our acting and being. As can be seen above, habitus are the dispositions that are formed and re-shaped by personal experiences both in past and current circumstances, which implies a necessary reaction to the social world in terms of subjective adjustment. In my point of view, I believe that habitus is a set of dispositions behind our decision making. This set of dispositions influences what kind of belief, attitude, or expectation we choose to have. In other words, it roots deeper than attitude or value or belief and operates at the unaware level. That is to say, many attitudes and values that we take for granted are set

by habitus. That is, each "taken-for-granted" belief or value or attitude is filtered by our habitus, and this level of function of habitus is an unconscious selection.

Moreover, it is argued here that habitus operates not only at the unconscious but also at the conscious level. On the one hand, when habitus tends to internalize/form itself through its encounter against the exterior world, it operates at the unconscious level. On the other hand, when an agent acts in a way in which it appears to reflect the habitus, this particular action is made at the conscious level, even though the process of this particular action decision-making is not perceived by those in the environment or context it was made. Therefore, I argue that habitus is a system of disposition; furthermore, habitus can be recognised by actions. Here is an example: if *X* has more positive attitude or higher value of schooling than *Y*, it is *X*'s habitus that generates within *X* a more positive attitude or a higher value; in this circumstance, habitus is not aware by *X*. When *X* studies harder than *Y*, *X*'s decision of studying harder is made by *X*'s habitus that operates at the conscious level.

Based on the aforementioned discussion, habitus is a system of durable and adjustable dispositions which has a mediating function between individual agent and social world; additionally, it operates both on unconscious and conscious levels. The process of habitus-working is generating and inventing. On the grounds that habitus has these features, I think that the concept of habitus could offer an integrated perspective to think about the following question: how individuals fit well with the social world or how individuals and social world are compatible with each other?

However, the fact that Bourdieu neither exactly examines how this process operates nor offers sufficient evidence to support this process causes some debates among academia.

4.2.3. Two Main Critiques of the Concept of Habitus

There are some debates about habitus in empirical research, mainly because of the "indeterminacy" and the "latent determinism" associated with the concept (LiPuma, 1993; Jenkins, 2002 and Sullivan, 2002).

Indeterminacy

Even if Bourdieu offers the definition of habitus, he does not state exactly and consistently what the system of dispositions is, nor does he give enough evidence to support the fact that the process of internalization could actually happen in a consistent manner. Therefore, many researchers think the concept of habitus is too vague to operate in empirical research, and moreover, habitus becomes whatever the empirical data reveal or becomes "a veneer of theoretical sophistication to empirical findings" (Sullivan, 2002:150).

However, I suggest there is still room for habitus to work in empirical research. First, Bourdieu (1990b:107) argues that habitus is an "open concept designed to guide empirical work" and that it is in a continual process of being reworked. In this case, this conceptual looseness of habitus can be seen as a potential strength. Reay (1995b:357) also states that "it makes possible adaption rather than the more constricting straightforward adoption of the concept within empirical work". In other words, in my view, the main use of the concept of habitus is to offer us a perspective to think the social practice rather than offer us a straight instruction to examine the social practice. Second, habitus should not merely be regarded as an abstract concept; rather, it should also be applied as a method that enables individual trajectories to be studied (Nash, 1999 and Reay, 2004). Truly, habitus is a product of individual history. By using the concept of habitus, it enables us to focus on the ways in which individuals are influenced and shaping their interaction with the social world. Through habitus, we can examine people within different social positions, such as social class and gender, their subjective experience and their surrounding objective social world. Therefore, form this point of view; it is possible to apply the concept of habitus to empirical research.

The Latent Determinism Criticism

Jenkins (2002) addresses a statement that objective social structures generate a habitus that is structured; this habitus generates practices which necessarily reflect the objective social structures; and so the objective social structures at the beginning of this circle is reproduced. Moreover, while Bourdieu wants to examine how people act

in helping to create their social world, his method also emphasizes the way in which "the structure of those worlds is already predefined by broader racial, gender and class relations" (Bourdieu & Waquant, 1992: 144). It seems to show that habitus is a pre-deterministic and mechanistic tendency. However, I do not share this view. According to the formula: [(habitus)(capital)] +field = practice (Bourdieu, 1986:101), practice is clearly generated by the interactions between habitus, capital and field; that is to say, this formula gives habitus a dynamic quality. Moreover, Bourdieu (1990b:116) also argues that "habitus became active in relation to a field, and the same habitus could lead to very different practices and stances depending on the state of the field". In other words, habitus are reflective of the social context in which they are acquired. Second, although Bourdieu thinks that the habitus causes individuals to act in certain ways and display certain types of behaviour, he explains that there are neither explicit rules nor principles that dictate this behaviour, rather "the habitus goes hand in hand with vagueness and indeterminacy" (Bourdieu, 1990b:77). It suggests that habitus shapes but does not determine the choices of individuals. Additionally, as the habitus is a system of durable dispositions inculcated by objective structural conditions, it takes time to process; in other words, time must be taken into account. As we know, there are no perfectly-identical structural conditions in our history; that is, the structural conditions are always different. Therefore, there is no reason to believe that the habitus always remains the same. Remember that individuals not only have habitus but also use habitus, and give habitus meaning.

As given above, notions and features of habitus have been examined. On the basis of these arguments, I will examine how habitus frames the theoretical work and how it is applied to this research in next section.

4.3 Habitus in This Study

4.3.1 How Does Habitus Form the Theoretical Frame of This Study?

The initial intention of this study is to investigate why students have different school experiences; then, this study carries to explore whether family environment and gender affect students' perceptions of their experiences in schools, and furthermore, to clarify how these specific factors cast their influences on school experience. In order to

unravel these issues, I believe that the concept of habitus offers a valuable and pertinent account by which examine how family and gender influence pupils' school experiences. There are two reasons which can be raised to support this claim.

Firstly, as has been mentioned above, habitus is the product of history; it is "an open system of dispositions that is constantly subjected to experiences, and therefore constantly affected by them in a way that either reinforces or modifies its structure" (Bourdieu and Wacquant, 1992:133). In other words, habitus is a system of dispositions that are an inherited experiential concept of society; moreover, individuals can modify habitus for themselves to adapt to their respective circumstances. Therefore, habitus is durable but also adjustable. At this point, habitus seems to offer an appropriate explanation for this study, which intends to investigate the dynamic system of how family and gender affect individuals' perceptions of their school experiences. As children have attached to their family environment and gender since they are born, it is inevitable that family environment and gender would form individuals' habitus, and habitus would be changed by individuals' situations. Indeed, habitus form individuals' schema to get on with the exterior society. Moreover, habitus is a product of history, specifically; habitus is derived from the class-specific experiences of socialization. In this case, it seems that individuals who share similar social conditions (such as social class, race or gender) may have samiliar habitus.

Secondly, Hillier et al.(2005:20) state that "Bourdieu proposes a structural theory of practice which connects structure and agency in a dialectical relationship between culture, structure and power; further, he recognizes the social relations among actors as being structured by, and in turn contributing to the structuring of, the social relations of power among different positions (of class, gender etc.)". It is the theory from which habitus is derived; moreover, habitus is a mechanism which connects structure and individuals. As Calhoun (2000) has stated, through an intriguing metaphor, social life requires our active engagement in its games. In order to actively engage, we have to obtain a huge amount of practical knowledge; however, this knowledge is filtered by the embodied understanding of our habitus, which not only reflects and affects our understanding of what is taking place in various situations but also shapes how we practically engaged with those situations. As habitus has this specific feature, it is

appropriate to explain the relations between agent (student) and structure (family, gender).

Based on the aforementioned reasons, I share a similar view with Reay (2004) and Nash (1999): habitus is not only a theory but also a method. In other words, I believe that habitus offers us an frame to ask questions and offers us a way to answer questions at the same time. Moreover, Bourdieu has stated the relation between habitus and school experience:

> The habitus acquired in the family is at the basis of the structuring of school experiences…; the habitus transformed by the action of the school, itself diversified, is in turn at the basis of all subsequent experiences … and so on, from restructuring to restructuring.
>
> (Bourdieu, 1972, cited in Bourdieu & Wacquant, 1992:134)

It clearly gives a support to apply the concept of habitus to the study of school experiences.

4.3.2 The Application of Habitus: Students' Educational Habitus

Bourdieu has expressed the notion of habitus in a clearer explanation "as a system of dispositions . . . of permanent manners of being, seeing, acting and thinking, or a system of long-lasting schemes or schemata or structures of perception, conception and action" (Bourdieu, 2005:43). He also has pointed out that the habitus of a group of people occupy a similar or neighbouring position in social spaces in a sense very systematic: all the elements of his or her behaviour have a kind of affinity of style, just like the works of the same painter. It is not a logical systematicity but a practical systematicity. There are discrepancies and exceptions, but the word "style" indicates very well this practical unity (Bourdieu, 2005:44). These statements clearly show that habitus is a durable system of perception, conception and action; and people sharing similar positions in social space have the same style with regard to their habitus. On the basis of these statements, I assume that students with similar positions in social space (family status and gender) will have same habitus. In particular, since this study focuses on education, those specific habitus are named *educational habitus*. To put it more concretely, in this study, I try not only to examine how different family status and gender generate different educational habitus but also to understand to what extent

different educational habitus lead to different school experiences. Moreover, habitus is a system of dispositions; in other words, it is a latent construct and can only be inferred from external cues. In addition, as has been mentioned above, I argue that habitus can be recognised by means of observing actions. In the matter of educational habitus, therefore, there are three aspects I want to explore: students' views on education, students' views of their roles as students and students' willingness to conform to student-role values. These responses are expected to reflect the underlying educational habitus which is used to distinguish individuals.

First of all, from the perspective of **students' views of value of education**, habitus shapes individuals' value judgements because it is a set of propensities, dispositions and tendencies. Indeed, values, beliefs and actions which are taken for granted are filtered by our habitus. Therefore, it is sensible to discuss students' educational value in order to examine how the factor (habitus) has formed these values.

Secondly, since this study intends to examine students' school experiences, in addition to students' general view of education, it is also vital to examine **students' views of their roles as students**. Individuals play various social roles in different social situations, and each role has a corresponding role value. This role value is developed, adopted and integrated through interactions between people and social settings. Over time, people internalise the role value. When this role value is developing, the habitus is also functioning simultaneously. In other words, individuals' beliefs, attitudes, and dispositions become integrated with the role value. Therefore, a specific habitus, such as educational habitus, is also integrated with student-role value. In this case, student-role value is an important aspect for researchers to explore students' educational habitus.

Thirdly, in terms of the student-role value, students are expected not only to internalise it in their minds but also to behave in an appropriate way which matches this specific role value. As has been mentioned above, habitus is not only a set of attitudes or dispositions setting our thinking and feeling but also a set of action of decision-making shown in our acting and being. In addition, habitus is also a principle which generates actions. That is to say, individuals' external behaviours can reflect individuals' internal

habitus. Therefore, the following aspect intends to examine students' habitus through **students' willingness to conform to student-role values.**

After discussing the application of the concept of habitus, we may now proceed to the next concept: parents' educative capital.

Section II-Parents' Educative Capital

This section will review the idea of parents' educative capital, which is derived from Bourdieu's influential concept of cultural capital. Cultural capital is a big concept; however, I want to focus on parents' educational investment in their children's education. Indeed, in this study, the specific type of cultural capital is named parents' educative capital. In addition, since this concept of parent' educative capital will be used as a framework to explore the principle questions under investigation, its applicability to the research will also be explained.

4.4 Cultural Capital

In Bourdieu article (1977a), he provides a definition of cultural capital. He says it is the "instruments for the appropriation of symbolic wealth socially designed as worthy of being sought and possessed" (1977a: 488). In his view, the inheritance of cultural wealth as symbolic wealth only belongs to those endowed with the means of appropriating it for themselves. At this point, cultural capital is the instruments of appropriation. More specifically, cultural capital is a kind of *resources* to familiarize individuals with the dominant culture in a society. Furthermore, for him, cultural capital could take many forms: the objectified form (such as pictures, books, dictionaries, etc.), the embodied form (i.e., in the form of long-lasting dispositions of the mind and body) and the institutionalized form (such as educational qualifications) (Bourdieu, 1997). All forms reflect "the internalisation of behaviour, dispositions, knowledge and habitus which were acquired in the socialisation process or were accumulated through investment in education and training or in the acquisition of cultural goods" (Vryonides, 2007:868). Although Bourdieu offers three kinds of cultural capital, he employs a set of measures of arts participants in trying to establish evidence for his ideas through empirical research. These include activities such as

museum visits, reading habits, theatre attendance, and classical music appreciation, which he believes are some indicators of cultural capital. Bourdieu's definition has gained much popularity in the academic world, and his indicators of cultural capital have inspired much further research. For instance, with response to Bourdieu, DiMaggio also interprets cultural capital in terms of "elite status cultures"—that is, as the "specific distinctive cultural traits, tastes, and styles" of individuals who share a "common sense of honour based upon and reinforced by shared conventions" (DiMaggio, 1982:189). Cultural capital, according to DiMaggio, is thus associated with "prestigious" cultural practices. Moreover, many subsequent researchers have adopted this definition and its underlying basic assumptions in their studies because DiMaggio's work assigns to cultural capital in the process of education attainment (DiMaggio & Mohr, 1985; Aschaffenburg & Mass, 1997; De Graaf et al., 2000; Sullivan, 2001 and Dumais, 2002). From what has been highlighted above, it is argued that the influential interpretation of cultural capital in the field of education is as follows: cultural capital means knowledge of or ability within "highbrow" aesthetic culture, furthermore, salience of cultural capital is tested by assessing whether measures of "highbrow" cultural activities predict educational outcomes (Lareau & Weininger, 2003). However, in Bourdieu and Passeron's later work (1977), he appears to put more emphasis on scholarly language. He argues that "working-class and middle-class students who reach higher education have necessarily undergone more stringent selection, precisely in terms of the criterion of linguistic competence" (Bourdieu and Passeron, 1977:73). Therefore, he argues, linguistic ability is the key to cultural capital which enables an individual to succeed or progress through a competitive education system. However, this assumption leads to the question whether or not students coming from upper social classes in society have higher linguistic ability by virtue of their social background? It is believed that, linguistic ability can be improved by cultural stimulation and does not necessarily have to be rooted in material privilege. Cultural stimulation might be benefited by material advantage; however, having material advantage does not guarantee the happening of cultural privilege.

As have been discussed above, it is interesting to ask at this juncture if there is another way to examine the notion of cultural capital. At this point, Lareau and Weininger (2003) suggest an alternative conception of cultural capital; they say it "stresses the micro-interactional process through which individuals comply (or fail to comply) with

the evaluative standards of dominant institutions such as schools" (2003:568). More precisely, they argue that individuals come into contact with institutionalized standards of evaluation by strategic use of knowledge, skills, and competence. These specialized skills are transmissible across generations, are subject to monopoly, and may yield advantages or profits. In examining this interpretation in more details, it can be seen that it highlights the way in which cultural resources can help families comply with established norms and standards. These authors believe that their definition emphasizes Bourdieu's reference to the capacity of a social class to "impose" advantageous standards of evaluation on the educational institution (2003: 568). Other studies have taken a similar view to that of Lareau (McDonough, 1997; Reay, 1998 and Vryonides, 2007). Therefore, it seems to suggest that, in addition to these three forms of cultural capital, there is the fourth form of cultural capital: the capacitated form which refers to the capacity including skills, knowledge or actions that complies with institutional standards.

As has been shown above, cultural capital appears to be, on the one hand, a capacity to help people from different social origins to comply with dominant institutions (such as school) effectively; on the other hand it also appears to be taken as classified tastes or as a kind of given cultural privilege that individuals inherit from their social background. Therefore, from this perspective, in this study, there are two aspects in the operation of cultural capital: participation in elite status culture activities, and the capacity to comply with institutionalized standards. For the latter one, it may include an ability to judge, negotiate with and evaluate institutionalized standards or requirements. It is this interpretation that I apply the concept of cultural capital to this study.

Before going further to discuss the application of cultural capital to this study, it is necessary to examine its role in education.

4.5 The Role of Cultural Capital in Education

Bourdieu has claimed that different social classes, depending which position they occupied in the social structure, had varying degrees of cultural capital. Moreover, for him, cultural capital was a theoretical hypothesis which offered a perspective to

explain or answer a basic education phenomenon: the unequal distribution of cultural capital between different social classes which resulted in the unequal educational attainment of children from different social origins. In this regard, Bourdieu claimed that the education system was the main mechanism in which the dominant class culture re-enacted and perpetuated class distinctions. He argues that children from the upper or middle classes used their cultural capital, more specifically to Bourdieu, the linguistic skill and competence which they inherited from their family and social backgrounds enabled them to excel and be successful because they had the competence that facilitated their adjustment to the school environment, knowledge and culture. And as a result of the advantage that these children had through cultural capital, they would show more appropriate behaviour and better learning achievement than others. In this case, dominant class culture is reserved and transmitted; that is, cultural reproduction happens.

Bourdieu focuses on its function in the process of cultural reproduction. He tries to apply the idea of cultural capital to examine and answer how reproduction in education happens; furthermore, how social reproduction happens through formal education. However, he emphasises educational achievement without paying attention to students' psychological development or their overall school experience. Therefore, for this study, I intend to use the idea of cultural capital to examine students' school experience. In doing so, on the one hand, the question whether students' school experiences can be empirically tested according to assumptions of the theory of reproduction in education can be answered; on the other hand, the new findings will be a supplement to the existing field of education research.

I now return to the discussion on how to apply the concept of cultural capital to this research.

4.6 The Application of Cultural Capital: Parents' Educative Capital

It may be argued that, for education studies, cultural capital is a cultural resource that facilitates the harmonious transition between pupils and the school's education requirements during the period of schooling. If pupils have adequate cultural capital—which is obtained and accumulated in home environment—they appear to have

exhibited a higher potential to excel within the education system. This raises the question as follows: Does home environment, or more specifically, parental cultural capital, influence children's school experiences? And if it does, how significant is its influence?

In order to set the scope of this study, it is important to mention here that cultural capital in this study will mainly refer to parental cultural capital, or more specifically, parents' educative capital which refers to parents' investment in children' education. In addition, some studies have found that there is a relationship between increase in maternal education and increases in children's academic achievement (Magnuson, 2003 and Ganzach, 2000). However, the gender of parents is not a factor considered in this study. The issues which I want to examine and explore are the associations between pupils' family social status, gender of students and their own school experiences. Both parents' education background and occupation are the indices of family social status. In other words, the influence of gender of parents will not be discussed specifically here. Moreover, because parents' educative capital is parents' investment in children's education, it is therefore beyond the scope of this research to discuss whether or not children inherit cultural capital from their parents. Such a discussion has been excluded from this study because parental/family cultural capital is regarded as a type of cultural investment in children here, and therefore the question of inheritance is not central to this study. More specifically, the central question here is focused on how effective parents' educative capital as an investment influences children's school experiences.

In keeping with the previous discussion, it seems that, in the field of education research, there are two aspects which are worth examining in the operationalisation of cultural capital, namely, participation in elite status culture activities, and the capacity to comply with institutionalized standards which include an ability to judge, negotiate with and evaluate institutionalized standards. In addition, as has been mentioned above, it is from this point of view that I apply the concept of cultural capital to this study. Therefore, it may be argued that, in this study, parents' educative capital focuses specifically on a range of parenting practices. It involves four aspects: parents' participation in cultural activities with children, parenting style, parents' involvement in education, and parents' participations in educational activities with children. The

first aspect is a response to Bourdieu while the last three aspects derive from Lareau and Weininger.

With regard to the aspect of **parents' participations in cultural activities with children**, it comes back to the root of Bourdieu's idea and indicator of cultural capital: cultural capital is associated with prestigious cultural practices. Furthermore, parental educative capital is seen as a cultural investment made in children in this study. Indeed, parents' accompanying children to join cultural activities is particular sensible and observable as children's perceptions of their parental educative capital. Consequently, the level of parents' participation in cultural activities with children is one perspective of parental educative capital.

As for **parenting style**, Lareau (2003, 2011) described how social class-based cultural patterns, habits, and skills are created and reinforced by different parenting styles; moreover, she conceptualizes her findings as a distinction between the strategy of "concerted cultivation" prevalent in middle-class and upper-middle-class families and the "accomplishment of natural growth" prevalent in lower-income and working-class families. On the one hand, parents who engage in concerted cultivation are highly concerned about the concerted development of their children, and actively foster and assess their children's talents, opinions and skills. On the other hand, parents who engage their children in accomplishment of natural growth regard children's development as a process that unfolds spontaneously and a progress that requires no more than such basic supports as food, clothing and shelter. Accordingly, children under different parenting styles will have different developments. For example, those children whose parents adopt the parenting style of concerted cultivation appear to gain a sense of entitlement, and such a sense of entitlement plays an important role in institutional settings where middle-class children learn to question adults and regard the latter as being relative equal to themselves (Lareau, 2003). Even if parents from different social classes share the same desire to help their children, their parenting practices are inevitably influenced by their own backgrounds in different social classes. That is, different social class parents have different "styles" of parenting. Therefore, in this case, parenting style is a type of capital which can influence their children's development in the institutions. Certainly, it can be seen as a type of parental educative capital.

Bodoviski (2010) points out that **parental involvement in education** has positive effects on children's education, such as attainment, improved homework, better study habits, welcoming attitudes toward school, low absenteeism and dropping out; moreover, parental involvement is part of more comprehensive and deeply embedded cultural patterns that guide and are recreated by parents. Although parental involvement has positive impacts on educational outcomes, not all parents are equally involved in schooling (Lareau, 2000 and Vincent et al., 2000). Many research findings tell us the fact very clearly: social classes have a direct and powerful impact on parents' involvement in education (Vincent et al., 2000; Lareau, 2000, 2003, 2011; Gillies, 2005; Maier et al., 2008 and Harris et al., 2009). Moreover, Vincent et al. (2000) argue that schools sometimes reveal a tendency to marginalise parents from lower social classes by creating hostile circumstances that discourage them from participation. Indeed, "social class did make a critical difference in the resources parents could bring to bear on their children's behalf. It is especially significant in parents' interaction with educational institutions" (Lareau, 2011:262). For example, working-class and poor parents tend to have limited and often vague information about institutions, whereas middle-class parents have access to more-detailed information; moreover, working-class parents experience a sense of powerlessness when negotiating with teachers, whereas middle-class parents express criticism and often intervene on behalf of their children (Lareau, 2003 and Gillies, 2005). Lareau and Weininger (2003) argue that individuals have to negotiate with institutions (e.g., school) through the strategic manipulation of knowledge, skills, and competence, and such specialised skills are monopolistically transmissible across generations. Therefore, it is a monopolistic mechanism that creates a selective and exclusive system of institutions and consolidates those capital owners' advantageous position.

Further, I would like to emphasize that the term "parents' involvement in education" in this study is positioned on an institutional level (e.g., parents' intervention into school policy). Therefore, only those parents with educative capital (that is, specialised skills and knowledge to intervene and negotiate with institutions) have "tickets for the game", and once entering the game, they display involvement with and enthusiasm in their children's welfare in education to multiply their capital: the more involved they seem to be with children's education, the more credentials they have to comply—or rather, play the game right—with school standards and change of these standards—or game

rules—to their own advantage to win the game. In other words, "parents' involvement" is a concept that has a subtly mutual relation to educative capital: parents need educative capital to get involved with children's education, and, once they get involved, such involvement itself creates more capital for them. Simply said, "parents' involvement in education" is a trilogy: it needs educative capital, creates educative capital, and becomes educative capital itself.

We may now proceed to the issue of "**parents' participation in children's educational activities**", which, in this study, refers to parents' participation in the classroom and home level (micro level) educational activities. Parents' ability to participate in their children's educational activities is also an expression of parents' educative capital, since it demonstrates that they can join children's educational activities, and that, more importantly, they can comply with institutionalised standards. Take teacher-parent relationship as an example, working-class parents can appear baffled, intimidated, and subdued in parent-teacher conferences, and when they try to intervene in their children's educational experiences, they often feel powerless while middle-class parents typically share the same vocabulary with teachers, and regard teachers as being in the same position as they are (Harris et al., 2009). Consequently, middle-class parents' actions make their children's school experience qualitatively different from the school experience of working-class children.

4.7 Conclusion

In this chapter, I have set out the conceptual framework of this study. I apply the concept of parents' educative capital and students' educational habitus to examine students' school experience which includes students' engagement with school and academic attainment. Additionally, it is important to keep in mind that the individual agency and the indeterminacy of social life are two variables that need to be taken into consideration when we try to examine the social phenomena, just like in Bourdieu's formula of theory of practice:

[(habitus)*(capital)]+field=practice
(Bourdieu, 1986:101)

This formula shows that practice results from capital and habitus that function simultaneously within a field. Thus, in the field, the practice would be incomplete without either one of them. As Dumais (2002: 45) argues that "it is necessary to consider both one's resources (capital) and the orientation one has toward using those resources (habitus) to implement the model of practice in the education field in the way that Bourdieu intended". Therefore, if we aim to investigate the complexity of pupils' perceptions of school experiences, it is necessary to consider influences from both capital and habitus.

Chapter 5
Methodology

This chapter presents an overview of the research design, including the research principles which guide the study and details of the instruments used. A conceptual rationale is provided for the questionnaire design, including the rationale for specific items. Therefore, this chapter will begin with an introduction of the research principles, before moving to discuss the instrument design.

5.1 Research Principle

The research principles of this study are built on the findings and theories of previous research, which make a contribution toward developing this investigation from setting the aims, deciding the research questions, and choosing the research methods. Furthermore, data collection and ethical issues are also stated in this section.

5.1.1 Research Aims

The purpose of this study is to investigate the extent to which gender and family socio-economic status are associated with students' perception of parents' educative capital and their own educational habitus which, in turn, are understood to influence pupils' school experience.

In previous Taiwanese research, particularly that which focused on junior high school students, researchers emphasised the factors which affect students' academic achievement. In addition, when they intended to make a connection between family factors and educational attainment, the concept of cultural capital often played a key role in explaining why students with dissimilar family backgrounds had different educational achievements. Although many researchers have proved that family factors do make a difference to students' educational grades, they have not achieved consensus that cultural capital may be the factor which causes these differences in educational achievement. In other words, this suggests that there may be other factors which influence students' educational achievement. In Bourdieu's view, the practice would be complete in a situation in which both capital and habitus operate interactively

in a field. Moreover, Dumais (2002) also suggests that it is important to consider the functions of both cultural capital and habitus when studying gender differences in education. These arguments suggest that a combination of both factors can help to more clearly and convincingly explain and examine practices in the field of education. Therefore, the concepts of habitus and capital are adopted as mediating variables in this study to determine how they mediate the association between family social status/gender differences and school experience.

In addition, it is argued that the notion of schooling outcome is limited to educational achievement by many Taiwanese educational researchers (Wang, 2006; Hsu, 2006; Li, 2007; Kuo, 2007; Jou et al., 2009; Lin, 2009; Tzeng et al., 2008; Lin, 2011 and Tan, 2010). Instead, the scope of this present research goes beyond the examination of educational attainment; it is concerned with the broad experience of schooling, including relationships with peers, interaction with teachers, and participation in school activities. Thus, it can help to build a broad view of schooling outcome.

To put it more precisely, in the context of Taiwan, the **aim** of this research is a) to probe how the school experience of male and female adolescents from different social status varies, b) to ascertain whether or not family social background and gender play significant roles in students' perception of parents' educative capital, students' educational habitus and school experience, and c) to determine whether gender, in addition to socials status, leads to different benefits or disadvantages from students' perception of parents' educative capital and students' educational habitus in terms of school experience.

5.1.2 Research Questions

This study of school experience will investigate the influence of students' perception of parents' educative capital and students' educational habitus in order to examine the effect of family socio-economic status alongside that of gender in the context of the Taiwanese junior high school. The relationship between the factors which construct this research model has been shown in Figure 1.1 (p. 9). The research questions and hypotheses designed to achieve the research aim also have been presented in chapter 1 (pp 10-14).

5.1.3 Research Strategy

Since this research seeks to ascertain the general features of school experience, questionnaires can best facilitate this by providing a huge amount of data. My aim was to model school experience in order to test a number of specific hypotheses, hence quantitative data was essential. In addition, students' school experience, particularly their perceptions and feelings, is the central issue of investigation. Therefore, adopting a self-report questionnaire is an appropriate method. Moreover, as has been mentioned before, habitus is a latent construct that can only be inferred from external cues. However, observing overt behaviours or internal reactions which occur in a real setting is time-consuming. Given more time, it would have been interesting to explore a mixed-methods approach. However, on the terms of my grant from the Taiwanese government, I was only allowed to spend 90 days in each academic year outside the UK. The issue of limited time was another concern. In this case, for practical reasons, this study relies on self-report questionnaire to obtain information in a short time.

In terms of data analysis, aspects of school experience are designed as dependent variables, while the independent variables are gender and family socio-economic status. Students' perception of parents' educative capital and their own educational habitus are treated as intervening variables. In the first instance, the methods of descriptive statistics, t–test and One-way ANOVA are used to answer questions 1 and 2, and Structural Equation Modelling is used to answer questions 3 and 4.

5.1.4 Data Collection

As a secondary school teacher in Kaohsiung City for many years, I am interested in pupils' school experience in this particular city. Moreover, subject to various practical constraints, including time and resources, this research included a pilot study and main study was conducted in the southern industrial city of Kaohsiung in 2009. Additionally, grade 8 students of both male and female gender were chosen since they have special features (see 3.3.1) which make them more suitable in this study. With regard to Kaohsiung City, in December 2010, Kaohsiung City merged with Kaohsiung County to form a larger municipality. However, the pilot and main study were conducted in the summer and winter of 2009, respectively; and the information of Kaohsiung City

presented here is based on unmerged data. Kaohsiung City is the second largest city located in south-western Taiwan, with a population of around 1.5 million. It is a centre for manufacturing, refining, shipbuilding, and other light and heavy industries. Today, as a major international port and industrial city, Kaohsiung is the most rapidly developing urban centre of Taiwan. The city has an oil refinery, aluminium and cement works, fertiliser factories, sugar refineries, brick and tile works, and salt-manufacturing and papermaking plants. With regard to Kaohsiung employees' profession, in 2008, the majority of employees were in the service trade (68.40%), followed by the manufacturing industry (30.73%) and primary industry (0.87%). During the same period of time, in Taiwan, 58.02% were service trade workers; 36.84% of employees were in the manufacturing industry, and 5.14% were primary labourers (National Statistics, 2013). As of 2012, the per capita GDP of Kaohsiung City and Taiwan in nominal terms were approximately US$ 21,608 and US$ 20,374 respectively (San, 2013).

Pilot Study

In order to increase the reliability, validity and practicability of the questionnaire, a pilot study was conducted in September 2009. The two schools (three grade 8 classes) which participated in the pilot were chosen randomly from all state junior high schools in Kaohsiung city. The two participating schools are located in the city centre. After the target schools had been selected, a letter (see Appendix 5.1) was sent to school head teachers to get access to the schools. Then I paid a personal visit, so as to get contact with the head teachers and class teachers, and to obtain permission and have the questionnaires completed. On the day, having conveyed the purpose and importance of the research, and guaranteed the participants' confidentiality, the self-completion questionnaires were handed to the students by a teacher and the researcher in the classroom. The students were advised that they had the right to refuse to participate in the research and they had 30 minutes to complete the questionnaires. When the questionnaires were completed they were collected. On average, each student spent 20-25 minutes answering the questionnaire. A total of 92 questionnaires were obtained, with a total response rate of 100%. Having omitted invalid responses, which were incomplete or contained erroneous answers, 87 questionnaires (43 female students and 44 male students) were considered to be acceptable for data analysis.

This achieved a valid response rate of 94.6%. With regard to response rate and answer time, the accessibility of the questionnaire was confirmed. The version of the questionnaire used in the pilot study is presented in section 5.2, and the results of analysing pilot data are presented in the next chapter (chapter 6).

Main Research

Kaohsiung City has 33 state junior high schools, excluding the 7 complete schools and 2 schools which participated in the pilot study. The full names of these 33 schools were listed and they were each given a number. Then, ten numbers were randomly drawn from the 33 numbers. 10 schools were selected which correspond to the randomly chosen numbers in December 2009. In addition, two grade 8 classes were also selected randomly from each sample school. The ten chosen schools are located widely within the city. With regard to sample size, many factors decide the sample size for this research. Firstly, from the point view of statistics, as the sample size increases, the size of the standard error of any estimate of a statistic decreases (De Vaus, 2002). In addition, the necessity of a further statistical analysis is another concern. Cohen, Manion and Morrison (2007:104) suggest that, if the population size is 20,000, the sample size should be 583 for probability sampling at a 95 percent confidence level and 4 percent confidence intervals. There are between 15,000 and 20,000 grade 8 students in Kaohsiung, and therefore, based on these factors, 660 students (10 schools* 2 classes* 33 students) should be surveyed. Moreover, the procedure of conducting the questionnaires used in the pilot study was also adopted in this main study. Overall, in this case, 664 questionnaires were returned; 13 of them were insufficiently complete and therefore invalid, so finally, 651 questionnaires were obtained. This demonstrated an excellent valid response rate of 98%. The characteristics of sample of the main study are presented in the chapter 7 which shows the results of primary data analysis.

Access

As mentioned above, the pilot and main study followed the same procedure to gain access to participants. Now that the schools and classes had been chosen and that formal permission had been requested from head teachers and class teachers by me contacting them with letters and personal visits, the access was granted. Having explained the purpose and importance of the research, and guaranteed participants'

confidentiality, I, accompanied by the class teacher, assigned questionnaires to students in the classroom. The students were advised that they had the right to refuse to participate in the research. Students had 30 minutes to complete the questionnaires. When the questionnaires were completed (students took between 20-25 minutes) they were collected.

5.1.5 Ethical Issues

This study has already been passed by the internal Institute of Education ethics committee. In addition, the research was guided by the BERA Revised Ethical Guidelines for Education (2004). The responsibilities of the research for participants are described in the following sub-sections.

Informed Consent

It is crucial to obtain the informed consent and cooperation of participants and significant others, such as head teachers and class teachers. Therefore, the formal permission of head teachers and class teachers was orally requested, followed by informed consent letters and personal visits. An outline of the research and the purpose of the study were stated in my initial letters, and during the meetings with principals and class teachers, it was essential to ensure that they understood the aim and process of this research. Details of the informed consent letter can be seen in Appendix 5.1.

Moreover, according to Guideline 14 of the BERA Revised Ethical Guidelines for Education (2004:7), "Article 12 requires that children who are capable of forming their own views should be granted the right to express their views freely in all matters affecting them, commensurate with their age and maturity. Children should therefore be facilitated to give fully informed consent". All of the participants in this research are 14 years old, and no particularly sensitive questions are asked in the questionnaire (for example, there are no items which parents may object to, such as those relating to sex or unlawful activities). Since the questions relate to topics such as attitude to school and views on education, after careful consideration, it was deemed highly unlikely that these questions could cause distress to the respondents, or that parents could find them objectionable. After the participating classes has been chosen, an

induction—which included details of the research process, research aim, and how the data was to be used and reported—was given to students. They could then decide whether or not they would like to participate in the study.

Right to Withdraw

Although it is hoped that all of the students from the sample population will take part in the research, participants still have the right to refuse to answer any questions. It was stressed that respondents had the right to withdraw at any time, and did not have to answer any questions they did not wish to answer.

Privacy

All of the information provided will be kept in the strictest confidence (Lindsay, 2000). Basically, the questionnaires will be answered anonymously, and all of the data only used for this research. However, if students would like to participate in a further research step, such as being interviewed, they could write their names on the questionnaires and these named questionnaires were put separetly from unnamed questionnaires. Certainly, all of their personal information is kept secure, and further publication will not lead to a breach of agreed confidentiality and anonymity.

Social Desirability

Respondents' answers are influenced by their desire to be helpful and to live up to their own self-image, or to an ideal which they think will look good or be appropriate to the researcher (Aldridge and Levine, 2001). In order to lower the influence of social desirability, it is necessary to convey a clear and meaningful research purpose to the participants. Moreover, it is essential to emphasise that their honest opinion will be appreciated, and this is what the research requires in order to obtain true information form participants.

Since the research principle has been discussed above, the instrument adopted by this study will be examined in the next section.

5.2 Instruments

The content of the questionnaire will be addressed in this part, and the relevance between measured concepts and measurements will be explained. Briefly, in this study, the instrument, *A Questionnaire of School Experience of Grade 8 Students of Kaousiung City*, has been developed and is used to measure students' perception of parents' educative capital, students' educational habitus, and students' experiences with school, their gender, and their families' socio-economic status.

5.2.1 Questionnaire Design

As far as questionnaire items are concerned, after I read relevant books and articles, the questions were made to reflect the aspects which I wanted to investigate; moreover, I also transformed the qualitative research findings, such as the study of Vincent (2001) and Lareau (2003, 2011) into measurable questionnaire items. To put it concretely, the questionnaire is divided into four main sections, and the response of the scale items are on Likert scales (Neuman, 2006). In the first part, the questions relate to the concept of cultural capital, mainly students' perceptions of their parents' educative capital. The second part focuses on the concept of habitus, particularly pupils' educational habitus. Thirdly, this section investigates the perception of school experience, not only in terms of pupils' academic attainment, but also their sense of belonging and participation. The last section incorporates questions about the background data of the participants.

In this research, it is not intended to ask parents questions directly; in other words, a parental questionnaire is not utilised. Since the aim of the research is to investigate students' perceptions of school experience and parental educative capital, with participation and knowledge of school education understood to be mediating factors, it is crucial to understand how children perceive their parents' actions. If children do not perceive the many efforts their parents make for their schooling as being important, the effect of parental influence may be minimal. This is why students are asked about their parents instead of asking the parents directly.

Overall, the questionnaire was composed of four main scales, and each main scale had different sub-scales (see Table 5.1). In addition, a draft of pilot questionnaire had been both written in Chinese and English. When items had been completed, they were reviewed and tested by five peers who know both languages well; by doing so, I could confirm whether or not the meaning of items—which were written in two different languages—matched. The whole text of the questionnaire of the pilot study can be seen in Appendix 5.2.

Table 5.1 An overview of the questionnaire of pilot study

Scale A: Students' Perception of Parents' Educative Capital	Sub-scales	Number of items
		Pilot study
	1. Parenting Style Scale: PSS	11
	2. Parents' Participation in Cultural Activities with Children Scale: PPCS	12
	3. Parents' Participation in their Children's Educational Activities Scale: PPES	12
	4. Parents' Involvement in Education Scale: PIES	10
Scale B: Students' Educational Habitus	1. Students' Views of Education Scale: SVES	9
	2. Students' Recognition of Student-Role Value Scale: SRSS	9
	3. Students' Conformity to the Student-Role Value Scale: SCSS	7
Scale C: Students' Educational Attainments	1. Students' Educational Attainment Scale: SEAS	4
Scale D: Students' Engagement in School	1. Students' Relationship with Classmates Scale: SRCS	10
	2. Students' Relationship with the Class Teacher Scale: SRTS	9
	3. Students' Participation in Educational Activities Scale: SPES	8

Scale E: Background Information	1. Gender	1
	2. Family Type	1
	3. Free School Meals	1
	4. Father's Highest Educational Degree	1
	5. Mother's Highest Educational Degree	1
	6. Father's Current/ Last Occupation	1
	7. Mother's Current/ Last Occupation	1

The main measurement concept of Scale A, which has four sub-scales, is "**students' perception of parents' educative capital**". Precisely, these 4 sub-scales are *Parenting Style Scale* (PSS, 11 items), *Parents' Participation in Cultural Activities with Children Scale* (PPCS, 12 items), *Parents' Participation in Children' Educational Activities Scale* (PPES, 12 items), and *Parents' Involvement in Education Scale* (PIES, 10 items) respectively.

The second scale consists of 3 sub-scales measuring the concept of "**students' educational habitus**". These sub-scales include *Students' Views of Education Scale* (SVES, 9 items), *Students' Recognition of Student-Role Value Scale* (SRSS, 9 items) and *Students' Conformity to the Student- Role Value Scale* (SCSS, 7 items).

With regard to the concept of "**students' school experience**", there are two main aspects: students' educational attainment and students' engagement in school. For scale C, a Likert Scale is used to indicate *Students' Educational Attainment* (SEAS, 4 items). In addition, for scale D, three sub-scales with a Likert Scale are used to measure *Students' Participation in Educational Activities Scale* (SPES, 8 items), *Students' Relationship with Classmates Scale* (SRCS, 10 items) and *Students' Relationship with the Class Teacher Scale* (SRTS, 9 items).

The purpose of section E is to investigate students' personal information, such as their gender, family type, free school meals, and their parents' educational backgrounds and occupations.

Next, I turn to the detail of measurement of each subscale.

5.2.2 Measurement of Students' Perception of Parents' Educative Capital

The following section examines the measurement of students' perception of parents' educative capital, which refers to parents' investment in their children's education and includes four sub-scales. As shown in chapter 4, on the one hand, educative capital appears to be the capacity to help parents with their social origin to effectively comply with the standard of an institution (such as a school); on the other hand, it also appears to be regarded as a classified taste or a kind of given cultural privilege individuals inherit from their social background. Therefore, this study covers two aspects of the operation of parents'educative capital: participation in elitist cultural activities, and the capacity to comply with institutionalised standards. The latter may include an ability to judge, negotiate and evaluate institutionalised standards or requirements.

All sub-scales use Likert Scale with 5 points ('Always', 'Often', 'Sometimes', 'Seldom' and 'Never'). Participants could score between 5 and 1. Higher scores signify more positive perceptions. The details and functions of each sub-scale are discussed below.

Parenting Style Scale (PSS)

The purpose of this sub-scale is to examine students' perception of parents' views of parenting, particularly those which refer to cultivation and education. As mentioned in the previous chapter, parental/family cultural capital is a type of cultural investment. Although parents undoubtedly invest in their children, their view of cultivation and education is reflected in terms of "investment" (Lareau, 2003). Therefore, parents' view of parenting could be seen as being a kind of parental cultural capital.

This sub-scale contained 11 questions which were derived from the study of Lareau (2003). Questions PSS1 to PSS6 examined students' perception of parents' raising style, while questions PSS7- PSS9 reflected students' perception of parents' view of whether or not education is important, and the last two questions focused on students' perception of parents' view of their children's non-academic activities. Students were asked to indicate how often they experienced their parents showing the following behaviour or attitude toward them.

PSS1. My parents have strict rules for reward and punishment.
PSS2. If I do something wrong, my parents will tell me what mistakes I have made.
PSS3. My parents bring me up strictly.
PSS4. My parents bring me up democratically.
PSS5. My parents praise me for my study achievement.
PSS6. My parents praise me for other achievements at school.
PSS7. My parents tell me the importance of studying and encourage me to study hard.
PSS8. My parents talk to me about my future plans.
PSS9. My parents talk to me about my studies.
PSS10. My parents care about my interpersonal relationships.
PSS11. Apart from studying, my parents encourage me to join outside school activities which are not connected to study.

Parents' Participation in Cultural Activities with Children Scale (PPCS)

When trying to establish evidence for his ideas through empirical research, Bourdieu employed a set of measures for arts participation. These included activities such as museum visits, reading habits, theatre attendance, and classical music appreciation, which he believed were some indicators of cultural capital. Furthermore, following Bourdieu, DiMaggio (1982) maintained that cultural capital was associated with prestigious cultural practices. However, I excluded such prestigious cultural practices as classical music appreciation, so as to make these questionnaire items fit in with the cultural context of Taiwan. In addition, in this study, parental cultural capital is seen as a cultural investment made in children. Consequently, the level of parents' participation in cultural activities with children is an alternative perspective of parental cultural capital.

This measure was assessed by students examining how often their parents accompanied them in cultural activities.

PPCS1. I have been to a Book Exhibition with my parents
PPCS2. I have been to an Art Exhibition with my parents
PPCS3. I have been to an Art Show with my parents
PPCS4. I have been to a Sports game with my parents

PPCS5. I have been to a Scientific Exhibition with my parents
PPCS6. I have been to a Speech Day with my parents
PPCS7. I have visited a Museum with my parents
PPCS8. I have visited a Gallery with my parents
PPCS9. I have visited a Library with my parents
PPCS10. I have visited a National Park with my parents
PPCS11. I have visited a Historical Site with my parents
PPCS12. I have visited another country with my parents

Parents' Participation in Children' Educational Activities Scale (PPES)

Parents' ability to participate in their children's educational activities is also an alternative view of parental cultural capital. Indeed, this ability is an expression of parents' cultural capital, since it demonstrates that they can join children' educational activities, and more importantly, it means that they can comply with institutionalised standards. This operation of cultural capital responds to Lareau's (2003) and Vincent's (2001) arguments. This construct was measured by 12 questions, and students were asked to examine the frequency with which their parents participated in educational activities.

PPES1. My parents take part in school activities, such as parent-teacher conferences.
PPES2. My parents talk to teachers about my study achievements.
PPES3. My parents talk to teachers about my study problems.
PPES4. My parents ask teachers about my behaviour in school.
PPES5. My parents sign my learning diary.
PPES6. My parents write comments in my learning diary.
PPES7. My parents teach me homework.
PPES8. My parents supervise my homework.
PPES9. My parents set a standard for study achievement.
PPES10. My parents follow the school rules.
PPES11. My parents help me to finish the assignments/ activities required by the school.
PPES12. My parents read the documents forwarded by the school.

Parents' Involvement in Children' Educational Scale (PIES)

Lareau and Weininger (2003) argue that individuals come into contact with institutionalised standards of evaluation by the strategic use of knowledge, skills, and competence. These specialised skills are transmissible across generations, are possessed by a social class, and may yield advantages or profits. In addition, Vincent's (2001) findings also reveal the same phenomenon. Here, it is sensible to associate parents' involvement in education with the ability to affect their children's school experience. Indeed, by becoming involved, parents show that they care about their children's education and are interested in getting involved. Importantly, parents can not only comply with school standards, but can also intervene to change them. In other words, this intervention expresses a kind of delicate ability, or it could be seen as a kind of advanced cultural capital.

The students answered ten questions about how frequently the following statements applied to their parents.

