

## **Fathers' Work Conditions, Parenting Styles, and Children's School Achievement**

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*Malaysia economy has shifted from lower-income agriculture to upper-middle income and increasingly industrial based. This development results the changing of economic pattern, sectoral of employment and demographic pattern. By 1990s Malaysia became an exporter of manufactured goods with just few primary products such as petroleum, palm oil and rubber. Rapid urban and industrial development have encouraged massive migration of rural population to the urban industrialized areas. The cities and government policy are not well structure in terms of housing, public amenities and social supports for the new migrants. At present about 65 percent of Malaysian living in the urban centers. These development have affected families in many ways and the most substantial change is the large extended family has become nuclear family unit. Overall most family still regard education as an important tool for social mobility. Research on effect of parental works conditions on children development in the past were focused on mothers' work condition without much consideration that fathers also play important part in raising children. The present research attempted to investigate this issue and specifically focused on relationship between fathers' work conditions on children' school achievement. Following survey method, this study deployed 400 fathers ( 200 = Malay, 200 = Chinese) 400 primary school children as sample of study. Data of this study are analyzed using path model analysis. Results of this study indicate that fathers work conditions has modest effects on parenting styles, children behavior and school achievement. The importance of social support for lower-income families is discussed.*

### **1. Introduction**

Research interest in family processes and their relation to children behavior and school achievement has been active in the past few decades. In recent years, due to demographic changes in the family as more mothers have to come to participate in the workplace, research on children's school achievement has been extended to examine the relation between school achievement and maternal employment. Under some conditions such as longer work hours, non-day shift, low job satisfaction; the effects have been found to be adverse on aspects of children's development (Barnett, 1999; Lachman & Boone-James, 1997; Lerner, 1994), behavior (Rubin et al. 1996; Bogen & Joshi, 2001; Han, 2005), and school achievement (Heyns & Catsambis, 1985). In addition, researchers who have examined the relationship of work conditions such as work hours, work schedule, job demands, job supervision and job promotion have generally found some significant associations with maternal or parental feelings of role conflict, her parenting style and parental participation on children's school work (Allen et al. 2000; Heymann, 2000). The multiple

effects of work conditions on families' well-being have also shown positive association with children's school achievement especially among lower income children (Miller, 2002; Huston et al., 2000; Gottfried, Gottfried & Bathurst, 1988). However, the relation is considered to be indirect because research has not been able to demonstrate that maternal employment per se is linked to low or high level of children's intellectual and cognitive development (Lerner, 1994; Gottfried, Gottfried & Bathurst, 1995). Maternal work conditions was expected to affect children's development indirectly through its effect on parenting styles or other aspects of family processes (Gottfried, Gottfried, & Bathurst, 1995; Foster & Kalil, 2005).

Research on parental employment and children's outcomes have been conducted quite extensive in many countries such as United States, United Kingdom, Germany and Sweden. Review on these studies indicate that many have concentrated on maternal employment without taking account of trends for fathers' participation in dual-earner families in managing the household (Aldous, Mulligan & Bjarnason, 1998; Marsiglio, Amato, Day & Lamb, 2000). Fathers also contribute their income share and psycho-emotional aspects as result of their work conditions that may be reflected in the life of the family. Research studies on father involvement in family in developed countries indicate more fathers are willingly taking part in child upbringing and doing housework. For example, British fathers' care of infants and young children rose 800% between 1975 and 1997, from 15 minutes to two hours on the average working day, a double rate of mothers' (Fisher, McCulloch & Gershuny, 1999). Married American fathers also undertake far more housework than ever before, an average 9.7 hours a week in 2000, up from 4.4 hours in 1965 (Bianchi et al., 2006). Similarly, English fathers in two parent families carry out an average of 25% of the family's childcare related activities during the week, and one-third at weekends (Smeaton & Marsh, 2006). Hence, fathers, like mothers play an important role in child development and therefore deserve to be included in future research. Further, it is possible that cultural differences in school facilities, community child-care facilities and home background in developing countries may result in different outcomes or findings from those outcomes reported in the developed societies. Therefore study about the similar issues is essential in the developing countries such as Malaysia.

At present about 54.6% of Malaysian lived in the urban areas. The demands from the city life such as high cost of living have forced some mothers to leave their children for employment. About 62.8% of Malaysian mothers with children below 15 years of age working full-time. (Malaysia, 2004). Moving into full-time employment may result in tensions for those who have small children or children who still need child-care or supervision while they are away. This issue becomes more serious because there were about 68% of families in Malaysia were a nuclear based families (Malaysia, 2004). Life in the city is not easy for some parents especially those who come from lower-income families. At the same time education in Malaysia is still being regarded as an important tool for social mobility. How do parents of dual-earner families cope with life demands need to be investigated especially in terms of father involvement in the family. The present study focused on relationships between fathers' work conditions, parenting styles and children's school achievement.

## 2. Review Of Literature

Research on parental employment has proliferated over the past 40 years. However, the majority of these research studies were conducted on maternal employment and emphasized two major

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areas : effects of maternal employment on family well-being (i.e marital satisfaction, family happiness, family conflicts) and effects of maternal employment on emotional and personality development (Menaghan & Parcel, 1990). The reason for this phenomenon is that many researchers often yielded the mother's role in child development as pivotal and irreplaceable, therefore many studies were expected to detect negative effect of maternal employment on children. This assumption led to much research designed to examine the issue from a maternal deprivation perspective (Hand, 1957; Nye, Perry and Ogles, 1963; Burchinal, 1963). Although there are research studies conducted to examine effects of maternal employment on the child's development, research that has focused specifically on the influences of maternal employment on child's cognitive and intellectual development is limited (Gottfried, Gottfried, and Bathurst, 1995) More attention has been paid to the influences of infant and social emotional development and parent-child attachment (Lerner, 1994). The few studies that have been conducted present inconsistent results : sometimes infants and children of employed mothers performed better in cognitive development than children of unemployed mothers and sometimes they performed lower (Hock, 1980; Schubert, Bradley-Johnson & Nutal, 1980; Pederson, Cain, Zaslow & Anderson, 1983). Similarly, research that has been conducted to examine effects of mothers' employment on children's school achievement yielded inconsistent findings : with few exceptions of mother's employment on achievement, the children of working mothers differ from children of non-working mothers. The exception here referred to sub-group of the population white middle-class boys growing up in intact families score lower in school achievement than white middle-class girls and black lower-class boys and girls (Banducci, 1967; Bronfenbrenner and Crouter, 1982; Hoffman, 1989).

In overview of research studies on work conditions and parental involvement, Gottfried, Gottfried & Bathurst, (1995) suggest that children's achievement are also related to other factors not only parental work conditions per se. The simple causal-direct approach that has been applied in the previous studies led psychologists such as Bronfenbrenner & Crouter (1982) to assert that " most studies on employment and child outcomes involves a leap from very start of the causal process directly to the outcomes leaving everything in between to the imagination" (pp.71). This statement gives clues that the link between maternal employment and child development is not direct one, and that factors related to the child, the families, parenting, parental involvement, early child experiences, and child-care contribute to child's development. Understanding such factors in multidimensional perspective will assist us to understand the factors ( or underlying factors) that determine the relationship between parental employment and children's development.

In a multidimensional perspective, a range of mediating and moderating variables are examined in investigating the links between two factors in the present studies. They may affect the direction and strength of the relationship between variables such as parental work conditions and children's school achievement, and may help us to understand under what conditions and parental employment must also extends its scope to examine the importance or effect of father's employment or dual-earner families on child development. This suggestion is being highlighted here because many research studies on parental employment have been carried out at the individual level and show less concern about the importance of the fathers' role in child development. Previous research findings indicates that fathers' participation in managing the family increased when wives are working ( Greenberger and Goldberg, 1989, Lamb, 2000; Foster and Kalil, 2005). Moreover, research on paternal involvement in the past were emphasized on topics related to :

gender relations, divorce and fatherhood, fatherless, social role, interaction with children, father-child relationships fathers' commitment etc. ( Marsioglio et al. 2000). Research on fathers' involvement therefore needs to be expanded in line with the changes of the family pattern, that is more and more families are nuclear and dual-earner based. In dual-earner families, fathers, like mothers take care of their children' clean up the house, do the routine shopping, and monitor their children's schooling activities (Bulanda, 2004; Marsioglio et al. 2000). It is therefore important to include fathers' participation in the family process in the future research.

