

Parenting Behaviours and Children School Competence

SZE, Ching Shim Esther
Bukit View Primary School

Abstract: This study explored the perceptions of parenting behaviours of Primary Five pupils in Singapore, and their relationships to the child school competence in terms of academic achievement and school adjustment. In addition, it examined whether perceptions varied according to parent and child gender. The results showed that while fathers and mothers within a family were likely to practise similar parenting characteristics, there were significant differences in the way fathers and mothers were perceived by children. Both boys and girls perceived mothers to be warmer and more controlling than fathers. In general, girls more than boys, perceived mothers to be warmer than fathers. Furthermore, the results showed that parenting behaviours influence children school competence. Parents who showed more warmth and more positive affect in parent-child communication contributed to better academic standing in their children. Boys' academic achievement was significantly linked to both mothers' and fathers' warmth in terms of support and affection, as well as their affect in communication, whereas girls' academic achievement was only significantly linked to mothers' support. The study further showed that parental warmth, autonomy support, induction and communication had a significant association with both boys' and girls' school adjustment. Moreover, gender was seen to have influenced the relationship between parenting behaviours and school adjustment. Fathers' warmth and communication had stronger association with boys' school adjustment while mothers' warmth and communication had stronger association with girls' school adjustment. Autonomy support granted by both mother and father is associated with positive school adjustment for both boys and girls. The results of the study contribute to existing research on parenting in Singapore as well as provide useful data that will enable policy makers to address key issues in the design of parenting and children programs.

Chapter 1 Introduction

The present study is an investigation of parenting behaviours as perceived by a sample of Primary Five boys and girls. The study examines three key dimensions of fathers' and mothers' parenting behaviours: warmth, control and communication, as well as children's academic efficacy and self-efficacy. This chapter provides the rationale and the purpose for the study in Singapore and the conceptual framework of the study.

In Singapore, education is about nurturing the whole child. Indeed, this is the traditional Asian understanding of the term. Education means developing the child morally, intellectually, physically, socially and aesthetically. The mission of the Ministry of Education in Singapore is to mould the future of our nation, by moulding the people who will determine the future of the nation. The vision for meeting the challenges for the future can be summed up as Thinking Schools, Learning Nation – a vision which will ensure that Singapore will be a nation of thinking and committed citizens who are capable of contributing towards Singapore's continued growth and prosperity.

Many parents wonder about the different types of parenting behaviours and practices and how these affects the child's growth and development. Indeed, parenting is a complex activity that includes many specific behaviours that work individually and together to

influence child outcomes and one important child outcome is that of academic achievement. In Singapore, the education system requires the child to put in a lot of effort into his/ her study. A child may spend up to three-quarters of his/ her day in school and after school, engaging in enrichment activities provided by the school after school hours. A child in Singapore undergoes at least 10 years of general education. This comprises 6 years of primary education, which is compulsory with effect from 1 January 2003, and 4 years of secondary education. At the primary level, pupils go through a 4-year foundation stage, from Primary 1 to 4, and a 2-year orientation stage from Primary 5 to 6. To maximise their potential, pupils are formally streamed into EM1, EM2 or EM3, according to their learning ability at the end of Primary 4. However, from end-2004, the distinction between the EM1 and EM2 streams will be removed and schools will have the autonomy to decide how best to band their pupils by ability, in ways that add the most educational value. At the end of Primary 6, all pupils would sit for the Primary School Leaving Examination (PSLE), which assess their abilities for placements in a secondary school course that suits their learning pace and aptitude (Foo and Kwok, 1999). This in turn poses a great challenge to parents who want their children to be placed in good secondary schools.

As a result, Singapore parents become increasingly concerned about their child's education and try to help out as they become more and more aware of the impact they may have on their child's academic achievements. More parents engage themselves in school activities, tried to understand the child's needs more, and interacted with teachers and other parents in school, in an attempt to help their child achieve academically.

Although there is an abundance of literature in the West on parenting, few studies have been done in Singapore on children. Recently, studies such as that of Latika (2000), Ong (1999) and Sim (1998), have attempted to fill the gap by studying perceptions of parenting and their impact on adolescent adjustments. The present study is a modest attempt to help build the literature base on parenting for children in Singapore.

Rationale for Study

Singapore, a small but affluent city-state has been hammering the importance of education to its citizens to make up for its lack of natural resources. A recent survey showed parents in Singapore spent S\$320 million a year, or about S\$1 million dollars a day, on extra tuition to boost the academic performance of their children. But another survey found that thirty three percent of 9 –12 year-olds considered life not worth living because of the fear of academic failure (Straits Times, March 2, 2001). The report further noted that "Singapore psychiatrists were swamped by children unable to take the city-state's pressure-cooker education environment that demands success". Tan Chue Tin, a consultant psychiatrist, said Singapore's competitive environment generated stress. "The school system is very result-oriented. As a result, parents become anxious and push their children to succeed, sometimes beyond their means," (the Straits Times March 2, 2001). Most of the children seeking psychiatric help were suffering from anxiety disorders and behavioural problems. As the senior Parliamentary Secretary for the community development ministry, Yu-Foo Yee Shoon, noted, the trend is disturbing, and said a secure family environment was optimal for child development. Divorces in Singapore have risen nearly 66 percent in the past decade and "this means that young children are caught in distressful marital break-ups and the problems of single parenting that follow," (Straits Times, March 2, 2001). Given this backdrop, this study hopes to shed some light on the parenting characteristics of Singaporean parents in terms of involvement, monitoring and social resources provided to

the child, and the influence they have on their children in the areas of academic achievement and self-efficacy.