PIES1. My parents have been volunteers or parent representatives in school.
PIES2. In order for me to study at a better school, my parents changed my school district.
PIES3. My parents arranged for me to study in a better class.
PIES4. My parents give gifts to teachers in private.
PIES5. My parents help me to overcome any difficulties in school.
PIES6. My parents talk about the effectiveness and ineffectiveness of school to their friends.
PIES7. My parents understand the school regulations, such as attendance requirements.
PIES8.My parents know the date of the school's important events, such as examination dates.
PIES9. My parents care about news related to school affairs.
PIES10. My parents care about educational policy news.

The details of the measurement of students' perception of parents' educative capital are expressed above, and the measurement of students' educational habitus will be discussed in the next section.

5.2.3 Measurements of Students' Educational Habitus

The concept of students' educational habitus was explored in this part, specifically referring to students' values, attitudes and actions which reflect their disposition toward education. As discussed in the previous chapter, habitus is a concept which explains the way in which individuals develop by shaping their attitudes and values, and the way in which those individuals practice their shaped attitudes and values in present and future situations.

This section included three sub-scales indicating these three dimensions: *Students' Views on Education Scale* (SVES), *Students' Recognition of Student-Role Value Scale* (SRSS) and *Students' Conformity to the Student- Role Value Scale* (SCSS). Generally speaking, these scales intended to explore students' propensity for education. In addition, the items of this section were developed by myself. All questions were answered by means of choosing one of the following options: 'Agree strongly', 'Agree', 'Neither agree nor disagree', 'Disagree' and 'Disagree strongly', and the participants could gain a score from 1 to 5. The more positive option they chose, the higher score they had. The bigger sum they scored, the higher was their educational habitus. The details and functions of each sub-scale are addressed below.

Students' Views on Education Scale (SVES)

Since habitus is a set of propensities, dispositions and tendencies which affect individuals' value judgements, when the concept of educational habitus is discussed, it is sensible to take students' educational value as an indicator. For this sub-scale, nine items were used to assess students' views of education. They were asked to express their attitude toward education in order to explore their educational habitus, which reflects their social status and gender difference. In addition, since credentialism fairly strongly influences Taiwanese junior high school students, their views of education and how their school experiences are influenced by their educational values needed more investigation. Therefore, in order to reconcile the influence of credentialism, the value of being educated (the questions SVES1, 2, 8 and 9) and the function of education (questions SVES3-7) were the key points to be explored.

SVES1. Being educated is important.
SVES2. Doing well in studies is important.
SVES3. Education can enrich my knowledge.
SVES4. Education can help me to find a satisfying job in the future.
SVES5. The importance of education is to enrich knowledge rather than helping to find a satisfactory job.
SVES6. Education is the main way to improve my family's economy situation.
SVES7. Education is the main way to honour my family.
SVES8. I study for myself, not for my parents.
SVES9. Studying is my priority.

Students' Recognition of Student-Role Value Scale (SRSS)

Individuals play various social roles in different social situations, and each role has a corresponding role value. This role value is developed, adopted and integrated by means of interaction between people and their surrounding social settings (Coleman, 2011). Over time, people internalise the role value. In other words, individuals' beliefs and attitudes become integrated with the role value. Furthermore, a specific habitus, such as educational habitus, is also integrated with student-role value. In this case, student-role value is an important aspect for exploring students' educational habitus. Additionally, a further research issue was whether the recognition of the student-role value differs according to different social statuses or gender. The sub-scale for students' educational habitus mainly focused on students' tendency to believe in the importance of traditional student-role values, since they are students in schools. Furthermore, since educational habitus is mainly presented in the school setting, and considering the Taiwanese traditional view of students' role, the concept of student-role value was measured by active studying (SRSS1, 5, 7, 8 and 9), the relationship with the class teacher (SRSS 3 and 4), the relationship with classmates (SRSS6) and obeying school rules (SRSS2).

SRSS1. It is important to be a student with high academic achievement.
SRSS2. It is important to follow the school's rules.
SRSS3. It is important to respect teachers.
SRSS4. It is important to obey teachers.

SRSS5. It is important to take responsibility for our own work.
SRSS6. It is important to be nice to classmates.
SRSS7. The main purpose of going to school is to learn.
SRSS8. It is my responsibility to study actively.
SRSS9. It is important never to delay homework.

Students' Conformity to the Student- Role Value Scale (SCSS)

In terms of the student-role value, students are expected not only to internalise it in their minds, but also behave in an appropriate way which matches this specific role value. Therefore, the following sub-scale intended to examine students' willingness to conform to student-role values. Questions SCSS 1, 2 and 3 were corresponded to the idea of the relationship with classmates, while question SCSS 4 was designed to indicate the concept of the relationship with the class teacher. Questions SCSS 6 related to 'active studying', and questions SCSS 5 and 7 were connected to 'obeying school rules'. The answers were obtained by asking students how the following statements applied to them.

SCSS1. I am willing to help classmates voluntarily.
SCSS2. I am willing to get to know classmates.
SCSS3. I am willing to get on well with classmates.
SCSS4. I am willing to be close to teachers.
SCSS5. I am willing to do my best to satisfy the class cadres' requirements.
SCSS6. I am willing to do my best to take part in class activities.
SCSS7. I am willing to do my best to take responsibility for my duties.

The details of the measurement of students' educational habitus are expressed above, and the next concept measurement, students' school experience, will be discussed in the next section.

5.2.4 Measurements of Students' Experience in School

The central issue of this study is students' perception of their school experience. In response to Thiessen (2007), two themes of school experience are addressed in this

study: how students relate to and interact with other students and with their teachers in different contexts inside and outside the classroom, and what students do in the course of the day at school. In other words, this study focuses on students' feeling of belonging and their actions in the school context. Moreover, as far as students' school experience is concerned, the particular issue of students' academic achievement occupies a leading position, since it is measurable and comparable. For the above-mentioned reasons, the measurement of school experience is based on students' academic achievements, peer relationships, the teacher-student relationship, and students' participation in school activities.

Students' Educational Attainments (SEAS)

Students' Educational Attainments (SEAS) were assessed asking students to report their last monthly test results. Questions SEAS 1 to 3 reflect the objective fact of students' academic achievement. On the other hand, question SEAS4 pertains to students' subjective view of their academic attainment. For this sub-scale, students answered four questions about their test results via a five-point scale. The highest score was 5 (most positive answer/highest points), and the lowest was 1 (most negative answer/lowest points). The bigger sum of scores indicated a higher educational attainment.

According to the last monthly test result, answer these following questions, please.
SEAS1. My score of Chinese is?
□ 100- 90 points □ 89-80 points □ 79-70 points □ 69-60 points □ 59 points~
SEAS2. My score of Math is?
□ 100- 90 points □ 89-80 points □ 79-70 points □ 69-60 points □ 59 points~
SEAS3. My score of English is?
□ 100- 90 points □ 89-80 points □ 79-70 points □ 69-60 points □ 59 points~
SEAS4. Overall, I am glad with my education achievement?
□ Very true □ Usually true □ Cannot say □ Usually untrue □ Not true at all

Students' Engagement in School

This section included three main subscales: *Students' Participations in Education Activities* (SPES), *Students' Relationships with Classmates* (SRCS) and *Students'*

Relationship with the Class Teacher (SRTS). Having consulting relevant literatures (Chu, 2006 and Taiwanese Institute of Sociology, 2000), I developed my own items. Moreover, they were all measured on a five-point scale ("Very true", "Usually true", "Cannot say", "Usually untrue" and "Not true at all"). The participants could gain a score from 1 to 5. The more positive an option they chose, the higher the score they had. The details and functions of each sub-scale are addressed below.

Students' Participation in Educational Activitiess (SPES)

With regard to the aspect of students' participation in educational activities, the first step is attending school and class. Questions SPES 1, SPES 2 and SPES 3 were designed to test this view. Furthermore, another aspect of concern is whether or not students like to devote themselves to learning, since if they do, it could be said that they have better engagement. The degree of students' engagement in learning was obtained by their answers to these questions (from SPES 4 to SPES8). This measure was assessed by eight items.

SPES1. I get to school on time.
SPES2. I do not skip classes.
SPES3. I like to go to school.
SPES4. During classes, I concentrate on studying.
SPES5. I like to join the class learning activities
SPES6. I discuss homework with classmates.
SPES7. I can acquire knowledge from school education.
SPES8. Overall, I am satisfied with my engagement in learning activities.

Students' Relationships with Classmates (SRCS)

As already mentioned, a sense of belonging is also an important aspect of school engagement. This is easy to understand, since Taiwanese students spend almost ten hours in school, and if they cannot feel that they belong to a certain class or peer group, it must affect their school experience. Moreover, teenagers need a group identity to help them to shape their social image. Therefore, it is believed that peer relationships

play a key role for junior high school students in forming their school experience. In this scale, the students answered ten questions about their relationship with classmates.

SRCS1. It is easy for me to build relationships with classmates.
SRCS2. I get on well with classmates.
SRCS3. Classmates and I help each other.
SRCS4. Classmates like me.
SRCS5. I have close friends in class.
SRCS6. During the break time, I play with friends.
SRCS7. I feel happy to be with friends.
SRCS8. School is a place to make good friends.
SRCS9. I belong to this class.
SRCS10. Overall, I am pleased with my interpersonal relationships.

Students' Relationship with the Class Teacher (SRTS)

In addition to peer relationships, Taiwanese junior high school students' relationship with their class teacher is a significant part of their school experience. This is because students not only have the most interaction with the class teacher, but they also see the class teacher as their parent in school. In this case, the student-teacher relationship can be expected to influence students' perception of the school experience. I developed the questionnaire items on the basis of Chu (2006)'s argument, furthermore, I designed the items by myself. The measure of how students feel about their relationship with the class teacher was obtained by indicating how the following statements applied to them.

SRTS1. My class teacher likes me.
SRTS2. My class teacher cares about me.
SRTS3. My class teacher understands me.
SRTS4. My class teacher acts fairly with everyone.
SRTS5. My class teacher encourages me.
SRTS6. I like to be with my class teacher.
SRTS7. I trust my class teacher.
SRTS8. I respect my class teacher.
SRTS9. Overall, I am pleased with my relationship with my class teacher.

5.2.5 Measurement of Students' Background Information

In this section, students were asked to provide details of their gender, family structure and whether or not they have free school meals. They were then asked to provide their parents' educational background and occupation. Lin's (2000) method to classify Taiwanese family's social status is widely used in Taiwanese academia. Therefore, in order to measure students' socio-economic status more precisely and fit it within the context of Taiwan, four indices were taken from Lin (2000): the highest completed educational level of the father and mother, and the current/last occupation of the father and mother. However, it must be emphasized here, with regard to Lin's method (2000), that such factors as free school meals and family structure were not the indices of family social status. In order to compare research results with others in Taiwanese academia, these two indices were not used in this study. Five levels of education were distinguished: (5) post-graduate education, (4) university education, (3) college education, (2) secondary school education and (1) primary school education or lower. Moreover, in the same context, the respondents were asked to indicate their father and mother's current/last employment status by choosing one of five codes: (5) Professional, (4) Semi-Professional, (3) Skilled non-manual, (2) Skilled manual and (1) Non-skilled and unemployed. Details of codes of parents' employment statuses are shown in Appendix 5.2. Indeed, these details can help students to choose a proper code which matchs their parents' employment status. If students could not choose a proper code that corresponds to their parents' job, I would ask them to describe the job in details on the questionnaires, and make a classification for them. Furthermore, an equation, education *4+ occupation*7= score, transformed parents' background information into five social statuses. Students' family social status was determined by the highest social status of parents.

This chapter has presented an overview of the research design and details of the instruments used. The data from the pilot study will be analysed in the next chapter, and the questionnaire of the main study will also be designed.

Chapter 6
Results I : Exploration of Data

This chapter will firstly present an examination of the reliability of the measures used in the pilot and main study (section 6.1 and 6.2) and this will be followed by a discussion on the factor analysis of the items and scale reduction (section 6.3 and 6.4). The final items and scales used for the further analysis will be discussed in detail.

6.1 Realiability of Assessment Scales: **Pilot Study**

Regarding the pilot study, one of purposes of conducting pilot study is to examine whether the questionnaire is suitable for the sample population. The reliability of a scale is extremely important; however, reliability is an umbrella term under which different types of score stability are assessed, in fact, score stability may mainly mean stability of test scores over time (test-retest) and stability of item scores across item (internal consistency) (Kline, 2005). The focus of this study will be on the internal consistency which refers to the degree to which the items are measuring the same underlying construct. There are several measures of internal consistency; although, the Cronbach's alpha coefficient is probably the most pervasive indicator (DeVellis, 2003; Kline, 2005 and Pallant, 2007). Since Cronbach's alpha is a measure of the average inter-item correlation (varying between 0 and 1), it is appropriate to adopt it to determine the extent to which items form a coherent scale, in other words, to test the homogeneity of a scale. Thus, the indicator of the reliability coefficient used by this study is Cronbach's alpha coefficient. Generally, the Cronbach's alpha value of a scale should be above .7 (DeVellis, 2003) to indicate appropriate reliability of a scale. Furthermore, item-total correlations, a measure of how individuals response to an item relates to the total test score, were assessed for all of the sub-scales to ensure that they were also reliable. To put it more concretely, a negative value of inter-item correlation (which means this item may have not been correctly reverse scored) or a less than .3 value of item-total correlation (which means this item may measure something different from the scale) should be removed from scales. Moreover, Skewness values and Kurtosis values of all items were also examined. If the values of Kurtosis are bigger than 3, it means they do not match the assumption of normality and then these inadequate items have to be removed (Pallant, 2007).

On the basis of above process, the reliability of each subscale can be assessed. Before we turn to the discussion of the reliability of every scale, I have to state that the items which have inadequate values of item-total correlation, skewness or kurtosis will be excluded from the scales. Since these items were developed theoretically, these items were well-thought-out. If these items still could not have good values of item-total correlation, skewness or kurtosis at this stage, I think that deleting these items is the only way to ensure the consistency and normality of scales.

6.1.1 Scale of Students' Perception of Parents' Educative Capital

As mentioned in the chapter 5, there are four Likert-type scales in Scale of Students' Perception of Parents' Educative Capital. The value of the reliability of these 4 subscales is shown below (see Table 6.1). It clearly tells us the all subscales have a satisfactory reliability coefficient (above .7).

However, because these items' values of reliability indicators do not reach the level of satisfaction, question PSS 3, PSS 4, PPES 5, PIES 6, PPCS 5 and 6 are removed from the scales. The detail of results of the inter-item correlation values, item-total correlation values, Skewness values and Kurtosis values are presented in Appendix 6.4 and Appendix 6.1.

In summary, having discarded the inappropriate items, the remaining questions for a further main study and the reliability of these new sub-scales are listed below (Table 6.1).

Table 6.1 Reliability of Sub-scales of Students' Perception of Parents' Educative Capital (Pilot Study)

Subscale	Original		Renewed	
	Number of Items	Internal Consistency	Number of Items	Internal Consistency
PSS (Parenting Style)	11	.782	9	.843
PPCS (Parents' Participation in Cultural Activities with Children)	12	.881	10	.860
PPES (Parents' Participation in Children's Educational Activities)	12	.825	11	.829
PIES (Parents' Involvement in Education)	10	.754	9	.766

6.1.2 Scale of Students' Educational Habitus

The scale of students' educational habitus includes three subscales. The coefficient of the internal consistency of each subscale is listed in Table 6.2. All the values of reliability are above .8. In other words, they reach a satisfactory level.

Since SVES 8 and SVES7 have low value of item-total correlation, these two items are excluded from the questionnaire. In daddition, for subscale SCSS, after consulting the feedback of participants, there is a reform of subscale SCSS (see the section 6.1.5 of this chapter). The detail of results of the inter-item correlation values, item-total correlation values, Skewness values and Kurtosis values showed in Appendix 6.4 and Appendix 6.2.

In brief, for scale of students' educational habitus, the remaining items for a further main study and the reliability of these new sub-scales are listed below (Table 6.2).

Table 6.2 Reliability of Sub-scales of Students' Educational Habitus (Pilot Study)

Subscale	Original		Renewed	
	Number of Items	Internal Consistency	Number of Items	Internal Consistency
SVES (Students' Views of Education)	9	.821	7	.841
SRSS (Students' Recognition of Students-Role Value)	9	.892	9	.892
SCSS (Students' Conformity to the Student-Role Value)	7	.876	7	.876

6.1.3 Scale of Students' School Experiences

The scale of students' school experiences comprised four subscales. The value of reliability of each subscale is listed in Table 6.3. All the values of reliability are greater than .7. In other words, they have satisfactory reliability coefficients.

Moreover, all items have appropriate inter-item correlation coefficients, item-total correlation coefficients, and Kurtosis values except SEAS 4, SPES 2 and SRCS 7 In this case, these three items are removed from questionnaire. Overall, for the scale

measuring students' school experience, the remaining items the reliability of these new sub-scales for the main study are listed below (Table 6.3). The detail of results of the inter-item correlation values, item-total correlation values, Skewness values and Kurtosis values showed in Appendix 6.4 and Appendix 6.3.

Table 6.3 Reliability of Sub-scales of Students' School Experiences (Pilot Study)

Subscale	Original		Renewed	
	Number of Items	Internal Consistency	Number of Items	Internal Consistency
SEAS (Students' Educational Attainment)	4	.723	3	.721
SPES (Students' Participation in Educational Activities)	8	.886	7	.869
SRCS (Students' Relationship with Classmates)	10	.902	9	.893
SRTS (Students' Relationship with the Class teacher)	9	.949	9	.949

6.1.4 Scale of Family Socio-economic Status

The value of reliability of this scale comprising four items is 0.814 (see Appendix 6.4). It means that it has satisfactory reliability coefficient; in addition, it also has appropriate inter-item and item-total correlation coefficients (see Appendix 6.4). Therfore, all questions are kept for main study.

6.1.5 A Reform of Students' Conformity to the Student-Role Value Scale

Regarding the Students' Conformity to the Student-Role Value Scale (SCSS), after consulting the feedback of participants, 5 more questions are added in order to measure students' willingness to conform to student-role values more properly. Indeed, apart from building a holistic view of student-role value by discussing students' willingness to behave, the exploration of students' educational habitus could also be accomplished. Based on the four aspects of student-role value, questions SCSS 1, 2 and 3 corresponded to the idea of the relationship with classmates, while questions SCSS 4,

5, and 10 were designed to indicate the concept of the relationship with the home-teacher. Questions SCSS 7, 9, and 12 related to 'active studying', and questions SCSS 6, 8, and 11 were connected to 'obeying school rules. All items of subscale SCSS are listed below:

SCSS1. I am willing to help classmates voluntarily.
SCSS2. I am willing to know classmate.
SCSS3. I am willing to get on well with classmates.
SCSS4. I am willing to be close to teachers.
SCSS5. I am willing to do my best to satisfy teacher's requirements.
SCSS6. I am willing to do my best to satisfy class cadres' requirements.
SCSS7. I am willing to do my best to take part in class activities.
SCSS8. I am willing to do my best to take my responsibility for my duties.
SCSS9. I am willing to do my best to complete my assignment.
SCSS10. I am willing to respect my teacher.
SCSS11. I am willing to obey the school regulations.
SCSS12. I am willing to study actively.

Table 6.4 has showed us the differences between original scales and renewed scales of the pilot study. Moreover, as has been pointed out, after some changes has been made, the renewed scales of pilot study formed the very version of the questionnaire used in the main study. In other words, Table 6.4 has also given us an overview of the differences between the questionnaires of the pilot study and that of the main study. In addition, all questions used in the final questionnaire are presented in Appendix 6.5.

Table 6.4 The differences between the original and renewed sacles of the pilot study

Scale A: Students' Perception of Parents' Educative Capital	Sub-scales	Pilot study (all items)		Pilot Study (deleting inappropriate items)[1]	
		Number of Items	Cronbach's alpha value	Number of Items	Cronbach's alpha value
	1. Parenting Style Scale: PSS	11	.782	9	.843
	2.Parents' Participation in Cultural Activities with Children Scale: PPCS	12	.881	10	.860

[1] After deleting inappropriate items, these renewed scales were used in the main study.

	3.Parents' Participation in their Children's Educational Activities Scale: PPES	12	.825	11	.829
	4. Parents' Involvement in Education Scale: PIES	10	.754	9	.766
Scale B: Students' Educational Habitus	1. Students' Views of Education Scale: SVES	9	.821	7	.841
	2. Students' Recognition of Student-Role Value Scale: SRSS	9	.892	9	.892
	3. Students' Conformity to the Student-Role Value Scale: SCSS	7	.876	12	#[2]
Scale C: Students' Educational Attainments	1.Students' Educational Attainment Scale: SEAS	4	.723	3	.721
Scale D: Students' Engagement in School	1. Students' Relationship with Classmates Scale: SRCS	10	.902	9	.893
	2. Students' Relationship with the Class Teacher Scale: SRTS	9	.949	9	.949
	3.Students' Participation in Educational Activities Scale: SPES	8	.886	7	.869
Scale E: Background Information	1. Gender	1		1	
	2. Family Type	1		1	
	3. Free School Meals	1		1	
	4. Father's Highest Educational Degree	1		1	
	5. Mother's Highest Educational Degree	1		1	
	6. Father's Current/ Last Occupation	1		1	
	7. Mother's Current/ Last Occupation	1		1	
Total Number of Items		108		102	

[2] Since the subscale SCSS was reformed, its reliability could not be obtained until new data in the main study were collected.

6.2. Reliability of Assessment Scales: **Main Study**

Having clarified the content of the questionnaires of the main study, I will examine the reliability of each assessment scale. As has been done in the pilot study, the Cronbach's alpha value, inter-item correlation values, item-total correlation values, the Skewness and Kurtosis values are still the indicators of reliability. If items could not have good values of these indicators, deleting these items is the way to ensure consistency and normality of the scales.

6.2.1 Scale of Students' Perception of Parents' Educative Capital

As mentioned in the previous chapter, in terms of the scale of parents' educative capital, there were four Likert-type sub-scales. The value of the reliability of the four Likert-type scales indicates that all the sub-scales had a satisfactory reliability (above .7). However, PPCS10 and PIES 2 had a value of item-total correlation of less than .3 (see Appendix 6.6). In addition, PPCS 1, PPCS 2, PPCS 4, PPCS 10, PIES 1, and PIES 3 had greater values of Kurtosis (above 3) which meant these items did not match an assumption of normality (see Appendix 6.7). Consequently, these items were removed from these sub-scales.

In summary, having discarded inappropriate items, the remaining questions for further analysis, and the reliability of these new sub-scales are listed below (Table 6.5). Most of the new reliabilities were slightly higher than the previous ones.

Table 6.5 Reliability of Sub-scales of Students' Perception of Parents' Educative Capital (Main Study)

Subscale	Original		Renewed	
	Number of Items	Internal Consistency	Number of Items	Internal Consistency
PSS (Parenting Style)	9	.853	9	.853
PPCS (Parents' Participation in Cultural Activities with Children)	10	.837	6	.798
PPES (Parents' Participation in Children's Educational Activities)	11	.846	11	.847
PIES (Parents' Involvement in Education)	9	.766	6	.800

6.2.2 Scale of Students' Educational Habitus

The scale of students' educational habitus comprised three sub-scales. The coefficient of the internal consistency of each sub-scale is listed in Table 6.6. Since all the values were satisfactory (see Appendix 6.8 and Appendix 6.9). Therefore, all of the questions of these sub-scales were retained for the factor analysis.

Table 6.6 Reliability of Sub-scales of Students' Educational Habitus (Main Study)

Subscale	Original		Renewed	
	Number of Items	Internal Consistency	Number of Items	Internal Consistency
SVES (Students' Views of Education)	7	.894	7	.894
SRSS (Students' Recognition of Students-Role Value)	9	.911	9	.911
SCSS (Students' Conformity to the Student-Role Value)	12	.929	12	.929

6.2.3 Scale of Students' Experience in School

Students' experience in school was measured with a composite of two main scales. The first scale focuses on students' educational attainment; the other one, which has three aspects, measures the concept of school engagement. The value of the reliability of these sub-scales is illustrated in Table 6.7. All values were satisfactory (see Appendix 6.10 and Appendix 6.11). Accordingly, all items were used for a factor analysis.

Table 6.7 Reliability of Sub-scales of Students' School Experiences (Main study)

Subscale	Original		Renewed	
	Number of Items	Internal Consistency	Number of Items	Internal Consistency
SEAS (Students' Educational Attainment)	3	.837	3	.837
SPES (Students' Participation in Educational Activities)	7	.869	7	.869
SRCS (Students' Relationship with Classmates)	9	.934	9	.934
SRTS (Students' Relationship with the Class teacher)	9	.954	9	.954

6.2.4 Scale of Family Socio-economic Status

Family socioeconomic status (FSES) was measured with a composite of four items (Father's Highest Educational Degree, Father's Work, Mother's Highest Educational Degree, and Mother's Work). The value of the reliability of this scale is .772. In additionally, the values of all of the items were satisfactory. Therefore, all of the questions were retained for the factor analysis.

In summary, Table 6.8 has shown us the differences between the original scales and the renewed scales of the main study.

Table 6.8 The differences between the original and renewed sacles of the main study

Scale A: Students' Perception of Parents' Educative Capital	Sub-scales	Main Study		Main Study (deleting inappropriate items)	
		Number of Items	Cronbach's alpha value	Number of Items	Cronbach's alpha value
	1. Parenting Style Scale: PSS	9	.853	9	.853
	2.Parents' Participation in Cultural Activities with Children Scale: PPCS	10	.837	6	.798
	3.Parents' Participation in their Children's Educational Activities Scale: PPES	11	.846	11	.847
	4. Parents' Involvement in Education Scale: PIES	9	.766	6	.800
Scale B: Students' Educational Habitus	1. Students' Views of Education Scale: SVES	7	.894	7	.894
	2. Students' Recognition of Student-Role Value Scale: SRSS	9	.911	9	.911
	3. Students' Conformity to the Student-Role Value Scale: SCSS	12	.929	12	.929
Scale C: Students' Educational Attainments	1.Students' Educational Attainment Scale: SEAS	3	.837	3	.837
Scale D: Students'	1. Students' Relationship with Classmates Scale: SRCS	9	.934	9	.934

Engagement in School	2. Students' Relationship with the Class Teacher Scale: SRTS	9	.954	9	.954
	3.Students' Participation in Educational Activities Scale: SPES	7	.869	7	.869
Scale E: Background Information	1. Gender	1		1	
	2. Family Type	1		1	
	3. Free School Meals	1		1	
	4. Father's Highest Educational Degree	1		1	
	5. Mother's Highest Educational Degree	1		1	
	6. Father's Current/ Last Occupation	1		1	
	7. Mother's Current/ Last Occupation	1		1	
Total Number of Items		102		95	

After examining the reliability value of each sub-scale and removing inappropriate items, I conducted an exploratory factor analysis to check the unidimensionality of the scales, as will be explained in the next section.

6.3 Overview of Exploratory Factor Analysis

In this section, a factor analysis (FA) was conducted to evaluate the three main scales, namely, *Students' Perception of Parents' Educative Capital, Students' Educational Habitus and Students' School Experience.* The reason why I undertook a factor analysis was perfectly articulated by Comrey and Lee: I had to 'test [my] theory about the number and nature of the factor constructs needed to account for the intercorrelations among the variables being studied' (Comrey & Lee, 1992:4). In other words, my manipulation of factor analys in this study was to determine the potential dimensions of latent factors. Most of latent factors could not be measured directly; factor analysis was a method to explore the elements of latent factors, that is, to determine the different dimensions of factors, and to examine the different variables of each dimension. To put it more concretely, I wanted to find out groups among the items of questionnaire and to assess whether these groups are associated with the three main measured concepts. Moreover, I also used factor analysis to reduce the large number of related variables to a more manageable number, prior to using them for

further analysis. Gorsuch (1983:2) has stated that factor analysis can be used to'summarize the interrelationships among the variables in a concise but accurate manner as an aid in conceptualization …. [T]his is often achieved by including the maximum amount of information from the original variables in as few derived variables, or factors, as possible to keep the solution understandable'. Indeed, factor analysis can be used to establish the maximum amount of variance that can be explained by the minimum number of underlying factors (Field, 2009; Pallant, 2007; Chen, et al., 2009 and Wang, 2006); therefore, it can give a parsimonious description of data.

Having clarified the rationale of Exploratory Factor Analysis (EFA), the three main steps of procedure of EFA will be examined.

Step 1: Inspection of The Suitability of The Data

Before conducting a factor analysis, it is vital to examine the suitability of the data. In terms of this issue, the inter-correlation between the variables must be first consideration to assess multicollinearity (Tabachnick & Fidell, 2007; Field, 2009 and Wang, 2006). The pattern of this relationship can be ascertained by inspecting the correlation matrix. Tabachnick and Fidell (2007) suggested the value of coefficients of the correlation matrix should be greater than .3. However, if these coefficients are too big or too small, the coefficients of the correlations are not suitable for factor analys. In addition, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity are indices used to judge the data. With regard to KMO, it is based on partial correlation matrix. Tabachnick & Fidell, (2007) have pointed out that the value of KMO have to be greater than .6. The closer to 1 the value of KMO is the better the correlations of items will be. That is, the data is more suitable for conducting factor analysis. Furthermore, the index of Bartlett's Test of Sphericity should be significant ($p < .05$). It means that these items share the same factor. If the index value reaches the level of satisfactory, the data for the factor analysis can be considered appropriate.

Step 2: Factor Extraction

The next step was to choose a method of factor extraction. The purpose of factor extraction is to determine the smallest number of factors which can best represent the inter-relationship among the set of variables (Field, 2009). Many approaches can be adopted to extract the number of underlying factors, including principal components, principal axis factoring, image factoring, and so on. Since the method of principal components is easier to explain than the others, it is the most commonly used approach and is more preferable for beginners (Pallant, 2007 and Chen, et al., 2009). Therefore, the principal components method was chosen to extract the underlying factors in this study. Moreover, the researcher can determine the number of factors to best describe the underlying relationship among the variables. In other words, the researcher has to find as few factors as possible, while these few factors should explain as much of the variance in the original data set as possible. There are a number of techniques that can be used to assist in making the decision concerning the number of factors to retain, such as Kaiser's criterion, scree test and parallel analysis. In this study, the approach that has been used was Catell's scree test. Pallent (2007) has stated that Catell's scree test involves plotting each of the eigenvalues of the factors and inspecting the plot to find a point at which the shape of the curve changes direction and becomes horizontal. Catell recommends retaining all factors break in the plot as these factors contribute the most to the explanation of the variance in the data set. However, it is necessary to consider prior theories when deciding the number of extracted factors.

Step 3: Factor Rotation and Interpretation

Following the decision to adopt the method of factor extraction, it is necessary to choose the most appropriate factor rotation approach. Rotation maximises the loading of each variable on one of the extracted factors whilst minimising the loading on all the other factors. Indeed, it presents a pattern of the loadings in a manner which is easy to interpret (Field, 2009). There are two methods of factor rotation, namely, orthogonal rotation and oblique rotation (Wang, 2006; Field, 2009 and Chen, et al., 2009). Basically, from a theoretical perspective, the choice of rotation largely depends upon whether or not the researcher thinks that the underlying factors should be related. If the factors are assumed to be independent, then an orthogonal rotation (such as varimax, quartimax and equamax) should be used. However, if the factors may be correlated, then an oblique rotation (such as direct oblimin and promax) should be selected. Since the varimax method attempts to minimise the number of variables with high loadings

in each factor, it has become the most commonly used orthogonal approach. In addition, Gorsuch (1983) believes that the promax method is capable of obtaining the factors as well as the varimax method. Therefore, in this study, the promax method and the varimax method represent the oblique rotation and orthogonal rotation respectively. Moreover, Pedhazur and Schmelkin (1991) suggest that when conducting a factor analysis, one should do both oblique and orthogonal rotations. Then, based on the values of component correlation matrix, to decide whether to use an orthogonal rotation (varimax rotation) or a oblique rotation (promax rotation). Therefore, this study always starts with an oblique rotation (promax rotation), since it provides the degree of correlation between the factors. In other words, the values of the component correlation matrix are considered before deciding whether to use an orthogonal rotation (varimax rotation) or an oblique rotation (promax rotation).

After conducting factor rotation, we know which variables would cluster together to construct the factors. The next step is to label and interpret these factors. It is possible to label these factors based on the basis of our understanding of the content of the variables, testing theory and past research (Wang, 2006; Pallant, 2007 and Field, 2009).

6.4 Exploratory Factor Analysis in this Study

As mentioned above, based on the results of the scale reliability, some questions had been rejected from the original scale, while the remaining questions were subjected to a factor analysis. To put the matter more concretely, the first step is to check whether or not the data are suitable for factor analysis; a principal components extraction with a promax rotation was conducted, and then, depending on the results of the Component Correlation Matrix, the appropriate rotation method was decided. Finally, the output of the factor analysis was interpreted.

6.4.1 Exploratory Factor Analysis of Scale of Students' Perception of Parents' Educative Capital

As mentioned above, for the tested items in this study, the correlation matrix revealed many coefficients of .3 and above, which range from .3 to .72 (see Appendix 6.12).

Moreover, the KMO value was .920 which falls into the range of being superb (Pallant, 2007), and Bartlett's Test reached a statistical significance (at $p < .001$). These measures supported the factorability of the correlation matrix (Tabachnick & Fidell, 2007). The diagnostic tests all produced satisfactory results (see Appendix 6.13), which verified the appropriateness of conducting a factor analysis on this data.

With regard to the scale of students' perception of parents' educative capital including 32 items, the component correlation matrix (see Appendix 6.13) shows that many of the correlation coefficients between the components are greater than .3 and this assumes that the components are strongly correlated. Therefore, the oblique rotation (promax rotation) is the appropriate method for this scale.

As mentioned above, a total of 32 questions (Table 6.5) remained for a factor analysis. A principal components analysis revealed the presence of five components with eigenvalues exceeding 1, explaining 53.23% of the variance respectively (Appendix 6.13). An inspection of the Catell's scree test suggested that two components might be retained for further investigation (Appendix 6.13). However, the two-component solution only explained a total of 38.48% of the variance, which was far below the accepted standard. In social science, the acceptable minimum value of a total variance explained is 50% (Wang, 2006). Moreover, the Pattern Component Matrix presented information about the factor loadings of each of the variables (Appendix 6.13). There were five groups that were clearly displayed in the Pattern Component Matrix. That is, this result suggested that there were five components. Therefore, it was sensible to assume that a five-component solution was appropriate for this scale.

From the table of the Pattern Component Matrix (Appendix 6.13), it shows that Component 1 included 11 items: item PPES 5, 9, 6, 7, 10, 11 and PIES 5, 6, 7, 8, 9. The values of the loading of these 11 items were all above .3, However, item PPES 6, 7 and 9 were cross-loaded on Component 1 and Component 5. In such cases, according to Hair et al. (2006) and Pallant (2007), the researcher should decide how many factors to extract and which factor loadings are significant in the light of theoretical literature. Since PPES 7 reflected how parents view the importance of education, it did not fit well with other items. Consequently, after consulting the theoretical function and the value of the loading, item PPES 6 and 9 were retained in Component 1, while PPES 7 was moved to Component 5. In this situation, Component 1 which now contained 10

items. Moreover, these items emphasized parent's abilities to comply with schools' standards and their concern of school affairs. Therefore, this subscale was named "Parents' Involvement in Education (PIE)".

Component 2 contained 9 items with loading values above .3. However, item PSS 1, 7 and 5 were cross-loaded on Component 2 and Component 5. Due to the value of the loading and, more importantly, the designed theoretical function, in this case, item PSS 5 and 7 were reallocated to Component 5 since they were more related to parents' view of importance of education but an item PSS 1—which reflected the idea of parenting style—was retained in Component 2. Therefore, Component 2 consisted of seven items (PSS1, 2, 3, 4, 6, 8 and 9), and kept its name "Parenting Style (PS)".

Component 3 contained 6 items (item PPCS 3, 5,6,7,8, and 9) with loading values of above .3, and they only loaded on Component3. Consequently, this component kept its name "Parents' Participation in Cultural Activities with Children (PPC)".

Component 4 included items PPES 1, 2, 3, 4 and item PIES 4, and the values of loading of these 5 items were greater than .3, only loading on Component 4. Therefore, Component 4 contained 5 items. Moreover, these five items all focused on the interaction between parents and class teachers. In this case, this subscale was named "Parent- Teacher Relationships (PTR)".

Component 5 consisted of seven items: item PSS 1, 5, 7 and item PPES 6,7,8,9. However, item PPES 6, 7 and 9 were cross-loaded on Component 1 and 5; item PSS 1, 5 and 7 were cross-loaded on Component 2 and 5. Because the decisions made above, item PPES 7, PSS 5 and 7 were retained in the fifth component; while item PSS 1 and PPES 6, 9 were reassigned to Component 2 and Component 1 respectively. Accordingly, the fifth component included four items (PPES 7, 8 and PSS 5, 7). When we looked at these four items (see Appendix 6.6), these items reflected parents' view of the importance of education. In this case, the fifth factor with four items was entitled "Parents' View of Education (PVE)".

Overall, the scale of measuring students' perception of parents' educative capital originally consisted of four sub-scales (four measured concepts). However, having conducted a factor analysis, a total of five new measured components (five measured sub-scales) were obtained. The following table 6.9 illustrates the content of these five

sub-scales. Furthermore, it was necessary to re-measure the reliability of these five sub-scales which formed a new scale of students' perception of parents' educative capital. Table 6.9 also shows the value of the reliability of each new sub-scale as well.

Table 6.9 The Content of These Five Sub-scales of Students' Perception of Parents' Educative Capital

Sub-scale	Questions		Internal Consistency
PIE (Parents' Involvement in Education)	10 items:	PPES 5,6,9,10,11 and PIES 5,6,7,8,9	.875
PS (Parenting Style)	7 items:	PPS1,2,3,4,6,8,9	.822
PPC (Parents' Participation in Cultural Activities with Children)	6 items:	PPCS3,5,6,7,8,9	.798
PTR (Parent- Teacher Relationships)	5 items:	PIES 4 and PPES1.2, 3,4	.766
PVE (Parents' View of Education)	4 items:	PPES 7, 8 and PSS 5, 7	.726

The reliability and validity of the new scale of students' perception of parents' educative capital were examined, as discussed above. The next section will move to discuss the scale of students' educational habitus.

6.4.2 Exploratory Factor Analysis of Scale of Students' Educational Habitus

Due to the high reliability of each sub-scale of the Students' Educational Habitus scale (Table 6.6); all of the questions were temporarily retained, and subjected to a factor analysis (FA). The data was assessed for its suitability for factor analysis prior to performing the FA, and an inspection of the correlation matrix revealed the presence of many correlation coefficients of .3 and above, which range from .30 to .78 (see Appendix 6.15). In addition, the KMO value was .956 and Bartlett's Test reached a statistical significance (at $p < .001$) which supported the factorability of the correlation matrix. Since the diagnostic tests all produced satisfactory results (Appendix 6.14), it was deemed reasonable to proceed with the factor analysis.

Next, a principal components analysis with a promax rotation was conducted. The component correlation matrix demonstrated that the correlation coefficients between

the components were high (above .3) (Appendix 6.14). Therefore, it could be assumed that the components were strongly correlated, and the promax rotation was the appropriate method for this scale.

The Table of Total Variance Explained revealed the presence of four components with eigenvalues exceeding 1, explaining a total of 66.67% of the variance (Appendix 6.14). Based on Catell's scree test (Appendix 6.14), two components should be retained for further investigation. Although the two-component solution can explain a total of 57.40% of the variance, the conceptual design includes four factors; moreover, in this case, it can explain a total of 66.67% of the variance. Since choosing a four-factor solution can improve the total amount of the variance and respond to the conceptual design, it suggested that a four-factor solution was likely to be more appropriate and meaningful than a two-factor solution.

Next, the table of Pattern Matrix (Appendix 6.14) provided information about the factor loadings of each of the variables.

Component 1 contained nine items which were loaded above .3. However, five of these were cross-loaded. Items SRSS2, SRSS3, SRSS4, and SCSS11 were loaded on Components 1 and 3, while item SCSS7 was loaded on Components 1 and 4. The identification of these items had to be carefully considered. Items SRSS3, SRSS4, SCSS7 and SCSS11 showed a greater loading on Component 1. In addition, these questions were theoretically designed to function in a similar fashion as the items in the first component. Hair et al. (2006) and Pallant (2007) suggest that the researcher should decide how many factors to extract, and which factor loadings are significant in the light of theoretical literature. Since this scale emphasized students' willingness to obey school's requirement, items SRSS3, SRSS4, SCSS7 and SCSS11 fit with this concept and they had greater loading in this component. In this case, items SRSS3, SRSS4, SCSS7 and SCSS11 were put into the first component. However, item SRSS2 was allocated to Component 3 because it has greater loading on Component 3. Therefore, the main loadings on Component1 were items SCSS4, 5, 6, 7, 10, 11 and items SRSS3 and 4. Furthermore, Component 1, which contained 8 items, was labelled "Students' Obedience to Authority (SOA)".

Component 2 contained 8 items loading above .3, four of which were cross-loaded on Components 2 and 3 (SVES1, 2, 7 and SRSS 1). Due to the value of the loading and the theoretical assumption, it was considered that these cross-loaded items should be reassigned or excluded from the component. Because of consideration of the original theoretical design, SRSS 1 was reassigned to the third component while other cross-loaded items retained in the second component. Therefore, Component 2 consisted of 7 items, namely, SVES1, 2, 3, 4, 5, 6, and 7, and kept its name "Students' Views of Education (SVE)".

With regard to the third component, 15 items loaded above .3, and some of them were cross-loaded on other components. Following the decision made above and considering the value of the loading, 2 of the cross-loaded items (items SRSS 1 and 6) were retained in Component 3. Consequently, nine items belonged to Component 3, namely, items SRSS1, 2, 5, 6, 7, 8, 9, and SCSS 9, 12. In addition, since these items all stressed the importance of learning actively, Component 3 was labelled "Students' Awareness of Being an Active Learner (SAA)".

Component 4 contained 6 items loading above .3, two of which were cross-loaded. Based on the selection made above, two cross-loaded items (SRSS6 and SCSS7) were removed from this component. Consequently, four items were included in Component 4, namely, SCSS1, 2, 3, and 8. Additionally, the central issue of this scale examined students' willingness to make friends with classmates. This component was labelled "Students' Views of Friendship Keeping (SFK)".

Initially, the scale of measuring students' educational habitus consisted of three sub-scales (three measured concepts). However, having conducted a factor analysis, four new measured components were obtained. As a result, there are four sub-scales for measuring students' habitus, and these are detailed in the following table (Table 6.10).

Table 6.10 The Content of These Four Sub-scales of Students' Educational Habitus

Sub-scale	Items	Internal Consistency
SOA (Students' Obedience to Authority)	8 items: SCSS4,5,6,7, 10,11 and SRSS3,4	.930
SVE (Students' Views of Education)	7 items: SVES1,2,3,4 5,6,7	.894
SAA (Students' Awareness of Being an Active Learner)	9 items: SCSS9,12 and SRSS1,2,5,6,7,8,9	.916
SFK (Students' Views of Friendship Keeping)	4 items: SCSS 1, 2, 3, 8	.800

The next section will present a discussion of the scale of students' experience in school.

6.4.3 Exploratory Factor Analysis of Scale of Students' Educational Attainment

Students' experience in school was measured with a composite of two main sub-scales. The first subscale focuses on students' educational attainment; the other one which has three aspects measures the concept of school engagement.

Firstly, look at the subscale of students' educational attainment. Because of the high reliability of this subscale (Table 6.7), three items were used for a factor analysis. Added to the fact that an inspection of the correlation matrix revealed the presence of many coefficients of .3 and above (Appendix 6.16), the preliminary analysis also suggested that both the KMO (.722) and the Bartlett Tests were statistically suitable ($p < .001$) for performing a factor analysis.

The promax rotation revealed the presence of one component with eigenvalues exceeding 1, explaining a total of 75.54% of the variance (Appendix 6.16). In addition, as the scree plot and Pattern Matrix revealed, it was decided to retain one component for further investigation. In addition, this component is named "students' educational attainment" (SEA).

6.4.4 Exploratory Factor Analysis of Scale of Students' School Engagement

Due to the satisfactory of reliability (Table 6.8), 25 items were subjected to perform factor analysis. Firstly, the correlation matrix revealed the presence of many coefficients of .3 and above, which range from .30 to .83 (Appendix 6.18); the KMO value was .942, and Bartlett's Test reached a statistical significance (at $p < .001$). All tests produced satisfactory results, which assumed that the appropriateness of conducting a factor analysis (Appendix 6.17).

Then, a principal components analysis with a promax rotation was conducted. The component correlation matrix demonstrated that most of the correlation coefficients between components were above .3 (Appendix 6.17), therefore, it was assumed that the components were strongly correlated, and that the promax rotation was the appropriate method for this scale.

The promax rotation revealed the presence of three components with eigenvalues exceeding 1, explaining a total of 67.20% of the variance (Appendix 6.17). In addition, as the scree plot revealed a clear break after the third component, it was decided to retain three components for further investigation.

The result of the Pattern Matrix (Appendix 6.17) illustrates a structure with three components: each of the variables was strongly loaded on only one component, and each component was represented by a number of strongly loaded variables. Indeed, it can be seen from the Pattern Matrix that the main loadings on Component 1 in this scale were items SRTS1 to SRTS9, on Component 2 were items SRCS1 to SRCS9, and on Component 3 were items SPES1 to SPES7. All items reflected the theoretical design. Therefore, these three components kept their names "Students' Relationship with the Class Teacher (SRT), Students' Relationship with Classmates (SRC), and Students' Participation in Educational Activities (SPE)" respectively.

Moreover, for the new scale of students' experience in school, the value of the reliability of each sub-scale is shown below (Table 6.11), and all of the sub-scales had preferable internal consistency coefficients.

Table 6.11 Reliability of The Four Sub-scales of Students' School Experiences

Sub-scale	Items	Internal consistency
SRC (Students' Relationship with Classmates)	9	.934
SRT (Students' Relationship with the Class Teacher)	9	.954
SPE (Students' Participation in Educational Activities)	7	.869
SEA (Students' Educational Attainment)	3	.837

6.4.5 Exploratory Factor Analysis of Scale of Family Socioeconomic Status

For this scale, the four questions were subjected to a factor analysis (FA). Then, an inspection of the correlation matrix revealed the presence of many coefficients of .3 and above, which range from .35 to .60 (Appendix 6.20). In addition, the KMO value was .723 and Bartlett's Test reached a statistical significance (at $p < .001$) which supported the factorability of the correlation matrix. Since the diagnostic tests all produced satisfactory results, it was deemed reasonable to proceed with the factor analysis (Appendix 6.19).