Research studies on effects of father involvement related to children development show positive outcomes. School aged children of involved fathers are better academic achievers. They are more likely to get good scores in school tests, have better quantitative and verbal skills (Nord & West, 2001; Bing, 1962, Goldstein, 1982; Radin, 1982) have better high grade point averages, receive superior grades, perform a year above their expected age level on academic tests and obtain higher scores on reading (Astone & McLanahan, 1991; Cooksey & Fondell 1996; Mc Bride et al. 2005; Gadsen & Ray, 2003). Further, father's academic support was positively related to adolescent boys' academic motivation to try hard in school, feel grades were important and to place high value on education (Alfaro, Umana-Taylor, & Bamaca, 2006) . In longer term, children of involved fathers are more likely to have higher levels of economic and educational achievement, career success, occupational competency, better educational outcomes, higher educational attainment and psychological well-being (Amato, 1994; Barber & Thomas, 1986; Bell, 1996). For example, children of involved fathers are more likely to demonstrate a greater internal locus of control (Biller, 1993; Mosley & Thompson, 1993; Ross & Broh, 2000), have a greater ability to take initiative, use self direction and control (Amato, 1989; Pruett, 1987). In short, research studies show that involved fathers play important role in child development which cover all aspects of life such as academic achievement, effort and initiative in school, aspiration, locus of control and also predicted better life quality in long term.

### 3. Research Design

The determinants of school achievement have long been a subject of interest among both educational psychologists and sociologists. Generally, educational psychologists tend to focus on the student's personality and parent-child interaction processes as important variables of school achievement whereas sociologists tend to give emphasis to socio-cultural variables in explaining variation in children's school achievement. In recent years, studies on determinants of children's school achievement have been extended to another area that is parents' work conditions or parental employment. In the Malaysian context, the traditional family with a home-maker wife and bread-winner husband is disappearing rapidly. Little research has been directed towards linking specific characteristics of parents' employment with children outcomes such as school achievement ( Gottfried, Gottfried and Bathurst, 1995; Hill et al 2005). For example, potential aspect to be investigated "is effect of parental employment which depend on the age, sex, or temperament of the children or on timing, quality, or intensity of employment and that the effects on children may be mediated or moderated by a variety of family processes and interactions both inside and outside the home" ( Foster & Kalil, 2005, pp. 829 ). The present study's focus is consistent with this suggestion.

The present study attempts to narrow down the previous and present research gap and developed a model incorporating a range and distal and more proximal variables, relevant to these relationships is theory of human cultural ecology (Bronfenbrenner, 1979; 1986; Bronfenbrenner & Crouter, 1983) which proposes that family, home environment, social and cultural worlds interact each other at various levels in ways which affect the child and family. While many previous studies had focused only on intra familial processes in the family microsystem, the conceptual paradigms put forward by Bronfenbrenner (1979) emphasized ways in which intra familial processes are affected by extra familial conditions (Bronfenbrenner, 1986; Wertsch, 1991). In formulating these interactive processes, Bronfenbrenner (1979) suggests that a child development is influenced by four environmental systems namely microsystem, mesosystem, exosystem and macrosystem. The objective of the present study is to examine the relationship between parental works conditions, parenting styles and children's school achievement. There are two directions of relationships examined : direct relationship between seven suggested variables in the model and children's school achievement (SES , parental work conditions, parenting styles, parental monitoring, parental beliefs on their self-efficacy and children's social skills and children's task engagement behavior), and indirect relationships between parental work conditions, parenting styles, children's task engagement behavior and children's school achievement.

Figure 1 and Figure 2 illustrate the major categories of variables included in the model. The first column of the figure indicates two variables that are parents' work conditions (exosystem) and children's family structure (microsystem), background. These variables represent the basic input characteristics of children, their families and parental work conditions. This level of variables also represent the basic input characteristic of children, their families and parental work conditions. This level of variables also represents some of the more important social-psychological and school organizational influences included in models such as Wisconsin Model of educational and Occupational attainment (Sewell, Haller & Portes, 1969; Sewell and

Hauser, 1980), general Cognitive Ability (Mercy & Steelman, 1983) and Children's Learning Environment Model (Marjoribanks, 1994). Family structure background and parents' work conditions are placed in the same section because they are interrelated or inseparable (Googin, 1991; Hoffman, 1989). The present model however expands the original models by adding six variables (including parental working processes such as job demand, job supervision and job promotion) in the parents' work conditions vector as suggested by previous researcher (eg. Gottfried, Gottfried & Bathurst, 1995; Foster & Kalil, 2005). The first set of variables are related to family structure background : child sex and helps hours from maid or baby sitter. The second set of the model includes subgroups of variables : parenting styles and parental involvement in children's school activities and these variables are conceptualized as part of the proximal home background as suggested by Gottfried, Gottfried & Bathurst (1995) as part of microsystem and mesosystem variables in the first panel. The parenting subgroups includes three types of parenting styles : authoritarian, permissive and authoritative. Parental involvement in children's school activities includes four subgroups of variables : parental monitoring, parents' belief on the importance of children's social skills, parents' beliefs on the importance of children's self-management skills and parental self-efficacy. The combination of these variables in this section (Panel 2) are adapted from parental involvement in children's schooling models ( eg. Hoover-Dempsey & Sandler, 1997; Bogenschneider, 1997). The third and fourth sections of this model focus on children's behavior in the classroom and their school

achievement. These two variables represent the output of the other variables. They are arranged consecutively rather than together because children's behavior in the classroom can also affect children's school achievement ( Finn & Cox, 1992; Finn, Pannoza & Voelkl, 1995).

### 4. Setting

Research for this study was carried out in the state of Negeri Sembilan in the Malay Peninsula. The state of Negeri Sembilan was chosen because its demographic, social and economic backgrounds were consistent with the study's model background : (1) has experienced rapid development in urbanization and industrialisation, (ii) its development provides job opportunities for both rural and urban population, (iii) it has multicultural communities and (v) located between another two industrialised states in the Malay Peninsula ; Melaka and Selangor Darul Ehsan. In the year of 2004 the state of Negeri Sembilan has about 900,000 people (52.6% = Malay, 29.7% Chinese and 17% Indian and Others). Rapid industrialisation development and strategic location of Negeri Sembilan encourage its population work in the private industrial sector. Similar to her neighbouring states in west coast of Malay Peninsula, Negeri Sembilan is a multicultural state and its population reflects the multiculturalism of Malaysia's population as a whole. In terms of education, the Negeri Sembilan government provides 160 primary schools with about 54,000 children in Year 1 through Year 3 (Primary 1, 2, 3). The participants of the current study involved 200 Malay fathers and 200 Chinese fathers, with 400 target children living in the urban areas. All of them came from dual-earner families background.

### 5. Methodology

#### Sample of the Study

This study involved comprised 200 Malay fathers and 200 Chinese fathers came from dual-earner intact families background. There were also 200 Malay children and 200 Chinese children and 45 teachers in the study's sample. Consistent with the study's topic the present study only focused on effects of fathers' work condition on children development. This is the limitation of this study. Further, the study only involved 400 working fathers as sample and only selected from one state out of 14 states in Malaysia. However, the state chosen was appropriate because it reflects the Malaysian society as a whole : comprises three major ethnics, Malay, Chinese and Indian. Future research is recommended using bigger sample focused on comparison between ethnics such as between Malay and Chinese families. Sample background for this study is divided into four parts : family background, fathers background, children background and teachers background.