In addition, the study will examine whether fathers and mothers differ in their parenting behaviours and whether these have differential outcomes. In Singapore, there have been calls on fathers to take a more active role in parenting. For instance, Soin (1996) asserted that for parenting to be effective, both the father and mother must be committed to the parenting role. She added that fathers have to move away from “traditional patriarchal attitudes whereby the home and the care of the young and the aged are considered the responsibility of women” (p. 199). This need was similarly highlighted in a study on Singapore adolescents which clearly showed that fathers make significant contributions to their adolescents’ academic achievement (Latika, 2000).

As noted by Shek (1998), an increased understanding of gender differences in parenting would have implications for parental education. Understanding how fathers and mothers differ in their parenting behaviours and noting the effects on these behaviours on children’s school competence will be helpful in the design of public education on parenting. The examination of individual parenting dimensions also makes it possible to explore the relative and independent effects of these dimensions on child outcomes (Grolnick & Ryan, 1989). By being informed about the differences in parenting characteristics in Singapore parents, professionals in the helping professions will become more aware of the need to include both parents in any intervention programmes. It is imperative that Singapore parents be empowered in their parental roles by way of public education and awareness campaigns. By looking at differences in parenting characteristics between fathers and mothers and by studying the impact of the different aspects of parenting on children’s school competence and self-efficacy, helping professionals can better tailor their counselling treatment approaches.

Thus, this study aims to explore the relationship between the perceived parental behaviours and the school competence of primary aged pupils in Singapore. It is hoped that the study will shed some light on the perceived role of parental behaviours and the school competence of children so that programs may be designed to meet the needs of parents and their primary aged child.

Purpose of the Study

The purpose of this study is primarily two-fold:

1. To compare differences in perceptions of parenting behaviours of father and mother.
2. To compare the relationship between parenting behaviours and children’s school competence in terms of academic achievement and school adjustment.

Research Questions

The study is guided by the following research questions:

1. Are there differences in children’s perceptions of parenting behaviours of father and mother?
2. Are there differences in the perceptions of parenting behaviours of father and mother according to child gender?
3. Are there differences in the perceptions of parental behaviours of father and mother according to parents’ education and family income?

4. Is there a relationship between perceptions of parenting behaviours of father and mother and children's academic achievement?
5. Is there a relationship between perceptions of parenting behaviours and children's self-efficacy?

Conceptual Framework

The conceptual model presented in Figure 1 illustrates the relationship between perceived parental behaviours and school competence. The parenting behaviours in the model are assessed in terms of parental warmth, control and support.