Next, a principal components analysis with a promax rotation was conducted. The promax rotation revealed the presence of one component with eigenvalues exceeding 1, explaining a total of 59.45% of the variance (Appendix 6.19). In addition, as the scree plot revealed a clear break after the first component, it was decided to retain one component for further investigation.

With regard to this component, it includes four items: Father's Highest Educational Degree (FE), Father's Work (FW), Mother's Highest Educational Degree (ME), and Mother's Work (MW). Moreover, this component was still labelled "Family Socio-economic Status (FSES)".

6.5 Conclusion

As discussed above, new components were extracted because of the results of the factor analysis. Moreover, each component was designed to be measured by a sub-scale, and consequently, the content of the questionnaire was re-formed. An overview of the new questionnaire is presented in Table 6.12 below.

Table 6.12 After conducting EFA, an overview of extractive factors of question items

Scale A: Students' Perception of Parents' Educative Capital	Factor	Items	Internal Consistency
	1.Parents' Participation in Cultural Activities with Children: PPC	6	.798
	2. Parents' View of Education: PVE	4	.726
	3.Parenting Style: PS	7	.882
	4.Parent-Teacher Relationships: PTR	5	.766
	5. Parents' Involvement in Education: PIE	10	.875
Scale B: Students' Educational Habitus	1.Students' Obedience to Authority: SOA	8	.930
	2.Students' Awareness of Being an Active Learner: SAA	9	.916
	3. Students' Views of Education: SVE	7	.894
	4. Students' Views of Friendship Keeping: SFK	4	.800
Scale C: Students' Educational Attainment	1.Students' Educational Attainment: SEA	3	.837
Scale D: Students' School Engagement	1. Students' Relationship with Classmates: SRC	9	.934
	2. Students' Relationship with the Class Teacher: SRT	9	.954
	3. Students' Participation in Educational Activities: SPE	7	.869
Scale E:	1.Gender	1	

Background Information	2.Family Style	1	
	3.Free School Meals	1	
	4.Father's Highest Educational Degree	1	
	5.Mother's Highest Educational Degree	1	
	6.Father's Current/ Last Occupation	1	
	7.Mother's Current/ Last Occupation	1	
Total Number of Items		95	

As can be seen, the first scale, students' perception of parents' educative capital, contained five sub-scales, and these five components were PPC, PVE, PS, PTR, and PIE. These five components explained a total of 53.23% of the variance. Secondly, the scale of students' educational habitus had four components, namely, SOA, SAA, SVE, and SFK, which explained a total of 66.67% of the variance. Thirdly, the scale of students' educational attainment which has one component explained a total of 75.54% of the variance. The fourth scale, students' engagement in school, explained a total of 67.2% of the variance, and, the three components which formed the scale were SRC, SRT, and SPE. And, the last scale of family socioeconomical status has one component and explained a total of 59.45% of the variance.

Over all, all scales have the acceptable explained value of a total variance which are greater than 50%. In addition, these measures (Table 6.12) will be used in the subsequent data analysis.

Chapter 7

Results II: Different School Experience in Terms of Social Status and Gender

The purpose of this chapter is to offer the reader preliminary analyses undertaken in this study and answer two of research questions. To this end, the descriptive statistics of participants' responses to measured subscales are presented first, and this is followed by a comparison of the Means of each subscale in terms of gender and social status in order to answer research question 1: *Does school experience vary according to family socio-economic status and gender?,* and research question 2: *To what extent are family socio-economic status/gender linked to difference in students' perception of parents' educative capital, student educational habitus and school experience?* Moreover, it needs to be noted that this chapter reports on the subscales which were produced by the Exploratory Factor Analysis (Chapter 6), and which were used in the subsequent Structural Equation Modelling (Chapter 8).

7.1 Preliminary Data Analyses: Descriptive Statistics

Data analysis usually starts from descriptive statistics; indeed, descriptive statistics are used to describe the features of the collected data in order to examine its important characteristics. That is, it is the most appropriate way to offer readers a preliminary understanding of a large amount of data. Social status background and gender are particularly referred to as the two independent variables in this research, and it is vital to understand the distribution of the participants. Therefore, the participants' background information is addressed first, and then the distribution of participants' various responses to all sub-scales. Furthermore, the participants' responses are also compared to measured concepts, such as students' perception of parents' educative capital, students' educational habitus and school experience, in terms of family social status and gender.

7.1.1 Distribution of Participants' Background Information

In order to present an overall picture of the basic information of participants, a good way to begin is to examine their general information. In this study, 49.2% of the 651

participants were female (Table 7.1), which shows that the gender distribution is nearly equal.

Table 7.1 Distribution of Gender

	Frequency	Percent
Female	320	49.2
Male	331	50.8
Total	651	100.0

In terms of family social status, based on a combination of the highest educational qualification and the occupation of participants' parents, the pupils were grouped into 5 levels (Lin, 2000). As we have seen in Table 7.2, the highest and lowest levels are level 1 and level 5 respectively. 1.8% of all pupils were level 1 (professional), 18.0% were level 2 (semi-professional), 24.9% were level 3 (skilled non-manual), 37.6% were level 4 (skilled manual) and 17.7% were level 1 (unemployed and non-skilled manual). In other words, the majority of pupils come from level 4 (skilled manual), while fewer of them come from level 1 (professional). However, due to the few number of Level 1 (professional, 1.8%), I combine the number of level l (professional) with level 2 (semi-professional). The new distribution of family socio-economic status is shown in Table 7.3. It appears that most students come from skilled manual level (around 37.6%), and skilled non-manual level students take the second position (around 24.9%), while professional level students take the third position (around 19.8%) and the unemployed and non-skilled manual level is in the minority (around 17.7%). This result also responses to Guo's research finding that Kaohsiung City is an industrial city, and the majority of the population of the city are skilled manual and skilled non-manual workers (Guo, 2010). With regard to the distribution of parents' highest educational background and last/current occupation, please refer to Appendix 7.1.

Table 7.2 Distribution of Family Socio-economic Status (5 Levels)

	Frequency	Percent
professional (Level 1)	12	1.8
semi-professional (Level 2)	117	18.0
skilled non-manual (Level 3)	162	24.9
skilled manual (Level 4)	245	37.6
unemployed and non-skilled manual (Level 5)	115	17.7
Total	651	100.0

Table 7.3 Distribution of Family Socio-economic Status (4 Levels)

	Frequency	Percent
professional (Level 1)	129	19.8
skilled non-manual (Level 2)	162	24.9
skilled-manual (Level 3)	245	37.6
unemployed and non-skilled manual (Level 4)	115	17.7
Total	651	100.0

If the factors of gender and social status are considered together, the results are presented below (Tables 7.4). The table shows the distribution of the number of females and males at each level respectively. In terms of male students, the results respond to those of the whole sample: more of them are at a skilled-manual level with fewer being unemployed and non-skilled manual. As for females, there are more at a skilled-manual level and fewer at a professional level. In addition, 22% of boys have a professional status compared with 17.5% of girls. Therefore, it appears that more male students than females come from a prestigious class in this research. However, in general, children's socio-economic backgrounds do not vary by gender.

Table 7.4 Family Socio-economic Status/Gender

	Male		Female	
	Frequency	Valid Percent	Frequency	Valid Percent
professional (Level 1)	73	22.0	56	17.5
skilled non-manual (Level 2)	74	22.4	88	27.5
skilled manual (Level 3)	128	38.7	117	36.6
unemployed and non-skilled manual (Level 4)	56	16.9	59	18.4
Total	331	100	320	100

7.1.2 Distribution of Participants' Responses

Before examining the participants' various responses to the measured sub-scales of family socio-economic status and gender, it is necessary to examine the overall response distribution of each sub-scale to obtain a straightforward understanding of participants' responses. The responses to the scale items are measured by a 5-point Likert scale. The higher point chosen means a more positive or stronger opinion was expressed. A summary of the descriptive statistics of the thirteen sub-scales is shown below (Table 7.5). Because each sub-scale has different number of questions, the mean of each sub-scale was divided by the number of items. In doing so, each scale score ranges from 1-5 and can be compared. Moreover, Chart 7.1 clearly shows that the participants made a less positive response to parents' participation in cultural activities with children (Mean=1.89) and parent-teacher relationships (Mean=2.20), whereas the participants more positively responded to students' views of friendship keeping (Mean=4.27), students' relationship with classmates (Mean=4.12) and students' obedience to authority (Mean=4.02).

Furthermore, a more pertinent understanding can be reached by examining different constructs in detail. Firstly, in the aspect of students' perception of parents' educative capital, students have the least positive perception of their parents participating with them in cultural activities (Mean=1.89); in contrast, these students have the most positive perception of their parents' view of education (Mean=3.63). Secondly, for their educational habitus, students have the most positive attitude toward their friendship-keeping (Mean=4.27); however, surprisingly, they have the least positive (but still positive) attitude toward education and their awareness of being active learners (both Means=3.94). Finally, with regard to students' school experience, they have most positive perception of their friendship with classmates (Mean=4.12); moreover, the average score of students' educational attainment is between 60 and 69 points.

It is clear that, apart from parents' participation in cultural activities with children (Mean=1.89) and parent-teacher relationships (Mean=2.20), the means of other sub-scales are greater than 2.5. This illustrates that students generally have a positive perception of their educational habitus and school experience, while they have varied perceptions of their parents' educative capital.

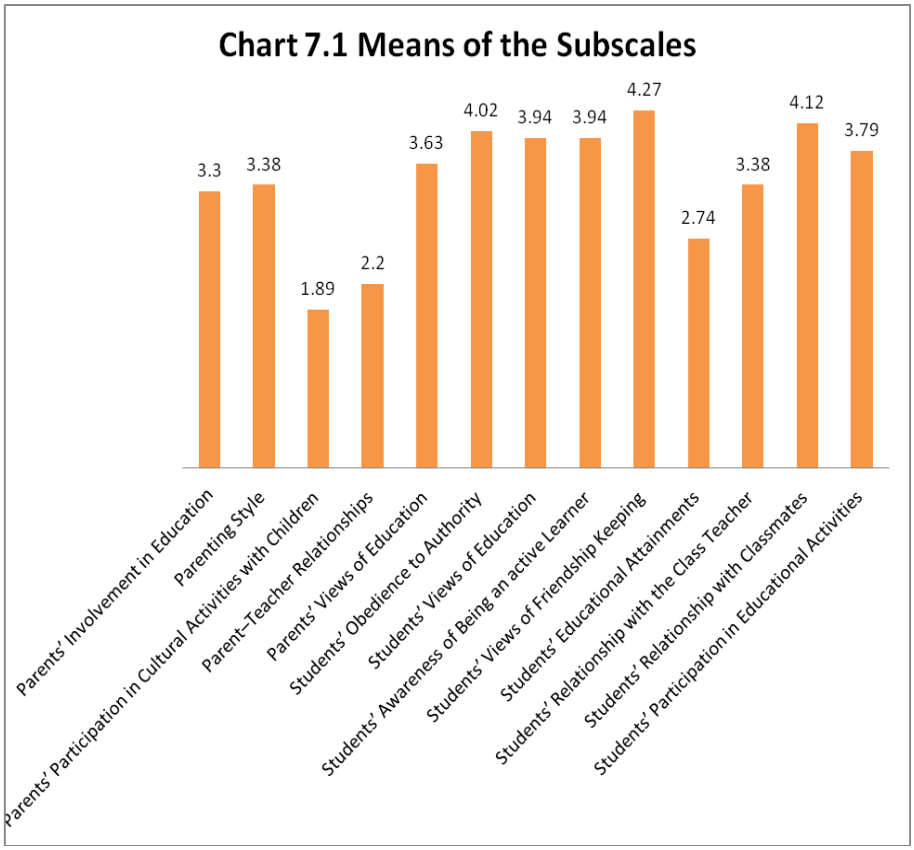


Chart 7.1 Means of the Subscales
3.3
3.38
1.89
2.2
3.63
4.02
3.94
3.94
4.27
2.74
3.38
4.12
3.79
Parents' Involvement in Education
Parenting Style
Parents' Participation in Cultural Activities with Children
Parent–Teacher Relationships
Parents' Views of Education
Students' Obedience to Authority
Students' Views of Education
Students' Awareness of Being an active Learner
Students' Views of Friendship Keeping
Students' Educational Attainments
Students' Relationship with the Class Teacher
Students' Relationship with Classmates
Students' Participation in Educational Activities

Table 7.5 Summary of Descriptive Statistics of Sub-scales

Scale	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis	N of items
Parents' Involvement in Education (PIE)	651	1	5	3.3	0.96	-0.265	-0.639	10
Parenting Style (PS)	651	1	5	3.38	0.92	-0.376	-0.372	7
Parents' Participation in Cultural Activities with Children (PPC)	651	1	5	1.89	0.77	0.994	0.778	6
Parent–Teacher Relationships (PTR)	651	1	5	2.2	0.95	0.754	-0.129	5
Parents' Views of Education (PVE)	651	1	5	3.63	0.96	-0.493	-0.4	4
Students' Obedience to Authority (SOA)	651	1	5	4.02	0.85	-0.924	0.604	8
Students' Views of Education (SVE)	651	1	5	3.94	0.82	-0.707	0.094	7
Students' Awareness of Being an active Learner (SAA)	651	1	5	3.94	0.81	-0.784	0.306	9
Students' Views of Friendship Keeping (SFK)	651	1	5	4.27	0.69	-0.988	0.827	4
Students' Educational Attainments (SEA)	651	1	5	2.74	1.34	0.179	-1.304	3
Students' Relationship with the Class Teacher (SRT)	651	1	5	3.38	1.04	-0.418	-0.376	9
Students' Relationship with Classmates (SRC)	651	1	5	4.12	0.83	-1.081	0.988	9
Students' Participation in Educational Activities (SPE)	651	1	5	3.79	0.78	-0.754	0.597	7

7.2 Data Analysis: Differences between Groups

It is quite obvious from what has been examined thus far that there are different perceptions of parents' educative capital, students' educational habitus and school experiences in terms of participants' responses. Now, in order to answer the next question: is there a statistically significant difference in these perceptions? An appropriate method is to compare the means of the different groups. At this point, an independent-sample t-test can be used to compare the means of two separate groups of individuals on a single variable to examine whether the mean of one group is statistically higher than that of the other group. Moreover, because the independent t-test is used to test different groups of people, it also assumes that variances in these populations are roughly equal and scores are independent (Field, 2009). Indeed, these assumptions are the standards of significance testing. Beginning with testing whether or not there is a significant difference between the mean scores of two groups (male and female), the results of each measured concept is addressed respectively below.

In contrast, when comparing more than two mean scores, an analysis of variance (ANOVA) can be used to obtain the results (Tabachnick and Fidell, 2007). Therefore, a one-way ANOVA was used in terms of different groups' mean scores on a dependent variable (Howitt and Cramer, 2005). In other words, a one-way analysis of variance involves one independent variable, which has a number of different levels; these levels correspond to different groups or conditions. Since one of the research purposes of this study is to compare the differences between the measured concepts affected by family socio-economic status background (four levels), a one-way ANOVA is considered to be an appropriate method. When a significant F test was conducted, the results showed that there was more variability between the groups than within each group; however, they did not indicate which of the groups differ. Therefore, it was necessary to do post-hoc tests (Pallant, 2007), and SPSS provides many methods for doing such tests. The Scheffe test was chosen for this study, since this is the most appropriate method for combining the means of many groups when the assumption of homogeneity of variance is not violated and the number of participants of each group is not equal. (Wang, 2006 and Chiou, 2006); moreover, Tamhane's T2 test can also be adopted in the case of violating the assumption of the homogeneity of the variance. In addition, it

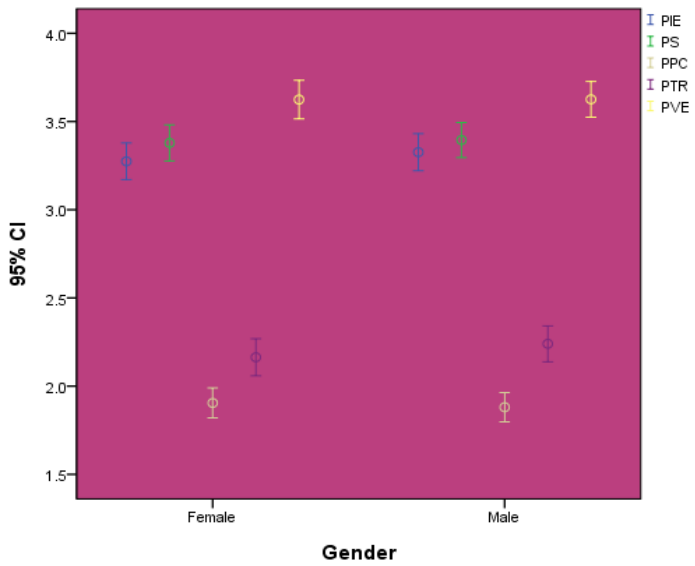
is necessary to state some important points: only significant differences are addressed in order to simplify the contents, and tables of the results of the post-hoc tests are listed in the appendices.

Overall, for this study, an independent-sample t-test and one-way ANOVA are adopted to investigate whether or not there are significant differences in these perceptions in respect of gender and family socio-economic status background.

7.2.1 Students' Perception of Parents' Educative Capital

In this section, five sub-scales measured different aspects of students' perception of parents' educative capital. Chart 7.2 indicates that, in the perspective of gender, there is no large difference of mean scores between boys and girls. In other words, both genders' perceptions of their parents' educative capital are roughly the same. In addition, the error bars overlap considerably, indicating that there is no significant difference between genders.

Chart 7.2 The Means of Subscales of Students' Perception of Parents' Educative Capital / Gender



PIE (Parents' Involvement in Education), PS (Parenting Style), PPC (Parents' Participation in Cultural Activities with Children), PTR (Parent-Teacher Relationship) and PVE (Parent's Views of Education)

Furthermore, an independent t-test was conducted to compare the measured concept of students' perception of parents' educative capital of males and females. The results obtained correspond to those reported above. In other words, there is no statistically significant difference in the perception of girls and boys. The details are shown below (Table 7.6) and all the tables of the t-test results are listed in Appendix 7.2.

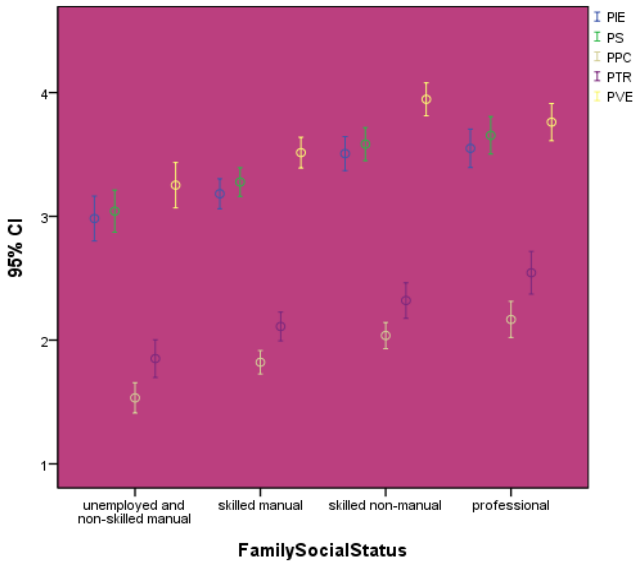
Table 7.6 Independent Sample Test: Students' Perception of Parents' Educative Capital

	Female		Male				95% CI	
Subscale	*M*	*SD*	*M*	*SD*	*t*(649)	*p*	*LL*	*UL*
PIE	32.74	9.40	33.26	9.73	-.69	.49	-1.99	.96
PS	23.65	6.49	23.76	6.43	-.23	.82	-1.11	.88
PPC	11.43	4.63	11.28	4.59	.40	.69	-.57	.85
PTR	10.82	4.77	11.20	4.70	-1.03	.31	-1.11	.35
PVE	14.50	3.96	14.50	3.75	-.02	.99	-.60	.59

Note: PIE (Parents' Involvement in Education), PS (Parenting Style), PPC (Parents' Participation in Cultural Activities with Children), PTR (Parent-Teacher Relationships), and PVE (Parents' Views of Education)

From the angle of family socio-economic status (Chart 7.3), the means of these sub-scales declined gradually from higher family socio-economic status to lower family socio-economic status. This reveals that pupils with a higher family socio-economic status background have a higher perception of educative capital of their parent. For details of means of parents' educative capital, please refer to Appendix 7.3. Furthermore, there are some significant differences, such as that between the professional level and unemployed & non-skilled manual level in terms of students' perception of parents' participation in cultural activities with children and parent-teacher relationships. However, in order to obtain more information about the differences in means of students' perception of parents' educative capital in terms of family socio-economic status differentiation, a one-way between-groups analysis of variance (one-way ANOVA) was conducted.

Chart 7.3 The Means of Subscales of Students' Perception of Parents' Educative Capital / Family Social Status



Note: PIE (Parents' Involvement in Education), PS (Parenting Style), PPC (Parents' Participation in Cultural Activities with Children), PTR (Parent-Teacher Relationships), and PVE (Parents' Views of Education)

Next, a summary of the results of a one-way between-groups analysis of variance exploring the impact of family socio-economic status on students' perception of parents' educative capital is shown in Table 7.7. Since the value for Levene's test did not reach the significance level (p> .000), the assumption of homogeneity of variance is not violated. In addition, the number of participants in each group is not equal. Therefore, a Scheffe test is used for post-hoc comparison. Details of the ANOVA analysis can be seen in Appendix 7.4.

Table 7.7 ANOVA: Students' Perception of Parents' Educative Capital

		df	F	*η2*	*p*
Parents' Involvement in Education	Between Groups	3	11.425***	0.050	0.000
	Within Groups	647			
Parenting Style	Between Groups	3	13.296***	0.058	0.000
	Within Groups	647			
Parents' Participation in Cultural	Between	3	17.781***	0.076	0.000

Activities with Children	Groups				
	Within Groups	647			
Parent-Teacher Relationships	Between Groups	3	13.201***	0.058	0.000
	Within Groups	647			
Parents' Views of Education	Between Groups	3	14.527***	0.063	0.000
	Within Groups	647			

Note: ***p< .001

As clearly shown in Table 7.7, in terms of the concept of parents' educative capital, all aspects reach the level of statistical significance.

There is a statistically significant difference at the p< .001 level in parents' involvement in education [F (3, 647) =11.425, p < .001]. The effect size is .050. Post-hoc comparisons using a Scheffe test indicate that there are significant differences between the lower group (unemployed & non-skilled manual and skilled manual) and the higher group (skilled non-manual and professional). However, as for unemployed & non-skilled manual level and skilled manual level, there is no difference between these two levels. Similarly, there is no significant difference between skilled non-manual level and professional level, either. In other words, there is no significant difference within the groups.

There is a statistically significant difference at the p< .001 level in parenting style [F (3, 647) =13.296, p < .001]. In detail, this indicates an effect size of .058. Post-hoc comparisons using a Scheffe test indicated the same results with parents' involvement in education: there are significant differences between the lower group (unemployed & non-skilled manual and skilled manual) and the higher group (skilled non-manual and professional). However, there is no significant difference within the groups.

There is also a statistically significant difference at the p< .001 level in parents' participation in cultural activities [F (3, 647) =17.781, p < .001]. This also indicates that the effect size, calculated using an eta squared, is .076. A post-hoc comparison using a Scheffe test indicates that the differences between the lower group

(unemployed & non-skilled manual and skilled manual) and the higher group (skilled non-manual and professional) are significant; moreover, there is also a significant difference within the lower group, while the higher group does not have any significant difference within them.

In terms of parent-teacher relationships, there is a statistically significant difference [F (3, 647) =13.201, $p < .001$], which also indicates an effect size (.058). Post-hoc comparisons using a Scheffe test indicate that the mean scores of the unemployed & non-skilled manual and of the professional are significantly different from the other levels; however, with regard to the lower and higher groups, like other results shown above, there is no significant difference within the groups.

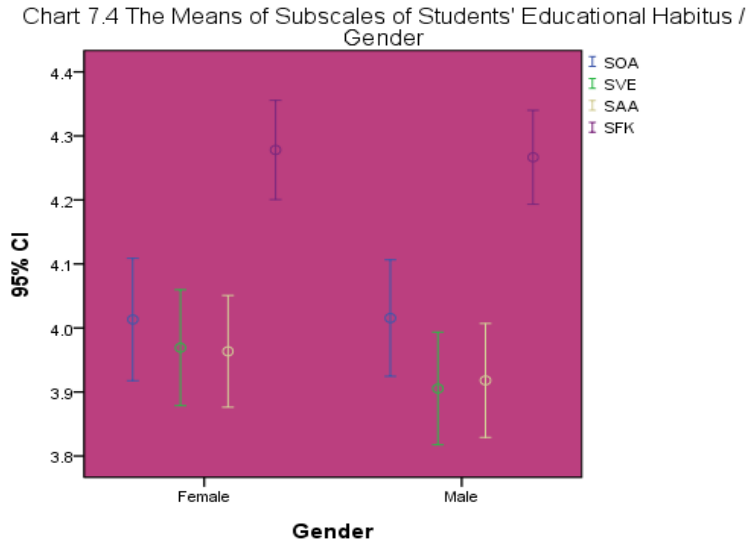
In the matter of parents' view of education, there is a statistically significant difference [F (3, 647) =14.527, $p < .001$]. The effect size, calculated using an eta squared, is .063. Again, post-hoc comparisons using a Scheffe test indicate that, again, there is no significant difference within the groups. However, the mean score of the unemployed & non-skilled manual is significantly different from the higher group.

So far, the students' perception of parents' educative capital of pupils of lower socio-economic status (unemployed & non-skilled manual and skilled manual) has been seen to be significantly different from that of pupils with a higher social background (skilled non-manual and professional). In this case, the results suggest that the four levels can be divided into two groups, since the students' perception of parents' educative capital of each group is different. In addition, pupils who come from a higher family socio-economic status have a better perception of their parents' educative capital. What needs to be emphasized is that there is no significant difference within the groups. As for gender difference, there is no difference in the perception of parents' educative capital between boys and girls.

7.2.2. Students' Educational Habitus

Four measured sub-scales are measured with regard to students' educational habitus, and it can be seen from Chart 7.4 that the gender differences in each sub-scale are quite

small. Again, clearly, the error bars overlap a lot. This suggests that there is no significant difference in students' educational habitus between boys and girls.



Note: SOA (Students' Obedience to Authority), SAA (Students' Awareness of Being an Active Learner), SVE (Students' Views of Education), and SFK (Students' Views of Friendship Keeping)

Furthermore, after conducting t-test, the surprising results are confirmed. In terms of all aspects of the measured concept of students' educational habitus, contrary to expectations, the results indicate that there is no statistically significant difference in the perception of girls and boys. In the same way, the details are shown below (Table 7.8) and all the tables of t-test results are listed in Appendix 7.5.

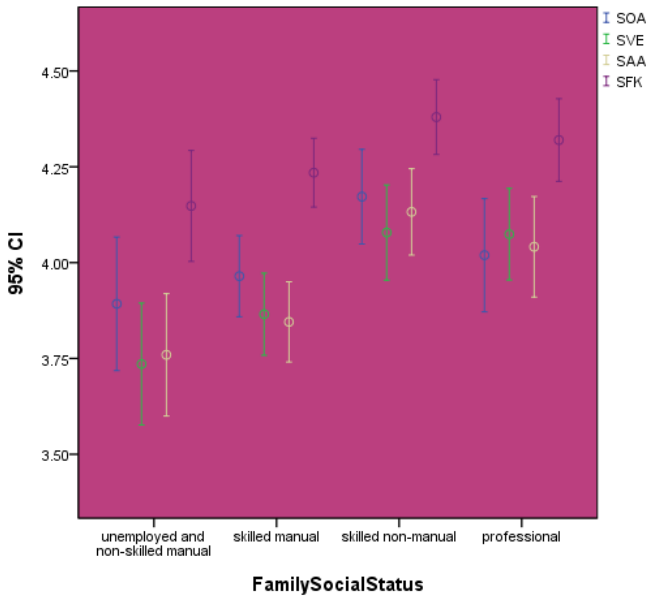
Table 7.8 Independent Sample Test: Students' Educational Habitus

	Female		Male				95% CI	
Subscale	*M*	*SD*	*M*	*SD*	*t*(649)	*p*	*LL*	*UL*
SOA	32.11	6.96	32.12	6.72	-.03	.97	-1.07	1.04
SAA	35.67	7.13	35.26	7.41	.72	.47	-.71	1.53
SVE	27.78	5.77	27.34	5.70	.99	.32	-.44	1.33
SFK	17.11	2.82	17.07	2.72	.21	.83	-.38	.47

Note: SOA (Students' Obedience to Authority), SAA (Students' Awareness of Being an Active Learner), SVE (Students' Views of Education), and SFK (Students' Views of Friendship Keeping)

In terms of the aspect of family socio-economic status (Chart 7.5), the error bars indicate that the differences are not statistically significant. Details of means of students' educational habitus can be seen in Appendix 7.6. However, as for the differences among means, in addition to error bars, one way ANOVA was conducted as well since I want to obtain more details about the differences of means of students' educational habitus in terms of family socio-economic status differentiation.

Chart 7.5 The Means of Subscales of Students' Educational Habitus / Family Social Status



Note: SOA (Students' Obedience to Authority), SAA (Students' Awareness of Being an Active Learner), SVE (Students' Views of Education), and SFK (Students' Views of Friendship Keeping)

A one-way between-groups analysis of variance was conducted to explore the impact of family socio-economic status on the perception of students' educational habitus. The same as above, since all the value of assumption of homogeneity of variance did not reach the significant level (Levene's test of variance was not significant, p> .000), we have not violated the assumption of homogeneity of variance. In addition, the number of participants in each group is not equal. Therefore, in this case, a Scheffe test is used for post-hoc comparison. There are statistically significant differences at the p<.001 level in students' awareness of being an active learner [F (3, 647) =6.963,

p< .001], and students' views of education [F (3, 647) =5.889, p < .01] for the four groups (Table 7.9). Details of the ANOVA analysis can be seen in Appendix 7.7.

These four levels of pupils are divided into two groups, namely, the higher group consisting of the professional and the skilled non-manual, and the lower group consisting of the skilled manual and the unemployed & non-skilled manual. In terms of students' awareness of being an active learner, the effect size, calculated using an eta squared, is .031. Post-hoc comparisons using a Scheffe test indicate that, specifically, there are only significant differences between the lower group (skilled manual, and unemployed & non-skilled manual) and the skilled non-manual. Also, a detailed examination of students' views of education indicates an effect size (.027). Post-hoc comparisons using a Scheffe test indicate that the mean score of the unemployed & non-skilled manual is significantly different from that of the higher group. In other words, in terms of students' perception of students' awareness of being an active learner and students' views of education, there is no significant difference within the groups. The higher group pupils (skilled non-manual and professional) have a more positive perception of students' views of education than those with the unemployed & non-skilled manual status. However, surprisingly, in terms of students' awareness of being an active learner, there is no significant difference between the professional level and the other levels.

Table 7.9 ANOVA: Students' Educational Habitus

		df	F	*η2*	*p*
Students' Obedience to Authority	Between Groups	3	2.924		0.033
	Within Groups	647			
Students' Awareness of Being an Active Learner	Between Groups	3	6.963***	0.031	0.000
	Within Groups	647			
Students' Views of Education	Between Groups	3	5.889**	0.028	0.001
	Within Groups	647			
Students' Views of Friendship Keeping	Between Groups	3	3.015		0.029
	Within Groups	647			

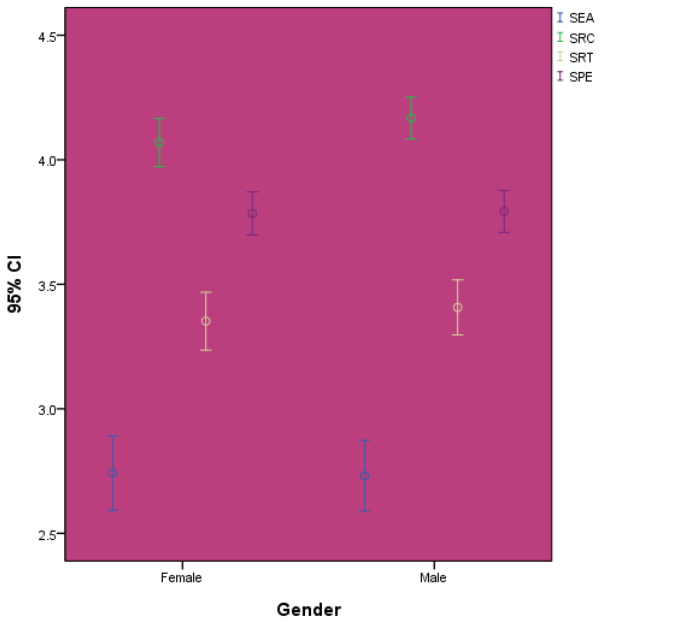
Note: ***p< .001, **p< .01

Overall, with respect to family socio-economic status, there are significant differences of perception of students' awareness of being an active learner and students' views of education between the lower group and the higher group. Nevertheless, there is no significant difference within the groups. As for gender difference, there is also no difference between the perception of boys and girls.

7.2.3 Students' School Experiences

In terms of students' school experiences, there are four measured subscales. Again, as can be seen from Chart 7.6 - the error bars' overlapping greatly indicating that there is no significant difference between genders.

Chart 7.6 The Means of Subscales of Students' School Experiences / Gender



Note: SRC ((Students' Relationship with Classmates), SRT (Students' Relationship with the Class Teacher), SPE (Students' Participation in Educational Activities), and SEA (Students' Educational Attainments)

Again, the results of an independent t-test (Table 7.10) reflect the results which are shown in Chart 7.6. There is no statistically significant difference in the perception of girls and boys. Details are shown below (Table 7.10) and all tables of the t-test results are listed in Appendix 7.8.

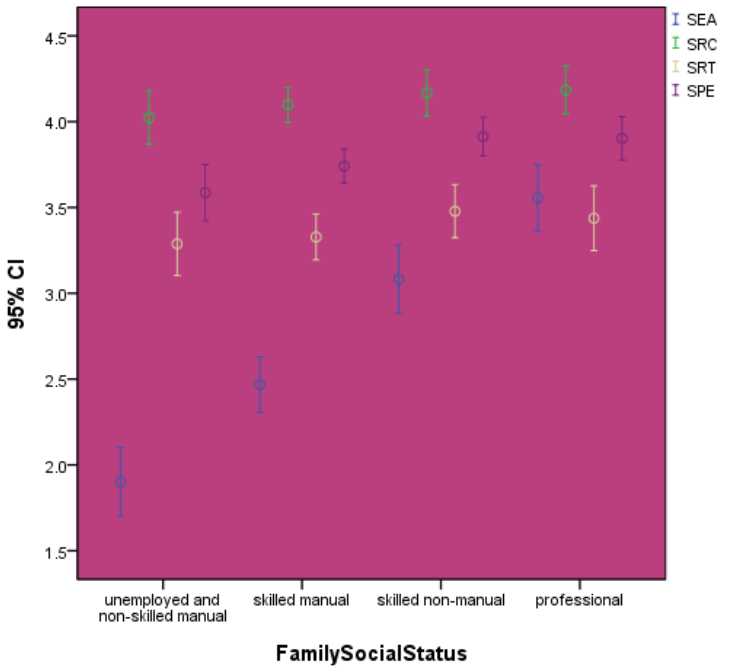
Table 7.10 Independent Sample Test: Students' School Experiences

	Female		Male				95% CI	
Subscale	*M*	*SD*	*M*	*SD*	*t*(649)	*p*	*LL*	*UL*
SRC	36.63	7.91	37.51	7.02	-1.51	.13	-2.03	0.27
SRT	30.17	9.52	30.66	9.21	-0.68	.50	-1.94	0.95
SPE	26.49	5.51	26.55	5.48	-.14	.89	-.91	.79
SEA	8.23	4.08	8.19	3.94	-.10	.92	-.59	.65

Note: SRC (Students' Relationship with Classmates), SRT (Students' Relationship with the Class Teacher), SPE (Students' Participation in Educational Activities) and SEA (Students' Educational Attainments)

Generally speaking, there is also a tendency that the means increase gradually from lower level to higher level (Chart 7.7). In this case, higher family socio-economic status pupils have a more positive perception of their school experience in general. For details of means of students' school experiences, please refer to Appendix 7.8. Moreover, as has been shown in Chart 7.7, the error bars of students' relationship with the class teacher and with classmates overlap noticeably; they suggest that there are no significant differences in terms of family social status variation. Nevertheless, a one-way ANOVA is still conducted to obtain further information.

Chart 7.7 The Means of Subscales of Students' School Experiences / Family Social Status



Note: SRC ((Students' Relationship with Classmates), SRT (Students' Relationship with the Class Teacher), SPE (Students' Participation in Educational Activities), and SEA (Students' Educational Attainments)

In the same way, a one-way between-groups analysis of variance (See Appendix 7.10) was conducted to explore the impact of family socio-economic status on the perception of school experience. Again, since all the value of assumption of homogeneity of variance did not reach the significant level (p> .000), we have not violated the assumption of homogeneity of variance. In addition, the number of participants in each group is not equal. Therefore, a Scheffe test is used for post-hoc comparisons. There were statistically significant differences at the p<.001 level in students' educational

attainment [F (3, 647) =46.022, p < .001] and at the p<.01 level in students' participation in educational activities [F (3, 647) =5.195, p <0.01] for the four groups (Table 7.11).

Moreover, as for students' educational attainment, the effect size is .176. Post-hoc comparisons using a Scheffe test indicate that the mean scores of all social statuses are significantly different from each other. This illustrates that, in terms of this issue, there is a significant difference between the scores of pupils from each social status.

In terms of students' participation in educational activities, an effect size (.024) is indicated. Post-hoc comparisons using a Scheffe test indicate that, again, there is no significant difference within the groups. However, the mean score of the unemployed & non-skilled manual level is significantly different from that of the higher group (skilled non-manual and professional).
Overall, students' educational attainment becomes worse and students' perception of their participation in educational activities becomes less positive with a lower family socio-economic status. Additionally, there is no difference between the perception of boys and girls.

Table 7.11 ANOVA: Students' School Experiences

		df	*F*	*ŋ2*	*p*
Students' Relationship with Classmates	Between Groups	3	1.000		.392
	Within Groups	647			
Students' Relationship with the Class Teacher	Between Groups	3	1.114		.343
	Within Groups	647			
Students' Participation in Educational Activities	Between Groups	3	5.195**	0.024	.001
	Within Groups	647			
Students' Educational Attainments	Between Groups	3	46.022***	0.176	.000
	Within Groups	647			

Note: ***p< .001, **p< .01

It can be concluded from a summary of the passages above that the factor of gender does not affect participants' perception of their parents' educative capital, their own educational habitus and school experience. With regard to differences in social status, these four levels can be divided into two groups: the lower group (unemployed & non-skilled manual and skilled manual) and the higher group (skilled non-manual and professional). In general, although there are differences between these two groups, there is no difference within them.

7.3 Conclusion

The plentiful information seen above clearly shows that the impact of family socio-economic status and gender on pupils' perception of parents' educative capital, students' educational habitus and school experience are complex (see Table 7.12); however, recognising this complex phenomenon was the author's intention. Moreover, this intention is transformed into the research questions. Therefore, it appears that, by answering these research questions, a clearer picture can be drawn to reflect these complicated phenomena.

Table 7.12 A summary of impact of gender/family social status on all measured factors

	PIE	PS	PPC	PTR	PVE	SAA	SVE	SOA	SFK	SEA	SRT	SRC	SPE
Gender	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
Social Status	■	■	■	■	■	■	■	☐	☐	O	☐	☐	■

☐: There is no difference between gender/family social status in terms of factors.

O : The higher the family social status, the better the students' educational attainment.

■ :There are differences between higher group（skilled non-manual and professional）and lower group (unemployed & non-skilled manual and skilled manual) in terms of factors.

Research question 1: Does school experience vary according to family socio-economic status /gender?

Since students' school experience is the main issue of this study, the general features of school experience are worth examining precisely. In this research, school experience

is considered from four different perspectives: students' relationship with classmates, students' relationship with the class teacher, students' participation in educational activities and students' educational attainment.

Firstly, generally speaking, students have an overall positive perception of their school experience. They particularly have the highest level of positive perception of their relationship with classmates, and their average score of educational attainment is between 60 and 69 points.

Secondly, the results obtained in terms of gender difference are surprising. Contrary to expectations, there are no differences between genders in terms of their perception of school experience. This is an interesting finding, which runs counter to my hypothesis drawn from the literature. Many studies have reached a same conclusion: girls are generally more motivated and engaged than boys (Eccles, 2009; Jacobs et al, 2002; Van Houtte, 2004 and Ding & Hall, 2007). From these points of view, it is very interesting to find that the factor of gender does not have an impact on students' school experience. More importantly, it is worth noting that both genders have a positive perception of their school experience.

Thirdly, the situation is more complex when considering the different family social statuses. The above-mentioned evidence indicates that there is no significant difference between social statuses in terms of students' relationship with class teacher and with classmate. In the context of Taiwan, as has been mentioned in chapter 2, the relationship between student and class teacher is very special. For a class teacher, his/her students are all important. Students' family status is not such a problem for Taiwanese class teachers. As for peer relationships, I think that having a close friendship is a personal need for teenagers; family social status could not change this nature. Further, whatever the social status of pupils' families, they have positive perception of their social relationships; they particularly have a most positive perception of their relationships with classmates.

Yet, there are social status differences in terms of students' participation in educational activities and educational attainment. It had been assumed that pupils with a lower social status would actively participate in educational activities less than their peers

with higher social statuses, and the results support this assumption. According to the evidence that has been shown above, if the four levels of pupils are divided into two groups: the lower group (unemployed & non-skilled manual and skilled manual) and the higher group (skilled non-manual and professional) , there are differences between the unemployed & non-skilled manual level and the higher group. In other words, there is a tendency for pupils with a lower family socio-economic status to have a less positive perception of participating in educational activities than those with a higher family social status. However, it should not be forgotten that there is no difference within the groups. This result indicates that pupils within the higher group share the same (more positive) perception of participating in educational activities, whereas pupils within the lower group also share the same (less positive) perception of participating in educational activities.

Turning now to students' educational attainment, the above evidence indicates that there are significant differences among pupils. In other words, students have different educational attainments. Since educational attainment is not only measurable but also comparable, students can clearly perceive the distinction between themselves and others. Moreover, unsurprisingly, it clearly shows that students coming from families of better social status have better educational attainment. This finding responds to the previous research finding: the higher the family's social status, the better the child's academic attainment.

As has been mentioned, in summary, school experience does not vary according to gender difference. Moreover, students' relationship with class teachers and peers do not vary on account of family social status difference either. By contrast, pupils with a lower family status have a less positive perception of participating in educational activities and have worse academic attainment than those with a higher family social status.

Furthermore, it also can be concluded by the above-mentioned evidence that hypothesis *H3). Students from families with a low socio-economic status may less actively participate in educational activities than others,* is supported.

On the contrary, hypotheses *H1). Students from families with a low socio-economic status may have a worse relationship with teachers than others, H2). Students from families with a low socio-economic status may have a stronger relationship with their peers, H4). Boys may have a worse educational attainment than girls, H5). Boys may have a worse relationship with teachers than girls, and H6). Boys may less actively participate in educational activities than female students,* are unsupported.

Research question 2: To what extent are family socio-economic status /gender linked to the difference in students' perception of parents' educative capital, students' educational habitus and school experience?

It is clear from what has been examined that pupils have a different perception of parents' educative capital, students' educational habitus and school experience. However, an unexpected result was found in terms of gender: there is no statistically significant difference between girls' and boys' perception of parents' educative capital, their own educational habitus and school experience. Therefore, hypotheses, *H10). Boys may more perceive parents' educational investment than girls, H11). Boys may have a less positive educational habitus than girls, and H12). Boys have a less positive school experience than girls,* are unsupported.

Further, I examine the family social status difference in terms of students' perception of parents' educative capital, students' educational habitus and school experience respectively and more closely. Although the situation of differences in family's socio-economic status is more complex, some common trends can still be found.

In terms of **students' perception of parents' educative capital**, the difference in the perception of all aspects is statistically significant. As illustrated, the perception of parents' educative capital of pupils with lower socio-economic statuses (unemployed & non-skilled manual and skilled manual) is significantly different from that of those with a higher social background (skilled non-manual and professional). This finding supports the assumption that the higher the social status, the better the parents' educative capital. However, it is necessary to keep in mind that there is no difference within the groups.

As for students' perception of their own **educational habitus**, they include students' willingness to learn actively (*Students' Awareness of Being an Active Learner*), students' view of the importance of education (*Students' Views of Education*), students' willingness to obey schools' requirements (*Students' Obedience to Authority*) and students' willingness to make friends with classmates (Students' *Views of Friendship Keeping*). Due to the evidence given above, the difference in the perception of students' awareness of being an active learner and students' views of education are statistically significant, while the perception of students' obedience to authority and students' views of friendship keeping are not. Further, if the four levels of pupils are divided into two groups as has been done above, there is no significant difference in pupils' perception of students' awareness of being an active learner and students' views of education within groups. Nevertheless, there are differences between two groups. That is, the findings again support the assumption that the higher the social status, the better the educational habitus. But, there is an exception: pupils whose families belong to the professional level do not have a better awareness of being an active learner than others.

With regard to **students' school experience**; there were statistically significant differences in students' educational attainment and students' participation in educational activities. Indeed, students have different educational attainments; moreover, the higher the social status, the better the educational attainment. In terms of students' participation in educational activities, pupils with a lower social status less actively participate in educational activities than their peers with other statuses.

In summary, there are some conclusions of research question 2. Firstly, in terms of all aspects measured, contrary to the author's hypotheses, the results indicate that there is no statistically significant difference in the perception of girls and boys. Secondly, in terms of measured aspects which are significantly different, the higher the social status, the better is the perception. That is, pupils whose families belong to a lower social level differ from those whose families belong to a higher level in terms of their perception of measured aspects which are significantly different. However, there is no difference within the groups. Finally, all pupils have different educational achievements, furthermore, the higher the social status, the better the educational attainment.