#### Family Demographic Background:

##### Malay families

Of the 200 families, 90.5 per cent (181) had nuclear family background and only 9.5 per cent (19) had extended family background. It seemed that some elderly parents of Malay families still live in the rural areas and refused to follow their children to the urban centres. Overall, percentage of nuclear family for the sample was higher than the national percentage that was 68 % (Malaysia, 2004) The mean of number of children per family in this study is 3.9, about 31.5% (63) of families had 4 children, 21% (42) had three, 15.5% (31) had 2 children and 10.5 % (21) had more than 7 children. For the purpose of this study, only families with more than one children were selected as sample. Of the 200 families in the sample, 5 % (10) had monthly income of RM1600 or less and the

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balance of that number ( 95 % = 190) were families with monthly income between RM 1601- RM6000. Overall, many families had income between RM2500- RM6000. With that income about 47 % of families had live in maid or family helper.

### Chinese families

Of the Chinese 200 families, 78% (156) had nuclear family background and 22% (44) had extended family background. Overall, percentage of nuclear family for the sample was higher than the national percentage that was 68 % (Malaysia, 2004). The mean of number of children per family in this study is 2.7, about 41.5 % (83) had three children, and only 21% (42) had four or more children. For the purpose of this study, only families with more than one children were selected as sample. Of the 200 families in the sample, 21% (42) families had monthly income of RM1600 or less, 68% (137) had income between RM1600-RM3500 and 34.5% had income between RM2000- RM3500. With that income about 50% (100) families had live-in maid.

### Fathers

Similar to mothers there were 200 Malay fathers and 200 Chinese fathers in the samples. Table 1 and Table 2 illustrate information on fathers in the research samples. Malay fathers were slightly younger (mean = 40 years) than Chinese fathers (mean = 41 years). Chinese fathers overall had slightly higher educational attainment than Malay fathers. Fathers from both ethnic groups had low percentage in low educational attainment, below Form 3 (Malay, 2.5% = 5 , Chinese, 1.3% = 3). The percentage of Malay fathers and Chinese fathers who completed Form 3 was similar 45% = 90). Malay fathers had higher educational attainment between Form 5 - Form 6 than Chinese fathers (Malay 42.5%=85, Chinese 30.5% = 61). However, more Chinese fathers completed tertiary education than Malay fathers (Malay 10% = 20, Chinese 19% = 38). With such educational attainment, fathers from both ethnic groups had job positions that was more distributed. About 22.5% (45) of the Malay fathers secured highest job positions (professional), slightly higher than the Chinese fathers, 20.5% (41). There were more Chinese fathers involved in marketing (Malay 10.5% = 21, Chinese , 25% = 50). However, there were more Malay fathers held job positions as mechanic (Malay, 16% = 32, Chinese, 11.5% = 22) and production operator (Malaya, 25.5% = 52, Chinese, 15.5% =31).

Overall , Malay fathers had higher monthly income than the Chinese fathers (Malay, between RM1500 – RM 2000, Chinese, between RM 1000- RM 1500). Malay fathers had closer percentage of monthly income at amount of RM1000– RM 1500 ( Malay, 36.5% = 73, Chinese, 30% = 60). There were more Malay fathers received monthly income above RM1500 than the Chinese fathers (Malay, 35.5% = 71, Chinese, 15.5% = 31).

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**Table 1 : Mean, Standard Deviations and ranges for Demographic Variables ( Malay Fathers )**

Variables	Mean	SD	Ranges
Fathers n=2000			
Age	40	1.1	30-49 years
Educational Attainment Below Form3=2.5%(5) Completed Form 3= 45%(90) Completed Form 5=21%(42) Completed Form 6=21.5%(43) 2-3 years diploma=2%(4) BA/BS= 8 %(16)	3.0 (between Form 5-Form6 )	1.3	Below Year 9– Bachelor degree Same
Occupational Status Professional = 3%(6) Profession junior=19.5%(39) Semi professional=11%(22) Marketing promoter, sales=10.5%(21) Administration support=14.5%(19) Mechanic and repair=16%(32) Production operator=25.5%(51)	4.6 (semi professional)	1.96	Production operator to professional
Monthly Income Less than RM500=10.5% (21) RM500-RM1000=17.5% (35) RM1000-RM1500=36.5% (73) RM500-RM2000=11.5%(23) RM2000-RM2500=8% (16)  RM2500 and above=16% (32)	RM1500	1.63	RM500- RM3000
Work Hours (weekly)	47 hours	.83	30-49 hours
Work Tempo Non-day shift = 16.5% (33) No shift =83.5% (167)	1.83	.37	



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**Table 2 : Mean, Standard Deviations and ranges for Demographic Variables ( Chinese Fathers )**

Variables	Mean	SD	Ranges
Fathers n=2000			
Age	41	1.22	30-49 years
Fathers' educational attainment Below Form3= 1.5%(3) Completed Form 3= 45%(90) Completed Form 5=25%(50) Completed Form 6=5.5%(11) 2-3 years diploma=4%(8) BA/BS= 19 (38)	3.3 (between Form 3-Form5 )	1.3	Year 9 – Bachelor degree
Occupational Status Professional = 4%(8) Profession junior=16.5%(33) Semi professional=13.5%(27) Marketing promoter, sales=14.5%(29) Administration support=25%(50) Mechanic and repair=11%(22) Production operator=15.5%(31)	3.2 (semi professional)	1.8	Production operator to professional
Monthly income Less than RM500= 29.5%(3) RM500-RM1000= 25%(50) RM1000-RM1500= 30%(60) RM500-RM2000=7.5% (15) RM2000-RM2500=3%(6) RM2500 and above=5 % (10)	RM1700	1.3	RM500- RM4000
Work Hours (weekly)	47	1.0	30-49 hours
Work Tempo Non-day shift = 12.5% (25) No shift = 87% (175)	1.87	.33	

### Malay Children

There were altogether 200 children in the study, 50% (100) of them were males and 50% were females. About 29.5% (59) of the children were 7 years of age, 34.5 % (69) 8 years, and 36% (72) were nine years. Because children's age go consistently with class in school, about 29.5 per cent (59) of the children were in Grade 1, 30% (60) in Grade 2 and 38% (76) in Grade 3. Children's background was provided with their school achievement based on there major subjects : Reading (Mean =80.4 %, SD= 15.37), Malay Language (Mean 80.70%, SD = 16.30) and Mathematics (Mean 77.20%, SD= 19.56). All three subjects' scores were based on mean of four times classroom tests developed by school teachers based on School Based Test Format

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### Chinese Children

There were altogether 200 children in the study, 50% (100) of them were males and 50% were females. About 25% (50) of the children were 7 years of age, 57.5% (115) 8 years, and 17.5% (35) were nine years. Because children's age go consistently with class in school, about 25% (50) of the children were in Grade 1, 57.5% (115) in Grade 2 and 17.5% (35) in Grade 3. Children's background was provided with their school achievement based on their major subjects : Reading (Mean =78.2 %, SD= 15.37), Malay Language (Mean 79.4%, SD = 16.30) and Mathematics (Mean 77.14%, SD= 19.56). All three subjects' scores were based on mean of four times classroom tests developed by school teachers based on School Based Test Format.

### Teachers

The present study examined relationships between parents' work conditions, parenting styles and children's school achievement. The study therefore involved school teachers. Children of this study were selected from 15 primary schools in Seremban, the state capital of Negeri Sembilan. There were 45 teachers involved in the study. Their roles were helping researcher to gather children's information, distributing research's questionnaire and giving children assessment based on three compulsory subjects in the Malaysian primary school curriculum : Malay Language, Mathematics, Reading. Out of 45 teachers selected, 25 were females and 20 were males and had mean of age of 40 years. Most of them had teaching experience more than 10 years and graduated from Teachers Training Institutes in Malaysia.