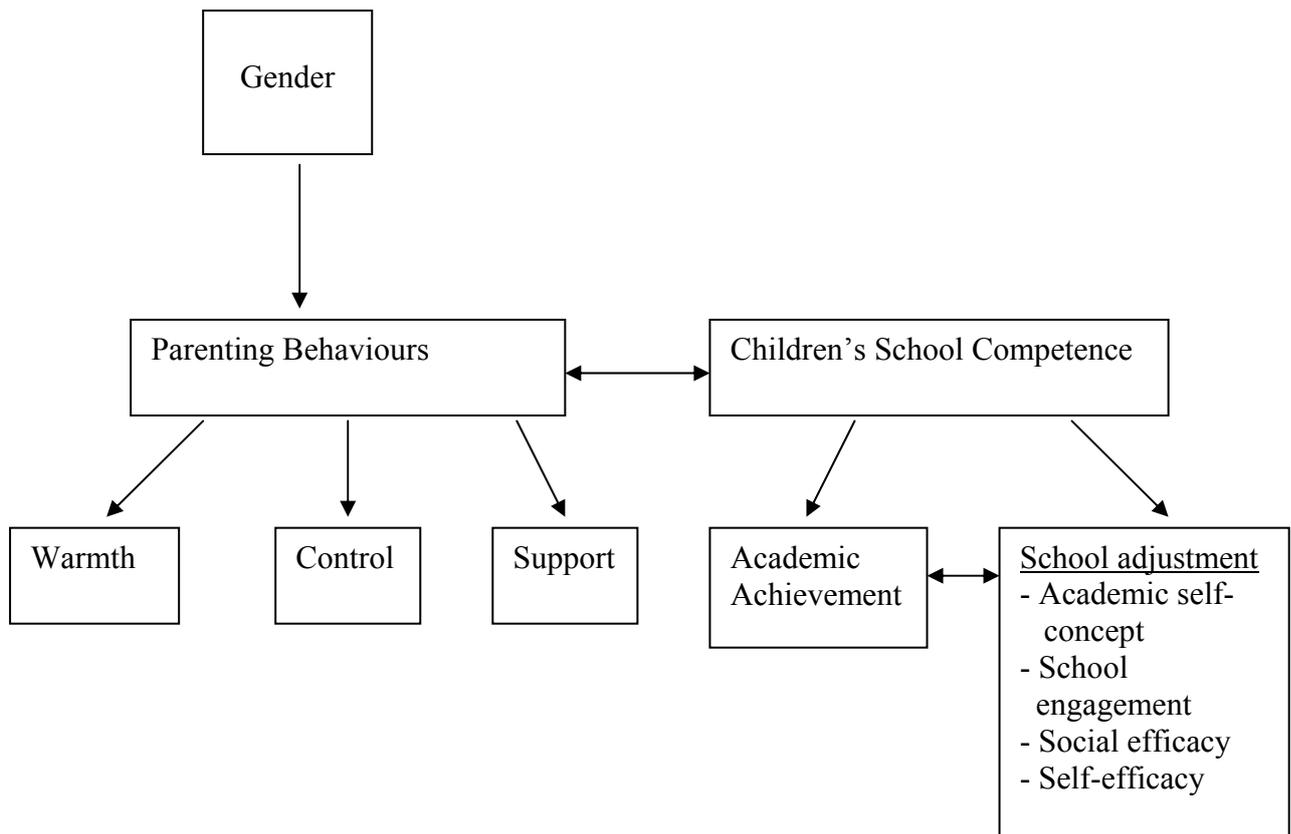


Figure 1: A Conceptual Framework

Several studies have shown the link between parenting behaviours and children's school competence. With regards to academic ability, numerous studies (Steinberg et. al., 1989; Reynolds, 1992; Dornbusch, Ritter, Liederman, Roberts & Fraleigh, 1987, Clark, 1978) have shown clearly that parental behaviours such as warmth, monitoring, involvement and control do influence children's academic performance. Similarly, the model assumes a relationship between parenting behaviours and children's self-efficacy. This is suggested by a vast amount of literature (Chen & Rubin, 1994; Crouter, MacDermid, McHale & Perry-Jenkins, 1990; Rollins & Thomas, 1979) which shows that parenting has a definite influence on the self-efficacy of children.

The influence of gender on perceptions of parenting behaviours is a significant factor considered in the present study. Research shows that parenting behaviours are moderated by the gender of the parent and the gender of the child (Collins & Russell, 1991; Ho, 1987; Easterbrooks & Goldberg, 1984). These studies support the present model's assumption that gender will influence perceptions of parenting behaviours.

The model shows that the direction of influence between parenting behaviours and children's school competence is bi-directional. This is suggested by literature that has viewed children as actively affecting the nature and outcome of parent-child relations (Maccoby & Martin, 1983; Peterson & Rollins, 1987). Such a reciprocal model assumes that a child's behaviour is as likely to influence parenting behaviours as it is to be its consequence (Gecas & Seff, 1990; Shek, 1999a).

Definition of Key Concepts

This section provides definition of key terms used in the present study.

Parenting Variables

Warmth. This refers to the responsiveness and acceptance of the parent toward the child (Linver & Silverberg, 1997).

Control. This refers to an attempt by parents to shape a child's behaviour and the extent to which these restrictions are enforced (Rohner & Pettengill, 1985). It is an attempt to modify the behaviour of another (Pettit & Bates, 1989).

Communication. This refers to the extent of openness or freedom to exchange ideas between parents and children as well as the quality or emotional tone (positive or negative) of interactions between parents and children. (Barnes & Olson, 1985).

Children Variables

School Competence. This refers to the competence achieved by the child in two main aspects: academic achievement and school adjustment.

Academic Achievement. This is defined in terms of the academic streams that the children are in. Children from the EM1 stream are assumed to have attained the highest academic achievement followed by those from the EM2 stream. Those from the EM3 stream are assumed to be the lowest in terms of academic achievement.

School Adjustment. This is defined in terms of the child's academic self-concept, school engagement, social efficacy and self-efficacy.

Academic self-concept. This refers to the child's perception of his own academic competence in relation to his peers.

School engagement. This refers to the child's attitude toward school and the extent of his involvement in class and school activities.

Social-efficacy. This is measured in terms of the child's attachment to and conflict with adults, and in terms of the child's perceived acceptance and rejection by peers.

Self-efficacy. This is defined as the belief that one can deal effectively with everyday life problems and challenges (Hoeltje, Zubrick, Siburn & Garton, 1996).

Chapter 2

Literature Review

This chapter provides a review of literature relevant to the present study. Section One presents an overview of major studies on parenting behaviors. Section Two describes research literature on the influence of gender on perceptions of parent behaviors. Section Three examines the relationship between parents behaviors and children school competence.

Section One: Major Studies on Parenting Behaviors

Each day, more than three quarters of a million adults and the world experience the joys and heartaches, the challenges and rewards of becoming new parents. Despite the fact that most people become parents and everyone who ever lived has had parents, parents remains

a somewhat mystifying subject about which almost everyone has opinions, but about which few people agree. One thing is certain, it is the primary and continuing task of parents in each generation to prepare children of the next generation for the physical, economic and psychosocial situations in which those children must survive and thrive. Many factors influence the development of children, but parenthood is the “final common pathway” to childhood oversight and care-giving, development and stature, adjustment and success.