When using these findings to examine the hypotheses, it can be seen that *H7). Students from families with a low socio-economic status may perceive less parents' educative capital, H8). Students from families with a low socio-economic status are expected to have a less positive educational habitus, H9). Students from families with a low family socio-economic status may have a less positive school experience and H13). The difference in school experience is determined more strongly by social status than by gender in the Taiwanese context,* are supported.

Chapter 8
Results III: How Does Social Status Affect the School Experience?

This chapter presents a series of analyses of Structural Equation Models (SEM) which were conducted to test a new model of school experience specifying the relationship between family social status and students' school experience, with parental educative capital and students' educational habitus as potential mediating factors. The building and testing of the hypothesised model will make it possible to answer research question 3: *If there are social status and gender differences in the school experience, are these mediated by differences in the student's perception of parents' educative capital and their own educational habitus?;* and research question 4*: To what extent are differences in students' perception of parents' educative capital and their own educational habitus associated with their school experience?*

8.1 Hypothesised Model

As mentioned in Chapter 5, the preliminary conceptual model has been shown in Figure 1.1. The notion of the school experience is conceptualised by two aspects, namely, school engagement and educational attainment. Figure 8.1 shows the relationship between key concepts within the research again.

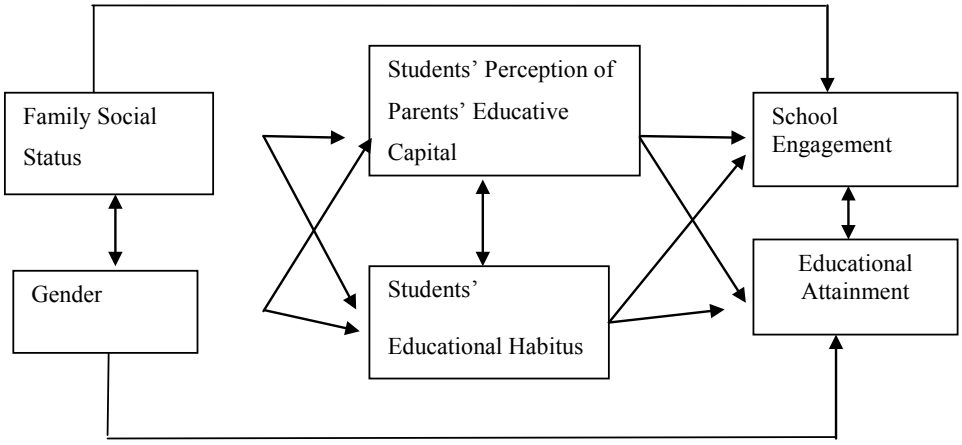


Fig 8.1 Preliminary Conceptual Model of Mediated School Experience

As the above diagram indicates, family socio-economic status and gender are expected to influence students' school engagement and educational attainment. In addition, both of these aspects are assumed to be associated with students' perception of parents' educative capital and students' educational habitus. In turn, students' perception of parents' educative capital and students' educational habitus, are assumed to co-vary, and are also expected to influence school engagement and educational attainment.

However, the whole model had to be modified in the light of previous findings. The results of a T–test (see Chapter 7) have shown that students' gender does not make a difference in their perceptions of their parents' educative capital, their educational habitus and their school experience. Therefore, the variable of gender is eliminated from the hypothesised model, and a new conceptual model of the school experience is shown in Figure 8.2. This focuses on the association between family socio-economic status and two aspects of the school experience (engagement and attainment) and the potential mediating role of students' perception of parents' educative capital and students' educational habitus.

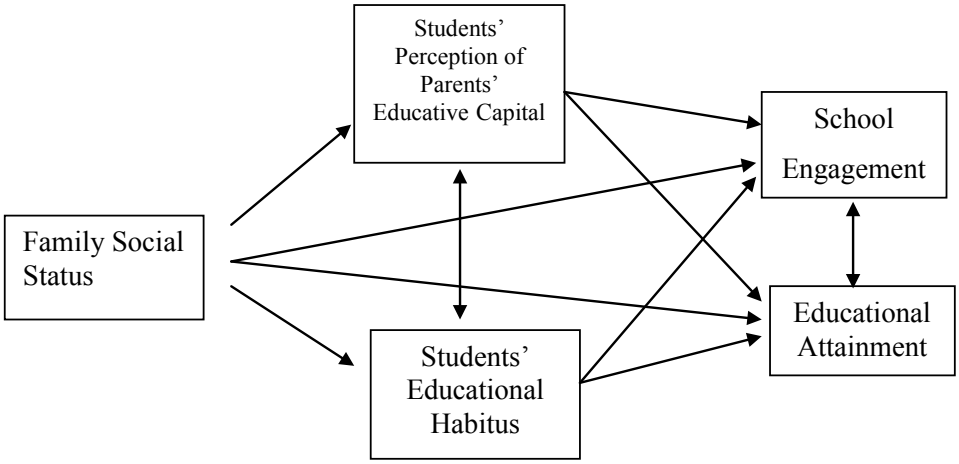


Fig 8.2 The Model of Mediated School Experience

This schematic model examines whether or not the school experience will vary in relation to different family social status, as well as whether or not students' perception of parents' educative capital and students' educational habitus are also connected to social status. It also seeks to evaluate how students' perception of parents' educative capital and students' educational habitus interact in determining their school

experience. In fact, the family's socio-economic status is expected to be associated with students' perception of their own school experience, educational habitus and parents' educative capital. Furthermore, the two variables (students' perception of parents' educative capital and their own educational habitus) are assumed to co-vary, and are expected to act as potential mediating variables, mediating the association between the family's social status and the school experience. Moreover, the two aspects of the school experience (school engagement and educational attainment) are also assumed to co-vary.

Before translating this new hypothesised model into a Structural Equation Model which can be tested statistically, a short description of Structural Equation Modelling will be given in the next section.

8.2 Overview of Structural Equation Modelling (SEM)

8.2.1 What Is Structural Equation Modelling?

Basic Concept

Structural Equation Modelling (SEM) has been defined as being "a multivariate technique combining the aspects of factor analysis and multiple regression that enables the researcher to simultaneously examine a series of interrelated *dependent relationships* among *measured variables* and *latent constructs* as well as between several latent constructs" (Hair et al., 2006: 710). Indeed, social science researchers are often interested in studying abstract constructs which cannot be observed or measured directly, and these unobserved constructs are called **latent constructs** (or latent variables or latent factors). Since these abstract constructs cannot be observed or measured directly, researchers have to adopt measured variables to represent them so that the unobservable variables are linked to measureable ones, thereby making it possible to measure them. These **measured variables** which serve as indicators of the underlying factors are called observed or manifest variables. Furthermore, as can be seen from the definition, SEM attempts to examine two relationships, one of which is the dependent relationship among the measured variables and latent constructs, while

the other is the dependent relationship between several latent constructs. Specifically, the model which presents the relationship among the measured variables and latent constructs is called a **measurement model,** while the other model which presents the relationship among the latent variables is called a **structural model.** Thus**,** a **full model** of SEM is composed of a measurement model and a structural model. Given these basic concepts, the characteristics of Structural Equation Modelling are described in the next section.

Distinguished Characteristics of Structural Equation Modelling (SEM)

According to Hair et al. (2006) SEM can simultaneously examine a series of relationships which include casual and correlated relationships, and this is particularly useful for testing theories which contain multiple equations involving dependent relationships. For example, if it is believed that beliefs create motivations and motivations then create actions, motivation is both a dependent and an independent variable in the same theory. Thus, a hypothesised dependent variable can become an independent variable in a subsequent dependent relationship, and SEM is useful to address these types of questions. In addition, SEM takes a confirmatory approach, rather than an exploratory one, to analyse the dependent relationships which form a structural model (Wu, 2009a, 2009b and Byrne, 2010).

Structural equation models have three distinguished characteristics compared to other multivariate data analysis techniques (Hair et al., 2006): SEM can 1. estimate multiple and interrelated dependent relationships, 2. represent latent concepts in these simultaneous relationships and correct for measurement errors in the estimation process and 3. examine an entire set of relationships to define a model. Given these advantages, SEM techniques are now widely used by researchers.

Model Construction and Illustration

To gain a better understanding, it will be useful to examine the analysis process of SEM step by step. Different researchers have similar opinions about the analytical steps, although there are slight differences between them (Hair et al., 2006; Wu, 2009a

& b; Chen et al., 2009; Huang, 2009 and Byrne, 2010). The whole process of the SEM analysis can be divided into seven stages: 1. *Model conceptualisation*: the relationship among variables has to be supported by an underlying theory; in other words, a model is a representation of a theory. 2. *Model specification*: the presence of an underlying theory makes a complete SEM model extremely complex, so for the model specification, a complex model is often portrayed in a visual form. 3. *Model identification*: the model, if fit the data, should be run to establish, whether or not the model can be fitted to the data and be estimated correctly, i.e. if it can estimate each free parameter. If it fails to do this, it cannot estimate correctly. 4. *Parameter estimation*: the method to identify estimates for each free parameter needs to be chosen at this stage. Maximum Likelihood (ML) is the most widely-used of the several available methods (Hoyle & Panter, 1995; Raykov, 2005; Raykov & Marcoulides, 2006; Hair et al., 2006; Wu, 2009a & b and Huang, 2009), since it is particularly suited for large samples and where the assumption of multivariate normality is met. Indeed, the ML method aims to find estimates for the model parameters which maximise the likelihood of observing the available data (Raykov and Marcoulides, 2006). That is to say, its essence "is the estimation of unknown parameters that underlie an assumed model (variable distribution) by values that maximise the probability of observing the data at hand" (Raykov, 2005:494). Moreover, ML can improve parameter estimates in a variety of less-than-optimal analytical conditions (Hoyle and Panter, 1995). Therefore, ML is not only the most widely-used approach but is also the default approach in most SEM programs. 5. *Assessment of model fit*: the purpose of this stage is to determine how consistent the model is with the data. 6. *Model modification*: if the model does not fit the data well, the researcher can fit or free parameters to modify the model based on the theory and statistical results (particularly the modification indices) and assess the model again. 7. *Interpretation of the results*: SEM is based on theory and the results should be interpreted by the extent to which the model fits the data. If the model does not fit the data, it has to be changed. Furthermore, every change to the model should be based on theory. Drawing upon theory, previous empirical research findings, or a combination of both, the researcher builds a model and then tests its validity with the sample data. This is what Structural Equation Modelling (SEM) means and tries to achieve (Raykov & Marcoulides, 2006 and Byrne, 2010).

Model Fit

When a hypothesised model is specified, it is tested to determine the extent of its consistency with the data. This process of testing is often called assessing the model fit. If goodness-of-fit is adequate, it means that the model fits the sample data well; if it is not adequate, the model does not fit the sample data. According to prior knowledge of the theory or previous research findings, the researcher builds a model which presents the relationship among the variables to test the postulated constructs and pathways linking them. Each model has an estimated covariance matrix and an observed sample covariance matrix based on the sample data. The aim of testing the model is to minimise the discrepancy between these two matrices. If the inconsistency between these two matrices is small, it means that the model fits the sample data and the hypothesised model is acceptable. In addition, the process of examining the difference between two matrices is called 'the assessment of fit'. Certainly, a better fit is what the researcher wants to achieve.

However, before examining the assessment of fit, it is important to consider the issue of offending estimates. Byrne (2010) defines an 'offending estimate' as a parameter estimated to fall outside the admissible range. Put simply, the model provides an incorrect solution. This clearly indicates that either the model is wrong or the input matrix lacks sufficient information. The following are three common examples of offending estimates (Hair et al., 2006; Byrne, 2010 and Wu, 2009a & b):

1. Negative error variances: the minimum value of error variance is zero. This indicates that there is no measurement variance. Therefore, a negative error variance is an offending estimate.
2. The standardised coefficient exceeds or is very close to 1.0.
3. Standard errors are excessively large or small. If a standard error approaches zero, the test statistic for its related parameter cannot be defined; likewise, an extremely large standard error indicates that the parameter cannot be determined.

Therefore, the viability of the parameter estimated values can be determined by checking whether or not there is an offending estimate, and this is the initial step in assessing the fit of a model.

Assessment of Fit

The classification by Hair et al. (2006) is used to assess the model fit. This categorises measures into three general groups: absolute fit measures, incremental fit measures and parsimony fit indices. Although there are many evaluation criteria of model fit, it is not necessary to report the entire set of fit indices (Byrne, 2010). However, according to Hair et al. (2006) and Hoyle & Panter (1995) the researcher should report at least one absolute fit measure and an incremental fit measure in addition to the x^2 value and the associated degrees of freedom. Moreover, Hair et al. (2006:752) assert that "A model reporting the x^2 value and the degrees of freedom, the CFI, and the RMSEA will often provide sufficient unique information to evaluate a model". Therefore, these specific indices will be explained in the next section.

Absolute fit measure is a direct measure of how well a researcher's theory fits the sample. This type of measure does not make any comparison to a specified null model (incremental fit measures) or adjust for the number of parameters in the estimated model (parsimony fit indices) (Hair et al*.,* 2006). There are many absolute fit measures, such as the Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Standardised Root Mean Square Residual (SRMR), Root Mean Square Error of approximation (RMSEA), Expected Cross-Validation Index (ECVI) and so on. In particular, the RMSEA appears to be adequately sensitive to model misspecification and seems to yield appropriate conclusions about model quality and provides a confidence interval (Hu & Bentler, 1998, 1999 and MacCallum & Austin, 2000), RMSEA is usually regarded as being a good and important reference of overall model fit and is strongly recommended for routine use (MacCallum & Austin, 2000; Hair et al., 2006; Wu, 2009a & b and Huang, 2009). Therefore, RMSEA is chosen to stand for absolute fit measure.

RMSEA (root mean square error of approximation) asks the question "how well would a model with unknown, but optimally chosen, parameter values fit the population covariance matrix if it were available?" (Brown & Cudeck, 1993:137-138). Lower RMSEA values indicate a better fit. Specifically, RMSEA values less than .05 indicate a good fit; RMSEA values ranging from .05 to .08 indicate a fair fit; RMSEA values ranging from .08 to .10 indicate a mediocre fit, and RMSEA values greater than .10

indicate a poor fit (Wu, 2009a & b, MacCallum et al., 1996 and Brown & Cudeck, 1993). Moreover, Hair et al. (2006:748) propose that "RMSEA is best suited for use in a confirmatory or competing model strategy as samples become larger. Large samples can be considered as consisting of more than 500 respondents". Since this study has 651 samples, it meets this criterion.

According to Hair et al. (2006:748), "**incremental fit indices** differ from absolute fit indices in that they assess how well a specified model fits relative to some alternative baseline model". The most common baseline model is referred to as a null model, which assumes that all the observed variables are uncorrelated. Commonly used incremental fit indices include Normed Fit Index (NFI), Non-Normed Fit Index (NNFI), Comparative Fit Index (CFI), Incremental Fix Index (IFI) and Relative Fit Index (RFI) (Huang, 2009). Since the CFI has many desirable properties, including its relative, but incomplete, insensitivity to model complexity, it is among the most widely-used indices. Indeed, the CFI (comparative fit index) is a kind of incremental indices of fit, which is derived by comparing a hypothesised model with the null model. Values for CFI range from zero to one, with higher values indicating a better fit. Although a value of > .90 is considered to represent a well-fitting model, a revised value close to .95 is advisable (Byrne, 2010).

With regard to **parsimony fit indices**, these are designed specifically to identify the best model among a set of competing models by considering its fit relative to its complexity. Moreover, they measure the overall goodness-of-fit by representing the degree of model fit per estimated coefficient in an attempt to correct any over-fitting of the model and evaluate the parsimony ratio of the model compared to the goodness-of-fit (Hair et al., 2006). This group includes Parsimonious Normed Fit Index (PNFI), Parsimonious Goodness-of-Fit Index (PGFI), Akaike information criterion (AIC), Hoelter's critical N (CN) and Normed Chi-Square (Huang, 2009). In this study, the Normed Chi-Square value is chosen to stand for parsimony fit indices, since it is the x^2 / degrees of freedom ratio, which means that it can deal with the problem caused by the chi-square value (x^2) and degree of freedom. It is a well-known fact that the x^2 depends on sample size. In the case of SEM, if the sample size is sufficiently small, the null hypothesis can never be rejected, and if it is sufficiently large, the null hypothesis is always rejected; additionally, the x^2 value increases as the sample size increases.

Moreover, a x^2 test provides a statistical test of the resulting difference between the observed sample covariance matrix and the SEM estimated covariance matrix. However, it is known that the SEM estimated covariance matrix is influenced by the number of parameters free to be estimated, so the degree of freedom also influences the x^2 value. Therefore, it would be useful to consider the x^2 value and degree of freedom simultaneously, and its ratio (Normed Chi-Square) in a proper index. Thus, in this study, the CMIN/DF value is taken as the Normed Chi-Square value because this is actually the x^2 / degree of freedom ratio. A smaller CMIN/DF value indicates a better fit, and the acceptable values for CMIN/DF range from one to three.

8.2.2 Procedure of Conducting Structural Equation Modelling Analysis

Having clarified the rationale of a SEM analysis, the procedure of a practical SEM analysis will be explained. Many analyses have been conducted using a statistical program called AMOS (Analysis of Moment Structure) to facilitate a SEM (Structural Equation Modelling) analysis, because AMOS enables users to directly draw a path diagram, which transforms abstract concepts into visual patterns. It also enables estimates to be displayed graphically in a path diagram; therefore, it provides a user-friendly working platform. All the following SEM analyses in this study were conducted using the AMOS 18 program, as is implemented in SPSS.

The AMOS program draws a graphical depiction of the model showing how the various concepts fit together, and then tests its validity. In other words, a hypothesised theory may be depicted in a graphical model; in addition, a complete SEM model comprises both a measurement model and a structural model. The *measurement model* describes the connection between the latent variables and their manifest indicators, while the *structural model* describes the relationship among the latent variables. The final purpose of the analysis is to map these connections as a means to test the hypothesised model. With these basic issues in mind, the graphical model will now be observed (for example, see Figure 8.3).

The hypothesised connections among the concepts are shown as arrows, the latent variables are symbolised by circles or ellipses, and the measured variables are

symbolised by rectangles, which are gathered by means of various data collection methods. There are two possible specified relationships among the constructs: dependent relationships and correlational (covariance) relationships. Straight arrows flow from the independent variable to the dependent variable, depicting a dependent relationship. In a measurement sense, dependent relationships occur from latent variables to indicators. In a structural sense, dependent relationships occur between latent variables. Correlational (covariance) relationships are depicted by a two-headed arrow connection, whereby the variables are assumed to be correlated, but are not dependent on each other (Hair et al., 2006).

Having specified the graphical model, stage two is the model specification.

8.2.3 Strengths and Limitations of Structural Equation Modelling (SEM)

As shown above, there are several advantages which make SEM different from other traditional multivariate data analysis techniques. Firstly, it examines the relationships between multiple variables simultaneously; moreover, it can incorporate both unobserved and observed variables. Secondly, it has a confirmatory approach rather than an exploratory approach to the data analysis. Thirdly, while traditional multivariate procedures cannot deal with measurement error, SEM provides explicit estimates of error variance parameters. Fourthly, by simultaneously examining direct and indirect effects, it can reduce the number of type I errors. Finally, the multivariate relationships can be modelled pictorially to produce a clear conceptualisation of the theory (Byrne, 2010 and Chen, et al., 2009). Since this study comprises many variables, it forms a complex model, which makes SEM particularly suitable for the analysis. However, it should also be noted that SEM applications have some general limitations (Littele et al., 1999; Guo, et al., 2009; Tomarken & Waller, 2005 and MacCallum & Austin, 2000). Firstly, in terms of the model construct, even if a specific model can fit the sample data, the existence of other models which could also fit the same data equally well is often ignored. In other words, although other models could also be a good fit, researchers do not specify them. Secondly, various indicators are required for a specific latent variable to be defined and operated effectively, and the choice of indicators can also affect the results and interpretation. Thus, the effect of the selected

indicators has to be considered when specifying the model. The problem of omitted variables is an important concern when building and testing a model. Thirdly, based on previous concerns, just because a model is a good fit, this does not mean that it is a perfect model. In addition, if a model is a good fit, this does not imply that the effects hypothesised in the model are strong. The only way to reduce the negative effects of these limitations is to adopt a theory as a foundation to construct the model.

If this powerful statistical technique is to be used more appropriately, it is important for users to consider both the advantages and disadvantages of using a SEM analysis. Having provided a brief and clear explanation of Structural Equation Modelling (SEM), the specific structural equation modelling analysis of this study will now be discussed.

8.3 Structural Equation Modelling Analysis of This Study

As mentioned above, the process of a SEM analysis has seven steps, which will be described on a step-by-step basis. However, firstly, an examination of the correlation among different variables can determine whether or not there is any significant correlation, as well as whether or not the sample data is suitable for further analysis. Therefore, the correlation among the variables included in the model must be examined, and it can be seen from Table 8.1 that most correlation values are significant at $p < .01$. This means that there is a less than 1% probability that this model will fit if the null hypothesis is true. Since this probability is very small, it signifies greater confidence that the alternative hypothesis is actually correct and the null hypothesis can be rejected. Furthermore, all the correlation values are positive; i.e. there is a positive correlation among the variables. In addition, from the evidence shown in Table 7.5 (Chapter 7), the absolute values of Skewness are less than 3, and all the absolute values of Kurtosis are also less than 3. Therefore, the sample data conforms to the assumption of a normal distribution.

Table 8.1 Pearson Correlations

Mean		FE	FW	ME	MW	PIE	PS	PPC	PTR	PVE	SVE	SAA	SEA	SRC	SRT	SPE	Social Status
1.51	FE	1															
1.52	FW	.521**	1														
1.40	ME	.596**	.416**	1													
1.37	MW	.351**	.419**	.440**	1												
3.3	PIE	.199**	.212**	.152**	.124**	1											
3.38	PS	.185**	.196**	.160**	.110**	.659**	1										
1.89	PPC	.221**	.230**	.190**	.116**	.432**	.458**	1									
2.2	PTR	.170**	.220**	.241**	.145**	.504**	.397**	.362**	1								
3.63	PVE	.173**	.210**	.123**	.089*	.655**	.590**	.365**	.452**	1							
3.94	SVE	.155**	.147**	.136**	.055	.431**	.483**	.264**	.218**	.402**	1						
3.94	SAA	.165**	.156**	.114**	.055	.500**	.484**	.272**	.209**	.427**	.774**	1					
2.74	SEA	.405**	.356**	.328**	.271**	.287**	.250**	.242**	.165**	.281**	.293**	.331**	1				
4.12	SRC	.042	.093*	.019	.038	.285**	.319**	.179**	.133**	.296**	.332**	.400**	.115**	1			
3.38	SRT	.066	.098*	.090*	.035	.412**	.397**	.218**	.192**	.336**	.491**	.557**	.207**	.322**	1		
3.79	SPE	.143**	.143**	.114**	.059	.462**	.463**	.271**	.226**	.426**	.649**	.758**	.291**	.506**	.543**	1	
1.47	Social Status	.747**	.675**	.653**	.529**	.216**	.234**	.272**	.240**	.208**	.153**	.148**	.419**	.066	.061	.143**	1

**. Pearson Correlation is significant at the 0.01 level (2-tailed) *. Pearson Correlation is significant at the 0.05 level (2-tailed).

FE=Father's Education, FW=Father's Work, ME=Mother's Education, MW= Mother's Work, PIE= Parents' Involvement in Education, PS= Parenting Style, PPC= Parents' Participation in Cultural Activities with Children, PTR=Parent- Teacher Relationships Parents' Participation in Educational Activities with Children, PVE= Parents' Views of Education, SVE= Students' Views of Education, SAA=Students' Awareness of Being an Active Learner, SRC= Students' Relationship with Classmates, SRT= Students' Relationship with Class Teacher, SPE= Students' Participation in Educational Activities, SEA= Students' Educational Attainment

Based on the above information, the sample data is suitable for further analysis. Therefore, having examined the correlation among the analytical variables, the SEM analysis will be continued in the next section.

8.3.1 Model Conceptualisation and Model Specification

This study seeks to understand a. if there is a direct association between family socio-economic status and two aspects of students' school experience; b. whether or not this association is mediated through students' perception of parents' educative capital and their own educational habitus. Based on the literature review and related theories, this study can be presented as a conceptual model of mediated school experience (see Figure 8.2). The conceptual model postulates that students' perception of parents' educative capital and students' educational habitus mediate the association between family socio-economic status and students' educational attainment and school engagement. Based on findings from previous analyses (Chapter 6 and Chapter 7), the conceptual model depicted in Figure 8.3 can be named "The Model of Mediated School Experience".

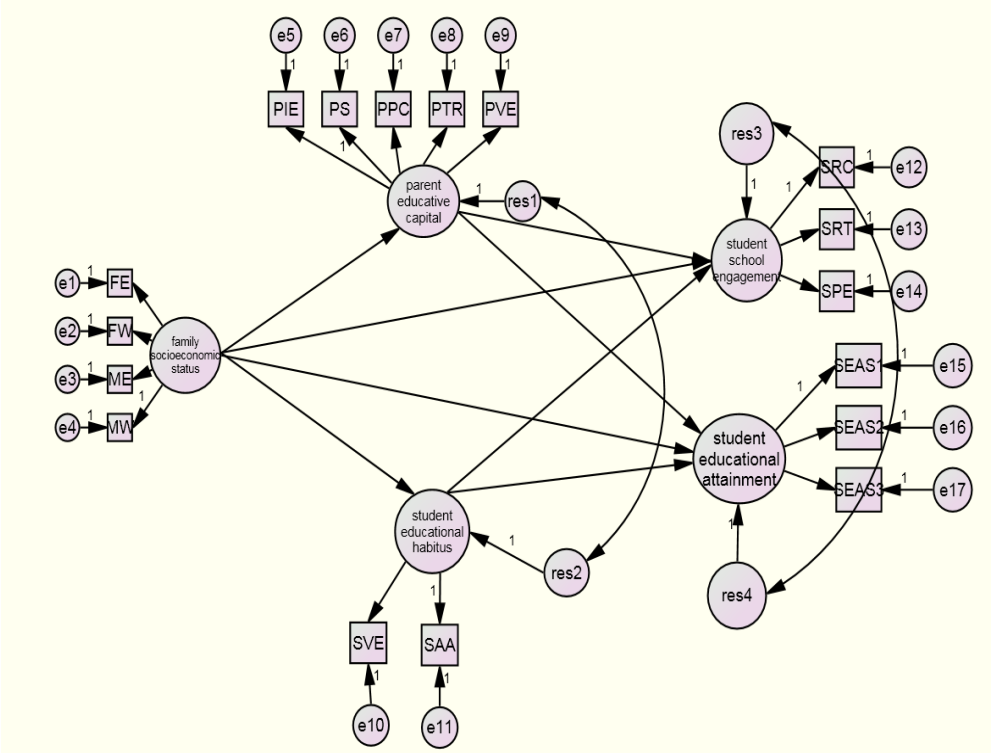


Figure 8.3 Schematic representation of "The Model of Mediated School Experience"

Note: FE=Father's Education, FW=Father's Work, ME=Mother's Education, MW=Mother's Work, PIE= Parents' Involvement in Education, PS= Parenting Style, PPC= Parents' Participation in Cultural Activities with Children, PTR=Parent-Teacher Relationships, PVE= Parents' Views of Education, SVE= Students' Views of Education, SAA=Students' Awareness of Being an Active Learner, SRC= Students' Relationship with Classmates, SRT= Students' Relationship with Class Teacher, SPE= Students' Participation in Educational Activities, SEAS1, 2, 3= Students' Educational Attainment Questions 1, 2 and 3.

In "The Model of Mediated School Experience" model (see Figure 8.3), family socio-economic status, students' perception of parents' educative capital; students' educational habitus, students' educational attainment and students' school engagement are latent variables:

1. The construct of family socio-economic status was measured by four measured variables (FE: Father's Highest Educational Degree, FW: Father's Work, ME: Mother's Highest Educational Degree, and MW: Mother's Work).
2. The construct of students' perception of parents' educative capital was measured by five measured variables (PIE: Parents' Involvement in Education, PS: Parenting Style, PPC: Parents' Participation in Cultural Activities with Children, PTR: Parent-Teacher Relationships, and PVE: Parents' Views of Education).

3. The construct of students' educational habitus was measured by two measured variables (SVE: Students' Views of Education and SAA: Students' Awareness of Being an Active Learner).
4. The construct of students' school engagement was measured by three measured variables (SRC: Students' Relationship with Classmates, SRT: Students' Relationship with Class Teacher, and SPE: Students' Participation in Educational Activities).
5. The construct of students' educational attainment was measured by three measured variables (SEAS1, 2 and 3: Students' Educational Attainment of Chinese, English and Math respectively).

Moreover, each path shown in the model indicates the hypothesised association between the variables:

1. Family socio-economic status is hypothesised to affect students' perception of parents' educative capital, students' educational habitus, students' school engagement and students' educational attainment.
2. Students' perception of parents' educative capital is hypothesised to affect students' school engagement and students' educational attainment.
3. Students' educational habitus is hypothesised to affect students' school engagement and students' educational attainment.
4. There is a hypothesised correlation between a residual error term of students' perception of parents' educative capital (res1) and a residual error term of students' educational habitus (res2).
5. There is a hypothesised correlation between a residual error term of students' school engagement (res3) and a residual error term of students' educational attainment (res4).

Overall, these hypotheses are set to test the pattern or structure linking the variables of interest: family socio-economic background (independent variable); students' perception of parents' educative capital and students' educational habitus (mediating variables) and school experience, which consists of school engagement and students' educational attainment (dependent variables). Figure 8.3, represents the full

hypothesised model: family socio-economic status is expected to be associated with school experience, comprising student school engagement and educational attainment. In addition, family socio-economic status is assumed to be associated with students' perception of parents' educative capital and students' educational habitus. In turn, students' perception of parents' educative capital and students' educational habitus are assumed to co-vary, and are also expected to be associated with school experience. The idea is to test two relationships: 1. the association between family social class and school experience, comprising student school engagement and educational attainment.; 2. the mediating function of students' perception of parents' educative capital and students' educational habitus in shaping the association between family social background and students' school experience, comprising student school engagement and educational attainment. This completes the model specification (see Figure 8.3). Since one aim is to test the hypothesised mediating factors (students' perception of parents' educative capital and students' educational habitus), it is necessary to first test the direct relationship between family socio-economic status and students' school experience (school engagement and educational attainment). Therefore, a hypothesised precursory model of this direct relationship is shown in Figure 8.4.

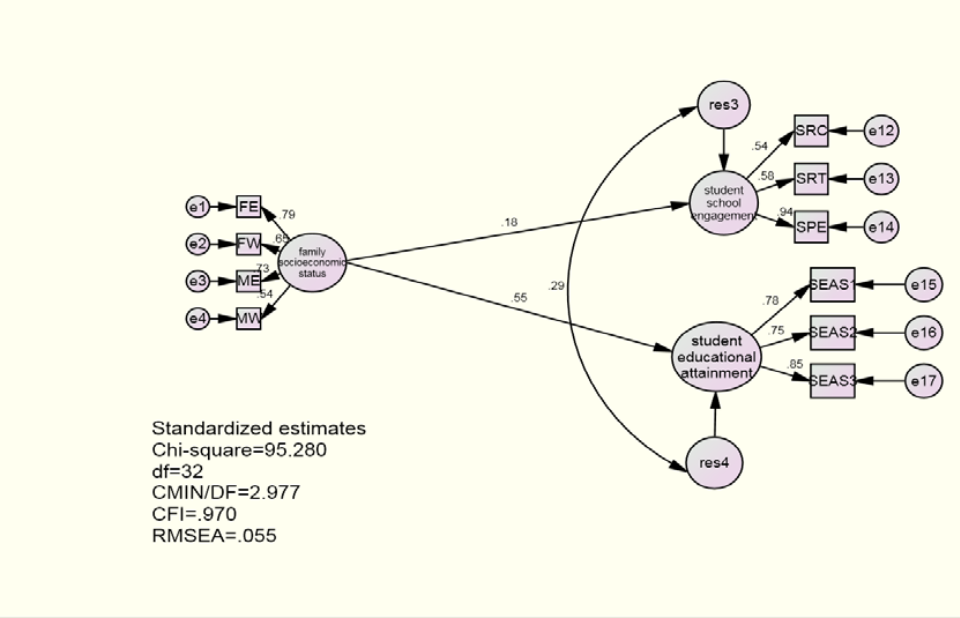


Figure 8.4 Precursory model of relationship between family social status and students' school experience

Note: FE=Father's Education, FW=Father's Work, ME=Mother's Education, MW=Mother's Work, SRC= Students' Relationship with Classmates, SRT= Students' Relationship with Class Teacher, SPE= Students' Participation in Educational Activities, SEAS1, 2, 3= Students' Educational Attainment Questions 1, 2 and 3.

The model fit statistics in Precursory Model (see Figure 8.4) are as follows: x^2 = 95.280, *df*=32, CMIN/DF= 2.977, CFI=.970 and RMSEA=.055, which reveals a satisfactory model fit. However, a reasonable covariance between e1 and e4 can be seen when looking at the modification indices (see Appendix 8.1). Because most mothers are full-time housewives while their husbands have higher educational qualifications, it can be expected that a high level of Father's Educational background would generate a low level of Mother's Occupation. Thus, Model 1 is re-specified with the path (e1 <--> e4) freely estimated, and labelled as Precursory Model 1 (Figure 8.4.1).

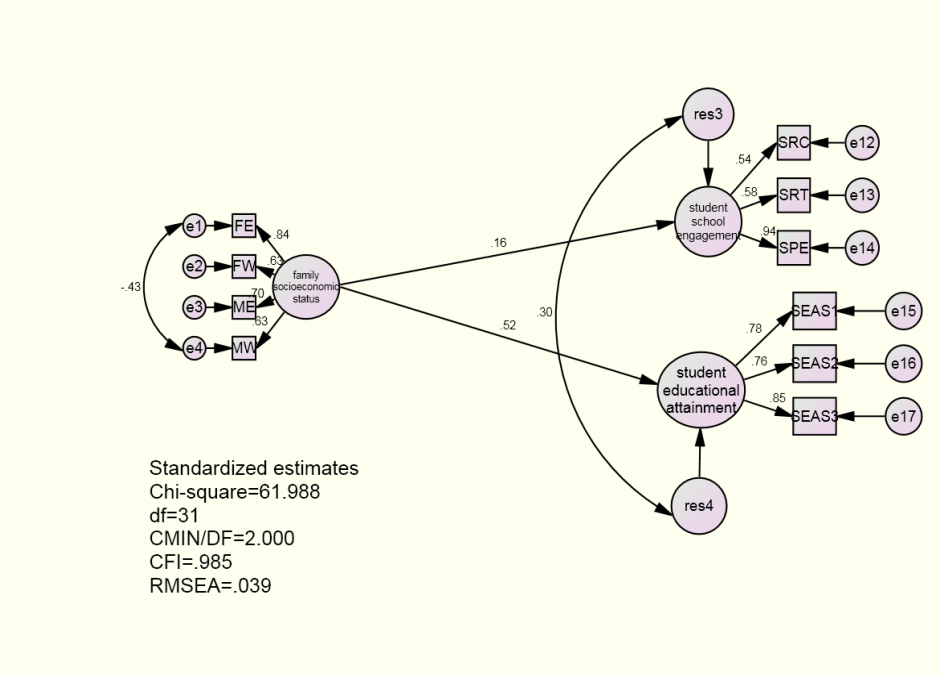


Figure 8.4.1 Precursory model of relationship between family social status and students' school experience -Precursory Model 1

Note: FE=Father's Education, FW=Father's Work, ME=Mother's Education, MF=Mother's Work, SRC= Students' Relationship with Classmates, SRT= Students' Relationship with Class Teacher, SPE= Students' Participation in Educational Activities, SEAS1, 2, 3= Students' Educational Attainment Questions 1, 2 and 3.

The model fit statistics in Precursory Model 1 (see Figure 8.4.1) are as follows: x^2 = 61.988, *df*=31, CMIN/DF=2.000 (< 3), CFI=.985 (> .95) and RMSEA=.039 (< .05), which indicates that Precursory Model 1 represents a better fit for the data. This means that Precursory Model 1 more appropriately represents the hypothesised model and is a good fit for the sample data. Consequently, this hypothesised structure model works, and illustrates that there is a direct relationship between family socio-economic status

and students' school experience (school engagement and educational attainment). Moreover, the association between family social background and students' school engagement is weaker (r= .16) than the association between family social background and students' educational attainment (r= .52). That is to say, there is a stronger association between family social background and students' educational attainment than family social background and school engagement.

At this stage, the main concern of this paper, the assessment of The Model of Mediated School Experience which is presented in Figure 8.3 will be discussed in the next section.

8.3.2 Model Identification and Parameter Estimation

Model identification (stage 3) and parameter estimation (stage 4) can be conducted at the same time using AMOS 18, and it is known that, if a model can be identified, each free parameter can be estimated, but if it cannot be identified, the parameters cannot be correctly estimated. The AMOS 18 program can tell whether a model can be identified or not, and if it can be identified, the estimates of each free parameter are directly presented. If it cannot be identified, the program simply tells the researcher that "this model is unidentified". Moreover, there are 651 participants for parameter estimation in the study sample and the observed data meets the assumption of multivariate normality (see Chapter 6). Therefore Maximum Likelihood is the method employed in this research.

The hypothesised model (Figure 8.3) will begin to be tested in the next paragraph, and Figure 8.5 provides information about the measurement and the structural model estimates.

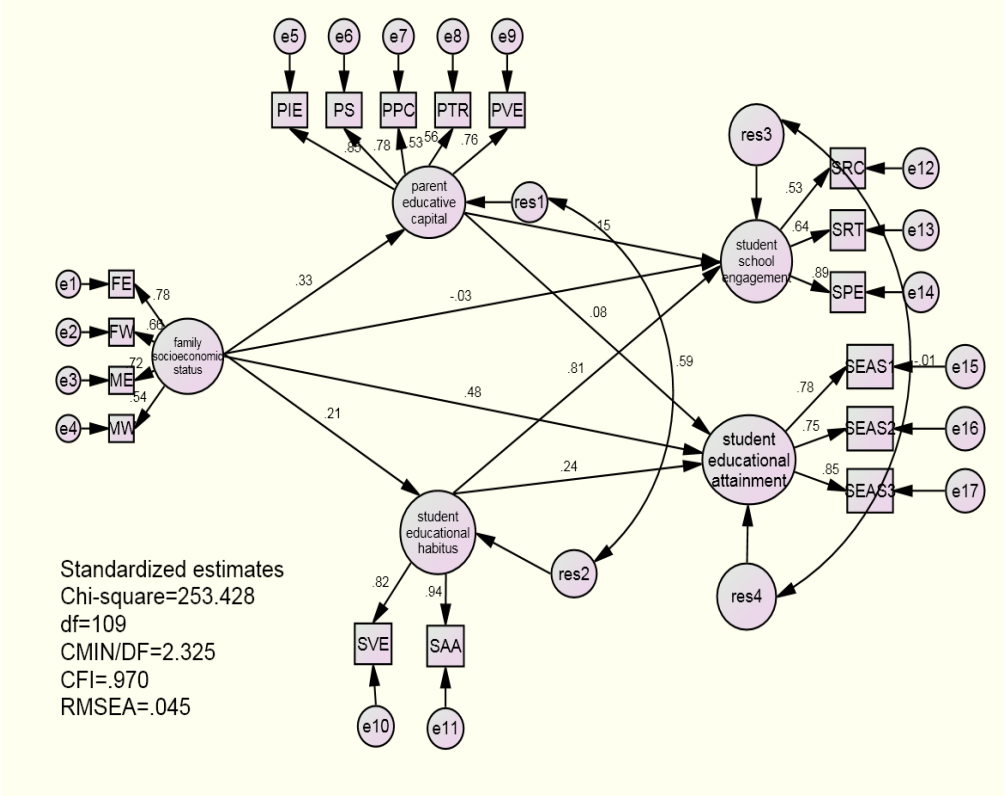


Figure 8.5 The Model of Mediated School Experience

Note: FE=Father's Education, FW=Father's Work, ME=Mother's Education, MW=Mother's Work, PIE= Parents' Involvement in Education, PS= Parenting Style, PPC= Parents' Participation in Cultural Activities with Children, PTR= Parent-Teacher Relationships, PVE= Parents' Views of Education, SVE= Students' Views of Education, SAA=Students' Awareness of Being an Active Learner, SRC= Students' Relationship with Classmates, SRT= Students' Relationship with Class Teacher, SPE= Students' Participation in Educational Activities, SEAS1, 2, 3= Students' Educational Attainment Questions 1, 2 and 3.

This model represents a good fit (CMIN\DF = 2.325 (< 3), CFI = .970 (> .95); and RMSEA = .045 (< .05)). Although these three fit measurements fall into the acceptable range, the value of the correlation between the residual error term of students' school engagement (res3) and the residual error term of students' educational attainment (res4) is very small (- .01); and fails to achieve statistical significance (p= .940). Therefore, it is sensible to remove this path from the original model to new model named The Model of Mediated School Experience –Model 1, which is presented in Figure 8.6.

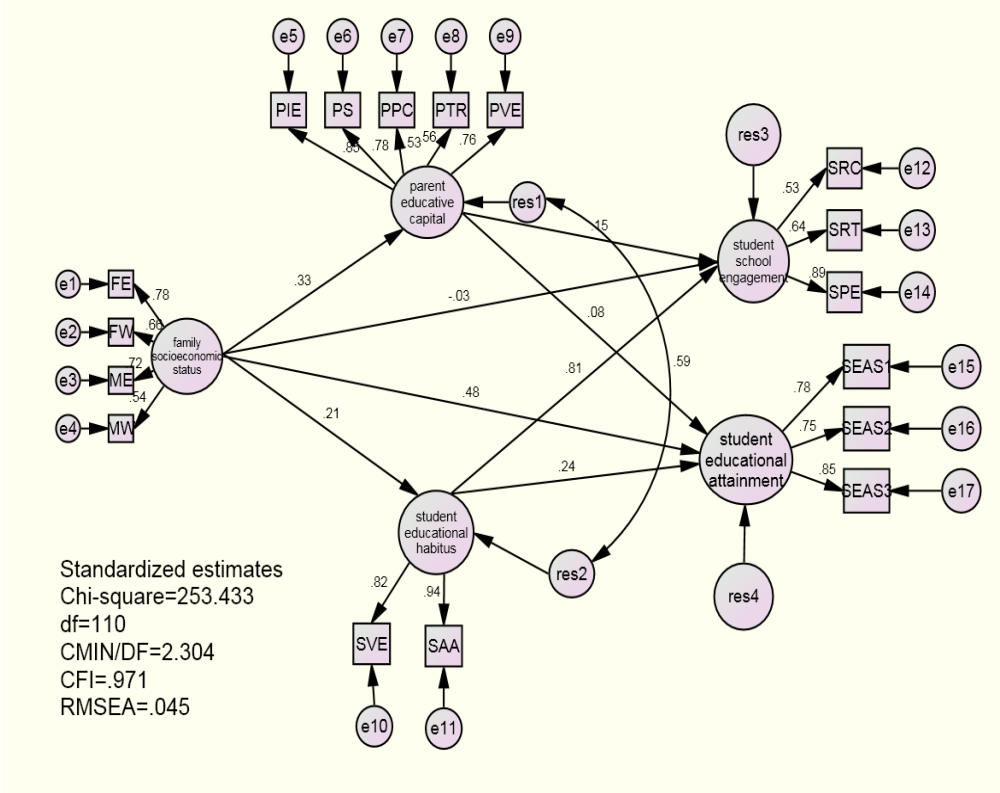


Figure 8.6 The Model of Mediated School Experience-Model 1

Note: FE=Father's Education, FW=Father's Work, ME=Mother's Education, MW=Mother's Work, PIE= Parents' Involvement in Education, PS= Parenting Style, PPC= Parents' Participation in Cultural Activities with Children, PTR= Parent-Teacher Relationships, PVE= Parents' Views of Education, SVE= Students' Views of Education, SAA=Students' Awareness of Being an Active Learner, SRC= Students' Relationship with Classmates, SRT= Students' Relationship with Class Teacher, SPE= Students' Participation in Educational Activities, SEAS1, 2, 3= Students' Educational Attainment Questions 1, 2 and 3.

This Model 1 represents a good fit (CMIN\DF = 2.304 (< 3), CFI = .971 (> .95); and RMSEA = .045 (< .05)). Although these three fit measurements fall into the acceptable range, the value of the regression weight of family socio-economic status → students' school engagement is very small (- .03) and fails to achieve statistical significance (p= .345). Since the path linking family social status to school engagement has become non-significant, it is sensible to remove this path from the Model 1. The finding suggests that students' perception of parents' educative capital and students' educational habitus fully mediate this association between family socio-economic status and students' school engagement. Moreover, the mediating variables hardly reduce the association between family status and academic attainment (from .52 to .48), so the mediating effect for this association is small. The new model is named The Model of Mediated School Experience-Model 2 and presented in Figure 8.7.