### Research's Instruments

There were eleven types of measures used in the study taken or adapted from previous researchers. All measures were tested again at the first stage of the study in the pilot study using 80 families. Sample for the pilot study involved 80 families and they were not included in the main study. Overall the cronbach alpha coefficients of all measures were between 0.65 to 0.85 : Work Conditions comprises three parts taken or adapted from Smith, Kendall & Hulin (1969) and modified by Roznowski (1980) = Job Demand 0.85; Job Supervision 0.81, Job Promotion 0.85; Parenting Styles taken or adapted from Lamborn et al (1991) = Authoritarian 0.65, Permissive 0.62, Authoritative 0.68; Parental Monitoring adapted from Block (1965) and Milne et al.(1986) = 0.81; Parents' Beliefs in Child's Social Skills 0.83; Parents' Beliefs in Child's Self-Management Skills= 0.83 all taken from Okagaki & Sternberg's Intelligence Scales (1993) ; Parents Self-Efficacy Scale taken and adapted from Gibson & Denbom (1984) = .81; and Children's Behaviour Checklist taken from Fincham, Hakoda & Sanders (1989) =0.86.

### Procedures

The study was conducted following a survey method which involved parents' responses to questionnaires. The first step of the procedures started with school visit. Researcher and teachers identified appropriate children and families to be sample for the study (dual earner family background, had at least two children, mixed socio-economic status background). Step 2 involved researcher distributing questionnaires through school children. In some cases researcher visited families and assisted parents who were not sure how to give response. Mothers and fathers' responses were measured separately because the study aimed to investigate the differences of father and mother work conditions, parenting style and parental involvement on children's school achievement. While different procedures were employed with these participants, the enhanced validity of data gathered was advanced as the justification for these variations.

## 6. Research Findings

The analyses for this research study consisted of a series of path models testing (LISREL Version 8.50, Scientific Software International 2001) for the direct and indirect links between (a) demographic variables (i.e parental work conditions, socio-economic status, amount of home help received and child sex), and (b) parenting variables and parental involvement) and children's task engagement behavior and school achievement. Two criteria were used in determining which of the path coefficients should be retained for interpretation. First, statistical significance was judged on the basis of t-value of greater than 1.96 or less than -1.96 ( $\alpha = 0.05$  for  $df > 120$ ). However, several researchers have noted that statistical significance can be misleading criterion in path analysis (e.g Pedhazur, 1997), urging that the absolute magnitude of the coefficients also taken into account in interpreting results. As such, only coefficients greater than 0.1 were retained for interpretation in this case ( Pedhazur, 1997).

### Malay Fathers

The correlation matrices for Malay fathers appears in Table 3. The corresponding path diagrams, showing standardized coefficients for the model parameters are shown in Figure 1 .Effects on Parenting Style and Beliefs. As indicated, for fathers in the sample, SES was negatively related to authoritarianism ( $p = -0.32$ ,  $t = -4.75$ ) but positively related to authoritativeness ( $p = 0.32$ ,  $t = 4.70$ ). SES also had significant positive effect on beliefs in the importance of self-management ( $p = 0.19$ ,  $t = 2.52$ ).

Effects on Task Engagement Behavior. Task engagement was negatively related to authoritarianism ( $p = -0.22$ ,  $t = -3.25$ ). Task engagement was related negatively to parental monitoring ( $p = -0.14$ ,  $t = -2.11$ ) and positively related to child sex ( $p = 0.20$ ,  $t = 2.98$ ). Also, task engagement was indirectly related (through the parenting style variables) to SES ( $p = 0.10$ ,  $t = 2.54$ ).

Effects on School Achievement. School achievement was related positively to task engagement behavior ( $p = 0.44$ ,  $t = 8.14$ ) and child sex ( $p = 0.13$ ,  $t = 2.53$ ), SES ( $p = 0.21$ ,  $t = 3.62$ ), the latter effect also reflected in indirect effects through the parenting style and task engagement variables ( $p = 0.21$ ,  $t = 4.39$ ). Achievement was negatively related to authoritarianism ( $p = -0.18$ ,  $t = -3.46$ ;  $p = -0.23$ ;  $t = -4.31$ , respectively) and help hours received ( $p = -0.18$ ,  $t = -3.53$ ). Both child sex and authoritarianism had significant indirect effects on achievement through the parenting style and task engagement variables ( $p = 0.14$ ,  $t = 3.56$ ;  $p = -0.10$ ,  $t = -3.02$ , respectively).

### Chinese Fathers

The correlation matrices for fathers and mothers appear in Table 4. The corresponding path diagrams, showing standardized coefficients for the model parameters are shown in Figure 2.

#### Effects on Parenting Style and Beliefs.

For Chinese fathers, SES had a negative direct effect on authoritarianism ( $p = -0.19$ ,  $t = -2.65$ ) but positively effects on authoritativeness ( $p = 0.41$ ,  $t = 6.39$ ) and beliefs in social skills ( $p = 0.20$ ,  $t = 2.70$ ). In the Chinese sample, work conditions also had positive effect in social skills ( $p = 0.22$ ,  $t = 3.12$ ). There was a positive relationship between help hours the family received and self-efficacy ( $p = 0.23$ ,  $t = 3.06$ ).

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### Effects on Task Engagement Behavior.

For Chinese fathers, task engagement was negatively related to authoritarianism (Direct effects:  $p = -0.35$ ,  $t = -6.84$ ; Indirect effects:  $p = -0.17$ ,  $t = -5.64$ ), and child sex (Direct effects  $p = -0.16$ ,  $t = -3.14$ , Indirect Effects:  $p = -0.14$ ,  $t = -3.15$ ). Engagement was, however, positively related to authoritative (Direct effects:  $p = 0.24$ ,  $t = 4.10$ ; Indirect effects  $p = 0.11$ ,  $t = 3.79$ , respectively), and SES ( $p = 0.15$ ,  $t = 2.46$ ). For Chinese fathers, the indirect effect of SES on task engagement through parenting style variables was also significant and positive ( $p = 0.21$ ,  $t = 4.39$ ).

### Effects on School Achievement.

In the Chinese sample, task engagement had a strong positive relationship with school achievement both for fathers ( $p = 0.48$ ,  $t = 9.95$ ), as did authoritative ( $p = 0.11$ ,  $t = 2.83$ ) and help hours the family received ( $p = 0.15$ ,  $t = 4.11$ ). Achievement was also negatively related to authoritarianism ( $p = -0.28$ ,  $t = -7.50$ ). SES on the other hand, had significant indirect effect on school achievement ( $p = 0.32$ ,  $t = 6.10$ ). For Chinese fathers significant positive effects on achievement were found for permissiveness ( $p = 0.11$ ,  $t = 3.35$ ) and for beliefs in social skills ( $p = 0.18$ ,  $t = 5.13$ ).