Since Coleman et al’s (1966) controversial conclusion that family background and social context are the primary influences in determining children’s achievement, there has been a growing body of research regarding the connections between home and school. (Hess and Holloway, 1984). There is a large body of research exploring parental attitudes, child-rearing behaviors and parent-child relationship as they relate to aspects of children’s development. (Maccoby and Martin, 1983)

There has been extensive research done on difference aspects of parenting styles, that might be considered as significant factors in child development outcomes. Rohner and Rohner’s (1980) extensive review has identified parental warmth and parental control as two major parenting dimensions prevalent in difference societies that are important variables for a wide range of adjustment outcomes for children.

Maccoby and Martin (1983) in particular have shown that children whose parents were warmer were more responsive, more co-operative with adults, more socially attentive, and have greater social competence. (Baumrind, 1989)

Warmth

The warmth dimensions measures the extent to which “children experience a positive, affective, personal relationship with care-givers” (Barber, 1992). In recent years, researchers have attempted to conceptualise parental support (i.e. nurturance, attachment and acceptance) as a more multidimensional construct (Barber & Thomas, 1986; Ellis, Thomas & Rollins, 1976). Several components have been identified and differentiated in terms of their effects: general support, physical affection, and companionship (Ellis et al., 1976; Peterson, Rollins & Thomas, 1985).

General support typically includes parents’ interest in the child’s activities, spending time with children, talking with them a good deal, providing help with everyday problems and schoolwork, express enthusiasm and praise over their accomplishments, and showing love and affection (Maccoby & Martin, 1983). Parental affection is evidenced by such parenting behaviours toward a child as praising the child, expressing terms of endearment, and physical affection. Barber and Thomas (1986) found these components of support to vary by sex of parent and child: fathers are found to differentiate their physical affection and sustained contact on the basis of gender of child, with more to daughters than to sons. Both parents were found to express more companionship to the same-sex child. These components, physical affection, sustained contact and general support had differential effects on the children according to their gender. Daughters’ self-esteem is predicted by mothers’ general support and fathers’ physical affection whereas sons’ self-esteem is best predicted by mothers’ companionship and fathers’ sustained contact.

Control

Rohner and Pettengill (1985) defined parental control as the extent to which parents place constraints or limits on children’s behavior, and the extent to which these restrictions

were enforced. Different researchers have examined different aspects of control such as the degree of protectiveness, induction, coercion, autonomy support, power and assertion (Gecas and Seff, 1990). As such, the control variable is as a whole seen as a complex variable as it consists of both positive and negative forms of control.

Baumrind (1967, 1971) has also delineated two relevant dimensions, namely firm versus lax control and psychological autonomy versus psychological control. In her research, she classified parents who were high in psychological autonomy and firm control as authoritative, whereas those high in psychological control and firm control were labeled authoritarian. Children of authoritative parents were found to be more self-reliant and inept whereas those of authoritarian parents were more withdrawn and discontent. Baumrind (1971) noted that the degree and kind of control exercised by parents are related to many and subtle differences among children. Inadequate supervision and a low level of parent involvement are important contributions to poor adjustment in elementary school-aged and young adolescent boys (Capaldi and Patterson, 1991).

Several studies have noted the difficulty with the control variable. Maccoby (1986), for example, states that the effects of parental control are less consistent than those related to support or warmth. They argued that control is especially problematic because different conceptualisations and operationalizations cannot be legitimately included under one label. As a result, many researchers (e.g. Coopersmith, 1967) argue against a unidimensional conceptual of parental control. Rollins and Thomas (1979) have argued for a multidimensional view of the control construct that identifies both “coercive” (less autonomy) and “inductive” (greater autonomy) control attempts.

Supervision/ Monitoring

Baumrind (1971) has noted that the degree and kind of control exercised by parents are related to many and subtle differences among children. One of the important components of parental control is the extent of parental monitoring, supervision and strictness (Maccoby & Martin, 1983; Peterson & Rollins, 1987). Several large scale studies have found that children with parents that exercised little control or structure are more vulnerable to problem behaviours such as delinquency, or antisocial activities. Inadequate supervision and a low level of parent-involvement are important contributions to poor adjustment in elementary school-aged and young adolescent boys (Capaldi & Patterson, 1991). Linver and Silverbeg (1997) found that parental monitoring made the largest individual contribution to school grades and psychosocial maturity. But equally, too controlling families may also put children at risk from peer pressures (Fulgini & Eccles, 1993). Restrictive parenting fosters dependency and interferes with the positive effects of independence training. A good deal of control, particularly when combined with high parental support, was found to be associated with high self-esteem (Coopersmith, 1967) and instrumental competence (Baumrind, 1971) in children.