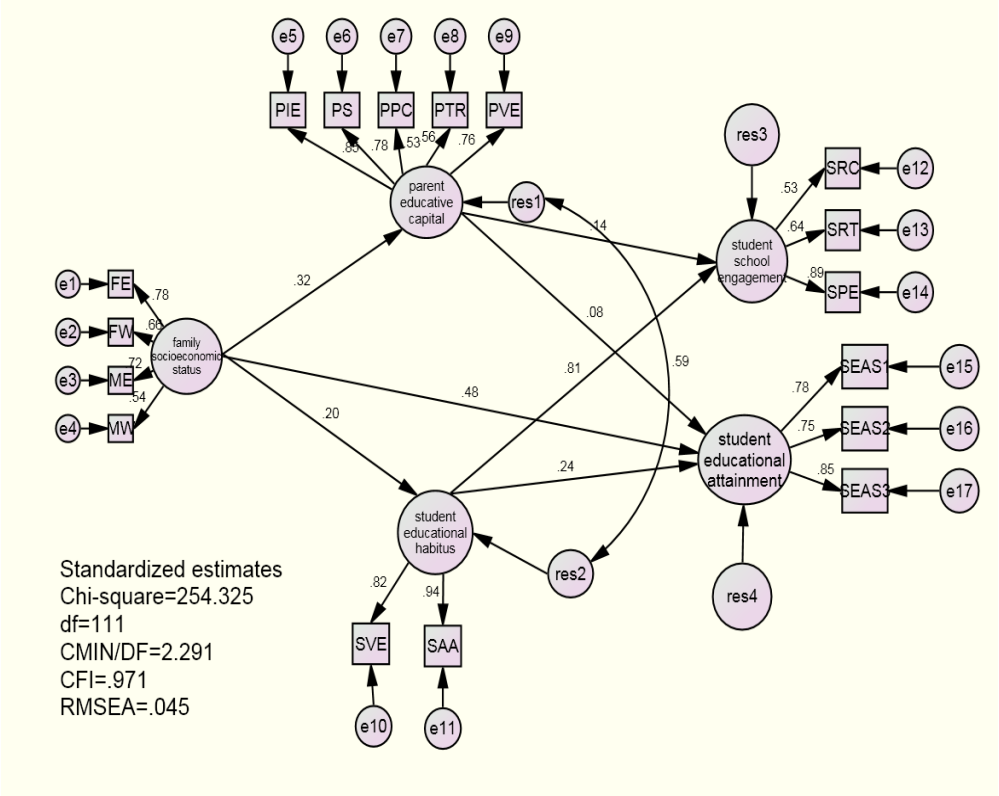


Figure 8.7 The Model of Mediated School Experience -Model 2

Note: FE=Father's Education, FW=Father's Work, ME=Mother's Education, MW=Mother's Work, PIE= Parents' Involvement in Education, PS= Parenting Style, PPC= Parents' Participation in Cultural Activities with Children, PTR= Parent-Teacher Relationships, PVE= Parents' Views of Education, SVE= Students' Views of Education, SAA=Students' Awareness of Being an Active Learner, SRC= Students' Relationship with Classmates, SRT= Students' Relationship with Class Teacher, SPE= Students' Participation in Educational Activities, SEAS1, 2, 3= Students' Educational Attainment Questions 1, 2 and 3.

The estimation of Model 2 yields a CMIN\DF of 2.291, a CFI of .971; a RMSEA of .045 and these values fall into the acceptable range. However, again, the value of the regression weight of students' perception of parents' educative capital → students' educational attainment is very small (.08); and fails to achieve statistical significance (p= .157). Consequently, this path is excluded from the Model 2, and the new model is named The Model of Mediated School Experience -Model 3 and is presented in Figure 8.8. This suggest that there is no association between students' perception of parents' educative capital and students' educational attainment, which means that students' perception of parents' educative capital has no mediating effect on educational attainment.

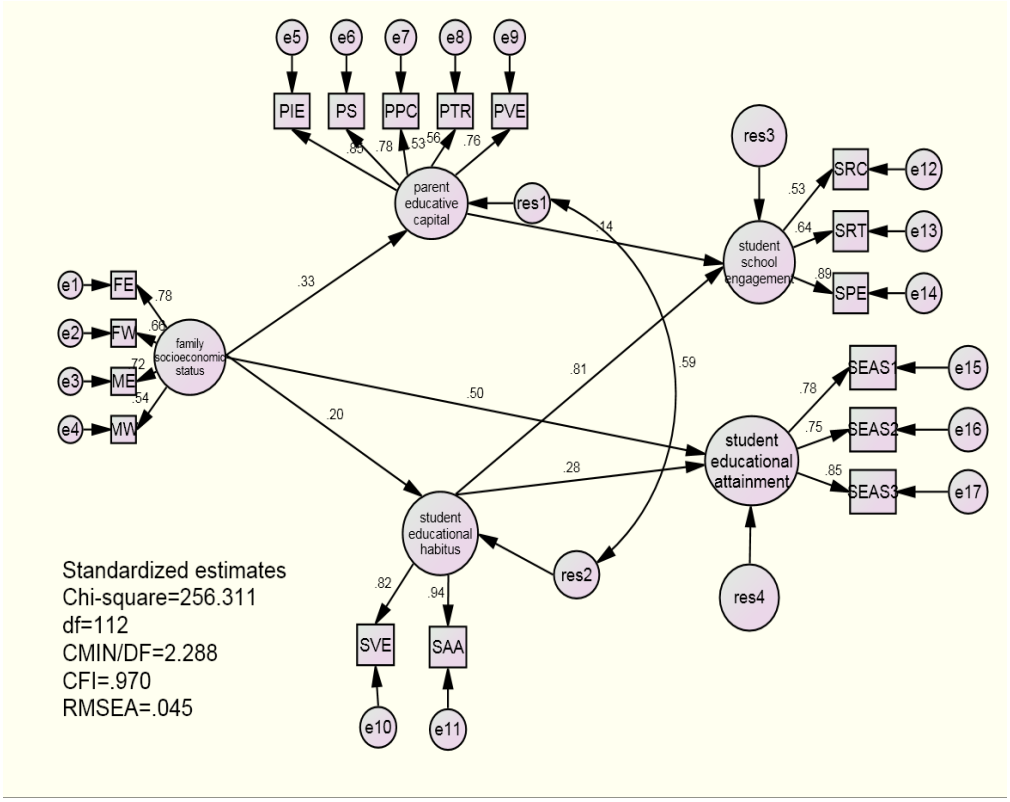


Figure 8.8 The Model of Mediated School Experience - Model 3

Note: FE=Father's Education, FW=Father's Work, ME=Mother's Education, MW=Mother's Work, PIE= Parents' Involvement in Education, PS= Parenting Style, PPC= Parents' Participation in Cultural Activities with Children, PPE= Parents' Participation in Educational Activities with Children, PVE= Parents' Views of Education, SVE= Students' Views of Education, SAA=Students' Awareness of Being an Active Learner, SRC= Students' Relationship with Classmates, SRT= Students' Relationship with Class Teacher, SPE= Students' Participation in Educational Activities, SEAS1, 2, 3= Students' Educational Attainment Questions 1, 2 and 3.

As illustrated by the goodness-of-fit indices, this model represents a good fit for the data (CMIN/DF= 2.288; CFI= .970 and RMSEA= .045). In other words, this model fits the observed data fairly well, and furthermore, all the standardised estimates are significant. More importantly, having considered that all the parameters are substantively meaningful and the need for parsimony, it is believed that it is most appropriate to adopt the The Model of Mediated School Experience – Model 3 to represent the best overall fit for the sample data.

8.3.3 Effects of Latent Variables of the Model

Having indicated that Model 3 best fits the data, the next step is to interpret the results

of the modelling, and the association among the latent variables can be examined based on Model 3 (see Figure 8.8). A SEM analysis consists of three kinds of effects, namely, direct effect[3], indirect effect[4] and total effect[5], all of which can be directly calculated by the AMOS program. The values of these three effects are shown in both Figure 8.8 and Table 8.2. In addition, the values of squared multiple correlations suggest that most measured variables have good explained variance (>. 50, see Appendix 8.2), apart from parents' work, parents' participation in cultural activities with children, parent-teacher relationships and students' relationship with classmates and class teacher.

Table 8.2 Standardised Estimated Value of Effects

			Student's Perception of Parents' Educative Capital	Students' Educational Habitus	School Engagement	Students' Educational Attainment
Independent Variable	Family Socio-economic Status	Direct Effect	0.33	0.20	0	0.50
		Indirect Effect	0	0	0.208	0.056
		Total Effect	0.33	0.20	0.208	0.556
Mediating Variables	Students' Perception of Parents' Educative Capital	Direct Effect			0.14	0
		Indirect Effect			0	0
		Total Effect			0.14	0
	Students' Educational Habitus	Direct Effect			0.81	0.28
		Indirect Effect			0	0
		Total Effect			0.81	0.28

Note: 0.208=0.33×0.14+0.81×0.2
0.056=0.20×.28

[3] Direct effect is the relationship linking two constructs with a single arrow between the two (Hair et al., 2006:844).

[4] Indirect effect is a relationship that involves a sequence of relationships with at least one intervening construct involved. That is, it is a sequence of two or more direct effects represented visually by multiple arrows between constructs (Hair et al., 2006: 868).

[5] Total effect is the sum of the direct and the indirect effect.

Effect of Family Social Status

Table 8.2 and Figure 8.8 illustrate that family social status does have a **direct positive association** with students' perception of parents' educative capital (r= .33), students' educational habitus (r= .20), and students' educational attainment (r= .50). This indicates that a high family social status has a direct and positive association with students' perception of parents' educative capital, students' educational habitus, and students' educational attainment, and its strongest direct association is with students' educational attainment. In addition, family social status has an **indirect effect** (.208) through students' perception of parents' educative capital and students' educational habitus on school engagement, and also **an indirect association** (.056) with students' educational attainment through students' educational habitus. Indeed, family social status has a **total positive effect** on school engagement (.208) and students' educational attainment (.556). This means that family social status has a stronger positive association with students' educational attainment than with school engagement.

There are also some findings in relation to the effect of family social status. Firstly, students who have a higher family socio-economic status perceive their parents' to have higher educative capital and themselves have a more positive educational habitus. Additionally, family social status has a stronger association with students' perception of parents' educative capital than with students' educational habitus. Since the importance of education is traditionally emphasised in Taiwanese society, students generally have a positive view or belief of education, which may be why family social status has only a small association (.20) with students' educational habitus. In addition, in this study, the measurement of parents' educative capital focuses on parents' capacity to become involved in their children's education and parents' participation in cultural activities. Much research has shown that these capacities are affected by family social status of parents (Lareau, 2003, 2011; Vincent, 2001 and Vincent & Ball, 2007). Thus, it is reasonable that family social status has a more positive connection with students' perception of parents' educative capital than with students' educational habitus. Secondly, there is a particularly strong association between family social status and educational attainment. Students with a higher family socio-economic status

demonstrate better educational attainment. Thirdly, the value of the path between family socio-economic status and school engagement is reduced to a point where it is not significantly different from zero when students' perception of parents' educative capital and students' educational habitus are included as mediating constructs. Therefore, with regard to the association between family socio-economic status and school engagement, the full mediation of students' perception of parents' educative capital and students' educational habitus is supported. This means that the association between family social status and school engagement is fully mediated by students' perception of parents' educative capital and students' educational habitus, rather than being directly connected. Finally, family social status does not merely have a positive direct effect on students' educational attainment, but also a positive indirect effect on it. Moreover, the direct positive association is stronger than the indirect positive one.

There may be reasons to account for these findings. In terms of educational attainment, in addition to personal efforts and talent, it is universally agreed that family social status has a positive association with educational achievement. This is mainly because families with a higher social status can offer their children more support with financial and social capital to enhance their educational achievements and parents with a higher social status are more educated to help their children to learn (Kuo, 2007; Lin & Huang, 2008; Feinstein et al., 2008 and Tu, 2011). All these reasons can explain why family social status has a strong connection with educational attainment. In contrast, in this study, school engagement, which emphasises relationship with teachers and peers and participation in activities, does not appear to be directly related to family social status. Since having close social relationships with others is not merely an important mental issue for teenagers but also seen as a personal need (Coleman, 2011), students generally have a tendency to show their willingness and behave to go along with peers/teachers and to participate in activities. Therefore, the association between family social status and school engagement is indirect rather than direct. Furthermore, as has been shown in this study, this association can be mediated both by students' perception of parents' educative capital and students' educational habitus.

In summary, all these findings emphasise that family social status and all the aspects

measured are positively connected, but that family social status still has a strong direct positive association with educational attainment.

Effect of Students' Perception of Parents' Educative Capital

Again, Table 8.2 and Figure 8.8 illustrate some findings, the first of which indicates that students' perception of parents' educative capital has a small direct positive connection with school engagement (.14), but it has no connection with students' educational attainment. This means that students' perception of parents' educative capital is associated with students' school engagement, but has no direct association with students' educational attainment. This suggests that students' perception of parents' educative capital has no mediating effect on educational attainment but it mediates the influence of family social status on school engagement. The reason for this phenomenon may be that Taiwanese students, under the influences of Confucian values, believe that education is very important for themselves and that their educational achievement is largely decided by their own efforts rather than their parents' devotion to their education. In this case, this can explain why parents' educative capital does not have a significant direct association with students' educational attainment. In other words, students' perception of parents' educative capital does not mediate the association between family social status and educational attainment.

Moreover, the association between family social status and school engagement is fully mediated by students' perception of parents' educative capital and students' educational habitus. That is, students with more privileged parents perceive them to have higher educative capital and are in turn more engaged in education. As for students' perception of parents' educative capital, parents with more educative capital tend to better understand and comply with teachers' requirements, so that they can help their children to behave appropriately when interacting socially with teachers and peers, as well as participating in educational activities. Therefore, family social status is indirectly connected to school engagement through parents' educative capital.

Effect of Students' Educational Habitus

As for the effect of students' educational habitus, Table 8.2 and Figure 8.8 illustrate three findings, the first of which is that students' educational habitus has a positive direct effect on school engagement (.81) and on students' educational attainment (.28). In other words, students who have a more positive educational habitus are more engaged at school and have greater educational attainment, particularly in terms of school engagement. Secondly, students' educational habitus mediates the association between family social status, school engagement and educational attainment. Moreover, the mediating effect of students' educational habitus is stronger than the mediating effect of students' perception of parents' educative capital for school engagement. As already mentioned, the concept of school engagement is an attempt to examine students' social interaction and participation, and this concept is more directly connected to their personal attributes, which are formed by their personal habitus. In other words, social status does not have a direct connection with school engagement; rather, it is indirectly connected through educational habitus. Thirdly, as the value of the path linking family socio-economic status and students' educational attainment is slightly reduced (from .52 to .50) but remains significant when students' educational habitus is included as a mediating construct, the partial mediation of students' educational habitus between family social status and educational attainment can be tentatively supported. As for school engagement, however, habitus furthermore seems to have an independent effect in addition to and above family status.

These findings suggest that, in addition to having a direct association, the difference in school experience relates to family social status can be mediated by students' educational habitus.

8.4 Conclusion

Research question 3**: *If there are social status and gender differences in the school experience, are these mediated by differences in the perception of parents' educative capital and students' educational habitus?***

The answer to this question is yes, although not fully. In terms of gender difference, this is not significant. Thus, H15) *Gender is associated with school experience*, and H17) *Gender differences in school experience can be mediated by differences in the perception of parents' educative capital and students' educational habitus* are not supported. However, the situation related to differences in social status is more complex.

As explained above, when reviewing Precursory Model 1 (Figure 8.4.1), family socio-economic status does have a positive direct effect on school engagement and students' educational attainment. Therefore, hypothesis H14) *Family socio-economic status is associated with school experience* is accepted.

In addition, when observing The Model of Mediated School Experience -Model 3 (Figure 8.8), family socio-economic status has a positive indirect association with school engagement through students' perception of parents' educative capital. Furthermore, family socio-economic status also has a positive indirect association both with students' educational attainment and school engagement through students' educational habitus. The model also shows that the connection between social status and school engagement can be fully mediated by students' perception of parents' educative capital and students' educational habitus. However, the connection between family social status and students' educational attainment is only partially mediated by students' educational habitus, but not mediated by students' perception of parents' educative capital. Therefore, although the degree of mediation is not the same, hypothesis *H16) Family socio-economic status differences in school experience can be mediated by differences in the perception of parents' educative capital and students' educational habitus* is accepted.

Research question 4: ***Following question 3, to what extent are differences in the perception of parents' educative capital and students' educational habitus associated with the school experience?***

As mentioned above, compared with students' perception of parents' educative capital, which has a positive direct connection with school engagement but has no connection

with students' educational attainment, students' educational habitus has a positive direct connection both with school engagement and students' educational attainment. This means that the association between students' educational habitus and school experience is stronger than the association between students' perception of parent's educative capital and school experience, especially regarding school engagement. Moreover, the connection between family social status and school engagement is fully mediated by students' perception of parents' educative capital and students' educational habitus. The connection between family socio-economic background and students' educational attainment is partially mediated by students' educational habitus. Therefore, hypothesis 18) *The effect of family socio-economic status and gender on school experience will be mediated more strongly by students' educational habitus than by parents' educative capital in the Taiwanese context* is accepted.

Overall, the results of testing the hypothesised model show that there is an association between family social status and the two aspects of students' school experience. Furthermore, this association can be explained by the difference in students' perception of parents' educative capital and students' educational habitus. These findings also show the extent to which students' perception of parental' educative capital and students' educational habitus shape their school experience in addition to and above the influence of family social background.

Chapter 9
Conclusion

This chapter provides a summary of the research in order to remind the reader of what was done and how it was done in this study. This will be followed by the contributions of the research and a discussion of my findings. In addition, the limitations of the research will be addressed, and some recommendations will be provided for further research in this field.

9.1 Research Summary

This study was designed to investigate the school experiences of junior high school level students in Taiwan; furthermore, it sought to understand how Taiwanese Grade 8 students' perception of the school experience varies according to their social status and gender. It was assumed that the family's social status and students' gender would contribute to different school experiences. Additionally, it was assumed that this relationship would be mediated by students' perception of their parents' educative capital and their own educational habitus. It is believed that a better understanding of the issue of school experience may help to provide leverage for interventions to enhance the level of students' well-being, and fill the gap between the home environment and the educational system.

In order to investigate students' school experience, data was collected by randomly choosing 10 schools (20 classes) from the State junior high schools in Kaohsiung city. 631 Grade 8 participants (50.8% male) were asked to complete a self-report questionnaire. The gender distribution of the survey was almost equal. Moreover, the distribution of the students' family social status corresponds to the overall population of Kaohsiung city, which is a predominantly industrial city. In other words, the majority of the students' parents were skilled manual and skilled non-manual workers.

As for the research findings, overall, they indicate that students generally have a positive perception of their educational habitus and school experience, while they have

varied perceptions of their parents' educative capital. They particularly have a less positive perception of two aspects of parents' educative capital: parents' participation in cultural activities with them and parents' relationships with class teachers. The findings in terms of gender/family social status differences and their implications will be discussed in more depth later in this chapter. The contributions of this research will be stated in the next section.

9.2 Contributions

The purpose of this study was to understand the effect of social status and gender differences on the school experiences of teenagers in Taiwan, and some contributions have also been made while achieving this purpose. Firstly, the study is innovative in that it combines insights from psychological literature on school experience and sociological literature on social class and gender differences in education. In particular, Bourdieu's concepts of cultural capital and habitus have been applied to the issue of school experience, and empirical measurements of these constructs have been developed in order to test specific hypotheses regarding the relationships between parental social background, young people's perceptions of their parental educative captital (i.e. their engagement with the education of the young person) and their perceptions of their own educational habitus and school experiences.

Secondly, SEM was used to analyse the data in order to understand the complex dynamic system of social differences in school experience which is mediated by students' perception of parents' educative capital and students' educational habitus. In my model, family social status is directly interlinked with students' perception of parents' educative capital, students' educational habitus and students' educational attainment; at the same time, family social status is indirectly linked to students' school engagement and educational attainment through students' perception of parents' educative capital and students' educational habitus respectively. This means that students' perception of parents' educative capital and students' educational habitus mediate the relationship between family social status and students' school experience. Therefore, I have identified the mediating function of students' perception of parents' educative capital and students' educational habitus. Moreover, in my model, gender

has no interconnection with the other measured aspects. In other words, I have found that gender has no effect on students' perception of parents' educative capital, students' educational habitus and school experience in the context of Taiwan.

Thirdly, the concept of parents' educative capital, which is derived from Bourdieu's concept of cultural capital, has been inserted into the equation, and this responds to a recent trend of advocating parents' involvement in children's education. Therefore, it is argued that, in the field of education, parents' educative capital is a parental investment, which can greatly benefit their children. This study has found that students' perception of parents' educative capital is associated with family social status and also connected to school engagement. That is, less privileged parents have lower educative capital, which in turn is associated with the young person's school engagement. Moreover, it has proved that parents' educative capital is unequally distributed among parents and can benefit children (albeit unevenly).

Furthermore, I have proved the mediating role of students' perception of parents' educative capital linking parental social status and the young person's school engagement; this means that differences in family social status are connected to school engagement via parents' different educational investment. Additionally, this research has identified the various aspects of parents' educative capital by means of a factor analysis. In other words, I have shown that parents' educative capital includes different skills of the parents, different capacities and views of education. Thus, the study was able to operationalise indicators of educative capital derived from Bourdieu's traditional indicators of cultural capital. In other words, apart from the three classical forms of cultural capital, it is believed that there is a fourth form of cultural capital: a capacity of the parents to make an decision and take a action, further, benefit children's education. Moreover, since there is no Taiwanese research to examine the influence of parents' educative capital on children's school experience, the study fills a gap in current educational research on the influence of parents' educative capital in the school experience in Taiwan.

Fourthly, the concept of habitus has been considered to be abstract; however, this study has tried to examine it empirically. This is the study to develop a broad

quantitative observation of the concept of habitus. Habitus is assumed to be a system of dispositions which adjusts individuals' beliefs, attitudes, values, aspirations, and actions. Since disposition is a latent construct which cannot be directly measured, it has been inferred from measureable responses related to students' beliefs, values and willingness, which have been named students' educational habitus. In this way, this abstract concept has been applied to empirical research. Moreover, this study has broken the tradition of sociological research, which focuses on studying cultural dispositions, values, and practices mainly associated with qualitative research, by using the quantitative research method to examine these concepts.

Fifthly, it has contributed to the existing body of knowledge on Bourdieu's theory of social and educational reproduction by testing and verifying this theory in the context of Taiwan. Moreover, it has expanded the debate of Bourdieu's theory of educational reproduction from students' educational attainment to students' school experience.

Sixthly, it has extended the notion of schooling outcome. Since educational attainment has many characteristics, such as being observable, measureable and comparable, it has been the central issue of schooling outcome. However, this study has argued that a positive school experience should be seen as being an important outcome in its own right; this means that the scope of educational outcome is not limited to educational attainment, but rather concerned with the broad experience of schooling.

Concern about enhancing the school experience of teenagers has been growing for the past several years. In the UK, the Department for Education has produced a series of publications to improve the development of young people at school, such as "Improving Attendance at School (Taylor, 2012)", "Positive for Youth (DfE, 2012)" and "Building the Engagement, Building the Future (DfE, 2011)". Similarly, the Ministry of Education in Taiwan is also devoted to "creating an excellent school environment to enhance students' mental and physical development (MoE, 2012)" as its vision for education. Since the issue of promoting a positive school experience has been brought to the public's attention, the basic intention of this study is to provide a view of the jigsaw puzzle which is the school experience of Taiwanese young people.

In addition, in terms of the research method, this was an independent study, for which I personally collected data from 631 students. Added to this, I developed my own scales which I proved to have good reliability. These are important steps for a new researcher. A statistical technique, structural equation modelling (SEM), was also used to analyse the data and test the hypotheses. In this case, the model-building and testing helped to gain an understanding of the dynamic system of variables; furthermore, the results helped to foster a more comprehensive understanding of these relationships at the micro level. It is important and meaningful to construct a model which has a theoretical background, and which can be analysed scientifically, particularly in complex cases, such as school experience. Indeed, how family influences children's school experience has always been my concern; however, my interest is not merely in the influence of static structural factors (social status and gender), but also in the impact of dynamic processes (the role of of educative capital and educational habitus) shaping school experience. Therefore, this study has provided significant information to examine the influence of students' perception of parents' educative capital and students' educational habitus to understand the effect of the family's socio-economic status alongside that of gender in the context of Taiwan. It is anticipated that the findings will add to the existing understanding of educational and social inequality in Taiwan.

9.3 Discussion of Findings

In the following I will summarise and discuss the main findings:

9.3.1 Gender

This study found that gender does not have an association with all of the measured aspects in this study. This finding is contrary to my expectations, such as boys may more perceive parents' educational investment, may have a less positive educational habitus, and may have a less positive school experience than girls. Although these hypotheses are drawn from the literature, they could not be supported by this study. That is, my findings actually challenge the conventional wisdom in this area. Indeed, many researchers have found that girls are generally more motivated and engaged than boys (Eccles, 2009; Jacobs et al, 2002; Van Houtte, 2004 and Ding & Hall, 2007).

From these points of view, it is very interesting to find that the factor of gender does not have an impact on the measured aspects.

However, social changes, such as an increase in wealth, smaller family sizes, and greater support for the value of gender equity, may account for this finding (Schoon, 2006, 2010; Tinklin, 2003 and Lundberg, 2005). In addition, since the crude birth rate in Taiwan has greatly decreased, from 1.16 % in 2001 to 0.72 % in 2010 (The Ministry of the Interior, 2012), every child is precious to its parents. In this situation, it is assumed that parents no longer favour boys, and parents' attitude and expectation toward a less gender-biased movement.

More importantly, this result is good news for Taiwanese parents, educators and government officials. In terms of gender, both genders of Taiwanese pupils have the same perception of their parents' educative investment, their own educational habitus, and their school experience. The Taiwan Ministry of Education (MoE) has been promoting substantive gender equality education since 2004. Many actions have been announced and taken, such as the development of policies and ideas of gender equality education, and the design, supervision and evaluation of practices of gender equality in schools. These gender-equity improvements and the high universal value placed on education may also explain why there is no gender difference in the measured aspects in the context of Taiwan. Furthermore, the finding that both genders have a positive perception of school engagement also corresponds with the results of recent research undertaken in Taiwan, which also found that there was no difference between genders in terms of school engagement (Wei and Chen, 2010).

9.3.2 Family Social Status

This study examined the assumption that the family's social status has a stronger association than gender with differences in the measured aspects of students' perception of their parents' educative capital, their own educational habitus, and their school experience in the Taiwanese context.

Students' Perception of Parents' Educative Capital

I have identified five dimensions of parents' educative capital: PIE (Parents' Involvement in Education), PS (Parenting Style), PPC (Parents' Participation in Cultural Activities with Children), PTR (Parent-Teacher Relationships), and PVE (Parents' Views of Education). Students generally have a positive perception of three aspects (parents' involvement in education, parenting style, and parents' views of education); indeed, they have a most positive perception of their parents' view of education. In contrast, they have the least positive perception of their parents' participation in cultural activities with them. In other words, pupils perceive that their parents seldom accompany them to cultural activities. This finding reflects Taiwan's social and cultural phenomena. As mentioned in chapter 2, Taiwanese parents generally have a positive view of education, since success in education is not only a mechanism to move up the social ladder, but is also a symbol of family honour. Obviously, children also perceive their parents' positive view of the importance of education. However, it may cause pressure or conflict between parents and children when children are unable to satisfy parents' expectations.

In terms of the least positive perception of parents' participation in cultural activities with their children, this may be caused by several factors. Since junior high school students face the pressure of passing the Core Competence Test (CCT), they have insufficient time to join cultural activities; consequently, the fact that parents seldom participate in cultural activities with their children makes sense. Moreover, because of a natural desire for autonomy, adolescents tend to want their parents to become less involved, particularly in their leisure activities (Ryan & Stiller, 1991; Steinberg, 1990 and Williams, 2002). Further, it may be the result of the characteristic of Kaohsiung city. Since the majority of its population are skilled manual and skilled non-manual workers, they may be less likely to enjoy spending time on cultural activities; for example, visiting museums, art exhibitions, and so on.

In terms of differences in social status, the study examined whether or not students with a higher family socio-economic status have a more positive perception of their parents' educative capital, and it is true that significant differences were found to exist

between the higher and the lower social status group, as defined by parents' educational backgrounds and occupations. It is also true that parents' investment in children's education can differ with social status. For example, the increasing complexity of school work limits the practical help parents can give their children. Parents with a higher educational background or better social status are more able to help their children with their school work. In addition, this finding also shows that social differences in parents' educative capital is apparent in Taiwan. Although parents' social status does not affect parents' support and care for their children, it does cause differences in parents' educational practices. This means that parents' educational practices are a function of their social status and serve as a mediaton to affect adolescents' educational outcomes (Spera, 2005). Moreover, this study also examined whether or not the association between social status and school engagement is mediated by students' perception of their parents' educative capital, and the finding corresponds to previous research findings showing that parents' practices are associatd with students' engagement with school (Simons-Morton & Crump, 2003; Spera, 2005 and Simons-Morton & Chen 2009). As the above evidence shows, Taiwanese parents' educative capital does not only differ with social status, but it is also vital for students' engagement with school. Therefore, parents, teachers and school authorities should recognise this situation. If teachers are sensitive to parents' limitations, schools can capitalise on the resources of even the lowest socio-economic status parents to help children to become more engaged with school.

Furthermore, this study also found that students' perception of parents' educative capital has no association with students' educational attainment. Although this finding is contrary to my expectation, there may be an explanation for it. In this study, the focus of "parents' educative capital" is parents' investment in their children's education, such as parents' involvement in education, parent-teacher relationship, parents' participation in cultural activities with children, and so on; however, the measure of educational attainment focuses on students' scores in academic subjects. In this case, it is assumed that students' educational attainment is more related to their own efforts than their parents' "educative capital".

Students' Educational Habitus

Four aspects of the concept of students' educational habitus were investigated: SOA (Students' Obedience to Authority), SVE (students' views of education), SAA (Students' Awareness of Being an active Learner), and SFK (Students' Views of Friendship Keeping). Generally, students have a very positive perception of their educational habitus. In addition, in terms of differences in social status, there are significant differences in the perception of students' awareness of being active learners and students' view of education between the lower and higher social status groups. This perception becomes more positive with a higher family socio-economic status. In addition, students with a more positive educational habitus are more engaged with school and have a better educational attainment. In other words, a less privileged social background contributes to students' lower level of educational engagement and achievement, as well as having an effect on their occupational aspirations and attainment. These findings are not surprising. Many studies reach a similar conclusion (Bynner, 1998; Sullivan, 2001; Schoon, 2008, 2010; Greenhalgh et al., 2004 and Van de Werfthorst & Hofstede, 2007), that students from poorer socio-economic backgrounds may be disadvantaged in their formation of educational aspirations.

As for school engagement, students' educational habitus seems to have an independent effect in addition to and above family status. In addition, in a recent study, Geckova et al. (2010) also indicate that the role of the family's social status is only partially confirmed in terms of educational aspiration. In this case, how to enhance students' educational habitus is an important issue, particularly since they have significantly different perceptions of being active learners, as well as having different views of education. If educational habitus has an independent effect on students' school engagement, this may be an important finding for schools. This suggests that schools may play a vital role in stimulating educational habitus by using various teaching and learning strategies to help students to learn actively; further, by doing this, schools can reduce the negative effects of socio-economic disadvantage on school engagement. In other words, it is possible to enhance students' perception of school engagement via schools improving students' educational habitus. Indeed, this finding offers teachers,

schools and educators important inspiration to narrow the socio-economic differences in students' perception of school engagement.

School Experience

The school experience has been observed to have two dimensions, namely, school engagement and educational attainment. Students generally have a positive perception of these two dimensions. The perception of students' school experience, particularly their participation in educational activities and their own educational attainments, becomes more positive with a higher family socio-economic status. In terms of the association between the family's social status and educational attainment, the conclusion that the higher the social status, the better the educational attainment, is universal, and the reasons for this have been discussed in previous chapters. Therefore, the focus here will be discussing students' participation in educational activities. According to the data in this study, pupils with a lower social status less actively participate in educational activities, and this may be for various reasons. It may be because of the cultural differences between the content of the school curriculum, pedagogy and home environment, or because of students' own motivation. Moreover, as shown above, students' educational habitus is very important in mediating the association between family's social status and students' perception of school experience. In this case, teachers could play a crucial role to enhance the degree of students' participation by reacting to their different educational habitus. Indeed, it is possible for teachers to recognise students' difficulty in joining educational activities by observing their behaviour and attitude, and further, examine the gap between school curriculum, pedagogy and students' educational habitus. If this gap is recognised by teachers, it is sensible for them to encourage and help students to become involved in learning activities.

9.4 Limitations of this study

The limitations of this study were created by the research design. However, these limitations, point 1 and point 2, could also be strong points. Firstly, it was especially concerned with the school experiences of grade 8 students. Since these students are in

their second year of middle school, they may have more school experience than juniors and, due to the necessity of preparing for their entrance examination, grade 9 students may not want to be distracted by participating in research. For these reasons, this investigation of school experience was limited to grade 8 students. In this case, school experiences of the grade 8 students has been examined carefully. Secondly, being subject to various practical constraints, including time and resources, the survey was exclusively conducted in Kaohsiung city, rather than nationwide. Although this study could not obtain national data, this study could offer local authority useful information to enhance school experience of Kaohsiung city students. Thirdly, the study examined the relationship between family social status and school experience, while the influence of the factors of school and classroom level was excluded. Lastly, SEM conclusions may be limited to the particular sample, variables, and timeframe represented by the design. In addition, it is important to recall that a great many potentially important aspects remain unmeasured in this survey. These limitations should be considered when interpreting the research results.

9.5 Suggestions for Further Research

Although this study has accomplished the research aims, it has failed to examine the influence of factors at school level. Incorporating school-specific measures would help to determine the extent to which school experience is content-specific and reduce any confounding aspects of the school context. Future studies may benefit from investigating school factors, such as school location, school size, school climate, etc. Moreover, the data of this study relies on self-reported information, which is provided by students. Although the 631 samples provided a great deal of information about the perception of their school experience, it is understood that the dynamics of school life are extremely complex, as are the often tacit ways in which parents transfer social-class advantages to their children. Clearly, ethnographic research may have the advantage of being able to examine the phenomenon of school experience and the covert mechanisms of transmitting existing family advantages in more detail. In the same vein, the influence of gender may also be better understood by adopting other methods, such as interviews and observations. Therefore, future studies should use multiple sources of information and multiple methodologies to gain a more diverse

perspective of school experience. In addition, this study did not measure students' own cultural capital; thus, it may be useful for future research to investigate this aspect in order to examine students' agency.

Reference

Aldridge, A. and Levine, K. (2001). *Surveying the Social World*. Buckingham: Open University Press.

Arnot, M. (2002). *Reproducing Gender?Essays on educational theory and feminist politics*. London: Routledge Falmer.

Aschaffenburg, K. and Maas, I. (1997). 'Cultural and Educational Careers: The dynamics of social reproductions'. *American Sociological Review,* 62*,* 573-587.

Ashby, J. and Schoon, I. (2010). 'Career Success: The role of teenage career aspirations, ambition value and gender in predicting adult social status and earnings'. *Journal of Vocational Behavior,* 77 (3)*,* 350-360.

Barba, R. and Cardinale, L. (1991). 'Are Females Invisible Students? An Investigation of Teacher-Student Questioning Interactions.' *School Science and Mathematics,* 91 (7)*,* 306-310.

Barber, B. and Olsen, J. (2004). Assessing the Transitions to Middle and High School. *Journal of Adolescent Research,* 19(1), 3-30.

BERA (2004). *BERA Revised Ethical Guidelines for Educational Research*. BERA.

Biggs, J. B. and Watkins, D. A. (1996). 'The Chinese Learner in Retrospect'. In D. A. Watkins and J. B. Biggs (Eds), *The Chinese Learner: Cultural, psychological and contextual influences*. Hong Kong: The University of Hong Kong.

Bodovski, K. (2010). 'Parental practices and educational achievement: social class, race, and habitus'. *British Journal of Sociology of Education,* 31 (2)*,* 139-156.

Bourdieu, P. (1977a). 'Cultural Reproduction and Social Reproduction'. In J. Karabel (Ed.), *Power and Ideology in Education*. Oxford: Oxford University Press.

Bourdieu, P.(1977b). *Outline of a theory of practice.* Cambridge: Cambridge University Press.

Bourdieu, P. (1986). *Distinction: a social critique of the judgement of taste.* London: Routledge.

Bourdieu, P. (1988). 'Vive la Crise! for heterodxy in social science'. *Theory and Society,* 19 (5)*,* 773-88.

Bourdieu, P. (1990a). *The Logic of Practice*. Cambridge: Polity.

Bourdieu, P. (1990b). *In other words: essays towards a reflexive sociology*. Oxford: Polity.

Bourdieu, P. (1993). *Sociology in Question*. London: SAGE.

Bourdieu, P. (1997). 'The Forms of Capital'. In A. H. Halset, H. Lauder, P. Brown and A. S. Wells (Eds), *Education: Culture, Economy and Society*. Oxford: Oxford University Press.

Bourdieu, P. (1998). *Practical Reason*. Cambridge: Polity Press.

Bourdieu, P. (2005). 'Habitus'. In J. Hillier and E. Rooksby (Eds), *Habitus: a sense of place*. England: ASHGATE.

Bourdieu, P. and Passeron, J. (1977). *Reproduction in Education, Society and Culture*. London: SAGE.

Bourdieu, P. and Wacquant, L. (1992). *An invitation to reflexive sociology*. Chicago: University of chicago Press.

Brantlinger, E. (1990). Low-Income Adolescents' Perceptions of School, Intelligence, and Themselves as Students. *Curriculum Inquiry,* 20(3), 305-324.

Broaded, C. M. (1997). The Limits and Possibilities of Tracking: Some Evidence from Taiwan. *Sociology of Education,* 70(1), 36-53.

Browne, M. W. and Cudeck, R. (1993). 'Alternative ways of assessing model fit'. In K. A. Bollen and J. S. Long (Eds), *Testing structural equation models*. CA: SAGE.

Buchmann, C., DiPrete, T. and McDaniel, A. (2008). 'Gender Inequalities in Education'. *Annual Review of Sociology,* 34*,* 319-337.

Byrne, B. M. (2010). *Structural Equation Modeling with AMOS*. London: Routledge.

Bynner, J. (1998). Education and family components of identity is the transition from school to work. *International Journal of Behaviour Development*, 22, 29-53.

Calhoun, C. (2000). 'Pierre Bourdieu'. In G. Ritzer (Ed.), *The Blackwell Companion to Major Social Theorists*. Oxford: Blackwell.

Campbell, C., Deed, C., Drane, S., Faulkner, M., McDonough, A., Mornane, A., Prain, V., Smith, C. and Sullivan, P. (2009). 'Junior secondary students' perception of influences on their engagement with schooling'. *Australian Journal of Education,* 53 (2)*,* 176-191.

Chan, C. H. (2006). *Teaching Disturbance and Supporting Needs of Teachers of General Classes at Junior High Schools for Students with Disabilities*. National Kaohsiung Normal University, Kaohsiung.

Chang, Y. C. (2007). *The relationship among parenting style, teacher's support and the Ninth-Graders' delinquency*. National Cheng-Kung University, Tainan.

Chen, G. T. (1995). *The school experience of primary school students with low achievements*. National Pin-Tong Teacher College, Taiwan.

Chen, H. C. (2004). *The effects of cultural capital and habitus on junior high school students'academic achievement in Taiwan*. National Taiwan Normal University, Taipei.

Chen, J. C., Cheng, B. L., Chen, T. F. and Liu, T. J. (2009). *Multivariate Analysis*. Taipei: Wu-Nan.

Chen, M. H. (2009). 'Gender'. In C. H. Wang and H. U. Chiu (Eds), *Sociology and Taiwan*. Taipei: Jiu-Liou.

Chen, P. W. (1997). *School Experiences and Related Growing- up Context of Formosan Aboriginal Juvenile Delinquents*. National Taiwan Normal University, Taiwan.

Chen, Y. M. (2001). *I am a dropout: school experiences and self idenity*. National Hua-Lien Teacher College, Taiwan.

Cheng, K. M. (1996). *The quality of primary education*. Paris: International Institute for Educational Planning.

Chiou, H. J. (2006). *Quantitative Research Method II: Statistical Principles and Analytic Techniques*. Taipei: Yeh Yeh.

Chu, C. T. (2006). *The Relationships of Junior High School Students' Cultural Capital, School Social Capital and English Academic Achievement in Taichung City and Taichung County*. National Changhua University of Education, Chang Hua.

Cohen, L., Manion, L. and Morrison, K. (2007). *Research Methods in Education*. London: Routledge.

Coleman, J. C. (2011). *The Nature of Adolescence*. London: Routledge.

Coleman, J. S. (1968). Equality of Educational Apportunity. *Equity & Excellence in Education,* 6(5), 19-28.

Comrey, A. and Lee, H. (1992). *A First Course in Factor Analysis*. New Jersey: LEA

Crosnoe, R., Johnson, M. K., and Elder, G. (2004). Intergenerational Bonding in School: The Behavioral and Contextual correlates of Student-Teacher Relationships. *Sociology of Education,* 77, 60-81.

Cumming, J. and Owen, C. (2001). *Reforming schools through innovative teaching*. Canberra: Australian College of Education & Enterprise and Career Education Foundation.

Davies, C. (2002). 'Student engagement with simulations: a case study'. *Computres & Education,* 39, 271-282.

De Graaf, N., De Graaf, P. and Kraaykamp, G. (2000). 'Parental education capital and education attainment in the Netherlands: a refinement of the cultural capital perspective'. *Sociology of Education,* 73 (2), 92-111.

De Vaus, D. (2002). *Surveys in Social Research*. London: Routledge.

Deci, E. L. (1992). 'The relation of interest to the motivation of behaviour: A self-determination theory perspective'. In K. A. Renninger, S. Hidi and A. Krapp (Eds), *The role of interest in learning and development*. NJ: Erlbaum.

Delpit, L. (1988). 'The silenced dialogue: Power and pedagogy in educating other people's children'. *Harvard Education Review,* 58 (3), 280-298.

DeVellis, R. F. (2003). *Scale development: Theory and applications*. California: SAGE.

DfE. (2011). Building the Engagement, Building the Future. London: Department for Educatio

DfE. (2012). Positive for Youth. London: Department for Education.

DiMaggio, P. (1982). 'Cultural Capital and School Success: the impact of status culture participation on the grades of U.S. high school students'. *American Sociological Review,* 47 (2), 189-201.

DiMaggio, P. and Mohr, J. (1985). 'Cultural Cpital, Educational Attainment, and Marital Selection'. *The American Journal of Sociology* 90 (6), 1231-1261.

Ding, C., & Hall, A. (2007). Gender, Ethnicity, and Grade Differences in Perceptios of School Experiences Among Adolescents. *Studies in Education Evaluation,* 33(2), 159-174.

Dollar, K., Perry, A., Fromuth, M. and Holt, A. (2004). 'Influence of gender roles on perceptions of teacher/adolescent student sexual relations'. *SEX ROLE,* 20 (1-2), 91-101.

Duffy, J., Warren, K. and Walsh, S. (2001). 'Classroom interactions: Gender of teacher, gender of student, and classroom subject '. *SEX ROLE,* 45 (9-10).

Dumais, S. (2002). 'Cultural Capital, Gender, and School Success: The Role of Habitus'. *Sociology of Education,* 75 (1)*,* 44-68.

Durkheim, E. (1956). *Education and sociology*. London: Free Press.

Dweck, C. (2000). *Self theories: Their role in motivation, personality, and development.* Philadelphia: Psychology Press.

Eccles, J. (2009). 'Who Am I and What Am I Going to Do With My Life? Personal and Collective Identities as Motivators of Action'. *Educational Psychologist,* 44 (2)*,* 78-89.

Eccles, J. and Wigfield, A. (2002). 'Motivations, Beliefs, Values, and Goals'. *Annual Review of Psychology,* 53*,* 109-132.

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., and Mac Iver, D. (1993a). Development During Adolescence: the impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist,* 48(2), 90-101.

Eccles, J., Wigfield, A., Flanagan, C., Miller, C., Reuman, D. and Yee, D. (1989). 'Self-concepts, domain values, and self-esteem: Relations and changes at early adolescence'. *Journal of Personality,* 57*,* 29-83-310.

Eckert, P. (1989). *Jocks and Burnouts: Social Categories and Identity in the High School*. New York: Teacher College Press.

Farrell, J. (1990). Learning as Work or Learning as Play. *Curriculum Inquiry,* 20(3), 243-247.

Feinstein, L., Duckworth, K. and Sabates, R. (2008). *Education and the family: passing success across the generations*. London: Routledge.

Field, A. (2009). *Discovering Statistics using SPSS*. London: SAGE.

Finn, J. D. (1989). 'Withdrawing from school'. *Review of Educational Research,* 59(2), 117-142.

Finn, J. D. and Voelkl, K. E. (1993). School Characteristics Related to Student Engagement. *Journal of Negro Education,* 62(3), 249-268.

Fisher, D. (1997). Gender and cultural differences in teacher-student interpersonal behavior, *The Annual Meeting of the American Educational Research Association* Chicago.

Flouri, E. (2006). Parental interest in children's education, children's self-esteem and locus of control, and later educational attainment: Twenty-six year follow-up of the 1970 British Birth Cohort. British Journal of Educational Psychology, 76, 41-55.

Fredricks, J., Blumenfeld, P. and Paris, A. (2004). 'School Engagement: potential of the concept, state of the evidence'. *Review of Educational Research,* 74 (1)*,* 59-109.

Frosh, S., Phoenix, A. and Pattman, R. (2002). *Young Masculinities: Understanding Boys in Contemporary Society* Basingstoke: Palgrave.

Fullarton, S. (2002). *Student engagement with school: individual and school-level influences*. Australia: ACER.

Ganzach, Y. (2000). 'Parents' education, cognitive ability, educational expextations and educational attainment: Interactive effects'. *British Journal of Educational Psychology,* 70*,* 419-441.

Garner, P. (1995). 'Schools by scoundrels'. In M. Lloyd-Smith and J. Davies (Eds), *On the Margins: the eduactional experience of 'problem' pupils*. Stoke: Trentham.

Geckova, M., Tavel, P., Van Dijk, J., Abel, T., & Reijneveld, S. (2010). Factors associated with educational aspirations among adolescents: cues to counteract socioeconomic difference? *BMC Public Health*, 10, 154-162.

Gieve, S. and Clark, R. (2005). 'The Chinese approach to learning: Cultural trait or situated response'. *System,* 33*,* 261-276.

Gillies, V. (2005). 'Raising the 'meritocracy': parenting and the individualization of social class'. *Sociology,* 39 (5)*,* 835-853.

Giordano, P. C. (2003). 'Relationships in Adolescence'. *Annual Review of Sociology,* 29*,* 257-281.

Gorard, S. and See, B. H. (2011). 'How can we enhance enjoyment of secondary school? The student view'. *British Educational Research Journal,* 37 (4)*,* 671-690.

Gorsuch, R. L. (1983). *Factor analysis*. NJ: Lawrence Erlbaum.

Greenhalgh, T., Seyan, K., & Boynton, P. (2004). "Not a university type": focus group study of social class, ethnic, and sex differences in school pupils' perceptions about medical school. *BMJ*, 328, 1541.