**Table 3. Correlation Matrix for Malay Fathers**

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Child Sex	1.00												
2. Socio-economic status	-0.05	1.00											
3. Home help hours	0.15	0.12	1.00										
4. Work Conditions	0.10	0.34	0.12	1.00									
5. Authoritarian	-0.11	-0.32	-0.15	-0.28	1.00								
6. Permissive	-0.01	-0.14	-0.17	-0.28	0.30	1.00							
7. Authoritative	0.12	0.31	0.03	0.29	-0.45	-0.27	1.00						
8. Monitoring	0.04	0.03	-0.10	0.06	0.00	0.12	0.14	1.00					
9. Beliefs in self-management	-0.09	0.16	0.01	-0.02	0.10	0.03	0.03	0.24	1.00				
10. Beliefs in social skills	-0.07	0.06	-0.08	-0.06	0.06	-0.02	0.18	0.34	0.38	1.00			
11. Self-efficacy	0.08	0.13	-0.05	0.17	-0.11	-0.10	0.24	0.41	0.36	0.48	1.00		
12. School achievement	0.22	0.40	-0.08	0.26	-0.47	-0.17	0.36	0.01	0.01	-0.04	0.12	1.00	
13. Task engagement	0.21	0.24	0.03	0.18	-0.32	-0.15	0.23	-0.07	0.02	0.01	0.11	0.61	1.00

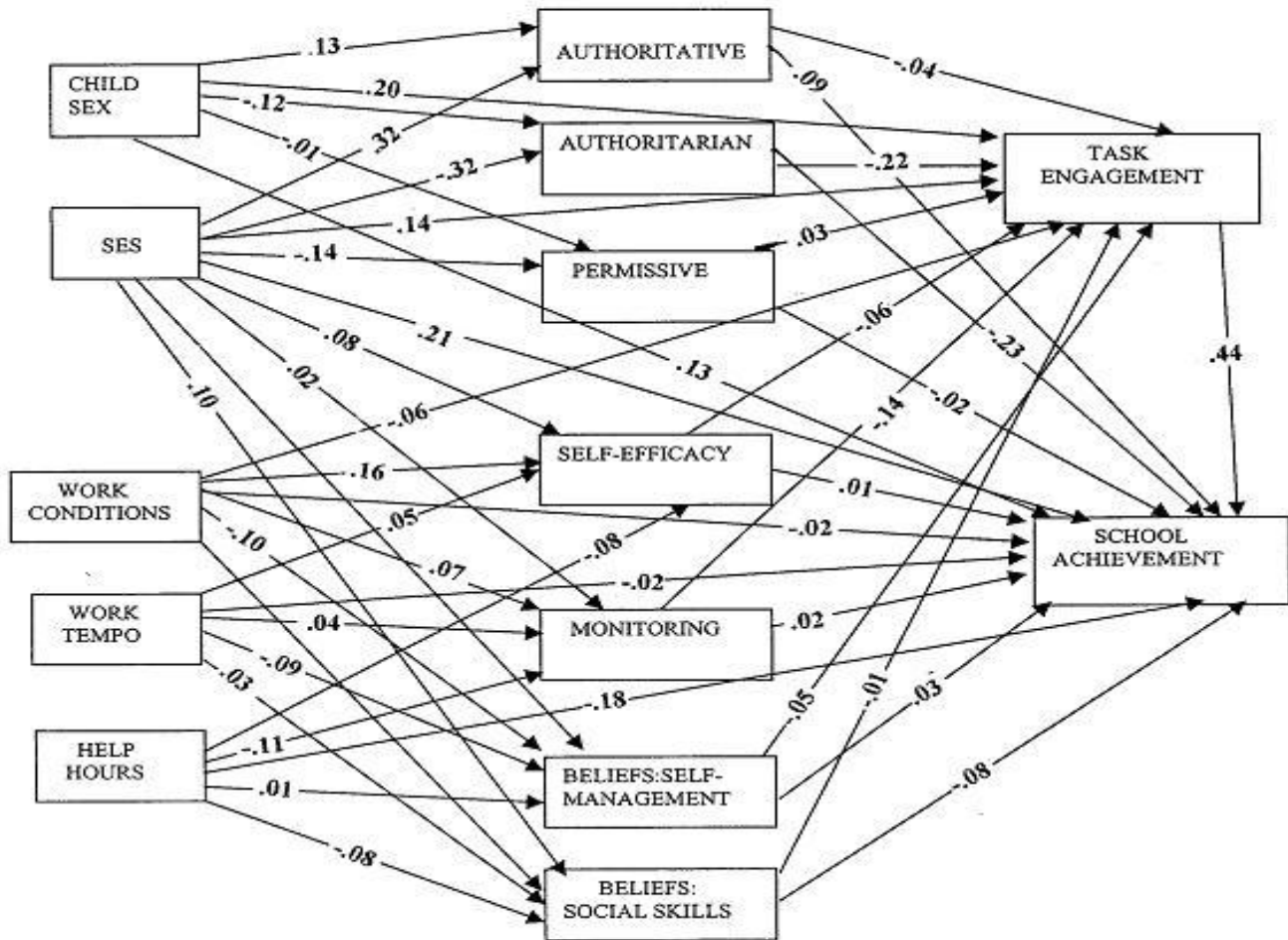


Figure 1 : Path Diagram for Malay Fathers

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Table 4 Correlation Matrix for Chinese Fathers

	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>1. Child Sex</b>	1.00												
<b>2. Socio-economic status</b>	-0.05	1.00											
<b>3. Help hours received</b>	0.04	0.34	1.00										
<b>4. Work conditions</b>	-0.04	0.14	0.19	1.00									
<b>5. Authoritarian</b>	0.12	-0.23	-0.17	-0.25	1.00								
<b>6. Permissive</b>	-0.11	-0.13	0.01	-0.02	0.09	1.00							
<b>7. Authoritative</b>	-0.04	0.52	0.17	0.13	-0.55	-0.18	1.00						
<b>8. Monitoring</b>	0.13	0.03	0.11	0.13	-0.24	-0.21	0.28	1.00					
<b>9. Beliefs in self-management</b>	0.10	0.13	0.07	0.09	-0.17	-0.23	0.26	0.42	1.00				
<b>10. Beliefs in social skills</b>	0.04	0.19	0.06	0.24	-0.19	-0.21	0.35	0.61	0.55	1.00			
<b>11. Self-efficacy</b>	0.11	0.12	0.24	0.02	-0.08	-0.21	0.30	0.32	0.36	0.38	1.00		
<b>12. School achievement</b>	-0.17	0.40	0.35	0.25	-0.69	-0.05	0.63	0.37	0.27	0.43	0.24	1.00	
<b>13. Task engagement</b>	-0.20	0.41	0.24	0.20	-0.59	-0.16	0.58	0.32	0.13	0.31	0.16	0.80	1.00