Autonomy Support

In contrast, autonomy support which is defined as the degree to which parents encourage children to make their own choices rather than apply pressure to control the children’s behaviour, is positively associated with outcomes such as self-regulation, school motivation and social development (Steinberg et al., 1989; Yee & Flanagan, 1985). Children with greater opportunity to participate in decision making at home reported greater liking for school, having greater intrinsic motivation, particularly with regard to a desire for independent mastery of academic work and a preference for challenging schoolwork than

children who reported less opportunity to participate in decision making at home (Yee & Flanagan, 1985). Given that research has found autonomy granting an important dimension in children development as children push for a more active role in the family, it is not surprising that parental overprotectiveness and a corresponding reluctance to encourage autonomy have often been found to be associated with negative psychological outcomes among children, including low self-esteem (Adams & Jones, 1983; Amoroso & Ware, 1986)

Coercive Control

The manner in which parents discipline their children has also been found to be an important factor in family functioning. Coercive discipline involves the use of force by parents, and takes the form of physical punishment and deprivation of privileges or threat or these. It focuses the child's attention on the powerful status of the parent rather than on the harmful consequences of the act that the parent opposes. Parent's use of coercion is related to the negative outcomes, such as low levels of cognitive development, moral development, self-esteem and social competence (Rollins and Thomas, 1979). The use of coercion methods of parenting combined with low levels of support, are linked to a wide range of child outcome variables, including poor peer relationships, more aggressive interactions with peer (Patterson, Reid, & Dishion, 1992). Parents' use of coercion is related to negative outcomes such as low levels of cognitive development, moral development, self-esteem, and social competence (Rollins & Thomas, 1979). However, in a study on corporal punishment and its relationship to children's psychological maladjustment, Rohner, Borque, and Elordi (1994) found that physical punishment is associated with children's psychological maladjustment only if punishment is perceived by youths as a form of parental rejection.

Induction

In contrast, induction paces rational maturity demands on children, offers explanations, and makes children aware of the consequences of their actions on themselves and others. Parents who rely on inductive approaches in discipline had children with fewer behaviour problems (Pettit, Bates, & Dodge, 1997). Results of past research primarily involving mothers has linked inductive discipline to greater self-control, enhanced communication skills, positive social interactions, and pre-social behaviors with peers (Hoffman, 1975). It may be likely that the use of calm discussion and proactive teaching may inculcate in their children a sense of respect for contrasting perspectives and a belief that disputes can be resolved through nonaversive means (Hart, DeWolf, Wozniak, & Burts, 1992), which help to promote the development of conscience (Kochanska, 1993). Quite often, parents use coercive and inductive techniques simultaneously, perhaps because they realise that the combination would offer more compliance (Smith, 1983).

Psychological Control

The last commonly researched type of parental power strategy is psychological control. Love withdrawal is a psychological technique that parents use to threaten a temporary discontinuation or withdrawal of love until the child corrects his/her behaviour. Examples of love withdrawal include ignoring, isolating, rejecting, or expressing coldness or disappointment to the child. Findings on love withdrawal have been insignificant and inconsistent (Rollins & Thomas, 1979), but Becker (1964) posited a positive relationship between maternal love withdrawal and signs of conscience and remorse after transgression in offspring only under a condition of high maternal love.

Consistency

Healthy parent-child relationships involve clear and consistent parental limit setting, which is part of a generally caring and affectionate atmosphere. Consistency in child rearing is associated with positive developmental outcomes in children (Maccoby & Martin, 1983; Thomas, Gecas, Weigert, & Rooney, 1974). On the other hand, parents who are inconsistent in their punishment of misbehaviour and who tend to threaten but seldom follow through on their threats are associated with a range of psychological and behavioural problems (Patterson, 1982).

Baumrind (1971) found that children who were high in competence tended to have parents who convey clear expectations of their responsibilities. The allocation of household responsibility to children is a positive factor in adolescent development (Baumrind, 1968). It reflects parental expectations and demands for maturity, and conveys to the children a sense that they are important members of the household. As such, it is likely to result in feelings of self-worth and self-perceptions of competence.

Coopersmith argued that the consistent enforcement of clear rules allow children to internalise a definite set of standards that facilitate the self-regulation of behaviour, and hence, the development of competence.

In summary, research has found that most powerful models of parental influence on children are those that combine the dimensions of support and control (Maccoby & Martin, 1983; Peterson & Rollins, 1987). Parents are most effective contributors of positive child outcomes when they express a high level of support and exercise inductive control. Their children are more likely to be identified with them and to internalise their values.

Communication

According to the Olson model (1985), open and frequent communication is critical in that it enables supportive affectional feelings and behaviours to be transmitted between family members. This is supported by research evidence that has shown that the quality of intrafamilial communication is a critical factor in the development of child development. Older children change their relationships with parents and develop new forms of interaction involving reduced levels of conflict. They negotiate their status in the parent-child relationship (Hunter, 1985; Hunter & Youniss, 1982) and their gains in status and control may emerge in their perceptions about the quality of their communication with parents. Adequate communication with the parents makes the child feel wanted and accepted and promotes feelings of acceptance (Elder, 1963) and is positively correlated with the individual and social adjustment of the child and negatively correlated with deviant or delinquent attitudes (Barnes & Farrell, 1992; Farrell & Barnes, 1993). These and other studies (Demo, Small & Slavin-Williams, 1987; Matteson, 1974; LaVoie, 1976) suggest that children self-esteem is promoted by parents who are accepting, who communicate with their children, and who do not regulate their children.