Guo, B., Perron, B. E. and Gillespie, D. F. (2009). 'A systematic review of structural equation modelling in social work research'. *British Journal of Social Work,* 39*,* 1556-1574.

Guo, G. (2010). *The Analysis of Industry Development of Kaohsiung City*. Kaohsiung: Kaohsiung City Government.

Gutman, L., & Feinstein, L. (2008). *Children's Well-Being in Primary School: Pupil and School*. London: The Centre for Research on the Wider Benefits of Learning.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. and Tatham, R. L. (2006). *Multivariate data analysis*. NJ: Pearson Education.

Han, J. C. (2008). *Sima Qian: Shiji*. Taipei: San-Min.

Hand, L., & Bryson, C. (2008). An introduction to student engagement. In L. Hand & C. Bryson (Eds.), *Student Engagement*. London: SEDA.

Harker, R., Mahar, C. and Wilkes, C. (1990). 'The Basic Theoretical Position'. In R. Harker, C. Mahar and C. Wilkes (Eds), *An introduction to the work of Pierre Bourdieu*. London: Macmillan.

Harris, A., Andrew-Power, K. and Goodall, J. (2009). *Do Parents Know They Matter?* London: Continuum.

Hillier, J. and Rooksby, E. (2005). 'Introduction to Second Edition: Committed Scholarship'. In J. Hillier and E. Prooksby (Eds), *Habitus: A Sense of Place*. England: ASHGATE.

Ho, D. (1986). 'Chinese patterns of socialization: A critical review'. In M. H. Bond (Ed.), *The psychology of the Chinese people*. Hong Kong: Oxford University Press

Howell, J., Egan, P. and Giuliano, T. (2011). 'The Reverse Double Standard in Perceptions of Student-Teacher Sexual Relationships: The Role of Gender, Initiation, and Power'. *Journal of Social Psychology,* 151 (2)*,* 180-200.

Howitt, D. and Cramer, D. (2005). *Introduction to Statistics in Psychology*. Harlow: Pearson.

Hoyle, R. H. and Panter, A. T. (1995). 'Writing About Structural Equation Models'. In R. H. Hoyle (Ed.), *Structural Equation Modeling*. Thousand Oaks: SAGE.

Hsa, M. H. (2006). *Our stories: A study of school experience of five six graders*. National Kaohsiung Normal University, Taiwan.

Hsieh, M. Y. (2002). *A Study of the Relationship between Parental Socioeconomic Backgroundsand and Students Academic Achievements*. National Chiayi University, Chia Yi.

Hsu, Y. W. (2006). *The relationships of junior high school students' perceptions of parental involvement, academic self-concept, and learning achievement*. National Changhua University of Education Changhua.

Hu, L. T. and Bentler, P. M. (1998). 'Fit Indices in Covariance Structure Modeling: Sensitivity to Underparameterized Model Misspecification'. *Psychological Methods,* 3 (4), 424-453.

Hu, L. T. and Bentler, P. M. (1999). 'Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus new alternatives'. *Structural Equation Modeling,* 6 (1), 1-55.

Huang, D. H. (2003). 'Characteristics and problems for the development of adolescents in Taiwan'. In F. Pajares and T. Urdan (Eds), *International Perspectives on Adolescence*. Greenwich: IAP.

Huang, H. M. (2009). *Structural Equation Modeling*. Taipei: Wu-Nan.

Hung, C.-L. (2011). *Junior High School Students' Teacher-Student Relationships, Peer Relationships and Well-Being* National Changhua University of Education, Chang Hua.

Jackson, B. and Marsden, D. (1986). *Education and the Working Class*. London: ARK Paperbacks.

Jacobs, J., Lanza, S., Osgood, D., Eccles, J., & Wigfield, A. (2002). Changes in Children's Self-Competence and Values: Gender and Domain Differences across Grades One through Twelve. *Child Development*, 73(2), 509-527.

Jenkins, R. (2002). *Pierre Bourdieu*. London: Routledge.

Ji, B. (2007) Confucian Traditional Education and Its Modern Significance. In Feng, J (Ed.), *Scholarly Studies on ASIA*, Beijing: China Renmin University Press

Jimerson, S., Campos, E. and Greif, J. (2003). 'Toward an Understanding of Definitions and Measures of School Engagement and Related Terms'. *The California School Psychologist,* 8, 7-27.

Jou, C. T., Cheng, Y. X. and Song, Q. M. (2009). 'A study on the relationships among English self-efficacy, English learning anxiety, and English learning

achievement of senior high school students in Taipei'. *Journal of Education and Psychology,* 32 (2)*,* 81-111.

Kiuru, N., Nurmi, J., Aunola, K. and Salmela-Aro, K. (2009). 'Peer group homogeneity in adolescents' school adjustment varies according to peer group type and gender'. *International Journal of Behavioral Development,* 33 (1)*,* 65-76.

Kline, T. J. (2005). *Psychological Testing*. London: SAGE.

Koepke, M. F. and Harkins, D. A. (2008). 'Conflict in the Classroom: Gender Differences in the Teacher-Child Relationship'. *Early Education and Development,* 19 (6)*,* 843-864.

Kuo, S. C. (2007). *The Learning Achievement and Cram School of Junior High School Students in Taiwan*. Nanhua University, Chiayi.

Lareau, A. (2000). *Home Advantage*. Maryland: Rowman & Littlefield

Lareau, A. (2002). 'Invisible Inequality: Social Class and Childrearing in Black Families and White Families'. *American Sociological Review,* 67 (5)*,* 747-776.

Lareau, A. (2003). *Unequal childhoods: class, race and family life*. Berkeley: CA: University of California Press.

Lareau, A. (2011). *Unequal childhoods*. (Second Ed.). London: University of California Press.

Lareau, A. and Weininger, E. (2003). 'Cultural capital in education research: A critical assessment'. *Theory and Society,* 32 (5-6)*,* 567-606.

Lee, C.Y. (2005). *Teacher-Student Relationship, Peer Relationship and the Source & Degree of Happiness in Student of Junior High School*. National Taichung University of Education, Tai Chung.

Lee, W. O. (1996). 'The Cultural Context for Chinese Learners: Conceptions of Learning in the Confucian Tradition'. In D. A. Watkins and J. B. Biggs (Eds), *The Chinese Learner: cultural, psychological and contextual influences*. Hong Kong: Comparative Education Research Centre.

Li, H. F. (2007). *The Relationship between Education-associated Capitals of Family and Academic Achievement for Junior High School Students in Taiwan*. National Changhua University of Education, ChangHua.

Li, H. (2012) *Learning for One's Self*. Hong Kong: The Chinese University Press

Li, J. (2003). 'The Core of Confucian Learning'. *American Psychologist,* 58 (2)*,* 146-147.

Li, J. (2006). 'Self in Learning: Chinese Adolescents' Goals and Sense of Agency'. *Child Development,* 77 (2)*,* 482-501.

Li, J. (2009). 'Learning to Self-Perfect: Chinese Beliefs about Learning'. In C. Chan and N. Rao (Eds), *Revisiting The Chinese Learner*. Hong Kong: Comparative Education Research Centre.

Li, J. (2009). *Taipei City Has Second-highest Per Capita GDP in Asia*. [Online]. Available at: http://www.cens.com.tw/cens/html/en/news/news_inner_26710.html

Li, J. and Wang, Q. (2004). 'Perceptions of achievement and achieving peers in U.S. and Chinese kindergartners'. *Social Development,* 13*,* 413-436.

Li, R. (2011) *Confucian Educational Theory and Its Modern Value*. Beijing: Zhonghua Book

Lin, B. F. (2009). 'An empirical study of the relationship between talent classes and learning achievement'. *Formosan Education and Society,* 17*,* 111-134.

Lin, C. Y. and Huang, Y. J. (2008). 'The Possible Mechanism Influencing Junior High School Students' Achievement in Taiwan: The Exploration of Structural Equation Modeling'. *Taiwan Journal of Sociology of Education* 8(1)*,* 45-88.

Lin, M. J. (2000). *The Study of Relationship Between Teacher-Student Interaction and Students' Satisfication*. National Kaohsiung Normal University, Kaohsiung.

Lin, P. F. (2011). *The panel study of effects of family cultural capital and individual learning motivation on adolescent learning achievement*. National Chengchi University, Taipei.

Lin, S. C. (2000). *Sociology of Education*. Taipei: Ju Liu.

Lindsay, G. (2000). 'Researching children's perspectives: ethical issues'. In G. Lindsay and A. Lewis (Eds), *Researching children's perspectives*. Buckingham: Open University Press.

Linnenbrink, E. and Pintrich, P. (2003). 'The role of self-efficacy beliefs in student engagement and learning in the classroom'. *Reading and Writing Quarterly,* 19*,* 119-137.

LiPuma, E. (1993). 'Culture and the concepts of culture in a theory of practice'. In E. Calhoun, E. LiPuma and M. Postone (Eds), *Bourdieu: Critical Perspectives*. Cambridge: Polity Press.

Little, T. D., Lindenberger, U. and Nesselroade, J. R. (1999). 'On selecting indicators for multivariate measurement and modeling with latent variables: when 'good' indicators are bad and 'bad' indicators are good'. *Psychological Methods,* 4 (2), 192-211.

Lu, H. M. (2009). *A research on the correlation between junior high school students' perception in leadership style of their homeroom teacher and classroom*. National Taichung University of Education, Taichung.

Lundberg, S. (2005). 'Sons, daughters, and parental behaviour'. *Oxford Review of Economic Policy,* 21 (3), 340-356.

Ma, H. K., Cheung, P. C. and Shek, D. (2007). 'The relation of prosocial orientation to peer interactions, family socio environment and personality of Chinese adolescents '. *International Journal of Behavioral Development,* 31 (1), 12-18.

MacCallum, R. C. and Austin, J. T. (2000). 'Applications of structural equation modeling in psychological research'. *Annual Review of Psychology,* 51, 201-226.

MacCallum, R. C., Browne, M. W. and Sugawara, H. M. (1996). 'Power analysis and determination of sample size for covariance structure modeling'. *Psychological Methods,* 1, 130-149.

Magnuson, K. (2003). *The Effect of Increases in Welfare Mothers' Education on Their Young Children's Academic and Behavioural Outcomes: Evidence from the National Evaluation of Welfare- to- Work Strategies Child Outcomes Study*, Institute of Research on Poverty. Madison: University of Wisconsin.

Maier, K. S., Ford, T. G. and Schneider, B. (2008). 'Are middle-class families advantaging their children?'. In L. Weis (Ed.), *The Way Class Works*. NY: Routledge.

Mann, S. (2001). 'Alternative Perspectives on the Student Experience: alienation and engagement'. *Studies in Higher Education,* 26 (1), 7-19.

Marsh, H., Martin, A. and Cheng, J. (2008). 'A multilevel perspective on gender in classroom motivation and climate: Potential benefits of male teachers for boys? '. *Journal of Educational Psychology,* 100 (1), 78-79.

Martin, A. and Marsh, H. (2006). 'Academic resilience and its psychological and educational correlates: A construct validity approach'. *Psychology in the Schools,* 43 (3), 267-281.

Maton, K. (2008). Habitus. In M. Grenfell (Ed.), *Pierre Bourdieu: Key Concepts,* Stocksfield: ACUMEN

McDonough, P. (1997). *Chosing College: how social class and schools structure opportunity*. New Yorker: State University of New York Press.

McLeod, J. (2005). 'Feminists re-reading Bourdieu: old debates and new questions about gender habitus and gender change'. *Theory and Research in Education,* 3 (1)*,* 11-30.

Mensah, F. K. and Kiernan, K. E. (2010). 'Gender differences in educational attainment: influences of the family environment'. *British Educational Research Journal,* 36 (2)*,* 239-260.

MoE. (2008). *2008 Education in Taiwan*. Taipei: The Ministry of Education.

MoE. (2010). *2009-2010 Statistics of Junior High Schools*. Taipei: The Ministry of Education.

MoE. (2012). *The Outline of Educational Policy*. Taipei: The Ministry of Education.

Ministry of the Interior. (2012). Statistics of Crude Birth Rate, from http://statis.moi.gov.tw/micst/stmain.jsp?sys=100

Nash, R. (1999). 'Bourdieu, 'Habitus' and Educational Research: is it all worth the candle?'. *British Journal of Sociology of Education,* 20 (2)*,* 175-187.

National Statistics, R.O.C. (2013). Statistics of Structure of Employee, from http://ebas1.ebas.gov.tw/pxweb/Dialog/Saveshow.asp

Neuman, W. (2006). *Social Research Methods: qualitative and quantitative approaches*. Boston: Pearson Education.

Newmann, F. (1992). 'The Significance and Sources of Student Engagement '. In F. Newsman (Ed.), *Student Engagement and Achievement in American Secondary Schools*. New York: Teachers College Press.

Pallant, J. (2007). *SPSS Survival Manual*. Maidenhead: Open University Press.

Pan, J. D. (1993). 'How do we have good interactions between teachers and students? '. *Journal of Student Counselling,* 25*,* 24-31.

Pedhazur, E. J. and Schmelkin, L. (1991). *Measurement, design, and analysis*. NJ: Lawrence Erlbaum Associate.

Pianta, R. C. and Walsh, D. J. (1996). *High-risk children in schools: Construcing sustaining relationships*. New York: Routledge.

Pomeroy, E. (1999). 'The teacher-student relationship in secondary school: insights from excluded students'. *British Journal of Sociology of Education* 20 (4), 465-482.

Rao, N. and Chan , C. (2009). 'Moving Beyond Paradoxes: Understanding Chinese Learners and Their Teachers'. In N. Rao and C. Chan (Eds), *Revisiting The Chinese Learner*. Hon Kong: Comparative Education Research Centre.

Raykov, T. (2005). 'Analysis of Longitudinal Studies With Missing Data Using Covariance Structure Modeling With Full-Information Maximum Likelihood'. *Structural Equation Modeling,* 12 (3), 493-505.

Raykov, T. and Marcoulides, G. A. (2006). *A First Course in Structural Equation Modeling*. NJ: Lawrence Erlbaum Associates.

Reay, D. (1995). 'They Employ Cleaners to Do that: habitus in the primary classroom'. *British Journal of Sociology of Education,* 16 (3), 353-371.

Reay, D. (1998). *Class Work: Mothers' Involement in Their children' Primary Schooling*. London: University of College of London.

Reay, D. (2001). 'Finding or Losing Yourself?'. *Journal of Education Policy,* 16 (4), 333-346.

Reay, D. (2004). 'It is all becoming habitus: beyond the habitual use of habitus in educational research '. *British Journal of Sociology of Education,* 25 (4), 431-444.

Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (2000). School as a Context of Early Adolescents'Academic and Social-Emotional Development: A Summary of Research Findings. *The Elementary School Journal, 100*(5), 443-471.

Rudduck, J., & Flutter, J. (2004). *The Challenge of Year 8*. Cambridge: Pearson.

Ryan, B., & Stiller, J. (1991). The social contexts of internalization: Parent and teacher influences on autonomy, motivation, and learning In M. Maehr & P. Pintrich (Eds.), *Advances in Motivation and Achievement*. Greenwich: JAI.

Ryan, A. M. and Patrick, H. (2001). 'The classroom social environment and changes in adolescents' motivation and engagement during middle school'. *American Educational Research Journal,* 38 (2), 437-460.

Salili, F., Zhou, H. and Hoosain, R. (2003). 'Adolescent education in Hong Kong and Mainland China'. In F. Pajares and T. Urdan (Eds), *International perspectives on adolescence*. Greenwich: IAP.

San, S. (2013) Statistics of Per Cpaita GDP of Taiwan, from http://www.elivecity.cn

Schon, I. (2006). *Risk and Resilience: Adaptations in Changing Times*. Cambridge: Cambridge University Press.

Schoon, I. (2007). 'Life chances and opportunities in times of social change: Evidence from two British Birth Cohorts'. In R. Silbereisen and R. Lerner (Eds), *Approaches to Positive Youth Development*. London: SAGE.

Schoon, I. (2008). A transgenerational model of status attainment: the potential mediating role of school motivation and education. *National Institute Economic Review*, 205, 72-82.

Schoon, I. (2010). 'Planning for the future: changing education expectations in three British cohorts'. *Historical Social Research,* 35 (2)*,* 99-119.

Sewell, W. H., & Hauser, R. M. (1980). The Wisconsin longitudinal study of social and psychological factors in aspirations and achievements. *Research in Sociology of Education and Socialization, 1*, 59-101.

Shiang, S. (2007). 'Reflection on Income Inequality Problem and the Middle Classes Issue in Taiwan'. *Taiwan Democracy Quarterly,* 4 (4)*,* 143-150.

Simons-Morton, B. and Chen, R. (2009). 'Peer and parent influences on school Engagement Among Early Adolescents'. *Youth & Society,* 41 (1)*,* 3-25.

Simons-Morton, B., & Crump, A. (2003). The association of parental involvement and social competence with school adjustment and engagement among sixth graders. *Journal of School Health*, 73, 121-126.

Smith, D. (1997). *Middle Education in the Middle Kingdom*. London: Praeger.

Spera, C. (2005). A Review of the Relationship Among Parenting Parctices, Parenting Styles, and Adolescent School Achievement. *Educational Psychology Review*, 17(2), 12146.

Steinberg, L. (1990). Autonomy, conflict, and harmont in the family relationship. In S. Feldman & G. Elliot (Eds.), *At the Threshold: The Developing Adolescent*. Cambridge: Harvard University Press.

Sullivan, A. (2001). 'Cultural Capital and Educational Attainment'. *Sociology,* 35*,* 893-912.

Sullivan, A. (2002). 'Bourdieu and Education: how useful is Bourdieu's Theory for Researchers?'. *The Netherlands' Journal of Social Sciences* 38 (2)*,* 144-166.

Sullivan, P., McDonough, A. and Prain, V. (2005). Student Engagement in the Middle Years: Describing indluences and possible teacheractions, *Proceedings of the Australian Association of Research in Education Annual Conference*. Sydney.

Sun, M. Y., Shin, W. Y. and Wang, C. H. (2007). 'The relationship between personalities of junior high school students and teacher-student interaction'. *The Archive of Guidance and Counseling,* 29 (2)*,* 51-72.

Swartz, D. (1997). *Culture and Power*. Chicago: The University of Chicago Press.

Tabachnick, B. G. and Fidell, L. S. (2007). *Using Multivarirate Statistics*. Boston: Person.

Tadich, B., Deed, C., Campbell, C. and Prain, V. (2007). 'Student engagement in the middle years: A year 8 case study'. *Issues in Educational Research,* 17 (2)*,* 256-271.

Taiwanese Institute of Sociology (2000). *Taiwan Youth Project*. Taipei.

Tan, H. T. (2010). *The effect of mother and fathar involvement between socioeconomic status and their children academic achievement: Evidence from Taiwan education panel survey*. National Chengchi University, Taipei.

Taylor, C. (2012). Improving Attendance at School. London: Department for Education.

Taylor, J., & Nelms, L. (2006). *School engagement and life chances*. Australia: Brotherhood of St. Laurence.

Thiessen, D. (2007). 'Researching Student Experiences in Elementary and Secondary School: An Evolving Field of Study'. In D. Thiessen and A. Cook-Sather (Eds), *International Handbook of Student Experience in Elementary and Secondary School*. London: Springer.

Tinklin, T. (2003). Gender Differences and High Attainment. *British Educational Research Journal,* 29(3), 307-325.

Tomarken, A. J. and Waller, N. G. (2005). 'Structural Equation Modeling: Strengths, Limitations, and Misconceptions'. *Annual Review of Clinical Psychology,* 1*,* 31-65.

Tu, P. I. (2011). *A Study on Relationship of Family Environment towards Learning Attitude and Learning Achievement –a Case Study of Junior High School Students on English in Keelung City*. Ming Chuan University, Taipei.

Tzeng, J. M. and Chen, C. S. (2008). 'The analysis of Taiwan assessment of student achievement 2006'. *Journal of Educational Research and Development,* 4 (4), 41-85.

Tzou, S.C. (2009). *The Relationship Among Peer Relationship, Teacher-Students Relationship and Learning Adjustment for Junior High School Students*. Tunghai University, Tai Chung.

Van de Werfhorst, H. G., & Hofstede, S. (2007). Cultural capital or relative risk aversion? Two mechanisms for educational inequality compared. *The British Journal of Sociology*, 58(3), 391-415.

Van Houtte, M. (2004). 'Why boys achieve less at school than girls: the difference between boys' and girls' academic culture'. *Educational Studies,* 30 (2), 159-173.

Van Petegem, K., Aelterman, A., Van Keer, H. and Rosseel, Y. (2008). 'The influence of student characteristics and interpersonal teacher behaviour in the classroom on students' well-being'. *Social Indicators Research,* 85, 279-291.

Vincent, C. (2001). 'Social class and parental agency'. *Journal of Education Policy,* 16 (4), 347-364.

Vincent, C. and Ball, S. (2007). '‘Making Up’ the Middle-Class Child: Families,Activities and Class Dispositions'. *Sociology,* 41 (6), 1061-1077.

Vincent, C. and Martin, J. (2000). 'School-based parents' groups-a politics of voice and representation?'. *Journal of Education Policy,* 15 (5), 459-480.

Vryonides, M. (2007). 'Social and cultural capital in educatioal research: issues of operationalisation and measurement'. *British Educational Research Journal* 33 (6), 867-885.

Wallace, G. (1996). 'Relating to teachers'. In J. Rudduck, R. Chaplain and G. Wallace (Eds), *School Improvement: what can pupils tell us?* London: David Fulton.

Wang, B. J. (2006). *SPSS and science of behaviour research*. Taipei: Psychological Publishing.

Wang, H. C. (2000). *The Study of The Rrelationship Between Math Self-Efficacy, Goal orientation, the Classroom Context and Academic Help-Seeking*. National Changhua University of Education, Changhua.

Wang, J. L. (2009). *XunZi*. Taipei: San-Min.

Wang, L. R. (2006). *The effects of ability grouping on student achievement*. National Taiwan University, Taipei.

Wang, M. T. and Eccles, J. (2012). 'Adolescent Behavioral, Emotional, and Cognitive Engagement Trajectories in School and Their Differential Relations to Educational Success'. *Journal of Research on Adolescence,* 22 (1)*,* 31-39.

Wei, C. F. (2008). 'Influences of Adolescent's Mental Health: A longitudinal Study'. *The Journal of Health Science,* 10 (4)*,* 251-266.

Wei, H. S., & Chen, J. K. (2010). School attachment among Taiwanese adolescents. *Social Indicators Research*, 95(3), 421-436.

Weis, L. (1990). *Curriculum for Tomorrow's School*. Buffalo: State University of New York.

Wen, M. L. (1992). *Critical Thinking and Innovation in Primary School Education in Taiwan*. Institute of Education, London.

Wentzel, K. R. (1998). 'Social Relationships and Motivation in Middle School: The Role of Parents, Teachers, and Peers'. *Journal of Education and Psychology,* 90 (2)*,* 202-209.

Wentzel, K. R. and Caldwell, K. (1997). 'Friendships, Peer Acceptance, and Group Membership: Relations to Academic Achievement in Middle School'. *Child Development,* 68 (6)*,* 1198-1209.

Wigfield, A. and Eccles, J. (2000). 'Expectancy- Value Theory of Achievement Motivation'. *Contemporary Educational Psychology,* 25*,* 68-81.

Wigfield, A., Eccles, J., Mac Iver, D., Reuman, D. and Midgley, C. (1991). 'Transitions at early adolescence: Changes in children's domain-specific self-perceptions and general self-esteem across the transition to junior high school'. *Developmental Psychology,* 27*,* 552-565.

Williams, B., Williams, J., & Ullman, A. (2002). *Parental Involvement in Education Research Report*. London: Department for Education and Skills.

Willis, P. (1977). *Learning to Labour: how workinhg class kids get working class jobs* UK: Saxon House.

Willms, J. (2003). *Student engagement at school*. France: OECD.

Wu, M. L. (2009a). *Structural equation modeling method and practical application*. Kaohsiung Li-Wen.

Wu, M. L.(2009b). *Structural Equation Modelling -AMOS Operation and Application*. Taipei: Wu-Nan.

Wu, Y. I. (1997). *Causal Mechanism Affecting Elementary School Students' Academic Achievement: A Comparison Between Taitung County and Taipei Municipality*. National Taitung University of Education, Tai Tung.

Wu, Y. I. (2005). *Effects of School and Non-school Factors on Elementary Students' Achievement in Taitung Taiwan :Integrating the Analytic Models of Equality of Educational Opportunity and School Effectiveness Research*. National Pingtung University of Education, Ping Tung.

Wubbels, T. and Brekelmans, M. (2005). 'Two decades of research on teacher-student relationships in class'. *International Journal of Educational Research,* 43 (1-2)*,* 6-24.

Wubbels, T., Brekelmans, M., Den Brok, P. and Van Tartwijk, J. (2006). 'An Interpersonal Perspective on Classroom Management in Secondary Classrooms in the Netherlands'. In C. Evertson and C. Weinstein (Eds), *Handbook of Classroom Management: Research, Practice, and Contemporary Issues*. London: Lawrence Erlbaum Associates.

Xu, Y. W. (2005). *The relationships of junior high school student's perceptions of parental involvement, academic self-concept, and learning achievement* National Zhang-Hua Normal University, Zhang-Hua.

Yamamoto, Y., & Brinton, M. (2010). Cultural Capital in East Asian Educational Systems: The case of Japan. *Sociology of Education, 83*(1), 67-83.

Yu, A. B. (1996). 'Ultimate life concerns, self, and Chinese achievement motivation'. In M. H. Bond (Ed.), *The handbook of Chinese psychology*. Hong Kong: Oxford University Press.

Zyngier, D. (2008). '(Re)conceptualising students engagement: Doing education not doing time'. *Teaching and Teacher Education,* 24 (7)*,* 1765-1776

Tables of Appendices

Appendix 5.1 A letter

Dear Principal

I am an MPhil/PhD student of the Institute of education, University of London. Now, I am doing a research "School Experience in Taiwan: social class and gender differences". The main purposes of this research are:

1. To determine whether adolescents coming from varying social classes have different school experience.
2. To probe whether cultural capital and habitus play significant roles in the perception of school experience.
3. To explore whether one's gender, in addition to one's social class, leads to different benefits from cultural capital and habitus in terms of school experience.

I should be most grateful if you could kindly let your students complete the questionnaire.

All information obtained will be treated strict confidential. No individual will be identified. If you have any questions, please feel free to contact me.

My Email: jli@ioe.ac.uk
My mobile number: 0981311037 (Taiwan)
00-44-7521062240 (UK)

Thank you a lot for your support.

Yours truly,
Li, Jen-Ying

Dear Teachers

I am an MPhil/PhD student of the Institute of education, University of London. Now, I am doing a research "School Experience in Taiwan: social class and gender differences". The main purposes of this research are:

1. To determine whether adolescents coming from varying social classes have different school experience.
2. To probe whether cultural capital and habitus play significant roles in the perception of school experience.
3. To explore whether one's gender, in addition to one's social class, leads to different benefits from cultural capital and habitus in terms of school experience.

I should be most grateful if you could kindly let your students complete the questionnaire.

All information obtained will be treated strict confidential. No individual will be identified. If you have any questions, please feel free to contact me.

My Email: jli@ioe.ac.uk
My mobile number: 0981311037 (Taiwan)
00-44-7521062240 (UK)

Thank you a lot for your support.

Yours truly,
Li, Jen-Ying

O 校長 XX 您好：

冒昧打擾，請先容許我自我介紹，本人目前是英國倫敦大學教育研究院 Institute of Education, University of London)博士班的學生，正在進行我的博士論文研究。我的研究主題是探討國二學生的學校經驗，研究焦點如下：

1. 探討是否不同階級、性別的學生有不同的學校經驗
2. 探討文化資本(cultural capital)、習性(habitus)是否在學生的學校經驗形成過程中扮演了重要的角色
3. 探討不同階級、性別的學生是否在文化資本、習性上有所差異，進而導致學生學校經驗不同

由於研究需要，極需您的協助，懇請惠允 讓我至貴校進行問卷調查。
問卷調查對象：貴校二年級二個班級的學生。
調查時間：國二第一學期期末(約在十二月與一月)，問卷填寫約花費三十分鐘。
當然問卷調查的匿名性及保密性將會受到嚴格的保護，所有的調查結果將只應用在學術研究上。

在此再度懇請 您的大力協助，您的協助不只是幫助一個博士生完成研究，更重要的是藉此能讓我們更了解學生的學校生活感受和家庭之間的關係。每個學生能覺得他們的學校生活是快樂的、有意義的，不是我們身為教育工作倍感慶幸的事嗎?

另外，由於本人目前不在台灣，故無法親自拜訪，只能先以書信和您連絡，深感抱歉。待今年九月回台灣，將再親自與您聯繫。

如果您有任何相關的疑問，請不要客氣，直接聯絡我：
我的電子郵件為：jli@ioe.ac.uk
連絡電話：0981311037 (Taiwan)
00-44-7521062240 (UK)

耑此 敬祝

校運昌隆

研究生 李貞瑩 敬上

XXX 老師您好：
冒昧打擾，請先容許我自我介紹，本人目前是英國倫敦大學教育研究院 Institute of Education, University of London)博士班的學生，正在進行我的博士論文研究。我的研究主題是探討國二學生的學校經驗，研究焦點如下：

1. 探討是否不同階級、性別的學生有不同的學校經驗
2. 探討文化資本(cultural capital)、習性(habitus)是否在學生的學校經驗形成過程中扮演了重要的角色
3. 探討不同階級、性別的學生是否在文化資本、習性上有所差異，進而導致學生學校經驗不同

由於研究需要，極需您的協助，懇請惠允 讓我至貴班進行問卷調查。調查時間是在國二第一學期期末(約在十二月與一月)，問卷填寫約花費三十分鐘。而問卷調查的匿名性及保密性將會受到嚴格的保護，所有的調查結果將只應用在學術研究上。

在此再度懇請 您的大力協助，您的協助不只是幫助一個博士生完成研究，更重要的是藉此能讓我們更了解學生的學校生活感受和家庭之間的關係。每個學生能覺得他們的學校生活是快樂的、有意義的，不是我們身為教育工作者倍感慶幸的事嗎?

如果您有任何相關的疑問，請直接聯繫我：
我的電子郵件為：jli@ioe.ac.uk
連絡電話：0981311037 (Taiwan)
00-44-7521062240 (UK)

耑此 敬祝

教安

研究生 李貞瑩 敬上

Appendix 5.2 A Questionnaire (Pilot Study)

Dear Students:
The purpose of this questionnaire is to collect information about your school experiences. It must be emphasized that there is no intention at all to use the replies as part of any official inspection; neither will any personal detail be revealed in any way. In addition, this is not a test; please feel free to answer all of the questions honestly. Thank you for your help.

Please read carefully, and then tick the one answer for each question that comes closest to reflecting your opinion about it.

【Part A】

A1 [PSS] Please tick the appropriate answer.
Since I have studied in a junior high school,

PSS1. My parents have strict the rules for reward and punishment.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS2. If I do something wrong, my parents will tell me what mistakes I have made.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS3. My parents bring me up strictly.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS4. My parents bring me up democratically.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS5. My parents praise me for my study achievement.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS6. My parents praise me for other achievements at school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS7. My parents tell me the importance of studying and encourage me to study hard.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS8. My parents talk to me about my future plans.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS9. My parents talk to me about my studies.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS10. My parents care about my interpersonal relationships.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS11. Apart from studying, my parents encourage me to join outside school activities which are not connected to study.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

A2 [PPCS] Please tick the appropriate answer. Since I have studied in a junior high school,

PPCS1. I have been to a Book Exhibition with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PPCS2. I have been to an Art Exhibition with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PPCS3. I have been to an Art Show with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS4. I have been to a Sport Game with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS5. I have been to a Scientific Exhibition with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS6. I have been to a Speech Day with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS7. I have visited a Museum with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS8. I have visited a Gallery with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS9. I have visited a Library with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS10. I have visited a National Park with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS11. I have visited a History Site with my parents
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS12. I have visited another country with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

A3 [PPES] Please tick the appropriate answer. Since I have studied in a junior high school,

PPES1. My parents take part in school activities, such as parent-teacher conferences.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES2. My parents talk to teachers about my study achievement.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES3. My parents talk to teachers about my study problems.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES4. My parents ask teachers about my behaviour in school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES5. My parents sign my learning diary.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES6. My parents write comments in my learning diary.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES7. My parents teach me homework.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES8. My parents supervise my homework.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES9. My parents set a standard for study achievement.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES10. My parents follow the school rules.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES11. My parents help me to finish the assignments/ activities required by the school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES12. My parents read the documents forwarded by the school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

A4 [PIES] Please tick the appropriate answer. Since I have studied in a junior high school,

PIES1. My parents have been volunteers or parent representative in school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES2. In order for me to study at a better school, parents changed my school district.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES3. My parents arranged me to study in a better class.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES4. My parents give gifts to teachers in private.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES5. My parents help me overcome any difficulties in school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES6. My parents talk about the effectiveness and ineffectiveness of school to their friends.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES7. My parents understand the school regulations, such as attendance requirements.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES8. My parents know the date of school's important events, such as examination dates.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES9. My parents care about news related to school affairs.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES10. My parents care about educational policy news.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

【Part B】

B1 [SVES] Please tick the appropriate answer. In my view,

SVES1. Being educated is important.
☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES2. Doing well in studying is important.
☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES3. Education can enrich my knowledge.
☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES4. Education can help me to find a satisfying job in the future.
☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES5. The importance of education is to enrich knowledge rather than helping to find a satisfactory job.
☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES6. Education is the main way to improve my family's economy situation.
☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES7. Education is the main way to honour my family.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES8. I study for myself, not for my parents.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES9. Studying is my priority.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

B2 [SRSS] Please tick the appropriate answer. In my view,

SRSS1. It is important to be a student with high academic achievement.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS2. It is important to follow school's rules.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS3. It is important to respect teachers.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS4. It is important to obey teachers.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS5. It is important to take responsibility for our own work.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS6. It is important to be nice to classmates.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS7. The main purpose of going to school is to learn.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS8. It is my responsibility to study actively.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS9. It is important never to delay homework.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

B3 [SCSS] Please tick the appropriate answer. In my view,

SCSS1. I am willing to help classmates voluntarily.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS2. I am willing to get to know classmate.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS3. I am willing to get on well with classmates.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS4. I am willing to be close to teachers.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS5. I am willing to do my best to satisfy the class cadres' requirements.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS6. I am willing to do my best to take part in class activities.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS7. I am willing to do my best to take my responsibility for my duties.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

【Part C】

C1 [SEAS] According to the last monthly test result, answer these following questions, please.

SEAS1. My score of Chinese is?

☐ 100- 90 points ☐ 89-80 points ☐ 79-70 points ☐ 69-60 points ☐ 59 points~

SEAS2. My score of Math is?

☐ 100- 90 points ☐ 89-80 points ☐ 79-70 points ☐ 69-60 points ☐ 59 points~

SEAS3. My score of English is?

☐ 100- 90 points ☐ 89-80 points ☐ 79-70 points ☐ 69-60 points ☐ 59 points~

SEAS4. Overall, I am glad with my education achievement?

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

C2 [SPES] Please tick the appropriate answer. Since I have studied in a junior high school,

SPES1. I get to school on time.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES2. I do not skip classes.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES3. I like to go to school.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES4. During classes, I concentrate on studying.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES5. I like to join the class learning activities

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES6. I discuss homework with classmates.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES7. I can acquire knowledge from school education.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES8. Overall, I am satisfied with my engagements in learning activities.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

C3 [SRCS] Please tick the appropriate answer. Since I have studied in a junior high school,

SRCS1. It is easy for me to build relationships with classmates.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS2. I get on well with classmates.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS3. Classmates and I help with each other.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS4. Classmates like me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS5. I have close friends in class.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS6. During the break time, I play with friends.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS7. I feel happy to be with friends.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS8. School is a place to make good friends.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS9. I belong to this class.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS10. Overall, I am pleased with my interpersonal relationship.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

C4[SRTS] Please tick the appropriate answer. Since I have studied in a junior high school,

SRTS1. My class teacher likes me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS2. My class teacher cares about me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS3. My class teacher understands me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS4. My class teacher acts fairly with everyone.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS5. My class teacher encourages me.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS6. I like to be with my class teacher.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS7. I trust my class teacher.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS8. I respect my class teacher.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS9. Overall, I am pleased with the relationship with my class teacher.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

【Part D】About me

D1. The location of my school: _____

D2. I am a ☐ boy ☐ girl

D3. I live

☐ with parents ☐ with a single- parent ☐ with step-parent ☐ only with grandparents ☐Others (please specify) _____

D4. Housing: ☐ Rented house ☐ Self-owned house

D5. I receive free school meal: ☐ Yes ☐ No

D6. Paternal education level:

☐ Junior high school or lower ☐ Senior high school ☐ Technical college ☐ University ☐ Graduate school

D7. Maternal education level:

☐ Junior high school or lower ☐ Senior high school ☐ Technical college ☐ University ☐ Graduate school

D8. Paternal career (please read the table below, then tick the appropriate code)

☐ Code 1 ☐ Code 2 ☐ Code 3 ☐ Code 4 ☐ Code 5

D9. Maternal career (please read the table below, then tick the appropriate code)

☐ Code 1 ☐ Code 2 ☐ Code 3 ☐ Code 4 ☐ Code 5

Code 5	Principal/teacher in college, Doctor, Grand Justice, Scientist, Legislator/supervisor/ examiner in government system, People's representative in government, Chainman/General manager, Senior government officer, General
Code 4	Boss of medium corporation, Justice/Judge/lawyer, principal/teacher in high or primary school, Middle rank government officer, Engineer/Architect, Manager, Assistant manager, Accountant, Police officer, Writer/painter/musician, Municipal member in parliament, Major
Code 3	Boss of small corporation, Technician, Junior government officer, Clerks, Secretary, Police man, Wholesaler, Fire-fighter, Sailor, Actor, Representative of town, member of parliament in county, Dress designer
Code 2	Mechanics, Plumber, Small store owner, salesman, Farmer, mailman, Driver, Tailors, Barber, Cook, Soldier, Typist, Foreman
Code 1	Housewife, Factory worker, Vendor, Hired farmer/fisherman, Cleaner, Temporary worker, Guard, Hired labourers, Servant/apprentice, Bar/dancing girl, unemployed

國中學生的學校經驗（預試）

各位同學，你好：
這份問卷的目的，是希望能了解你的學校經驗，幫助你更融入學校的生活。因此每一道題目都很重要，請回答每一題。然而這並不是考試，答案沒有對與錯，你所填寫的內容也絕對保密，所以請你依照實際狀況回答。謝謝你的協助。

英國倫敦大學教育研究院
指導教授：Dr.Alice Sullivan
& Pro. Ingrid Schoon
研究生：李貞瑩
2009 年 9 月

【A 部分】

作答說明：請在看完每一個題目之後，勾選最適合的答案，每題只能勾選一個答案，請不要有所遺漏。

A1『PSS』、請依照你的實際狀況，勾選(打勾)符合的選項。

	總是	通常	有時候	很少	沒有
PSS1.父母親有明確的賞罰標準。	□	□	□	□	□
PSS2.當我做錯事，父母會告訴我哪裡做錯了。	□	□	□	□	□
PSS3.父母親採用權威的管教方式。	□	□	□	□	□
PSS4.父母親採用民主的管教方式	□	□	□	□	□
PSS5.父母會稱讚我的學業表現。	□	□	□	□	□
PSS6.除了學業，父母親會稱讚我在學校的其他表現。	□	□	□	□	□
PSS7.父母親會告訴我讀書的重要，鼓勵我用功念書。	□	□	□	□	□
PSS8.父母會和我討論我的未來計畫。	□	□	□	□	□
PSS9.父母會和我討論我的學業成績。	□	□	□	□	□
PSS10.父母會關心我的人際關係。	□	□	□	□	□
PSS11.除了學校活動之外，父母會鼓勵我參加其他校外的活動。 (如：夏令營、運動活動等)	□	□	□	□	□

A2[PPCS]、請依照你的實際狀況，勾選合適的選項。

自從我上國中後，

PPCS1.父母親曾和我參觀書展?	□	□	□	□	□
PPCS2.父母親曾和我參觀藝術展覽(如畫展、攝影展、雕塑展)?	□	□	□	□	□
PPCS3.父母親曾和我觀賞藝術表演(如舞台劇、音樂劇、舞蹈表演、音樂會)?	□	□	□	□	□

PPCS4.父母曾和我觀賞運動競賽? □ □ □ □ □
PPCS5.父母曾和我參觀博物館? □ □ □ □ □
PPCS6.父母親曾和我參觀展覽中心? □ □ □ □ □
PPCS7.父母曾和我去圖書館? □ □ □ □ □
PPCS8.父母親曾和我去國家公園玩? □ □ □ □ □
PPCA9.父母親曾和我去參觀歷史古蹟? □ □ □ □ □
PPCS10.父母親曾和我出國旅行? □ □ □ □ □

A3[PPES]、請依照你的實際狀況，勾選合適的選項。
自從我上國中之後，

	總是	通常	有時候	很少	沒有
PPES1.父母會參加學校的活動，如班親會等。	□	□	□	□	□
PPES2.父母會和老師討論我的學業成績。	□	□	□	□	□
PPES3.父母會為了課業問題主動連絡學校老師。	□	□	□	□	□
PPES4.父母會為了我的在校行為，主動連絡學校老師。	□	□	□	□	□
PPES5.父母每天都會在聯絡簿留言。	□	□	□	□	□
PPES6.父母會指導我功課。	□	□	□	□	□
PPES7.父母會督促我的功課。	□	□	□	□	□
PPES8.父母會訂定段考學業成績標準。	□	□	□	□	□
PPES9.父母會配合學校或老師的規定。	□	□	□	□	□
PPES10.父母會協助我完成學校所規定的活動或課業要求。	□	□	□	□	□
PPES11.父母會看我從學校帶回給家長看的資料。	□	□	□	□	□

A4[PIES]、請依照你的實際狀況，勾選合適的選項。
自從我上國中之後，

PIES1.父母親曾經擔任或現任學校義工或家長委員。	□	□	□	□	□
PIES2.為了讀這所國中，父母安排我轉移戶口。	□	□	□	□	□
PIES3.父母會安排我到較好的班級。	□	□	□	□	□
PIES4.父母會送禮物給師長。	□	□	□	□	□
PIES5.父母親會設法幫我解決在學校遇到的困難。	□	□	□	□	□
PIES6.父母了解學校的規定,如請假手續。	□	□	□	□	□
PIES7.父母知道學校重要活動的日期，如段考等。	□	□	□	□	□
PIES8.父母會關心與校務相關的訊息。	□	□	□	□	□
PIES9.父母會關心與教育相關的政策訊息。	□	□	□	□	□

【B 部分】
B1 [SVES]、作答說明：答案沒有對錯，請依照你的真實想法來回答。

	非常同意	部份同意	普通	部份不同意	非常不同意
SVES1. 我認為受教育很重要。	□	□	□	□	□
SVES2. 我認為書讀得好很重	□	□	□	□	□
SVES3. 我認為受教育可以增加我的知識。	□	□	□	□	□
SVES4. 我認為受教育可以幫助我將來找到滿意的工作。	□	□	□	□	□
SVES5. 我認為讀書的重要性，在增加知識方面多於協助我將來找到滿意的工作。	□	□	□	□	□
SVES6. 我認為讀書是幫助我改善家庭經濟狀況的最主要方式。	□	□	□	□	□
SVES7. 讀書是我現在最重要的事。	□	□	□	□	□

B2[SRSS]、答案沒有對錯，請依照你的真實想法來回答。

SRSS1. 我認為做一個成績好的學生很重要。	□	□	□	□	□
SRSS2. 我認為遵守學校規定很重要。	□	□	□	□	□
SRSS3. 我認為尊敬師長很重要。	□	□	□	□	□
SRSS4. 我認為服從師長很重要。	□	□	□	□	□
SRSS5. 我認為對自己份內的工作負責很重要。	□	□	□	□	□
SRSS6. 我認為友愛同學很重要。	□	□	□	□	□
SRSS7. 我認為來學校最主要的目的是學習。	□	□	□	□	□
SRSS8. 我認為主動學習是學生的本分。	□	□	□	□	□
SRSS9. 我認為不讓別的事耽誤課業很重要。	□	□	□	□	□

B3[SCSS]、請依照你實際情況，勾選合適的選項。

SCSS1. 我願意協助同學。	□	□	□	□	□
SCSS2. 我願意認識同學。	□	□	□	□	□
SCSS3. 我願意和同學和睦相處。	□	□	□	□	□
SCSS4. 我願意親近老師。	□	□	□	□	□
SCSS5. 我願意盡力配合老師的要求。	□	□	□	□	□
SCSS6. 我願意盡力配合班級幹部的要求。	□	□	□	□	□
SCSS7. 我願意盡力配合班級活動。	□	□	□	□	□
SCSS8. 我願意盡力完成我的份內工作。	□	□	□	□	□
SCSS9. 我願意盡力去完成作業。	□	□	□	□	□
SCSS10. 我願意尊敬老師。	□	□	□	□	□
SCSS11. 我願意遵守學校規定。	□	□	□	□	□
SCSS12. 我願意主動學習。	□	□	□	□	□

【C 部分】

C1[SEAS].請依照自己上次月考成績來回答。

SEAS1.我的國文月考成績分數為?

☐100- 90 分 ☐89-80 分 ☐79-70 分 ☐69-60 分 ☐59 分~

SEAS2.我的數學月考成績分數為?

☐100- 90 分 ☐89-80 分 ☐79-70 分 ☐69-60 分 ☐59 分~

SEAS3.我的英文月考成績分數為?