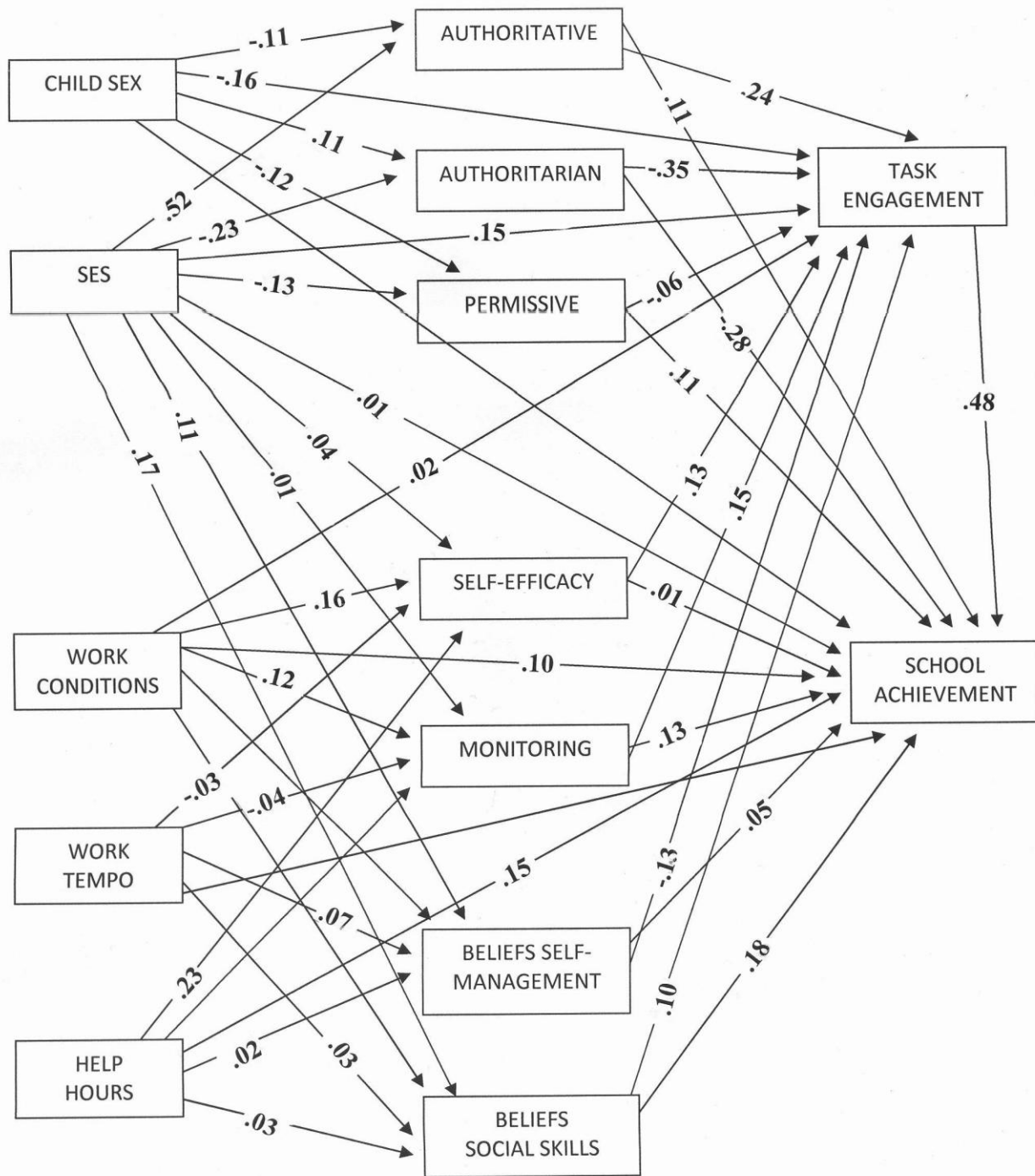


Figure 2: Path Diagram for Chinese Fathers

## 7. Discussion

Children's school achievement is an important topic to be discussed in Malaysia especially when concern with Malaysian children in the urban areas because their parents are both working. Directly, Malay children school achievement was influenced by task engagement behavior, SES, fathers' authoritativeness, authoritarianism and monitoring. Fathers' authoritarianism and permissiveness had negative effects on achievement. Directly, work conditions, work tempo, and belief in social skills had modest negative effects on achievement. For Chinese fathers, directly children's school achievement was influenced by SES, children's task-engagement behavior, parental authoritativeness, parental authoritarianism (negative), parental monitoring and the extent of help hours the family received. Effects of fathers' work conditions on achievement was modest and similar to Malay fathers, work tempo also had negative effects on achievement. Other variables in the sample (self-efficacy, self-management, and social skills) had positive modest effect on achievement. For both ethnics, directly several variables were thus influential for children school achievement, but family socio-economic status and children behavior were positively linked with school achievement. Indirect effects of variables from panel one of the study model (work conditions, work tempo, socio-economic status, help hours family received and child sex) on children's school achievement were largely mediated through two variables in the second panel: parenting style (authoritarian, permissive, authoritative) and parental involvement (monitoring, parents' beliefs in the importance of social skills, beliefs in the importance of self-management skills, and parental self-efficacy) and one variable in the third panel of the study (children's task-engagement behavior).

For both ethnics, work conditions had a small negative direct effect on children's school achievement. Indirectly, work conditions had no significant effect on children's school achievement. Work conditions had significant effects on parental monitoring, self-efficacy and other variables in panel 2, indicating that higher work conditions were associated with higher fathers' monitoring level, self-efficacy and other variables : management, social skills. Overall effects of work conditions on panel two of the model were significant for both ethnics especially on monitoring, indicated that higher work conditions affects fathers' monitoring level. Work tempo had no direct on children's school achievement. For both models, help hours had small negative direct effects on children's school achievement. Help hour the family received had significant direct effects on parents' self-efficacy, (negative for Malay fathers but positive for Chinese fathers), and parental monitoring levels.

As shown in the path models socio-economic status had mixed direct and indirect relationships with children's school achievement. However, for Chinese families, SES had a modest direct relationship with children's school achievement. A significant indirect relationship between SES appeared clearly in both models, suggested that socio-economic status still played an important role in determining children's school achievement in that level of SES was associated with parental authoritativeness or authoritarianism and then on children's school achievement. SES also had indirect effects on children's school achievement mediated by parental involvement, and children's task-engagement behavior. Overall, for mothers and fathers, SES had positive effect on parents' authoritativeness but negative on parents' authoritarianism and permissiveness (mothers) and these effects were similar to those reported in western samples (Dornbusch et al 1987; Dunifon & Kalil, 2005).



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For both Malay and Chinese fathers, SES had indirect effects on children's task-engagement behavior. SES was positively related to parents' authoritative style but negatively related to parental authoritarian and permissive style suggesting that the parenting style adopted at higher socio-economic status levels was characterized by greater authoritative interaction which partly mediated the children's task-engagement behavior and school achievement. SES also had positive relationships with parents' authoritative style and negative with authoritarian and permissive pattern. Indirectly, SES had modest positive relationship with children's task-engagement behavior and school achievement mediated partly through parents' authoritativeness but negatively through parents' authoritarianism and permissiveness. Overall, for both ethnics SES had substantial effects on children's school achievement through its relationship first, with authoritative style, and then children's task-engagement behavior. Effects of SES through association with permissive and children's task-engagement behavior on children's school achievement for both groups were negative and smaller.

Effects of SES on parenting style were fairly consistent, indicating that SES was negatively associated with authoritarian and positively related to authoritative subscale. SES also had a negative association with parental permissiveness. Higher SES was associated with higher authoritative style and at the same time lower authoritarian style. SES also had indirect relationship with children's school achievement through its relationship with parental involvement variables. At higher SES levels, scores in the parental involvement variables were also higher especially for parental monitoring and self-efficacy. SES also had modest effects on beliefs in the importance children's self-management skills. Similar findings were found in the western samples (Lareau, 1987; Hoover-Dempsey, Bassler & Brissie, 1987)

Parental involvement emerged as an important mediating variable for SES, in relation to children's school achievement. Effects of work conditions on parental involvement variables were small. Similarly, direct effects of self-efficacy, beliefs in self-management and beliefs in social skills on children's task engagement and school achievement were also small. Parental monitoring appeared as the only significant subvariable in the parental involvement cluster in relation to children's task-engagement behavior and school achievement. Further, indirect effects of SES, parental work conditions and help hours on children's school achievement were found through parental involvement. Overall, for both ethnics, work tempo showed no clear effects on parental involvement variables.

Overall, the outcomes of the present study support the ecological model which was used as direction for the study. Aspects of children's family background such as SES, child sex, work conditions and help hours had significant relationships with parenting styles and parental involvement variable in panel 2 of the study and then indirectly had significant relationships with children's task-engagement behavior and school achievement in panel 3 and panel 4. For Chinese families who had lived in the urban areas for a long time, directly SES had modest relationship with children's school achievement indicating that regardless their SES level, the awareness of the importance of education for children was all the same. They could have adjusted well in the urban environment. Moreover, many of them had small family size with only two children per family as compared to their Malay counterparts who had four children per family. Almost all factors in the study's model had relationships with children's school achievement directly or indirectly, but the

processes of how each factor affected other factors (mediating variables) and children's school achievement showed some differences.

### 8. Conclusion

The present study indicates that in dual-earner families both fathers play important roles in determining children's school achievement. For both mothers and fathers, almost all variables suggested in the model are related to children's school achievement. Differences between the two models more or less are concerning the strength of effect of each variable on children's school achievement. For example, for both mothers and fathers, SES affected children's school achievement. The relationships of all variables suggested in the model appeared in two major directions: direct and indirect. Four most significance set of variables had strong effects on children's school achievement are : parental work conditions, parenting styles, parental involvement and children's task engagement behavior. Effects of these variables on children's school achievement were moderated by one important variable : SES. For both ethnics, directly and indirectly SES had strong effects in almost all other variables in the model : parenting styles, parental involvement, and children' task engagement behavior. If there any program and plan to improve children's school achievement in Malaysia, as a whole efforts must be taken to improve quality of life for lower-income population especially in the urban areas. Children' school achievement in Malaysia is no longer referred to ethnic group variable like 20 years ago but the new scenario appeared : children's school achievement is indicated by social-class; lower-income children performed lower in school as compared to middle-class children who performed higher. This phenomenon cannot be ignored because it may affects the nation's stability in long run. All in all results of this study give answers to the major question of the study as suggested by previous researchers: how the family processes and parental working processes affects children's school achievement.