Despite strong evidence that supportive communication in the family is an important factor that promotes the development of social and coping skills and more positive identities among children, prior researchers have generally neglected this dimension of parenting. Some studies that were conducted in the past focused on the content of parent-adolescent communication. They found that the majority of arguments between parents and children centre on day-to-day topics such as school work, social activities and friendships, household chores, and personal hygiene (Montemayor, 1982, 1983). School performance and future career plans are reported to be frequent topics of conversations with both mothers and

fathers, but mother-child interactions, particularly those with daughters, are more likely than father-interactions, to include personal issues and practical matters, such as handling of money and achieving school goals (Youniss & Smollar, 1985).

In conclusion, research studies show that the most powerful models of parental influence on children are those that combine the dimensions of support and control (Maccoby & Martin, 1983; Peterson & Rollins, 1987). Parents can contribute effectively to positive child outcomes through a high level of support and exercise appropriate control.

Section Two: Influence of Gender on Perceptions of Parenting Behaviours

One of the major variables to be considered in parent-child research which may have important effects on parental behaviors and the socialization of children is the gender of the parent and the sex of the child. Past research done on parenting characteristics have either focused solely on maternal characteristics or aggregated maternal and paternal characteristics to get a composite parenting characteristics score. Such studies ignored the contribution made by fathers as socializing agents. More recently, researchers have begun to examine the relationship between fathers and children. Phares and Compas (1992) noted that it is important to study fathers as they play an integral part in determining the functioning of their children. The comprehensive review done on existing theories and research by Collins and Russell (1991) on socialization too noted that there is sufficient evidence to conclude that mothers and fathers provide different socialization experience for children.

Parent Gender

Several studies have proposed that mothers and fathers differs in their positions on the two most major dimensions of parenting, warmth and control (Lamb, 1981; Maccoby and Martin, 1983). Research in western societies has largely confirmed the assumptions that mothers are warmer and less controlling than fathers are. Studies have shown that mothers are seen as being more open, accepting, understanding and supportive (Johnson, Shulman and Collins, 1991; Youniss and Smollar, 1985, 1987)

Goldin (1969), in her review on children's reports of parental behavior published between 1931 and 1965, concluded that children experienced more positive about mothers than about fathers. Mothers were seen as more affectionate and less punitive than fathers, whereas both parents were perceived as equally controlling. In the meta-analytic review (Gerlsma and Emmelkamp, 1994) based on studies published between 1970 and 1990, it also reported that mothers were perceived by their children as more affectionate and controlling than fathers. Fathers were perceived as more forceful in their child-rearing techniques than mothers as demonstrated by their greater use of physical punishment; mothers, on the other hand, show a greater reliance on material punishment (Power and Shank, 1989) and are perceived as slightly more psychologically controlling than fathers (Litvosky and Dusek, 1985).

Studies done in a non-Western context also highlight differences between paternal and maternal parenting behaviours. Canetti, Bachar, Galili-Weisstub, DeNour, and Shalev (1997) noted in their study on Israeli children that mothers were perceived as more caring and controlling than fathers were. Gender differences were evident even in an Asian context (Shek, 1995a, 1998).

Among the Hong Kong Chinese, fathers were perceived to be more harsh, less concerned, less responsive and less demanding than mothers (Shek, 1998). Shek (1998) attributed this finding to the Chinese culture. While Chinese mothers were charged with basic socialisation and care giving tasks, men were regarded as being responsible in administering punishment. Ong's (1999) and Latika's (2000) studies found that Singapore mothers were perceived to be more nurturing, warm, affectionate, demanding and tended to have better communication with their children than fathers. As suggested by Canetti et al. (1997) the perception of mothers, as being more caring and more controlling could be a universal phenomenon.

Kon and Losenkov (1978) noted that girls' perceptions of fathers as less caring than mothers is stronger than that of boys. Some studies have shown that girls differentiate more between their parents and talk more to their mothers and less to their fathers than boys (Papini, Farmer, Clark, Micka, & Barnett, 1990; Youniss & Ketterlinus, 1987). In their study on Chinese families in China, Taiwan and Hong Kong, Berndt, Cheung, Lau, Hau and Lew (1993) showed that daughters found their mothers to be warmer than their fathers less often than did sons. While both sons and daughters perceived their father as having more control than their mothers have, daughters named their fathers as the less controlling parent less often than did sons. Litovsky and Dusek (1985) reported that girls perceived the mothers as being more firmly controlling than their fathers.

In general, the overall picture that had emerged from past studies is that mother-child relations tend to be close and affectionate in contrast to father-child relationships, which is marked by greater affectional distance.

Despite the vast difference in maternal and paternal availability for their children, differences in mother-child and father-child interactions may not be marked as most theories imply (Steinberg, 1987a; Forehand and Nousiainen, 1993). In their review comparing fathers' and mothers' parenting, Gerlsma and Emmelkamp (1994) concluded that perceived differences between maternal and paternal rearing style were quite small.