☐100- 90 分 ☐89-80 分 ☐79-70 分 ☐69-60 分 ☐59 分~

C2 [SPES].作答說明：答案沒有對錯，請依照自己實際狀況回答。

	非常符合	部份符合	普通	部份不符合	非常不符合
自從我上國中之後，					
SPES1. 我準時上學。	☐	☐	☐	☐	☐
SPES2. 我喜歡上學。	☐	☐	☐	☐	☐
SPES3. 上課時我專心聽課。	☐	☐	☐	☐	☐
SPES4. 我喜歡參與課堂活動	☐	☐	☐	☐	☐
SPES5. 我會和同學討論課業。	☐	☐	☐	☐	☐
SPES6. 我可以在學校學習到知識。	☐	☐	☐	☐	☐
SPES7. 整體來說，我滿意我的學習活動參與的表現。	☐	☐	☐	☐	☐

C3[SRCS]、作答說明：答案沒有對錯， 請依照自己實際狀況回答。

自從我上國中後，

SRCS1. 我很容易交到朋友。	☐	☐	☐	☐	☐
SRCS2. 我和同學相處得很好。	☐	☐	☐	☐	☐
SRCS3. 有困難時我和同學會互相幫忙。	☐	☐	☐	☐	☐
SRCS4. 同學喜歡我。	☐	☐	☐	☐	☐
SRCS5. 我在班上有知心的朋友。	☐	☐	☐	☐	☐
SRCS6. 下課時，我常和同學一起玩。	☐	☐	☐	☐	☐
SRCS7. 學校是可以交到好朋友的地方。	☐	☐	☐	☐	☐
SRCS8. 我認同我是班上的一份子。	☐	☐	☐	☐	☐
SRCS9. 整體來說，我滿意我的人際關係。	☐	☐	☐	☐	☐

C4[SRTS]、作答說明：答案沒有對錯，請依照自己實際狀況回答。

自從我上國中之後，

SRTS1. 我覺得導師喜歡我。	☐	☐	☐	☐	☐
SRTS2. 我覺得導師關心我。	☐	☐	☐	☐	☐
SRTS3. 我覺得導師了解我的想法。	☐	☐	☐	☐	☐
SRTS4. 我覺得導師對我們同學都一視同仁。	☐	☐	☐	☐	☐
SRTS5. 我覺得導師會鼓勵我。	☐	☐	☐	☐	☐
SRTS6. 我覺得我喜歡和導師相處。	☐	☐	☐	☐	☐
SRTS7. 我覺得我信任導師。	☐	☐	☐	☐	☐
SRTS8. 我覺得我尊敬	☐	☐	☐	☐	☐
SRTS9. 整體來說，我滿意和導師之間的關係。	☐	☐	☐	☐	☐

【D 部分】

D1. 我就讀的學校位在高雄市　　區

D2. 我的性別：☐　男生　　☐　女生

D3. 我的家庭　：

☐ 雙親家庭　☐單親家庭　☐ 再婚家庭　☐ 隔代家庭 (只和祖父母住)

☐ 三代家庭　☐ 其它：(請註明) _____

D4. 家裡的房子：☐ 自有的　☐　租的

D5. 我現在有申請學校的營養午餐補助：☐ 有　☐　沒有

D6. 父親的教育程度：☐研究所　☐大學、技術學院　☐ 專科　☐　高中(高職)　☐國中或以下

D7. 母親的教育程度：☐研究所　☐大學、技術學院　☐ 專科　☐　高中(高職)　☐國中或以下

D8. 父親的職業：請對照**下一頁**的「職業類別代號對照表」再勾選

☐ 代號五 ☐ 代號四　☐ 代號三　☐ 代號二 ☐ 代號一

若無合適代號，請直接寫下父親的職業名稱：_____

D9. 母親的職業：請對照**下一頁**的「職業類別代號對照表」再勾選

☐ 代號五 ☐ 代號四　☐ 代號三　☐ 代號二 ☐ 代號一

若無合適代號，請直接寫下母親的職業名稱：_____

職業類別代號對照表

代號一	工廠工人、學徒、小販、佃農、漁夫、清潔工、雜工、臨時工、工友、建築看管人員、門房、傭工、女傭、服務生、舞女或酒女、無業、家庭主婦
代號二	技工、水電工、店員、雜貨店老闆、零售員、推銷員、司機、自耕農、裁縫、美容師、理髮師、郵差、乙等職員、士官、士兵、打字員、領班、監工
代號三	技術員、技佐、委任級公務人員、科員、行員、出納員、縣市議員、鄉鎮民代表、批發商、代理商、包商、尉級軍官、警察、消防人員、甲等職員、船員、秘書、代書、演藝人員、服裝設計師
代號四	中小學校長、中小學教師、會計師、法官、推事、律師、工程師、建築師、薦任級公務人員、公司行號科長、船長、經理、襄理、協理、副理、校級軍官、警官、作家、畫家、音樂家、新聞電視記者
代號五	大學校長、大學教師、醫師、大法官、科學家、特任或簡任公務人員、立法委員、監察委員、考試委員、董事長、總經理、將級軍官

問卷到此結束，請再檢查一次，確定都沒有遺漏。非常謝謝你的填寫。再次感謝。

如果有需要，你是否願意接受進一步的訪問，如果願意請寫下你的班級座號，謝謝。

☐ 我願意：班級 (　　) 座號 (　　)　☐ 不用了，謝謝。

Appendix 6.1 Descriptive Statistics of Subscales of Students' Perception of Parents' Educative Capital (Pilot Study)

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
PSS1	87	1	5	3.51	1.380	-.406	-1.118
PSS2	87	1	5	4.11	1.061	-.892	-.281
PSS3	87	1	5	3.68	1.280	-.629	-.757
PSS4	87	1	5	3.25	1.183	-.034	-.970
PSS5	87	1	5	3.16	1.354	.017	-1.235
PSS6	87	1	5	4.28	1.128	-1.413	.789
PSS7	87	1	5	3.20	1.429	-.133	-1.291
PSS8	87	1	5	3.61	1.315	-.589	-.790
PSS9	87	1	5	3.26	1.450	-.219	-1.310
PSS10	87	1	5	3.05	1.509	.024	-1.404
PPCS1	87	1	5	1.67	1.138	1.758	2.069
PPCS2	87	1	5	1.84	1.200	1.352	.824
PPCS3	87	1	5	1.97	1.205	1.006	-.054
PPCS4	87	1	5	1.68	.970	1.629	2.400
PPCS5	87	1	5	1.49	.847	2.131	5.308
PPCS6	87	1	5	1.49	.913	2.313	5.739
PPCS7	87	1	5	1.83	1.133	1.232	.561
PPCS8	87	1	5	1.89	1.195	1.230	.579
PPCS9	87	1	5	2.25	1.408	.765	-.743
PPCS10	87	1	5	2.01	1.196	1.021	.161
PPCS11	87	1	5	2.13	1.379	.856	-.607
PPCS12	87	1	5	1.57	1.106	1.916	2.708
PPES1	87	1	5	2.97	1.639	.073	-1.646
PPES2	87	1	5	2.90	1.463	.160	-1.380
PPES3	87	1	5	2.17	1.296	.918	-.218
PPES4	87	1	5	2.31	1.417	.710	-.800
PPES6	87	1	5	3.70	1.348	-.659	-.790
PPES7	87	1	5	2.84	1.462	.195	-1.342
PPES8	87	1	5	3.41	1.522	-.532	-1.202
PPES9	87	1	5	3.13	1.539	-.001	-1.493
PPES10	87	1	5	3.68	1.459	-.753	-.881
PPES11	87	1	5	3.40	1.410	-.216	-1.319
PPES12	87	1	5	4.29	.975	-1.149	.458
PIES1	87	1	5	1.94	1.466	1.213	-.115
PIES2	87	1	5	2.24	1.830	.822	-1.320
PIES3	87	1	5	1.53	1.098	1.948	2.598
PIES4	87	1	5	1.74	1.234	1.701	1.764
PIES5	87	1	5	2.69	1.367	.304	-1.177
PIES7	87	1	5	3.11	1.490	-.050	-1.459

PIES8	87	1	5	3.97	1.280	-1.058	-.068
PIES9	87	1	5	3.03	1.513	.043	-1.419
PIES10	87	1	5	3.15	1.483	-.154	-1.346

Appendix 6.2 Descriptive Statistics of Subscales of Students' Educational Habitus (Pilot Study)

	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
SVES1	87	1	5	4.06	.992	-.994	.671
SVES2	87	1	5	3.76	1.110	-.706	.109
SVES3	87	1	5	4.14	.954	-1.022	.922
SVES4	87	1	5	3.91	1.052	-.731	-.132
SVES5	87	2	5	3.95	.951	-.571	-.588
SVES6	87	1	5	3.52	1.160	-.432	-.600
SVES7	87	1	5	3.14	1.122	-.076	-.605
SVES9	87	1	5	3.52	1.170	-.622	-.160
SRSS1	87	1	5	3.51	1.033	-.631	.198
SRSS2	87	1	5	4.13	1.032	-1.168	1.054
SRSS3	87	1	5	4.06	1.027	-1.106	.975
SRSS4	87	1	5	3.80	1.098	-.841	.375
SRSS5	87	1	5	4.21	.929	-.962	.377
SRSS6	87	2	5	4.31	.811	-.765	-.632
SRSS7	87	1	5	3.69	1.113	-.648	-.031
SRSS8	87	1	5	3.77	1.064	-.590	-.154
SRSS9	87	1	5	3.17	.991	-.356	.256
SCSS1	87	1	5	4.03	.982	-.976	.718
SCSS2	87	1	5	4.13	.900	-.843	.440
SCSS4	87	1	5	3.72	1.117	-.608	-.246
SCSS3	87	3	5	4.40	.706	-.758	-.645
SCSS5	87	1	5	4.08	.943	-.845	.257
SCSS6	87	1	5	4.16	.874	-.750	.238
SCSS7	87	2	5	4.37	.749	-.894	-.028

Appendix 6.3 Descriptive Statistics of Subscale of Students' School Experience (Pilot Study)

	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
SEAS1	87	1	5	2.62	1.203	.406	-.621
SEAS2	87	1	5	3.09	1.567	-.137	-1.542
SEAS3	87	1	5	2.92	1.527	-.022	-1.512
SEAS4	87	1	5	2.77	1.031	-.108	-.749
SPES1	87	2	5	4.51	.819	-1.576	1.569
SPES2	87	2	5	4.77	.522	-2.750	9.381
SPES3	87	1	5	3.07	1.118	-.139	-.515
SPES4	87	1	5	3.48	1.098	-.359	-.506
SPES5	87	1	5	3.72	1.245	-.750	-.349
SPES6	87	1	5	3.63	1.221	-.668	-.259
SPES7	87	1	5	4.01	1.062	-.858	-.001
SPES8	87	1	5	3.60	1.028	-.631	.437
SRCS1	87	1	5	3.86	.967	-.666	.277
SRCS2	87	2	5	4.18	.829	-.609	-.587
SRCS3	87	1	5	4.33	.773	-1.279	2.624
SRCS4	87	1	5	3.71	.914	-.609	.933
SRCS5	87	1	5	4.22	.945	-1.300	1.692
SRCS6	87	2	5	4.28	.845	-.802	-.457
SRCS7	87	1	5	4.43	.858	-1.856	4.240
SRCS8	87	1	5	4.36	.952	-1.603	2.385
SRCS9	87	1	5	4.28	.936	-1.453	2.178
SRCS10	87	1	5	4.01	1.017	-.973	.769
SRTS1	87	1	5	3.48	.887	-.407	.726
SRTS2	87	1	5	3.71	1.033	-.559	-.029
SRTS3	87	1	5	3.44	1.107	-.468	-.058
SRTS4	87	1	5	3.51	1.219	-.507	-.620
SRTS5	87	1	5	3.53	1.066	-.431	-.247
SRTS6	87	1	5	3.39	1.093	-.179	-.358
SRTS7	87	1	5	3.76	1.239	-.803	-.232
SRTS8	87	1	5	3.86	1.153	-.795	-.157
SRTS9	87	1	5	3.67	1.117	-.687	-.057

Appendix 6.4 The Reliability of All Subscales (Pilot Study)

1. The Reliability of Subscales of Parents' Educative Capital

1.1 PSS (Parenting Style Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.782	.782	11

Inter-Item Correlation Matrix

	PSS1	PSS2	PSS3	PSS4	PSS5	PSS6	PSS7	PSS8	PSS9	PSS 10	PSS 11
PSS1	1.00										
PSS2	0.20	1.00									
PSS3	-0.12	-0.16	1.00								
PSS4	0.12	0.38	-0.56	1.00							
PSS5	0.25	0.32	-0.36	0.50	1.00						
PSS6	0.24	0.27	-0.31	0.34	0.70	1.00					
PSS7	0.13	0.42	-0.01	0.11	0.28	0.38	1.00				
PSS8	0.33	0.29	-0.14	0.16	0.48	0.51	0.43	1.00			
PSS9	0.21	0.44	0.01	0.16	0.40	0.43	0.43	0.67	1.00		
PSS10	0.27	0.25	-0.14	0.11	0.31	0.45	0.40	0.46	0.33	1.00	
PSS11	0.27	0.27	-0.22	0.20	0.42	0.47	0.47	0.47	0.47	0.38	1.00

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PSS1	33.83	56.912	.334	.167	.777
PSS2	33.22	57.149	.466	.377	.763
PSS3	35.10	70.908	-.312	.396	.840
PSS4	33.66	59.229	.248	.481	.785
PSS5	34.08	53.935	.600	.597	.748
PSS6	34.17	51.563	.636	.585	.741
PSS7	33.06	55.357	.544	.403	.755
PSS8	34.14	50.051	.676	.586	.734
PSS9	33.72	51.760	.648	.576	.740

PSS10	34.07	52.995	.505	.327	.756
PSS11	34.29	50.998	.579	.414	.746

1.2 PPCS (Parents' Participation in Cultural Activities with Children Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.881	.886	12

Inter-Item Correlation Matrix

	PPCS1	PPCS2	PPCS3	PPCS4	PPCS5	PPCS6	PPCS7	PPCS8	PPCS9	PPCS10	PPCS11	PPCS12
PPCS1	1.00											
PPCS2	0.60	1.00										
PPCS3	0.38	0.60	1.00									
PPCS4	0.34	0.28	0.38	1.00								
PPCS5	0.43	0.45	0.61	0.63	1.00							
PPCS6	0.47	0.49	0.42	0.23	0.39	1.00						
PPCS7	0.41	0.60	0.44	0.51	0.53	0.38	1.00					
PPCS8	0.34	0.64	0.40	0.46	0.41	0.30	0.71	1.00				
PPCS9	0.32	0.21	0.40	0.25	0.33	0.39	0.31	0.21	1.00			
PPCS10	0.35	0.35	0.35	0.23	0.34	0.40	0.46	0.43	0.34	1.00		
PPCS11	0.35	0.39	0.42	0.27	0.34	0.42	0.43	0.43	0.34	0.63	1.00	
PPCS12	0.29	0.25	0.47	0.40	0.50	0.15	0.36	0.17	0.15	0.42	0.38	1.00

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PPCS1	20.15	70.687	.574	.485	.872
PPCS2	19.98	68.418	.661	.712	.867
PPCS3	19.85	68.361	.660	.597	.867
PPCS4	20.14	73.283	.526	.527	.875
PPCS5	20.32	72.570	.670	.604	.869
PPCS6	20.32	73.477	.553	.420	.874
PPCS7	19.99	68.546	.700	.623	.865

PPCS8	19.93	69.367	.611	.657	.870
PPCS9	19.56	70.854	.427	.317	.883
PPCS10	19.80	69.717	.592	.512	.871
PPCS11	19.69	67.403	.603	.478	.871
PPCS12	20.24	72.906	.468	.463	.878

1.3 PPES (Parents' Participation in their Children's Educational Activities Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.825	.823	12

Inter-Item Correlation Matrix

	PPES1	PPES2	PPES3	PPES4	PPES5	PPES6	PPES7	PPES8	PPES9	PPES10	PPES11	PPES12
PPES1	1.000											
PPES2	.624	1.000										
PPES3	.425	.604	1.000									
PPES4	.430	.532	.623	1.000								
PPES5	.113	.138	.017	.070	1.000							
PPES6	.111	.261	.183	.140	.097	1.000						
PPES7	.444	.427	.420	.434	.155	.418	1.000					
PPES8	.192	.281	.288	.129	.139	.293	.595	1.000				
PPES9	.117	.326	.257	.270	.058	.175	.288	.360	1.000			
PPES10	.161	.169	.153	.280	.119	.258	.379	.218	.117	1.000		
PPES11	.142	.212	.261	.344	.172	.327	.483	.355	.287	.437	1.000	
PPES12	.210	.217	.264	.162	.336	.261	.408	.467	.099	.286	.422	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PPES1	36.48	76.927	.462	.474	.815
PPES2	36.55	75.227	.612	.589	.801
PPES3	37.28	78.225	.567	.530	.806
PPES4	37.14	77.237	.548	.529	.807
PPES5	34.79	90.119	.201	.141	.829
PPES6	35.75	81.703	.385	.244	.820
PPES7	36.61	72.776	.721	.603	.791

PPES8	36.03	77.010	.508	.499	.810
PPES9	36.32	80.384	.368	.250	.823
PPES10	35.77	80.598	.389	.256	.821
PPES11	36.05	77.789	.528	.409	.808
PPES12	35.16	83.625	.467	.393	.815

1.4 PIES (Parents' Involvement in Education Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.754	.763	10

Inter-Item Correlation Matrix

	PIES1	PIES2	PIES3	PIES4	PIES5	PIES6	PIES7	PIES8	PIES9	PIES10
PIES1	1.000									
PIES2	.118	1.000								
PIES3	.373	.370	1.000							
PIES4	.352	.286	.508	1.000						
PIES5	.183	.109	.211	.213	1.000					
PIES6	.004	.139	.249	.400	.260	1.000				
PIES7	.216	.165	.126	.042	.172	-.023	1.000			
PIES8	.172	.282	.146	.127	.147	.022	.417	1.000		
PIES9	.336	.123	.311	.130	.348	-.019	.488	.487	1.000	
PIES10	.368	.128	.308	.124	.345	.052	.403	.370	.863	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PIES1	24.00	53.535	.398	.286	.736
PIES2	23.70	52.561	.313	.223	.754
PIES3	24.41	54.641	.516	.401	.724
PIES4	24.21	55.073	.416	.403	.734
PIES5	23.25	54.610	.383	.203	.738
PIES6	23.40	57.732	.188	.255	.766
PIES7	22.83	53.423	.394	.294	.737
PIES8	21.98	54.325	.437	.339	.731

PIES9	22.91	48.922	.614	.802	.702
PIES10	22.79	49.585	.596	.764	.706

2. The Reliability of Subscales of Students' Educational Habitus

2.1 SVES (Students' Views of Education Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.821	.826	9

Inter-Item Correlation Matrix

	SVES1	SVES2	SVES3	SVES4	SVES5	SVES6	SVES7	SVES8	SVES9
SVES1	1.000								
SVES2	.509	1.000							
SVES3	.667	.603	1.000						
SVES4	.539	.329	.603	1.000					
SVES5	.323	.342	.404	.623	1.000				
SVES6	.408	.288	.397	.278	.296	1.000			
SVES7	.139	.111	.243	.247	.082	.534	1.000		
SVES8	.481	.268	.371	.247	-.060	.023	.090	1.000	
SVES9	.575	.491	.518	.379	.262	.366	.140	.343	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SVES1	29.52	29.787	.720	.622	.780
SVES2	29.82	30.477	.560	.444	.798
SVES3	29.44	29.807	.754	.625	.778
SVES4	29.67	30.318	.617	.609	.791
SVES5	29.62	33.075	.420	.498	.814
SVES6	30.06	30.892	.491	.491	.807
SVES7	30.44	33.458	.297	.368	.830
SVES8	29.99	32.988	.324	.358	.827
SVES9	30.06	29.636	.594	.416	.793

2.2 SRSS (Students' Recognition of Student-Role Value Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.892	.890	9

Inter-Item Correlation Matrix

	SRSS1	SRSS2	SRSS3	SRSS4	SRSS5	SRSS6	SRSS7	SRSS8	SRSS9
SRSS1	1.000								
SRSS2	.539	1.000							
SRSS3	.400	.728	1.000						
SRSS4	.457	.699	.804	1.000					
SRSS5	.350	.615	.645	.519	1.000				
SRSS6	.046	.411	.509	.304	.531	1.000			
SRSS7	.492	.460	.534	.616	.310	.314	1.000		
SRSS8	.403	.387	.395	.508	.390	.366	.636	1.000	
SRSS9	.596	.456	.516	.619	.340	.135	.492	.545	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SRSS1	31.14	36.702	.561	.537	.887
SRSS2	30.52	34.741	.738	.662	.873
SRSS3	30.59	34.315	.783	.779	.869
SRSS4	30.84	33.509	.793	.767	.868
SRSS5	30.44	36.947	.618	.545	.883
SRSS6	30.33	39.760	.427	.477	.895
SRSS7	30.95	34.835	.663	.582	.879
SRSS8	30.87	35.809	.616	.552	.883
SRSS9	31.47	36.182	.640	.568	.881

2.3 SCSS (Students' Conformity to the Student-Role Value Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.876	.880	7

Inter-Item Correlation Matrix

	SCSS1	SCSS2	SCSS4	SCSS3	SCSS5	SCSS6	SCSS7
SCSS1	1.000						
SCSS2	.587	1.000					
SCSS4	.507	.567	1.000				
SCSS3	.432	.340	.422	1.000			
SCSS5	.587	.468	.529	.510	1.000		
SCSS6	.562	.447	.486	.553	.830	1.000	
SCSS7	.425	.258	.428	.618	.567	.601	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SCSS1	24.86	16.609	.678	.494	.855
SCSS2	24.77	17.737	.588	.462	.867
SCSS4	25.17	16.051	.637	.445	.865
SCSS3	24.49	18.788	.606	.452	.866
SCSS5	24.82	16.268	.768	.724	.843
SCSS6	24.74	16.778	.762	.727	.844
SCSS7	24.53	18.508	.610	.505	.865

3. The Reliability of Subscales of School Experience

3.1 SEAS (Students' Educational Attainment Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.723	.690	4

Inter-Item Correlation Matrix

	SEAS1	SEAS2	SEAS3	SEAS4
SEAS1	1.000	.596	.661	.083
SEAS2	.596	1.000	.642	.109
SEAS3	.661	.642	1.000	.054
SEAS4	.083	.109	.054	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SEAS1	7.46	9.910	.660	.488	.570
SEAS2	7.97	9.237	.658	.468	.565
SEAS3	7.57	8.993	.673	.532	.553
SEAS4	8.21	16.042	.094	.014	.837

3.2 SPES (Students' Participation in Educational Activities Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.886	.886	8

Inter-Item Correlation Matrix

	SPES1	SPES2	SPES3	SPES4	SPES5	SPES6	SPES7	SPES8
SPES1	1.000							
SPES2	.520	1.000						
SPES3	.291	.346	1.000					
SPES4	.397	.480	.550	1.000				
SPES5	.286	.420	.415	.719	1.000			
SPES6	.304	.340	.368	.672	.804	1.000		
SPES7	.274	.425	.440	.713	.688	.685	1.000	
SPES8	.272	.324	.409	.627	.648	.677	.686	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SPES1	26.29	33.951	.400	.318	.893

SPES2	26.02	34.976	.518	.394	.888
SPES3	27.72	30.760	.519	.323	.887
SPES4	27.31	27.775	.818	.679	.855
SPES5	27.07	26.716	.791	.721	.858
SPES6	27.16	27.183	.767	.708	.860
SPES7	26.78	28.568	.771	.643	.860
SPES8	27.20	29.368	.720	.569	.866

3.3 SRCS (Students' Relationship with Classmates Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.902	.904	10

Inter-Item Correlation Matrix

	SRCS1	SRCS2	SRCS3	SRCS4	SRCS5	SRCS6	SRCS7	SRCS8	SRCS9	SRCS10
SRCS1	1.000									
SRCS2	.671	1.000								
SRCS3	.623	.739	1.000							
SRCS4	.692	.685	.582	1.000						
SRCS5	.402	.453	.425	.302	1.000					
SRCS6	.303	.342	.356	.390	.521	1.000				
SRCS7	.310	.494	.380	.410	.601	.510	1.000			
SRCS8	.319	.447	.406	.400	.597	.498	.766	1.000		
SRCS9	.505	.533	.498	.461	.496	.344	.460	.619	1.000	
SRCS10	.640	.618	.572	.554	.336	.253	.407	.416	.473	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SRCS1	37.79	35.073	.675	.650	.892
SRCS2	37.47	35.531	.761	.700	.887
SRCS3	37.32	36.639	.695	.600	.891
SRCS4	37.94	35.543	.676	.614	.891
SRCS5	37.44	35.854	.618	.527	.895
SRCS6	37.38	37.634	.520	.387	.901

SRCS7	37.23	36.226	.657	.664	.893
SRCS8	37.30	35.212	.675	.698	.892
SRCS9	37.38	35.447	.665	.519	.892
SRCS10	37.64	34.976	.642	.515	.894

3.4 SRTS (Students' Relationship with Class Teacher Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.949	.950	9

Inter-Item Correlation Matrix

	SRTS1	SRTS2	SRTS3	SRTS4	SRTS5	SRTS6	SRTS7	SRTS8	SRTS9
SRTS1	1.000								
SRTS2	.787	1.000							
SRTS3	.588	.690	1.000						
SRTS4	.352	.495	.662	1.000					
SRTS5	.551	.689	.738	.651	1.000				
SRTS6	.595	.564	.722	.548	.719	1.000			
SRTS7	.583	.663	.756	.629	.741	.775	1.000		
SRTS8	.657	.689	.749	.580	.703	.745	.929	1.000	
SRTS9	.692	.651	.730	.561	.716	.803	.849	.812	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SRTS1	28.86	60.051	.695	.737	.948
SRTS2	28.63	57.421	.760	.753	.945
SRTS3	28.91	55.364	.838	.717	.941
SRTS4	28.84	56.904	.653	.523	.952
SRTS5	28.82	56.198	.817	.705	.942
SRTS6	28.95	55.951	.810	.723	.942
SRTS7	28.59	52.850	.889	.910	.938
SRTS8	28.48	54.183	.876	.885	.939
SRTS9	28.68	54.825	.865	.814	.939

4. The Reliability of Scale of Family Socio-economic Status

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.814	.814	4

Inter-Item Correlation Matrix

	FE	ME	FJ	MJ
FE	1.000	.595	.605	.512
ME	.595	1.000	.470	.518
FW	.605	.470	1.000	.436
MW	.512	.518	.436	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
FE	7.29	6.696	.706	.512	.730
ME	7.38	7.145	.642	.424	.762
FW	7.25	7.610	.605	.396	.780
MW	7.80	7.368	.583	.346	.790

Appendix 6.5

A Questionnaire of School Experience of Grade 8 Students of Kaohsiung City (Main Study)

Dear Students:
The purpose of this questionnaire is to collect information about your school experiences. It must be emphasized that there is no intention at all to use the replies as part of any official inspection; neither will any personal detail be revealed in any way. In addition, this is not a test; please feel free to answer all of the questions honestly. Thank you for your help.

Please read carefully, and then tick the one answer for each question that comes closest to reflecting your opinion about it.

【Part A】

A1 [PSS] Please tick the appropriate answer. Since I have studied in a junior high school,

PSS1. My parents have strict rules for reward and punishment.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS2. If I do something wrong, my parents will tell me what mistakes I have made.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS3. My parents praise me for my study achievement.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS4. My parents praise me for other achievements at school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS5. My parents tell me the importance of studying and encourage me to study hard.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS6. My parents talk to me about my future plans.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS7. My parents talk to me about my studies.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS8. My parents care about my interpersonal relationships.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PSS9. Apart from studying, my parents encourage me to join outside school activities which are not connected to study.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

A2 [PPCS] Please tick the appropriate answer. Since I have studied in a junior high school,

PPCS1. I have been to a Book Exhibition with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PPCS2. I have been to an Art Exhibition with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PPCS3. I have been to an Art Show with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PPCS4. I have been to a Sport Game with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS5. I have visited a Museum with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS6. I have visited a Gallery with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS7. I have visited a Library with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS8. I have visited a National Park with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS9. I have visited a History Site with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPCS10. I have visited another country with my parents.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

A3 [PPES] Please tick the appropriate answer. Since I have studied in a junior high school,

PPES1. My parents take part in school activities, such as parent-teacher conferences.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES2. My parents talk to teachers about my study achievements.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES3. My parents talk to teachers about my study problems.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES4. My parents ask teachers about my behaviour in school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES5. My parents write comments in my learning diary.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES6. My parents teach me homework.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES7. My parents supervise my homework.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES8. My parents set a standard for study achievement.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES9. My parents follow the school rules.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES10. My parents help me to finish the assignments/ activities required by the school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PPES11. My parents read the documents forwarded by the school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

A4[PIES] Please tick the appropriate answer. Since I have studied in a junior high school,

PIES1. My parents have been volunteers or parent representative in school.
☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never
PIES2. In order for me to study at a better school, my parents changed my school district.

☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES3. My parents arranged me to study in a better class.

☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES4. My parents give gifts to teachers in private.

☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES5. My parents help me overcome any difficulties in school.

☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES6. My parents understand the school regulations, such as attendance requirements.

☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES7. My parents know the date of school's important events, such as examination dates.

☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES8. My parents care about news related to school affairs.

☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

PIES9. My parents care about educational policy news.

☐ Always ☐ Often ☐ Sometimes ☐ Seldom ☐ Never

【Part B】

B1 [SVES] Please tick the appropriate answer. In my view,

SVES1. Being educated is important.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES2. Doing well in studying is important.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES3. Education can enrich my knowledge.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES4. Education can help me to find a satisfying job in the future.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES5. The importance of education is to enrich knowledge rather than helping to find a satisfactory job.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES6. Education is the main way to improve my family's economy situation.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SVES7. Studying is my priority.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

B2 [SRSS] Please tick the appropriate answer. In my view,

SRSS1. It is important to be a student with high academic achievement.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS2. It is important to follow school's rules.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree

strongly

SRSS3. It is important to respect teachers.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS4. It is important to obey teachers.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS5. It is important to take responsibility for our own work.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS6. It is important to be nice to classmates.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS7. The main purpose of going to school is to learn.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS8. It is my responsibility to study actively.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SRSS9. It is important never delay to homework.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

B3 [SCSS] Please tick the appropriate answer. In my view,

SCSS1. I am willing to help classmates voluntarily.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS2. I am willing to get to know classmates.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS3. I am willing to get on well with classmates.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS4. I am willing to be close to teachers.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS5. I am willing to do my best to satisfy teacher's requirements.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS6. I am willing to do my best to satisfy class cadres' requirements.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS7. I am willing to do my best to take part in class activities.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS8. I am willing to do my best to take my responsibility for my duties.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS9. I am willing to do my best to complete my assignment.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS10. I am willing to respect my teacher.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS11. I am willing to obey the school regulations.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

SCSS12. I am willing to study actively.

☐Agree strongly ☐ Agree ☐ Neither agree nor disagree ☐ Disagree ☐ Disagree strongly

【Part C】

C1 [SEAS] According to the last monthly test result, answer these following questions, please.

SEAS1. My score of Chinese is?

☐ 100- 90 points ☐ 89-80 points ☐ 79-70 points ☐ 69-60 points ☐ 59 points~

SEAS2. My score of Math is?

☐ 100- 90 points ☐ 89-80 points ☐ 79-70 points ☐ 69-60 points ☐ 59 points~

SEAS3. My score of English is?

☐ 100- 90 points ☐ 89-80 points ☐ 79-70 points ☐ 69-60 points ☐ 59 points~

C2 [SPES] Please tick the appropriate answer. Since I have studied in a junior high school,

SPES1. I get to school on time.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES2. I like to go to school.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES3. During classes, I concentrate on studying.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES4. I like to join the class learning activities

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES5. I discuss homework with classmates.

☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES6. I can acquire knowledge from school education.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SPES7. Overall, I am satisfied with my engagements in learning activities.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

C3 [SRCS] Please tick the appropriate answer. Since I have studied in a junior high school,

SRCS1. It is easy for me to build relationships with classmates.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS2. I get on well with classmates.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS3. Classmates and I help with each other.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS4. Classmates like me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS5. I have close friends in class.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS6. During the break time, I play with friends.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS7. School is a place to make good friends.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS8. I belong to this class.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRCS9. Overall, I am pleased with my interpersonal relationships.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

C4 [SRTS] Please tick the appropriate answer. Since I have studied in a junior high school,

SRTS1. My class teacher likes me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS2. My class teacher cares about me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS3. My class teacher understands me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS4. My class teacher acts fairly with everyone.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS5. My class teacher encourages me.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS6. I like to be with my class teacher.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS7. I trust my class teacher.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS8. I respect my class teacher.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

SRTS9. Overall, I am pleased with my relationship with class teacher.
☐ Very true ☐ Usually true ☐ Cannot say ☐ Usually untrue ☐ Not true at all

【Part D】

About me

D1. The location of my school: _____

D2. I am a ☐ boy ☐ girl

D3. I live
☐ with parents ☐ with a single- parent ☐ with step-parent ☐ only with grandparents ☐ Others (please specify) _____

D4. Housing: ☐ Rented house ☐ Self-owned house

D5. I receive free school meal: ☐ Yes ☐ No

D6. Paternal education level:
☐ Junior high school or lower ☐ Senior high school ☐ Technical college
☐ University ☐ Graduate school

D7. Maternal education level:
☐ Junior high school or lower ☐ Senior high school ☐ Technical college
☐ University ☐ Graduate school

D8. Paternal career (please read the table below, then tick the appropriate code)
☐ Code 1 ☐ Code 2 ☐ Code 3 ☐ Code 4 ☐ Code 5

D9. Maternal career (please read the table below, then tick the appropriate code)
☐ Code 1 ☐ Code 2 ☐ Code 3 ☐ Code 4 ☐ Code 5

Code 5	Principal/teacher in college, Doctor, Grand Justice, Scientist, Legislator/supervisor/ examiner in government system, People's representative in government, Chainman/General manager, Senior government officer, General
Code 4	Boss of medium corporation, Justice/Judge/lawyer, principal/teacher in high or primary school, Middle rank government officer, Engineer/Architect, Manager, Assistant manager, Accountant, Police officer, Writer/painter/musician, Municipal member in parliament, Major
Code 3	Boss of small corporation, Technician, Junior government officer, Clerks, Secretary, Police man, Wholesaler, Fire-fighter, Sailor, Actor, Representative of town, member of parliament in county, Dress designer
Code 2	Mechanics, Plumber, Small store owner, salesman, Farmer, mailman, Driver, Tailors, Barber, Cook, Soldier, Typist, Foreman
Code 1	Housewife, Factory worker, Vendor, Hired farmer/fisherman, Cleaner, Temporary worker, Guard, Hired labourers, Servant/apprentice, Bar/dancing girl, unemployed

Appendix 6.6 The Reliability of Subscales of Students' Perception of Parents' Educative Capital (Main Study)

The Reliability of Subscales of Students' Perception of Parents' Educative Capital

1.2 PSS (Parenting Style Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.853	.853	9

Inter-Item Correlation Matrix

	PSS1	PSS2	PSS3	PSS4	PSS5	PSS6	PSS7	PSS8	PSS9
PSS1	1.000								
PSS2	.406	1.000							
PSS3	.473	.407	1.000						
PSS4	.428	.376	.721	1.000					
PSS5	.372	.424	.414	.338	1.000				
PSS6	.347	.363	.397	.412	.452	1.000			
PSS7	.380	.300	.443	.382	.523	.537	1.000		
PSS8	.399	.358	.488	.556	.358	.397	.365	1.000	
PSS9	.254	.241	.329	.357	.261	.255	.256	.366	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PSS1	28.22	49.949	.555	.326	.839
PSS2	27.40	52.939	.518	.302	.843
PSS3	28.38	47.891	.687	.585	.825
PSS4	28.57	47.775	.669	.588	.827
PSS5	27.45	52.485	.570	.391	.839
PSS6	28.45	49.608	.573	.386	.837
PSS7	27.93	50.180	.579	.425	.837
PSS8	28.45	48.571	.607	.396	.834
PSS9	28.53	52.702	.415	.187	.853

1.2 PPCS (Parents' Participation in Cultural Activities with Children Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.837	.844	10

Inter-Item Correlation Matrix

	PPCS1	PPCS2	PPCS3	PPCS4	PPCS5	PPCS6	PPCS7	PPCS8	PPCS9	PPCS10
PPCS1	1.000									
PPCS2	.498	1.000								
PPCS3	.472	.537	1.000							
PPCS4	.354	.375	.433	1.000						
PPCS5	.460	.532	.419	.416	1.000					
PPCS6	.458	.511	.414	.379	.729	1.000				
PPCS7	.386	.272	.319	.291	.388	.378	1.000			
PPCS8	.258	.281	.270	.280	.410	.407	.309	1.000		
PPCS9	.349	.379	.348	.261	.469	.494	.352	.631	1.000	
PPCS10	.129	.078	.091	.104	.158	.161	.077	.302	.178	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PPCS1	15.82	33.543	.574	.384	.820
PPCS2	15.77	33.191	.583	.451	.818
PPCS3	15.74	32.843	.556	.399	.820
PPCS4	15.84	33.901	.485	.279	.826
PPCS5	15.63	31.735	.691	.596	.808
PPCS6	15.69	31.750	.683	.585	.808
PPCS7	15.10	30.046	.471	.251	.837
PPCS8	15.54	31.642	.548	.459	.820
PPCS9	15.26	30.317	.607	.492	.814
PPCS10	16.07	37.097	.210	.100	.846

1.3 PPES (Parents' Participation in their Children's Educational Activities Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.846	.847	11

Inter-Item Correlation Matrix

	PPES 1	PPES 2	PPES 3	PPES 4	PPES 5	PPES 6	PPES 7	PPES 8	PPES 9	PPES 10	PPES 11
PPES1	1.000										
PPES2	.585	1.000									
PPES3	.377	.598	1.000								
PPES4	.270	.469	.683	1.000							
PPES5	.345	.348	.301	.256	1.000						
PPES6	.314	.292	.271	.278	.401	1.000					
PPES7	.264	.340	.325	.280	.430	.604	1.000				
PPES8	.187	.307	.238	.197	.277	.301	.361	1.000			
PPES9	.266	.194	.199	.149	.340	.300	.376	.242	1.000		
PPES 10	.302	.281	.273	.253	.380	.535	.510	.265	.408	1.000	
PPES 11	.304	.213	.178	.186	.510	.399	.401	.193	.347	.493	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PPES1	30.65	75.717	.504	.404	.835
PPES2	30.56	74.699	.575	.539	.829
PPES3	31.18	76.770	.547	.574	.832
PPES4	31.03	77.092	.468	.483	.838
PPES5	29.47	75.560	.568	.379	.830
PPES6	30.45	73.478	.590	.461	.828
PPES7	29.82	73.310	.625	.482	.825
PPES8	30.08	78.470	.399	.192	.844
PPES9	29.73	77.364	.440	.251	.841
PPES10	29.97	74.013	.590	.438	.828
PPES11	29.20	77.831	.510	.389	.835

1.4 PIES (Parents' Involvement in Education Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.766	.773	9

Inter-Item Correlation Matrix

	PIES1	PIES2	PIES3	PIES4	PIES5	PIES6	PIES7	PIES8	PIES9
PIES1	1.000								
PIES2	.162	1.000							
PIES3	.270	.320	1.000						
PIES4	.216	.213	.396	1.000					
PIES5	.161	.097	.248	.238	1.000				
PIES6	.168	.188	.138	.173	.329	1.000			
PIES7	.110	.134	.165	.170	.335	.490	1.000		
PIES8	.241	.085	.208	.254	.443	.515	.548	1.000	
PIES9	.197	.115	.214	.237	.389	.499	.515	.707	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PIES1	21.17	46.740	.300	.125	.763
PIES2	20.31	43.133	.245	.141	.788
PIES3	21.19	45.612	.393	.262	.752
PIES4	21.08	46.103	.376	.208	.755
PIES5	19.77	41.899	.460	.248	.742
PIES6	19.48	39.798	.539	.366	.729
PIES7	18.83	41.163	.532	.384	.731
PIES8	19.82	38.797	.644	.591	.711
PIES9	19.65	39.726	.620	.543	.717

Appendix 6. 7 Descriptive Statistics of Subscales of Students' Perception of Parents' Educative Capital (Main Study)

	N	Min.	Max.	Mean	S.D.	Skewness	Kurtosis
PSS1	651	1	5	3.45	1.356	-.338	-1.128
PSS2	651	1	5	4.27	1.099	-1.503	1.398
PSS3	651	1	5	3.29	1.340	-.162	-1.164
PSS4	651	1	5	3.10	1.379	-.024	-1.231
PSS5	651	1	5	4.22	1.066	-1.304	.893
PSS6	651	1	5	3.22	1.359	-.133	-1.161
PSS7	651	1	5	3.74	1.290	-.690	-.683
PSS8	651	1	5	3.22	1.404	-.189	-1.208
PSS9	651	1	5	3.15	1.324	-.110	-1.097
PPCS1	651	1	5	1.56	.804	1.703	3.443
PPCS2	651	1	5	1.61	.840	1.673	3.190
PPCS3	651	1	5	1.65	.919	1.685	2.924
PPCS4	651	1	5	1.54	.866	1.876	3.612
PPCS5	651	1	5	1.75	.898	1.282	1.599
PPCS6	651	1	5	1.70	.906	1.418	1.869
PPCS7	651	1	5	2.29	1.438	.787	-.731
PPCS8	651	1	5	1.84	1.089	1.336	1.159
PPCS9	651	1	5	2.12	1.174	.916	-.001
PPCS10	651	1	5	1.31	.741	2.979	9.787
PPES1	651	1	5	2.56	1.436	.460	-1.137
PPES2	651	1	5	2.65	1.385	.390	-1.064
PPES3	651	1	5	2.03	1.257	1.078	.111
PPES4	651	1	5	2.19	1.384	.929	-.436
PPES5	651	1	5	3.75	1.324	-.708	-.711
PPES6	651	1	5	2.77	1.460	.282	-1.280
PPES7	651	1	5	3.40	1.410	-.313	-1.205
PPES8	651	1	5	3.14	1.405	-.140	-1.249
PPES9	651	1	5	3.49	1.421	-.469	-1.120
PPES10	651	1	5	3.24	1.416	-.217	-1.237
PPES11	651	1	5	4.01	1.228	-1.023	-.109
PIES1	651	1	5	1.50	1.079	2.173	3.576
PIES2	651	1	5	2.36	1.822	.681	-1.464
PIES3	651	1	5	1.47	1.056	2.264	4.002
PIES4	651	1	5	1.58	1.016	1.756	2.297
PIES5	651	1	5	2.90	1.415	.121	-1.264
PIES6	651	1	5	3.18	1.508	-.154	-1.419
PIES7	651	1	5	3.83	1.363	-.815	-.670
PIES8	651	1	5	2.84	1.430	.232	-1.236
PIES9	651	1	5	3.01	1.372	.035	-1.208

Appendix 6.8 The Reliability of Subscales of Students' Educational Habitus (Main Study)

The Reliability of Subscales of Students' Educational Habitus

1.1 SVES (Students' Views of Education Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.894	.898	7

Inter-Item Correlation Matrix

	SVES1	SVES2	SVES3	SVES4	SVES5	SVES6	SVES7
SVES1	1.000	.674	.703	.539	.550	.444	.586
SVES2	.674	1.000	.585	.563	.597	.498	.614
SVES3	.703	.585	1.000	.540	.595	.387	.524
SVES4	.539	.563	.540	1.000	.715	.516	.499
SVES5	.550	.597	.595	.715	1.000	.501	.571
SVES6	.444	.498	.387	.516	.501	1.000	.505
SVES7	.586	.614	.524	.499	.571	.505	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SVES1	23.39	25.278	.733	.619	.876
SVES2	23.78	23.729	.745	.577	.873
SVES3	23.25	25.836	.692	.565	.880
SVES4	23.57	24.631	.706	.570	.877
SVES5	23.57	24.519	.746	.614	.873
SVES6	23.97	24.804	.590	.372	.893
SVES7	23.82	23.428	.692	.496	.880

1.2 SRSS (Students' Recognition of Student-Role Value Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.911	.911	9

Inter-Item Correlation Matrix

	SRSS1	SRSS2	SRSS3	SRSS4	SRSS5	SRSS6	SRSS7	SRSS8	SRSS9
SRSS1	1.000								
SRSS2	.485	1.000							
SRSS3	.488	.698	1.000						
SRSS4	.505	.678	.778	1.000					
SRSS5	.420	.580	.555	.506	1.000				
SRSS6	.343	.434	.458	.380	.524	1.000			
SRSS7	.560	.513	.485	.586	.501	.434	1.000		
SRSS8	.562	.594	.554	.601	.555	.439	.681	1.000	
SRSS9	.585	.536	.490	.531	.452	.364	.616	.686	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SRSS1	32.24	40.246	.643	.444	.905
SRSS2	31.66	39.965	.738	.598	.897
SRSS3	31.53	40.708	.736	.683	.898
SRSS4	31.83	39.539	.751	.685	.896
SRSS5	31.41	42.951	.656	.480	.904
SRSS6	31.35	44.682	.530	.345	.911
SRSS7	31.91	40.401	.719	.572	.899
SRSS8	31.90	39.150	.773	.636	.895
SRSS9	32.32	39.551	.701	.557	.900

1.3 SCSS (Students' Conformity to the Student-Role Value Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.929	.929	12

Inter-Item Correlation Matrix

	SCSS1	SCSS2	SCSS3	SCSS4	SCSS5	SCSS6	SCSS7	SCSS8	SCSS9	SCSS 10	SCSS 11	SCSS 12
SCSS1	1.000											
SCSS2	.522	1.000										
SCSS3	.593	.573	1.000									
SCSS4	.423	.380	.416	1.000								
SCSS5	.421	.257	.404	.739	1.000							
SCSS6	.477	.315	.497	.591	.686	1.000						
SCSS7	.495	.390	.499	.528	.576	.694	1.000					
SCSS8	.482	.340	.530	.499	.572	.613	.648	1.000				
SCSS9	.425	.259	.452	.531	.658	.593	.525	.671	1.000			
SCSS 10	.382	.241	.398	.671	.777	.617	.553	.559	.643	1.000		
SCSS 11	.426	.281	.432	.541	.643	.557	.528	.591	.611	.705	1.000	
SCSS 12	.478	.315	.480	.504	.589	.551	.474	.602	.764	.596	.601	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SCSS1	44.69	70.721	.605	.473	.926
SCSS2	44.76	72.206	.443	.420	.932
SCSS3	44.45	70.870	.624	.526	.926
SCSS4	45.34	65.768	.711	.609	.923
SCSS5	45.00	65.371	.784	.740	.919
SCSS6	44.91	66.396	.755	.633	.921
SCSS7	44.69	68.257	.714	.593	.923
SCSS8	44.60	68.163	.742	.609	.922
SCSS9	44.91	65.875	.752	.692	.921
SCSS10	44.77	65.652	.759	.701	.920
SCSS11	44.76	67.066	.724	.584	.922
SCSS12	45.01	66.164	.725	.640	.922