### References

- Aldous, J., Mulligan, G.M., and Bjarnason, T. 1998. Fathering over time: What makes the difference? *Journal of Marriage and the Family*, 60, 809-820.
- Alfaro, E.C., Umana-Taylor, A.J., & Bamaca, M.Y. 2006. The influence of academic support on Latino adolescents' academic motivation. *Family Relations*, 55 (3), 624-747.
- Allen, S.M & Hawkin, A.J. 1999. Maternal gate-keeping : Mothers' beliefs and behaviors that inhibit greater father involvement in family work. *Journal of Marriage and the Family*, 61, 199-212.
- Amato, P. R. (1989). Family processes and the competence of primary school children and adolescents. *Journal of Youth and Adolescence*, 18, 39-53.
- Amato, P.R. 1994. Father-child relationships, mother-child relations, and offspring psychological well-being in early childhood. *Journal of Marriage and the Family*, 56, 39-53.
- Astone, N.M., & McLanahan, S.S. 1991. Family structure, parental practices, and high school completion. *American Sociological Review*, 56, 309-320.

## Talib & Yunos

Barber, B.K. & Thomas, D.L. 1986. Dimensions of fathers' and mothers' supportive behavior. The case for physical affection. *Journal of Marriage and the Family*, 48, 783-794.

Belsky, J. 1988. The effects of infant day care reconsidered. *Early Childhood Research, Quaterly*, 3, 235-277.

Belsky, J. 1990. Parental and non-parental child-care and children's socioemotional development. A decade review. *Journal of Marriage and the Family*, 52, 885-903.

Bell, A. 1969. Role modelling of fathers in adolescence and young adulthood. *Journal of Counseling Psychology*, 16, 144-151.

Biller, H.B. 1981. Father absence, divorce, and personality development. In M.E. Lamb (Ed.), *The role of the father in child development* (1st ed. Pp.489-552). NY : Wiley.

Bianchi, S.M, Robinson, J.P., & Milkie, M.A. 2006. *Changing rhythms of American Family Life*. NY : Russel Sage.

Bing, E. 1963. The effect of child rearing practices on the development pf cognitive abilities. *Child Development*, 34, 631-648.

Blanchard, R.W., & Biller, H.B. 1971. Father availability and academic performance among third grade boys. *Developmental Psychology*, 4, 301-305.

Bogen, K., and Joshi, P. 2002, ( November). Bad work or good move: The relationship of part-time and parenting and nonstandard work schedules to parenting and child behavior in working poor families. Paper presented at Low Income Families: Coping as Parents and Workers Conference, Washington, DC.

Bogenschneider, K. 1997. Parental involvement in adolescent schooling: A proximal process with transcontextual validity. *Journal of Marriage and the Family*, 59, 718-733

Bogenschneider, K. and Steinberg, L. 1994. Maternal employment and adolescents' academic achievement: A developmental analysis. *Sociology of Education*, 67, 60-77.

Bronfenbrenner, U. 1979. *The ecology of human development: Experiments by nature and design*. Cambridge, MA : Harvard University Press.

Bronfenbrenner, U. and Crouter, A. 1983. The evolution of environmental models in developmental research. In P.H. Mussen and W.Kessen, *Handbook of Child Development, Vol. 1 History, Theories and Method*. NY : Wiley.

Bronfenbrenner, U. 1986. Ecology of the family as a context of human development. Research perspective. *Developmental Psychology*, 22, 723-724.

## Talib & Yunos

Bulanda, R.E. 2004. Paternal involvement with children: : The influence of gender ideologies. *Journal of Marriage and Family*, 66, 40-45.

Burchinal, L.G. 1963. Personality characteristics of children. In Nye and L.W Hoffman (Eds.). *The Employed Mothers in America*. Chicago : Rand Mac Nally.

Caspi, A. & Silva, P. 1995. Temperamental qualities at age 3 predict personality traits in young adulthood: Longitudinal evidence from birth cohort. *Child Development*, 66,486-498.

Cooksey, E.C., & Fondell, M.M. 1996. Spending time with his kids: effects of family structure on fathers' and children's lives. *Journal of Marriage and the Family*, 50, 473-482.

Dermott, E. 2006. *The effect of fatherhood on men's employment*. Swindon : ESRC

Din, H.E. & Achir, J.A. 1978. The effect of mother attitude towards the development of their children's achievement, motivation and its relation with school achievement. *Proceedings of the first Asian Workshop for Child and Adolescent Development*. Jakarta : University of Indonesia.

Dornbusch, S.M., Ritter, P.L., Leiderman, P.H., Roberts, D.F. & Fraleigh, M.J. 1987. The relation of parenting style to adolescent school performance. *Child Development*, 58, 1244-1257.

Elder, G.H., Nguyen, T & Caspi, A. 1985. Linking family hardship to children's lives. *Child Development*, 56, 361-375.

Felner, R.D., Prand, S., Du Bois, D.L., Adan, A.M., Mulhall, P.F. & Evans, E.G. 1995. Socioeconomic disadvantage, proximal environment experiences, socioemotional and academic adjustment in early adolescence: Investigation of a mediated effects model. *Child Development*, 66, 774-792.

Fisher, K., McCulloch, A. & Gershuny, J. 1999. *British fathers and children*. Working Paper. University of Essex: Institute for Social and Economic Research.

Fordham, S. and Ogbu, J. 1986. Black students' school success. Coping with the burden of acting white. *Urban Review*, 18, 176-206.

Fincham, F.D., Hakoda, A. and Sanders Jr., R. 1989. Learned helplessness. A test anxiety and academic achievement. A longitudinal analysis. *Child Development*, 60, 138-145.

Finn, J.D. and Cox, D. 1992. Participation and withdrawal among fourth-grade pupils. *American Educational Research Journal*, 29, 141-162.

Finn, J.D., Pannocho, G.M. and Voelkl K.E. 1995. Disruptive and inattentive-withdrawn behavior and achievement among fourth graders. *The Elementary School Journal*, 95, 421-435.

Foster, E.M. and Kalil, A. 2005. Developmental Psychology and public policy: Progress and prospects. *Developmental Psychology*, 41, 827-932.

## Talib & Yunos

Gadsden, V., & ray, A. 2003. Fathers' role in children's academic achievement and early literacy. ERIC Digest.

Garbarino, J. 1980. Some thoughts on school size and its effects on adolescent development. *Journal of Youth and Adolescence*, 9, 19-31.

Gamoran, A. and Moore, R.D. 1989. Secondary school tracking, educational and inequality: Compensation, reinforcement, or neutrality? *American Journal of Sociology*, 94, 1146-1183.

Getsels, J.W. 1974. Socialization and education : A note of discontinuities. *Teachers College Record*, 76, 218-225.

Goldstein, H.S. 1982. Fathers absence and cognitive development of 12-17 year olds. *Psychological Report*, 51, 843-848.

Gottfried, A.E., Gottfried, A.W. and Bathurst, K. 1988. Maternal employment, family environment and children's development: Infancy through the school years. In A.E. Gottfried and A.W. Gottfried (Eds.), *Maternal employment and children's development. Longitudinal Research*, NY : Plenum.

Gottfried, A.E, Gottfried, A.W. and Bathurst, K.1995. Maternal and dual-earner employment, status and parenting. In M.H. Bornstein, *Handbook of Parenting, Vol. 2, Biology and Ecology of Parenting*. NJ: Erlbaum.