Children's perceptions of their mothers' and fathers' parenting behavior may in fact overlap considerably. Although little research has examined this, there is evidence that children may attribute the characteristics of one parent, possibly the dominant parent in the child's mind, to both parents. For e.g. Litovsky and Dusek (1985) found that children's perceptions of mothers' and fathers' childbearing techniques were highly co-related.

Child Gender

Researchers have also investigated whether perceptions of parenting characteristics varied according to child gender. Some of these studies suggest that perceptions of parenting characteristics are influenced by child gender. For e.g Block (1983) reported that parents are warmer towards daughters than sons and are more controlling and punitive towards sons than daughters.

More power strategies were directed to sons than daughters from their fathers (Bronfenbrenner,1961; Ferreira and Thomas,1984). Boys are expected to show independence, initiative and self-sufficiency. Consequently, they received a strong dose of parental discipline to 'build character'. In contrast, 'love-oriented' techniques are used more often with girls who in turn are expected to be compliant and dependent. A meta-analysis of the literature (Lutton and Romney,1991) however, suggested that parents do not

consistently treat daughters more warmly than they treat sons. Baumrind (1991a) noted that parents of girls displayed higher levels of monitoring, rational control and non-intrusive behavior. Other researchers have noted that boys generally report less satisfactory parental relations than do girls. They also reported that girls received more support from their parents and had more sustained contact with both parents.

Differences in boys' and girls' perceptions of parental control may arise from different interpretations attached to control (Huston, 1983). As girls are subject to closer parental supervision than are boys, hence they may be more accustomed to supervision and would less likely to view monitoring as being unnecessarily intrusive. In comparison, boys may be less accustomed to supervision and so may consider monitoring to be unnecessarily intrusive than would girls.

Compared to boys, girls perceive both mothers and fathers as more loving and less rejecting (Cox, 1970; Siegelman, 1965), and received more affection, praise and companionship than do boys (Bronfenbrenner, 1961). Other studies, however, did not find fathers to exercise a greater differential treatment of the sexes than did mothers (Power and Shank, 1989).

Some researchers have not found any differences in perceptions of parenting behaviours according to child gender. For instance, Steinberg (1987a) asserted that over a wide range of parent-child variables investigated by several studies there was a lack of evidence for consistent differences between the family relations of boys and girls. Other researchers such as Forehand and Nousiainen (1993) and Berndt et al. (1993) also supported Steinberg's observation. Berndt et al. observed that generally researchers commenting on parenting in the Chinese culture have reported that in traditional Chinese culture, the father-son and mother-son relationship were especially significant. Fathers exerted more control over their sons than daughters. Mothers were especially warm and exerted little control over sons compared to daughters. However, Berndt et al. (1993) found little evidence for such effects in their study on adults in China, Taiwan and Hong Kong.

Section Three: Relationship between Parenting Behavior and Children School Competence

Research literature has shown that parents behaviors affect children school competence in various areas (Shek, 1999a; Kurdek and Fine, 1994; Forehand and Nousiainen, 1993; Lamborn et. al, 1991). This section presents literature on the relationship between parents behavior and the children school competence variables of academic ability and school adjustment.

Academic Ability

Some researchers have noted that the dimensions of parental acceptance and firm forms of control have been positively related to school achievement. In addition, paternal dominance is consistently linked with academic achievement. Children from families characterized by low paternal dominance, or where the father felt very inadequate, were found to be low academic motivation and achievement (Franz, McClelland and Weinberger, 1991).

Research that maps out the potency of parental involvement in predicting school achievement have narrowly focused on mother-child relationships. Recently, however, there has been an increased interest in research on father's role (Marsiglio, 1993). Studies on the

salience of father's to their children's lives has found that fathers are also important for children's development and well-being (Forehand and Nousiainen, 1993; Phares and Compas, 1992). Although fathers may spend less time with their children as the children grow older, evidence suggests that the importance of fathers to children's development increases as children grow older (Thompson, 1986). In addition, fathers interact differently from mothers with their children (Parke, 1995; Lamb, 1981, 1997). Small scale and observation studies provide evidence that children and youth tend to rely upon their fathers to provide factual information whereas mothers are more involved in providing day-to-day care and emotional support and companionship (Ramey, 1996). The difference manner of interaction is associated with differential outcomes for their children's social, emotional and academic competence (Feldman and Wentzel, 1990).

In many studies, parental support and parental coercive control are identified as parental behaviors that predict academic achievement. Manscill and Rollins (1990) explain that parental support act to validate the worth of a child, while coercive behaviors disregard the child's worth. It is also likely that parental support facilitates positive academic outcomes by possibly serving as deterrent against the emergence of delinquent behavior patterns that are closely associated with academic difficulties (Dubois, Eitel and Felber, 1994).