Appendix 6. 9 Descriptive Statistics of Subscales of Students' Educational Habitus (Main Study)

	N	Min.	Max.	Mean	S.D.	Skewness	Kurtosis
SVES1	651	1	5	4.17	.920	-.998	.707
SVES2	651	1	5	3.78	1.098	-.567	-.456
SVES3	651	1	5	4.30	.893	-1.182	.950
SVES4	651	1	5	3.99	1.030	-.825	-.047
SVES5	651	1	5	3.98	1.001	-.770	.041
SVES6	651	1	5	3.59	1.153	-.427	-.614
SVES7	651	1	5	3.74	1.200	-.681	-.425
SRSS1	651	1	5	3.53	1.161	-.518	-.445
SRSS2	651	1	5	4.11	1.068	-1.101	.506
SRSS3	651	1	5	4.24	.997	-1.354	1.388
SRSS4	651	1	5	3.94	1.095	-.919	.220
SRSS5	651	1	5	4.35	.858	-1.205	.868
SRSS6	651	1	5	4.42	.808	-1.491	2.322
SRSS7	651	1	5	3.86	1.047	-.634	-.271
SRSS8	651	1	5	3.87	1.106	-.751	-.156
SRSS9	651	1	5	3.45	1.155	-.412	-.540
SCSS1	651	1	5	4.21	.847	-.908	.559
SCSS2	651	1	5	4.14	.929	-.781	-.204
SCSS3	651	1	5	4.45	.812	-1.568	2.581
SCSS4	651	1	5	3.56	1.129	-.374	-.510
SCSS5	651	1	5	3.90	1.069	-.738	-.032
SCSS6	651	1	5	3.99	1.025	-.853	.165
SCSS7	651	1	5	4.21	.928	-1.052	.722
SCSS8	651	1	5	4.30	.905	-1.220	1.081
SCSS9	651	1	5	3.99	1.068	-.840	.000
SCSS10	651	1	5	4.13	1.077	-1.166	.676
SCSS11	651	1	5	4.13	1.010	-1.025	.399
SCSS12	651	1	5	3.89	1.079	-.668	-.270

Appendix 6.10 The Reliability of Subscales of Students' School Experience (Main Study)

The Reliability of Subscales of School Experience

1.1 SEAS (Students' Educational Attainment Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.837	.838	3

Inter-Item Correlation Matrix

	SEAS1	SEAS2	SEAS3
SEAS1	1.000	.596	.661
SEAS2	.596	1.000	.642
SEAS3	.661	.642	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SEAS1	5.26	8.229	.694	.487	.782
SEAS2	5.77	7.664	.680	.464	.793
SEAS3	5.38	7.239	.728	.532	.745

1.2 SPES (Students' Participation in Educational Activities Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.869	.868	7

Inter-Item Correlation Matrix

	SPES1	SPES2	SPES3	SPES4	SPES5	SPES6	SPES7
SPES1	1.000	.281	.394	.369	.313	.331	.330
SPES2	.281	1.000	.570	.572	.519	.455	.400
SPES3	.394	.570	1.000	.616	.510	.573	.423
SPES4	.369	.572	.616	1.000	.761	.553	.547
SPES5	.313	.519	.510	.761	1.000	.495	.641
SPES6	.331	.455	.573	.553	.495	1.000	.526
SPES7	.330	.400	.423	.547	.641	.526	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SPES1	22.19	25.134	.425	.200	.876
SPES2	23.18	21.951	.616	.419	.855
SPES3	23.07	22.420	.687	.518	.844
SPES4	22.72	21.241	.778	.671	.831
SPES5	22.84	21.430	.730	.656	.838
SPES6	22.36	23.424	.647	.451	.850
SPES7	22.77	22.956	.631	.476	.852

1.3 SRCS (Students' Relationship with Classmates Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.934	.936	9

Inter-Item Correlation Matrix

	SRCS1	SRCS2	SRCS3	SRCS4	SRCS5	SRCS6	SRCS7	SRCS8	SRCS9
SRCS1	1.000								
SRCS2	.720	1.000							
SRCS3	.636	.754	1.000						
SRCS4	.676	.736	.687	1.000					
SRCS5	.481	.528	.515	.520	1.000				
SRCS6	.628	.603	.588	.566	.629	1.000			

SRCS7	.581	.642	.651	.565	.561	.656	1.000		
SRCS8	.555	.632	.669	.622	.531	.625	.725	1.000	
SRCS9	.690	.689	.590	.665	.568	.594	.597	.642	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SRCS1	33.03	44.876	.759	.640	.926
SRCS2	32.92	44.815	.815	.720	.923
SRCS3	32.82	45.409	.777	.661	.926
SRCS4	33.29	44.323	.770	.641	.926
SRCS5	32.99	44.335	.655	.479	.934
SRCS6	32.86	44.584	.749	.598	.927
SRCS7	32.75	45.103	.761	.633	.926
SRCS8	32.79	44.557	.765	.644	.926
SRCS9	33.15	43.034	.772	.631	.926

1.4 SRTS (Students' Relationship with Home Teacher Scale)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.954	.955	9

Inter-Item Correlation Matrix

	SRTS1	SRTS2	SRTS3	SRTS4	SRTS5	SRTS6	SRTS7	SRTS8	SRTS9
SRTS1	1.000								
SRTS2	.825	1.000							
SRTS3	.726	.728	1.000						
SRTS4	.611	.646	.679	1.000					
SRTS5	.715	.724	.702	.687	1.000				
SRTS6	.713	.715	.728	.684	.772	1.000			
SRTS7	.660	.659	.671	.692	.677	.791	1.000		
SRTS8	.616	.645	.565	.593	.617	.697	.826	1.000	
SRTS9	.706	.717	.706	.700	.716	.803	.795	.751	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SRTS1	27.15	71.320	.806	.735	.949
SRTS2	26.85	70.735	.820	.750	.949
SRTS3	27.34	70.975	.798	.674	.950
SRTS4	27.13	68.747	.765	.611	.952
SRTS5	27.08	70.002	.815	.691	.949
SRTS6	27.26	68.329	.864	.770	.946
SRTS7	26.95	68.154	.845	.797	.947
SRTS8	26.64	70.164	.770	.721	.951
SRTS9	26.98	68.386	.863	.761	.946

Appendix 6. 11 Descriptive Statistics of Subscales of Students' School Experiences (Main Study)

	N	Minimum	Maximum	Mean	S.D.	Skewness	Kurtosis
SEAS1	651	1	5	2.94	1.441	-.036	-1.328
SEAS2	651	1	5	2.43	1.570	.519	-1.343
SEAS3	651	1	5	2.83	1.596	.092	-1.584
SPES1	651	1	5	4.33	.964	-1.535	1.944
SPES2	651	1	5	3.35	1.181	-.352	-.608
SPES3	651	1	5	3.45	1.028	-.346	-.274
SPES4	651	1	5	3.80	1.082	-.581	-.359
SPES5	651	1	5	3.68	1.110	-.501	-.434
SPES6	651	1	5	4.16	.937	-.971	.526
SPES7	651	1	5	3.75	1.021	-.505	-.121
SRCS1	651	1	5	4.05	.991	-.939	.475
SRCS2	651	1	5	4.16	.938	-1.057	.871
SRCS3	651	1	5	4.26	.924	-1.192	1.067
SRCS4	651	1	5	3.78	1.029	-.559	-.072
SRCS5	651	1	5	4.09	1.172	-1.208	.565
SRCS6	651	1	5	4.21	1.029	-1.265	.960
SRCS7	651	1	5	4.33	.968	-1.354	1.082
SRCS8	651	1	5	4.28	1.014	-1.382	1.253
SRCS9	651	1	5	3.92	1.144	-.767	-.294
SRTS1	651	1	5	3.27	1.109	-.338	-.282
SRTS2	651	1	5	3.57	1.133	-.486	-.293
SRTS3	651	1	5	3.08	1.143	-.126	-.575
SRTS4	651	1	5	3.29	1.347	-.245	-1.050
SRTS5	651	1	5	3.34	1.190	-.296	-.597
SRTS6	651	1	5	3.16	1.244	-.175	-.782
SRTS7	651	1	5	3.47	1.280	-.406	-.776
SRTS8	651	1	5	3.78	1.237	-.722	-.425
SRTS9	651	1	5	3.44	1.241	-.424	-.616

Appendix 6.13 Exploratory Factor Analysis of Scale of Students' Perception of Parents' Educative Capital

A. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
Bartlett's Test of Sphericity	Approx. Chi-Square	8915.719
	df	496
	Sig.	.000

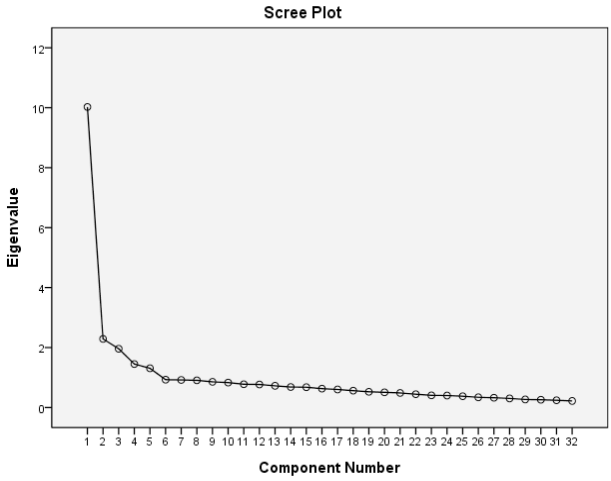
B. Component Correlation Matrix

Component	1	2	3	4	5
1	1.000				
2	.578	1.000			
3	.383	.394	1.000		
4	.426	.350	.329	1.000	
5	.467	.436	.250	.349	1.000

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

C. Scree Plot



D. Total Variance Explained- Students' Perception of Parents' Educative Capital

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.025	31.327	31.327	10.025	31.327	31.327	7.832
2	2.288	7.151	38.478	2.288	7.151	38.478	7.025
3	1.961	6.128	44.606	1.961	6.128	44.606	5.073

4	1.450	4.533	49.138	1.450	4.533	49.138	4.946
5	1.309	4.089	53.228	1.309	4.089	53.228	5.386
6	.929	2.904	56.132				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

E. Pattern Matrix[a]- Students' Perception of Parents' Educative Capital

	Component					communalities
	1	2	3	4	5	
PIES8	.817					.678
PIES6	.783					.527
PIES7	.716					.529
PIES9	.714					.616
PPES11	.669					.516
PPES10	.568					.523
PPES9	.498				.407	.408
PIES5	.425					.379
PPES5	.424					.464
PPES6	.356				.333	.504
PSS4		.828				.664
PSS3		.752				.638
PSS8		.734				.596
PSS6		.621				.520
PSS2		.615				.456
PSS9		.460				.370
PSS1		.430			.372	.471
PPCS6			.803			.654
PPCS9			.797			.621
PPCS5			.775			.648
PPCS8			.761			.536
PPCS3			.560			.383
PPCS7			.495			.385
PPES3				.880		.731
PPES4				.811		.627
PPES2				.764		.683
PPES1				.481		.433
PIES4				.468		.260
PPES8					.769	.539
PSS7		.339			.540	.587
PPES7	.326				.527	.556
PSS5		.444			.488	.536

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

E. Pattern Matrix[a]- Students' Perception of Parents' Educative Capital

	Component					communalities
	1	2	3	4	5	
PIES8	.817					.678
PIES6	.783					.527
PIES7	.716					.529
PIES9	.714					.616
PPES11	.669					.516
PPES10	.568					.523
PPES9	.498				.407	.408
PIES5	.425					.379
PPES5	.424					.464
PPES6	.356				.333	.504
PSS4		.828				.664
PSS3		.752				.638
PSS8		.734				.596
PSS6		.621				.520
PSS2		.615				.456
PSS9		.460				.370
PSS1		.430			.372	.471
PPCS6			.803			.654
PPCS9			.797			.621
PPCS5			.775			.648
PPCS8			.761			.536
PPCS3			.560			.383
PPCS7			.495			.385
PPES3				.880		.731
PPES4				.811		.627
PPES2				.764		.683
PPES1				.481		.433
PIES4				.468		.260
PPES8					.769	.539
PSS7		.339			.540	.587
PPES7	.326				.527	.556
PSS5		.444			.488	.536

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Appendix 6.14 Exploratory Factor Analysis of Scale of Students' Educational Habitus

A. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.956
Bartlett's Test of Sphericity	Approx. Chi-Square	13781.257
	df	378
	Sig.	.000

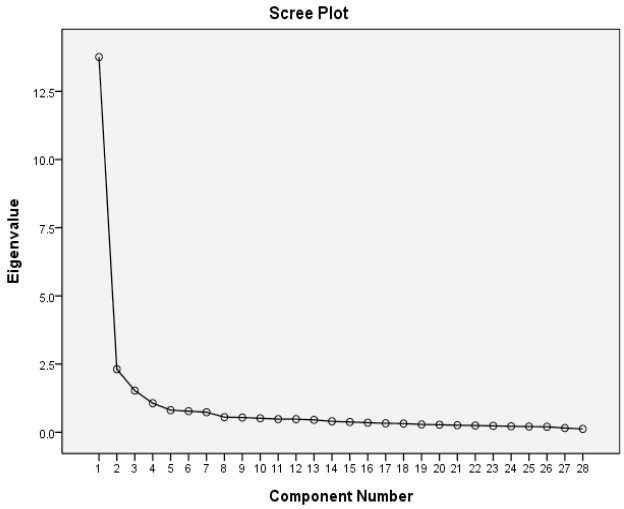
B. Component Correlation Matrix

Component	1	2	3	4
1	1.000			
2	.511	1.000		
3	.655	.613	1.000	
4	.502	.325	.423	1.000

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

C. Scree Plot



D. Selected Total Variance Explained- Students' Educational Habitus

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	13.760	49.142	49.142	13.760	49.142	49.142	10.629
2	2.313	8.262	57.404	2.313	8.262	57.404	9.034
3	1.530	5.465	62.869	1.530	5.465	62.869	11.259
4	1.065	3.803	66.672	1.065	3.803	66.672	6.252

5	.811	2.895	69.568				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

E. Pattern Matrix[a]- Students' Perception of Parents' Educative Capital

	Component					communalities
	1	2	3	4	5	
PIES8	.817					.678
PIES6	.783					.527
PIES7	.716					.529
PIES9	.714					.616
PPES11	.669					.516
PPES10	.568					.523
PPES9	.498				.407	.408
PIES5	.425					.379
PPES5	.424					.464
PPES6	.356				.333	.504
PSS4		.828				.664
PSS3		.752				.638
PSS8		.734				.596
PSS6		.621				.520
PSS2		.615				.456
PSS9		.460				.370
PSS1		.430			.372	.471
PPCS6			.803			.654
PPCS9			.797			.621
PPCS5			.775			.648
PPCS8			.761			.536
PPCS3			.560			.383
PPCS7			.495			.385
PPES3				.880		.731
PPES4				.811		.627
PPES2				.764		.683
PPES1				.481		.433
PIES4				.468		.260
PPES8					.769	.539
PSS7		.339			.540	.587
PPES7	.326				.527	.556
PSS5		.444			.488	.536

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Appendix 6.16 Exploratory Factor Analysis of Scale of Students' Educational Attainment

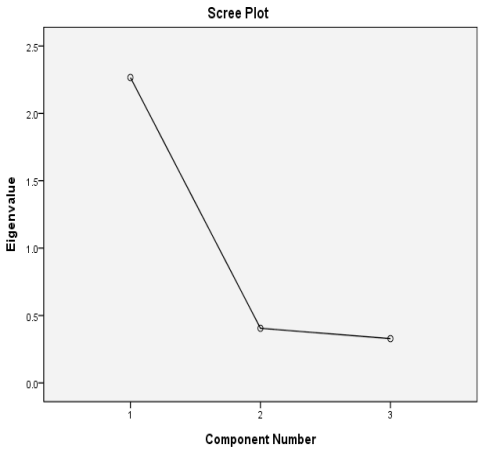
A. Correlation Matrix

		SEAS1	SEAS2	SEAS3
Correlation	SEAS1	1.000		
	SEAS2	.596	1.000	
	SEAS3	.661	.642	1.000

B. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.722
Bartlett's Test of Sphericity	Approx. Chi-Square	776.470
	df	3
	Sig.	.000

C. Scree Plot



D. Table 6.17 Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.266	75.535	75.535	2.266	75.535	75.535
2	.405	13.514	89.049			
3	.329	10.951	100.000			

Extraction Method: Principal Component Analysis.

Appendix 6.17 Exploratory Factor Analysis of Scale of Students' School Engagement

A. KMO and Bartlett's Test

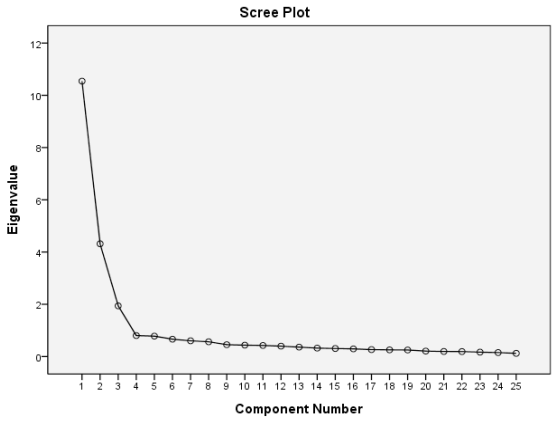
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.942
Bartlett's Test of Sphericity	Approx. Chi-Square	12944.943
	df	300
	Sig.	.000

B. Component Correlation Matrix

Component	1	2	3
1	1.000		
2	.322	1.000	
3	.533	.474	1.000

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.

C. Scree Plot



D. Total Variance Explained- Students School Experience

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings[a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	10.543	42.174	42.174	10.543	42.174	42.174	8.426
2	4.316	17.264	59.438	4.316	17.264	59.438	7.795
3	1.939	7.757	67.195	1.939	7.757	67.195	7.280
4	.802	3.207	70.402				

5	.781	3.124	73.526				
6	.663	2.651	76.177				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

E. Pattern Matrix- Students' School Experience

	Component			Communities
	1	2	3	
SRTS6	.908			.809
SRTS4	.881			.680
SRTS3	.880			.723
SRTS5	.878			.742
SRTS9	.875			.800
SRTS2	.869			.757
SRTS1	.838			.736
SRTS7	.833			.769
SRTS8	.695			.696
SRCS1		.885		.689
SRCS9		.869		.701
SRCS2		.843		.743
SRCS6		.841		.656
SRCS4		.825		.686
SRCS7		.793		.653
SRCS3		.767		.699
SRCS5		.753		.524
SRCS8		.734		.673
SPES3			.874	.674
SPES4			.870	.735
SPES5			.748	.677
SPES2			.698	.537
SPES6			.698	.567
SPES1			.646	.329
SPES7			.512	.545

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

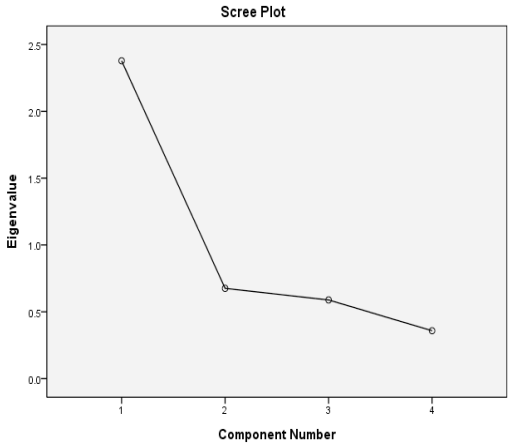
a. Rotation converged in 5 iterations.

Appendix 6.19 Exploratory Factor Analysis of Scale of Family Socioeconomic Status

A. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.723
Bartlett's Test of Sphericity	Approx. Chi-Square	701.614
	df	6
	Sig.	.000

B. Scree Plot



C. Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.378	59.448	59.448	2.378	59.448	59.448
2	.675	16.883	76.331			
3	.588	14.712	91.043			
4	.358	8.957	100.000			

Extraction Method: Principal Component Analysis.

Appendix 6.20 The Reliability of Subscales of Family Socio-economic Status （Main Study）

The Reliability of Subscales of Family Socio-economic Status

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.772	.771	4

Inter-Item Correlation Matrix

	FE	FW	ME	MW
FE	1.000	.521	.596	.351
FW	.521	1.000	.416	.419
ME	.596	.416	1.000	.440
MW	.351	.419	.440	1.000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
FE	4.29	1.660	.629	.446	.687
FW	4.28	1.857	.567	.338	.721
ME	4.40	1.809	.620	.419	.693
MW	4.43	2.098	.488	.262	.759

Appendix 7.1 The details of parents' highest educational background and last/current occupation

Mothers' Current/ Last Occupation

Fathers' Highest Educational Background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	junior high or under	112	17.2	17.2	17.2
	senior high	254	39.0	39.0	56.2
	college	91	14.0	14.0	70.2
	university	148	22.7	22.7	92.9
	graduate school	46	7.1	7.1	100.0
	Total	651	100.0	100.0	

Father's Current/Last Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	code 1	150	23.0	23.0	23.0
	code 2	186	28.6	28.6	51.6
	code 3	178	27.3	27.3	79.0
	code 4	112	17.2	17.2	96.2
	code 5	25	3.8	3.8	100.0
	Total	651	100.0	100.0	

Note: code 5= Professional, code 4= Semi-Professional, code 3= Skilled non-manual, code 2= Skilled manual and code1= Non-skilled and unemployed

Mother's Highest Educational Background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	junior high or under	92	14.1	14.1	14.1
	senior high	322	49.5	49.5	63.6
	college	113	17.4	17.4	81.0
	university	99	15.2	15.2	96.2
	graduate school	25	3.8	3.8	100.0
	Total	651	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	code 1	277	42.5	42.5	42.5
	code 2	141	21.7	21.7	64.2
	code 3	142	21.8	21.8	86.0
	code 4	84	12.9	12.9	98.9
	code 5	7	1.1	1.1	100.0
	Total	651	100.0	100.0	

Note: code 5= Professional, code 4= Semi-Professional, code 3= Skilled non-manual, code 2= Skilled manual and code1= Non-skilled and unemployed

Appendix 7.2 T-test: Students' Perception of Parents' Educative Capital

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
PIE	Female	320	32.74	9.40	0.53
	Male	331	33.26	9.73	0.53
PS	Female	320	23.65	6.49	0.36
	Male	331	23.76	6.43	0.35
PPC	Female	320	11.43	4.63	0.26
	Male	331	11.28	4.59	0.25
PTR	Female	320	10.82	4.77	0.27
	Male	331	11.20	4.70	0.26
PVE	Female	320	14.50	3.96	0.22
	Male	331	14.50	3.75	0.21

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
PIE	Equal variances assumed	0.96	0.33	- 0.69	649	0.49	- 0.52	0.75	- 1.99	0.96
PS	Equal variances assumed	0.10	0.76	- 0.23	649	0.82	- 0.11	0.51	- 1.11	0.88
PPC	Equal variances assumed	0.56	0.45	0.40	649	0.69	0.14	0.36	- 0.57	0.85
PTR	Equal variances assumed	0.36	0.55	- 1.03	649	0.31	- 0.38	0.37	- 1.11	0.35
PVE	Equal variances assumed	1.94	0.16	- 0.02	649	0.99	0.00	0.30	- 0.60	0.59

Appendix 7.3 The Means of Subscales of Students' Perception of Parents' Educative Capital

Gender	Social Status		PIE	PS	PPC	PTR	PVE
Female	non-skilled and unemployed	Mean	2.9203	3.0751	1.5706	1.7424	3.3051
		N	59	59	59	59	59
		Std. Deviation	.88216	.87275	.70657	.77731	.90743
	skilled manual	Mean	3.1744	3.2772	1.8148	2.1009	3.4509
		N	117	117	117	117	117
		Std. Deviation	.97204	.97529	.76682	.92050	1.01404
	skilled non-manual	Mean	3.4932	3.5584	1.9905	2.2227	3.9687
		N	88	88	88	88	88
		Std. Deviation	.91849	.87760	.69864	.90232	.95879
	professional	Mean	3.5125	3.6276	2.3095	2.6464	3.7813
		N	56	56	56	56	56
		Std. Deviation	.83100	.85266	.77488	1.06241	.90084
	Total	Mean	3.2744	3.3786	1.9047	2.1638	3.6242
		N	320	320	320	320	320
		Std. Deviation	.94034	.92757	.77178	.95435	.99055
Male	non-skilled and unemployed	Mean	3.0482	3.0077	1.4940	1.9643	3.1964
		N	56	56	56	56	56
		Std. Deviation	1.08527	.97859	.62358	.86222	1.08263
	skilled manual	Mean	3.1898	3.2779	1.8268	2.1188	3.5742
		N	128	128	128	128	128
		Std. Deviation	.95891	.86930	.74253	.93318	.96206
	skilled non-manual	Mean	3.5230	3.6139	2.0923	2.4351	3.9189
		N	74	74	74	74	74
		Std. Deviation	.85553	.85411	.66217	.94701	.72517
	professional	Mean	3.5781	3.6751	2.0571	2.4658	3.7466
		N	73	73	73	73	73
		Std. Deviation	.93768	.89000	.87455	.92739	.84316
	Total	Mean	3.3260	3.3949	1.8807	2.2399	3.6254
		N	331	331	331	331	331
		Std. Deviation	.97312	.91843	.76439	.93994	.93691
Total	non-skilled and unemployed	Mean	2.9826	3.0422	1.5333	1.8504	3.2522
		N	115	115	115	115	115
		Std. Deviation	.98402	.92233	.66564	.82370	.99367
	skilled manual	Mean	3.1824	3.2776	1.8211	2.1102	3.5153
		N	245	245	245	245	245
		Std. Deviation	.96325	.91953	.75270	.92529	.98712
	skilled non-manual	Mean	3.5068	3.5838	2.0370	2.3198	3.9460

	N	162	162	162	162	162
	Std. Deviation	.88767	.86471	.68202	.92621	.85779
professional	Mean	3.5496	3.6545	2.1667	2.5442	3.7616
	N	129	129	129	129	129
	Std. Deviation	.89015	.87093	.83904	.98836	.86538
Total	Mean	3.3006	3.3869	1.8925	2.2025	3.6248
	N	651	651	651	651	651
	Std. Deviation	.95676	.92226	.76753	.94709	.96291

Appendix 7.4 One-Way ANOVA: Students' Perception of Parents' Educative Capital

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
PIE	1.630	3	647	.181
PS	.450	3	647	.717
PPC	3.677	3	647	.012
PTR	1.655	3	647	.176
PVE	2.177	3	647	.090

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PIE	Between Groups	29.935	3	9.978	11.425	.000
	Within Groups	565.065	647	.873		
	Total	595.000	650			
PS	Between Groups	32.106	3	10.702	13.296	.000
	Within Groups	520.762	647	.805		
	Total	552.868	650			
PPC	Between Groups	29.165	3	9.722	17.781	.000
	Within Groups	353.752	647	.547		
	Total	382.918	650			
PTR	Between Groups	33.629	3	11.210	13.201	.000
	Within Groups	549.407	647	.849		
	Total	583.036	650			
PVE	Between Groups	38.032	3	12.677	14.527	.000
	Within Groups	564.640	647	.873		
	Total	602.672	650			

Post Hoc **Multiple Comparisons**

Dependent Variable		(I) Social Status	(J) Social Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
PIE	Scheffe	non-skilled and unemployed	skilled manual	-.19984	.10564	.312	-.4959	.0962
			skilled non-manual	-.52418*	.11395	.000	-.8436	-.2048
			professional	-.56700*	.11985	.000	-.9029	-.2311
		skilled manual	non-skilled and unemployed	.19984	.10564	.312	-.0962	.4959
			skilled non-manual	-.32434*	.09464	.009	-.5896	-.0591
			professional	-.36716*	.10166	.005	-.6521	-.0822
		skilled non-manual	non-skilled and unemployed	.52418*	.11395	.000	.2048	.8436
			skilled manual	.32434*	.09464	.009	.0591	.5896
			professional	-.04282	.11028	.985	-.3519	.2663
		professional	non-skilled and unemployed	.56700*	.11985	.000	.2311	.9029
			skilled manual	.36716*	.10166	.005	.0822	.6521
			skilled non-manual	.04282	.11028	.985	-.2663	.3519
PS	Scheffe	non-skilled and unemployed	skilled manual	-.23531	.10141	.147	-.5196	.0489
			skilled non-manual	-.54154*	.10940	.000	-.8482	-.2349
			professional	-.61225*	.11506	.000	-.9347	-.2898
		skilled manual	non-skilled and unemployed	.23531	.10141	.147	-.0489	.5196
			skilled non-manual	-.30622*	.09085	.010	-.5609	-.0516
			professional	-.37693*	.09759	.002	-.6505	-.1034
		skilled non-manual	non-skilled and unemployed	.54154*	.10940	.000	.2349	.8482
			skilled manual	.30622*	.09085	.010	.0516	.5609
			professional	-.07071	.10587	.931	-.3674	.2260
		professional	non-skilled and unemployed	.61225*	.11506	.000	.2898	.9347
			skilled manual	.37693*	.09759	.002	.1034	.6505
			skilled non-manual	.07071	.10587	.931	-.2260	.3674

PPC	Scheffe	non-skilled and unemployed	skilled manual	-.28776*	.08358	.008	-.5220	-.0535
			skilled non-manual	-.50370*	.09016	.000	-.7564	-.2510
			professional	-.63333*	.09483	.000	-.8991	-.3675
		skilled manual	non-skilled and unemployed	.28776*	.08358	.008	.0535	.5220
			skilled non-manual	-.21595*	.07488	.041	-.4258	-.0061
			professional	-.34558*	.08044	.000	-.5710	-.1201
		skilled non-manual	non-skilled and unemployed	.50370*	.09016	.000	.2510	.7564
			skilled manual	.21595*	.07488	.041	.0061	.4258
			professional	-.12963	.08726	.531	-.3742	.1149
		professional	non-skilled and unemployed	.63333*	.09483	.000	.3675	.8991
			skilled manual	.34558*	.08044	.000	.1201	.5710
			skilled non-manual	.12963	.08726	.531	-.1149	.3742
PTR	Scheffe	non-skilled and unemployed	skilled manual	-.25977	.10416	.103	-.5517	.0322
			skilled non-manual	-.46932*	.11236	.001	-.7843	-.1544
			professional	-.69375*	.11818	.000	-1.0250	-.3625
		skilled manual	non-skilled and unemployed	.25977	.10416	.103	-.0322	.5517
			skilled non-manual	-.20955	.09332	.170	-.4711	.0520
			professional	-.43398*	.10024	.000	-.7149	-.1530
		skilled non-manual	non-skilled and unemployed	.46932*	.11236	.001	.1544	.7843
			skilled manual	.20955	.09332	.170	-.0520	.4711
			professional	-.22443	.10874	.236	-.5292	.0803
		professional	non-skilled and unemployed	.69375*	.11818	.000	.3625	1.0250
			skilled manual	.43398*	.10024	.000	.1530	.7149
			skilled non-manual	.22443	.10874	.236	-.0803	.5292
PVE	Scheffe	non-skilled and unemployed	skilled manual	-.26313	.10560	.103	-.5591	.0328
			skilled non-manual	-.69381*	.11391	.000	-1.0131	-.3745
			professional	-.50945*	.11981	.000	-.8453	-.1737
		skilled manual	non-skilled and unemployed	.26313	.10560	.103	-.0328	.5591

		skilled non-manual	-.43068*	.09460	.000	-.6958	-.1655
		professional	-.24632	.10162	.119	-.5312	.0385
	skilled non-manual	non-skilled and unemployed	.69381*	.11391	.000	.3745	1.0131
		skilled manual	.43068*	.09460	.000	.1655	.6958
		professional	.18436	.11024	.425	-.1246	.4933
	professional	non-skilled and unemployed	.50945*	.11981	.000	.1737	.8453
		skilled manual	.24632	.10162	.119	-.0385	.5312
		skilled non-manual	-.18436	.11024	.425	-.4933	.1246

*. The mean difference is significant at the 0.05 level.

Appendix 7.5 T-test: Students' Educational Habitus

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
SOA	Female	320	32.11	6.96	0.39
	Male	331	32.12	6.72	0.37
SVE	Female	320	27.78	5.77	0.32
	Male	331	27.34	5.70	0.31
SAA	Female	320	35.67	7.13	0.40
	Male	331	35.26	7.41	0.41
SFK	Female	320	17.11	2.82	0.16
	Male	331	17.07	2.72	0.15

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
SOA	Equal variances assumed	0.06	0.81	-0.03	649	0.97	-0.02	0.54	-1.07	1.04
SVE	Equal variances assumed	0.94	0.33	0.99	649	0.32	0.45	0.45	-0.44	1.33
SAA	Equal variances assumed	0.52	0.47	0.72	649	0.47	0.41	0.57	-0.71	1.53
SFK	Equal variances assumed	0.60	0.44	0.21	649	0.83	0.05	0.22	-0.38	0.47

Appendix 7.6 The Means of Subscales of Students' Educational Habitus

Gender	Social Status		SOA	SVE	SAA	SFK
Female	non-skilled and unemployed	Mean	3.8242	3.7530	3.7269	4.0720
		N	59	59	59	59
		Std. Deviation	1.00728	.88812	.89016	.81215
	skilled manual	Mean	3.9530	3.9011	3.8737	4.2585
		N	117	117	117	117
		Std. Deviation	.81700	.83562	.75766	.69087
	skilled non-manual	Mean	4.1946	4.1201	4.1503	4.3892
		N	88	88	88	88
		Std. Deviation	.89295	.79875	.76053	.64422
	professional	Mean	4.0536	4.1020	4.1071	4.3616
		N	56	56	56	56
		Std. Deviation	.73965	.71647	.72628	.67068
	Total	Mean	4.0133	3.9692	3.9635	4.2781
		N	320	320	320	320
		Std. Deviation	.86965	.82435	.79250	.70488
Male	non-skilled and unemployed	Mean	3.9643	3.7168	3.7937	4.2277
		N	56	56	56	56
		Std. Deviation	.87344	.83765	.84099	.74966
	skilled manual	Mean	3.9756	3.8326	3.8194	4.2129
		N	128	128	128	128
		Std. Deviation	.86547	.86723	.89369	.73314
	skilled non-manual	Mean	4.1453	4.0290	4.1111	4.3682
		N	74	74	74	74
		Std. Deviation	.66660	.80742	.69010	.61686
	professional	Mean	3.9932	4.0528	3.9909	4.2877
		N	73	73	73	73
		Std. Deviation	.92747	.66688	.77330	.57836
	Total	Mean	4.0155	3.9055	3.9181	4.2666
		N	331	331	331	331
		Std. Deviation	.84044	.81483	.82280	.67931
Total	non-skilled and unemployed	Mean	3.8924	3.7354	3.7594	4.1478
		N	115	115	115	115
		Std. Deviation	.94299	.86032	.86342	.78283
	skilled manual	Mean	3.9648	3.8653	3.8454	4.2347
		N	245	245	245	245
		Std. Deviation	.84103	.85123	.83027	.71217
	skilled non-manual	Mean	4.1721	4.0785	4.1324	4.3796

	N	162	162	162	162
	Std. Deviation	.79559	.80152	.72724	.63001
professional	Mean	4.0194	4.0742	4.0413	4.3198
	N	129	129	129	129
	Std. Deviation	.84843	.68654	.75258	.61870
Total	Mean	4.0144	3.9368	3.9404	4.2723
	N	651	651	651	651
	Std. Deviation	.85426	.81951	.80775	.69149

Appendix 7.7 One-Way ANOVA: Students' Educational Habitus

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
SOA	1.151	3	647	.328
SVE	2.082	3	647	.101
SAA	2.158	3	647	.092
SFK	4.038	3	647	.007

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SOA	Between Groups	6.345	3	2.115	2.924	.033
	Within Groups	468.004	647	.723		
	Total	474.349	650			
SVE	Between Groups	11.604	3	3.868	5.889	.001
	Within Groups	424.939	647	.657		
	Total	436.543	650			
SAA	Between Groups	13.265	3	4.422	6.963	.000
	Within Groups	410.833	647	.635		
	Total	424.098	650			
SFK	Between Groups	4.285	3	1.428	3.015	.029
	Within Groups	306.517	647	.474		
	Total	310.802	650			

Post Hoc **Multiple Comparisons**

Dependent Variable		Social Status	Social Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
SVE	Scheffe	non-skilled and unemployed	skilled manual	-.12990	.09161	.570	-.3867	.1269
			skilled non-manual	-.34308*	.09882	.008	-.6201	-.0661
			professional	-.33879*	.10394	.014	-.6301	-.0475
		skilled manual	non-skilled and unemployed	.12990	.09161	.570	-.1269	.3867
			skilled non-manual	-.21318	.08207	.081	-.4432	.0168
			professional	-.20889	.08816	.133	-.4560	.0382
		skilled non-manual	non-skilled and unemployed	.34308*	.09882	.008	.0661	.6201

			skilled manual	.21318	.08207	.081	-.0168	.4432
			professional	.00429	.09563	1.000	-.2638	.2723
		professional	non-skilled and unemployed	.33879*	.10394	.014	.0475	.6301
			skilled manual	.20889	.08816	.133	-.0382	.4560
			skilled non-manual	-.00429	.09563	1.000	-.2723	.2638
SAA	Scheffe	non-skilled and unemployed	skilled manual	-.08593	.09007	.823	-.3384	.1665
			skilled non-manual	-.37295*	.09717	.002	-.6453	-.1006
			professional	-.28192	.10220	.056	-.5684	.0045
		skilled manual	non-skilled and unemployed	.08593	.09007	.823	-.1665	.3384
			skilled non-manual	-.28702*	.08069	.006	-.5132	-.0608
			professional	-.19599	.08668	.165	-.4390	.0470
		skilled non-manual	non-skilled and unemployed	.37295*	.09717	.002	.1006	.6453
			skilled manual	.28702*	.08069	.006	.0608	.5132
			professional	.09103	.09403	.816	-.1725	.3546
		professional	non-skilled and unemployed	.28192	.10220	.056	-.0045	.5684
			skilled manual	.19599	.08668	.165	-.0470	.4390
			skilled non-manual	-.09103	.09403	.816	-.3546	.1725

*. The mean difference is significant at the 0.05 level.

Appendix 7.8 T-test: Students' School Experiences

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
SEA	Female	320	8.23	4.08	0.23
	Male	331	8.19	3.94	0.22
SRT	Female	320	30.17	9.52	0.53
	Male	331	30.66	9.21	0.51
SRC	Female	320	36.63	7.91	0.44
	Male	331	37.51	7.02	0.39
SPE	Female	320	26.49	5.51	0.31
	Male	331	26.55	5.48	0.30

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
SEA	Equal variances assumed	1.52	0.22	0.10	649	0.92	0.03	0.31	- 0.59	0.65
SRT	Equal variances assumed	0.22	0.64	- 0.68	649	0.50	- 0.50	0.73	- 1.94	0.95
SRC	Equal variances assumed	1.11	0.29	- 1.51	649	0.13	- 0.88	0.59	- 2.03	0.27
SPE	Equal variances assumed	0.00	0.98	- 0.14	649	0.89	- 0.06	0.43	- 0.91	0.79

Appendix 7.9 The Means of Subscales of Students' School Experience

Gender	Social Status		SEA	SRC	SRT	SPE
Female	non-skilled and unemployed	Mean	1.9605	3.9266	3.2561	3.5617
		N	59	59	59	59
		Std. Deviation	1.15484	.85958	1.02983	.84593
	skilled manual	Mean	2.4103	4.0427	3.1909	3.7607
		N	117	117	117	117
		Std. Deviation	1.32713	.84063	1.06872	.73846
	skilled non-manual	Mean	3.1250	4.0884	3.4773	3.8571
		N	88	88	88	88
		Std. Deviation	1.26078	.96515	1.10408	.83074
	Professional	Mean	3.6548	4.2460	3.5933	3.9541
		N	56	56	56	56
		Std. Deviation	1.05402	.82463	.94406	.71512
	Total	Mean	2.7417	4.0694	3.3521	3.7844
		N	320	320	320	320
		Std. Deviation	1.35944	.87875	1.05832	.78784
Male	non-skilled and unemployed	Mean	1.8393	4.1270	3.3214	3.6122
		N	56	56	56	56
		Std. Deviation	1.02295	.83402	.97504	.92931
	skilled manual	Mean	2.5208	4.1484	3.4540	3.7243
		N	128	128	128	128
		Std. Deviation	1.24142	.78966	1.04306	.82664
	skilled non-manual	Mean	3.0315	4.2613	3.4790	3.9788
		N	74	74	74	74
		Std. Deviation	1.29883	.72253	.86633	.57469
	Professional	Mean	3.4795	4.1370	3.3181	3.8630
		N	73	73	73	73
		Std. Deviation	1.14798	.78666	1.17038	.73093
	Total	Mean	2.7311	4.1675	3.4072	3.7928
		N	331	331	331	331
		Std. Deviation	1.31318	.78039	1.02326	.78277
Total	non-skilled and unemployed	Mean	1.9014	4.0242	3.2879	3.5863
		N	115	115	115	115
		Std. Deviation	1.08953	.84949	.99966	.88395
	skilled manual	Mean	2.4680	4.0980	3.3283	3.7417
		N	245	245	245	245
		Std. Deviation	1.28161	.81444	1.06142	.78438
	skilled non-manual	Mean	3.0823	4.1674	3.4781	3.9127

	N	162	162	162	162
	Std. Deviation	1.27516	.86460	.99951	.72551
professional	Mean	3.5556	4.1843	3.4376	3.9025
	N	129	129	129	129
	Std. Deviation	1.10737	.80202	1.08269	.72271
Total	Mean	2.7363	4.1193	3.3801	3.7887
	N	651	651	651	651
	Std. Deviation	1.33510	.83100	1.04020	.78467

Appendix 7.10 ANOVA- Students' School Experiences

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
SEA	4.658	3	647	.003
SRC	.090	3	647	.966
SRT	.985	3	647	.399
SPE	2.013	3	647	.111

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
SEA	Between Groups	203.762	3	67.921	46.022	.000
	Within Groups	954.859	647	1.476		
	Total	1158.621	650			
SRC	Between Groups	2.072	3	.691	1.000	.392
	Within Groups	446.798	647	.691		
	Total	448.870	650			
SRT	Between Groups	3.614	3	1.205	1.114	.343
	Within Groups	699.703	647	1.081		
	Total	703.317	650			
SPE	Between Groups	9.414	3	3.138	5.195	.001
	Within Groups	390.800	647	.604		
	Total	400.214	650			

Multiple Comparisons

Dependent Variable		Social Status	Social Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
SEA	Scheffe	non-skilled and unemployed	skilled manual	-.56658*	.13732	.001	-.9515	-.1817
			skilled non-manual	-1.18086*	.14813	.000	-1.5961	-.7657
			professional	-1.65411*	.15580	.000	-2.0908	-1.2174
		skilled manual	non-skilled and unemployed	.56658*	.13732	.001	.1817	.9515
			skilled non-manual	-.61428*	.12302	.000	-.9591	-.2695
			professional	-1.08753*	.13215	.000	-1.4579	-.7171
		skilled non-manual	non-skilled and unemployed	1.18086*	.14813	.000	.7657	1.5961

			skilled manual	.61428*	.12302	.000	.2695	.9591
			professional	-.47325*	.14335	.013	-.8751	-.0714
		professional	non-skilled and unemployed	1.65411*	.15580	.000	1.2174	2.0908
			skilled manual	1.08753*	.13215	.000	.7171	1.4579
			skilled non-manual	.47325*	.14335	.013	.0714	.8751
SPE	Scheffe	non-skilled and unemployed	skilled manual	-.15536	.08785	.373	-.4016	.0909
			skilled non-manual	-.32636*	.09477	.008	-.5920	-.0607
			professional	-.31621*	.09967	.019	-.5956	-.0368
		skilled manual	non-skilled and unemployed	.15536	.08785	.373	-.0909	.4016
			skilled non-manual	-.17101	.07870	.194	-.3916	.0496
			professional	-.16086	.08454	.306	-.3978	.0761
		skilled non-manual	non-skilled and unemployed	.32636*	.09477	.008	.0607	.5920
			skilled manual	.17101	.07870	.194	-.0496	.3916
			professional	.01015	.09171	1.000	-.2469	.2672
		professional	non-skilled and unemployed	.31621*	.09967	.019	.0368	.5956
			skilled manual	.16086	.08454	.306	-.0761	.3978
			skilled non-manual	-.01015	.09171	1.000	-.2672	.2469

*. The mean difference is significant at the 0.05 level.

Appendix 8.1 Amos output of modification indices

(Precursory model of relationship between family social status and students' school experience - Precursory Model)

Covariances			M.I.	Par Change
e3	<-->	e16	7.663	-0.054
e3	<-->	e2	11.503	-0.027
e4	**<-->**	**e1**	**19.122**	**-0.035**
e4	<-->	e2	9.15	0.024
e4	<-->	e3	6.188	0.019
e13	<-->	e17	12.175	-1.137
e13	<-->	e15	22.246	1.48

Appendix 8.2 Squared Multiple Correlations

Latent Variable	Measured Variables	Standardized Regression Weights	Squared Multiple Correlations
Family Socio-economic Status	Father's Education	.78	.611
	Mather's Education	.72	.524
	Father's Work	.66	.433
	Mother's Work	.54	.291
Parent's Educative Capital	Parents' Involvement in Education	.85	.724
	Parenting Style	.78	.614
	Parents' Participation in Cultural Activities with Children	.53	.284
	Parent-Teacher Relationships	.56	.316
	Parents' Views of Education	.76	.578
Students' Educational Habitus	Students' Views of Education	.82	.673
	Students' Awareness of Being an Active Learner	.94	.891
School Engagement	Students' Relationship with Classmates	.53	.278
	Students' Relationship with Class Teacher	.64	.403
	Students' Participation in Educational Activities	.89	.794
Educational Attainment	The Score of Chinese Test	.78	.615
	The Score of Math Test	.75	.569
	The Score of English Test	.85	.719