Han, W-J. 2005. Maternal nonstandard work schedules and child out-comes. *Child Development*, 76, 137-156.

Hand, H.C. 1957. Working mothers and maladjusted children. *Journal of Educational Sociology*, 65,114-127.

Harrison, A.O., Wilson, M.N., Pine, C.J., Chan, S.Q & Buriel, R. 1990. Family ecologies of ethnic minority children. *Child Development*, 61, 347-362.

Heymann, J. 2000. *The widening gap : Why America's working families are in jeopardy, and what can be done about it*. New York: Basic Books.

Heyns, B. & Catsambis, S. 1985. Working mothers and the achievement of children. A critique. *Sociology of Education*, 18, 308-321.

Hill, J.L., Waldfogel, J., Brooks-Gunn, J. & Han, W.J. 2005. Maternal employment and child development: A fresh look using newer methods. *Developmental Psychology*, 66, 833-850.

Hoffman, L.W. 1980. *The effects of maternal employment on the academic attitudes and performance of school-age children*. Washington D.C.: National Institute of Education.

## Talib & Yunos

- Hoffman, L.W. 1984a. Work, family and socialization of the child. In R.D. Parke (Ed.), *Review of Child Development Research: Vol. 7, The Family*, Chicago: University of Chicago Press.
- Hoffman, L.W. 1984 b. Maternal employment and the young child. In M.Perlmutter (Ed.), *Parent-child interactions and parent-child relations in child development. The Minnesota Symposia on Child Psychology*, Vol. 17, NJ : Erlbaum.
- Hoffman, L.W. 1989. Effects of maternal employment in the two-parent family. *American Psychologist*, 44, 283-292.
- Intasuwan, P. 1985. School achievement. In C.Svannathat, D. Bhanthumnavin, L. Bhuapirom and D.M Keats (Eds.), *Handbook of Asian Child Development and Childrearing Paractices*, Bangkok, Behavioral Science Research Institute: Sinakharinwirot University.
- Kerckhoff, A.C. 1986. Effects of ability grouping in British secondary school. *American Sociological review*, 52, 113-121.
- Lachman, M.E., & Boone-James (Eds.) 1997. Charting the course of midlife development: An overview. In M.E. Lachman & J.Boone-James (Eds.), *Multiple paths of midlife development* (pp.1-20) Chicago: University of Chicago Press.
- Lareau, A. 1989. *Home Adventure. Social-class and parental intervention in elementary education*. NY : Palmer Press.
- Lempers, J., Clark-Lempers, D. & Simons, R. 1989. Economic hardship, parenting and distress in adolescence. *Child Development*, 60, 25-49.
- Lerner, J.V.1994. *Working women and their families*. CA, Thousand Oaks : Sage Pub. Series.
- Lieberman, E.J. 1970. Reserving a womb: A case for the small family. *American Journal of Public Health*, 60, 87-92.
- Lytton H. 1990. Child and parent effects in boys' conduct disorder: A reinterpretation. *Developmental: Psychology*, 26, 683-697.
- Mc Bride, B.A, Schoppe-Sullivan, S.J., & Ho, M. 2005. The mediating role of fathers' school involvement on student achievement. *Journal of Applied Developmental psychology*, 26,(2), 201-216.
- Malaysia 2004. Department of Statistic. Government Printing House: Kuala Lumpur.
- Marsiglio, W., Amato, P., Day, R.D., & Lamb, M.E. 2000. Scholarship on fatherhood in the 1990s and beyond. *Journal of Marriage and Family*, 62, 1173-1191.
- McLoyd, V.C . 1990. The impact of economic hardship on black and disadvantaged children. Psychological distress, parenting and sosioemotional development. *Child Development*, 61, 311-346.

## Talib & Yunos

- Mc Lane, J & McNamee 1990. Early literacy. Cambridge, MA : Harvard University.
- Menaghan, E.G and Parcel, T.L.(1990). Parental employment and family life. Research in the 1980s. Journal of Health and Society Behavior, 29, 169-184.
- Misra, G. & Agarwal, R. 1985. The meaning of achievement. Implications for a cross cultural theory of achievement. In A.R. Longues, Y.H. Poortinga (Ed.), From a different perspective. Studies of behavior across cultures, Lisse : Swet Zeitllinger.
- Moffit, T.E. 1997. Adolescent-limited and life course-persistent offending: A complementary pair of developmental theories. In T.P. Thornberry (Ed.), Developmental theories of crime and delinquency. New Brunswick, NJ :Transaction.
- Mosley, J. & Thompson, E. 1995. Fathering behavior and child outcomes.The role of race and poverty. In W.Marsiglio, (Ed.), Fatherhood: Contemporary theory, research, and social policy (pp. 149-165). Thousand Oaks, CA: Sage.
- Myers, H.F & King, L. 1983. Mental health issues in the development of black American child. In G. Powell, J. Yamamoto, R. Romero, A. Morales (Ed.), The psychological development of the minority group children (276-306), NY : Brunell Manzel.
- Nord, C.W., & West, J. 2001. Fathers' and mothers' involvement in their children's school by family type and resident status. National Center for Education Statistics, (NCES 2001-032). Washington , D.C. : US Department of Education.
- Nye, F.I, Perry, J.B. & Ogles, R.H.1963. Anxiety and anti-social behavior in preschool children. In F.I Nye, L.W. Hoffman (Ed.). The employed mothers in America, 3-13, Chicago : Rand Mc Nally.
- Ogbu, J.U 1981. Origins of human competence. A cultural-ecological perspective. Child Development, 52, 413-429.
- Omar, R. & Pandian, S. 2005. Malaysia: Isu-isu social semasa (Current social issues). Kuala Lumpur: ISM
- O'Neill, R. 1991. Maternal occupational experiences and psychological well-being. Influences of parental achievement, facilitation and children's academic achievement. Unpublished doctoral dissertation, University of California, Irvine.
- Pedhazur, E.J. 1997. Multiple Regression in Behavioral Research.: Explanation and Prediction. Forth Worth : Harcourt Brace College Pub.
- Presser, H.B. 1988. Shift work and child care among youth dual-earner American parents. Journal of Marriage and the Family, 50, 133-148.
- Pruett, K.D. 1997. How men and children affect each other's development. Zero to Three, 19 (1), 1-11.

## Talib & Yunos

Radin, N. 1982. Primary caregiving and role sharing fathers. In M.E Lamb (ed), Non-traditional families: Parenting and child development.(pp. 173-204). Hillsdale, NJ: Erlbaum.

Robin, R.W., John, O.P., Caspi, A, Moffitt, T.E. & Stouthamer-Loeber, M. 1996. Resilient, overcontrolled and undercontrolled boys : Three replicable personality types. *Journal of Personality and Social Psychology*, 70, 157-171.

Ross, C.E, & Broh, B.A. 2000. The role of self-esteem and the sense of personal control in the academic achievement process. *Sociology of Education*, 73, 270-284.

Rumberger, R.W., Ghatak, R., Poulos, G., Ritter, P.L. & Dornbusch, S.M. 1990. Family influences on dropout behavior in one California high school. *Sociology of Education*, 63, 290-289.

Simon , R.L., Chao, W. & Conger, R. 2002. *Journal of Marriage and family*, 63, 63-79.

Slavin , R.E. & Madden, N.A. 1991. Success for all at Buckingham Elementary. Second year evaluation. Baltimore, MD : Center for Research of Effective Schooling for Disadvantaged.

Smeaton, D., & Marsh, A. 2006. Maternity and paternity rights and benefits: Survey of parents 2005. Employment Relations Research Series No. 50. Department of Trade and Industry.

Wertsch, J.V. 1991. *Voices of mind*. London: Harvester.

World Bank 1994. *The World Bank Report 1994*. New York : Oxford University Press.