Debaryshe (1993) found monitoring to be an important predictor of academic achievement. Crouter et al's (1990) study on families with children aged 9-12 noted the importance of parental monitoring, especially for boys. Less well-monitored boys received significantly lower grades than did other children. In their study, monitoring was related to school competence and conduct of boys but not girls. Linver and Silverberg (1997) noted that monitoring made a significant contribution to school grades when all parenting practices were examined concurrently. Grolnick and Ryan (1989) gave a possible explanations as to how monitoring may affect achievement. They stated that family environments, low in provision of guidelines for behaviors and consistent follow through on contingencies, lack structure. Structure is associated with academic outcomes because children who have a clear sense of action-outcome relations would be able to better direct their efforts in achievement related activities.

Parental involvement is also frequently associated with higher grades, if other factors are equal (Crouter et al, 1990; Stevenson and Baker, 1987).

Self-concept

Studies have found that parents who show positive affection by being warm, accepting and concerned foster the development of healthy self-concepts in their children. Acceptance and warmth conveys a feeling of value that is the basis of positive self-concepts (Rosenberg, 1965; Schuldermann and Schuldermann, 1983).

Cross-sectional studies show a positive relationship between supportive parental behavior and the self-concepts of children (Thomas and Rollins, 1984). Parental support of and involvement with their children and parental willingness are positively related to high self-concept among children. Rosenberg (1965) found that children with high self-concepts reported that their mothers knew most or all of their friends; those with middle or low self-concepts reported that their mothers knew fewer of their friends. Parents who gave positive response to their children's academic achievement had offspring with higher self-concepts. Parental support communicates a positive evaluation to the child who in turn internalizes this evaluation of his or her worth.

Social-efficacy

With regards to social efficacy, research findings have consistently indicated that parents characterized by warmth, consistency, low levels of hostility is associated with socially competent behavior, whereas inconsistency, low levels of warmth, harsh and high levels of punitiveness predicts peer rejection and aggressive anti-social forms of behavior (Dishion,1990; Feldman and Wentzel,1990). A lack of parental social support and affection may impede the development of feelings of security, trust and positive orientation towards others (Bowlby,1969). Sensitive and warm mothers are likely to help their children learn social rules and norms that facilitate social adaption (Puttallaz and Heflin,1990). A significant correlate of social efficacy is parental control. A study of preschool-aged children (Hart et al.,1992) found mothers who used power assertive discipline had children who were less preferred by peers. In analyses of children's socio-metric status, fathers and mothers of unpopular children used fewer explanations to aid their children than fathers and mothers of popular children (Roopnarine and Adams,1987), and fathers and mothers of rejected or isolated children reported more patriarchal child-rearing attitudes, used praise more infrequently than fathers and mothers of popular children (Peery, Sensen and Adams,1985).

Self-efficacy

Self-efficacy is another variable that indicates children school competence. Bandura (1977) defined self-efficacy as the 'conviction that one can successfully execute the behavior required to produce the outcome' (P.193). It reflects 'the belief of being able to control challenging environmental demands by means of taking adaptive action' (Zhang and Schwarzer,1995,p.174) Hoeltje. et al.'s study on generalized self-efficacy noted that stronger self-efficacy has been shown to occur in families where parenting behavior are nurturing rather than punitive/rejecting. Furthermore, their finding that stronger generalized self-efficacy was associated with fewer mental health problems and higher academic achievement highlights the importance of paying more attention to how self-efficacy is influenced by parental behaviors. The relationship between parental control and self-efficacy is not clear. As such, it would be informative to examine the relationship between self-efficacy and parental control as measured by parental strictness.

Conclusion

Extensive research exists on the importance of parental involvement but relatively few studies have discussed the individual contributions that mothers and fathers make to their children's school adjustment. Researchers have tended to limit the study of families to the mother-child dyad and to examine the effects of mothers on their children. Increasingly, psychologists are reaching the conclusion that fathers, as well as mothers, influence children's social, emotional, and cognitive development. Phares and Compas (1992) have concluded that variables related to fathers (e.g. father-child relationships)account for variance in children adjustment that is not captured by mother-related variables. Omitting father data has been shown to produce misleading results regarding mothers' impact on child adjustment (Compas, Howell, Phares, Williams, & Giunta, 1989).

This study seeks to examine differences between paternal and maternal parenting behaviours, and the implications that these differences might have on children school competence. It attempts to provide an even inclusion of parenting variables in assessing their associations with school competence outcomes.

Chapter 3 Methodology

This chapter presents the research design, the sample, instrumentation, conduct of the study and the statistical analysis of data used in this study.

Research Design

The study adopted a quantitative, cross-sectional survey research design. Though it is acknowledged that qualitative methods such as interviews and observational studies would provide in-depth information, the quantitative method was used for this study for convenience and practical purposes. A cross-sectional research design was used, as the intention of the study was to examine perceptions of a sample of students at one point in time.

The Sample

A total of 177 Primary Five pupils from two schools participated in this study. Primary Five students were chosen because they would have already been streamed according to EM1, EM2, or EM3. Another consideration was that Primary Five is not considered to be a crucial year of study for the child. Primary Six students will be preparing for their PSLE exam while Primary Four students will be too young to answer the questionnaire. Thus, Primary Five was decided to be the most suitable level to conduct a survey on perceived parental behaviours and school competency. The sample of students were drawn from Primary Five students who had been streamed according to their intellectual ability, as measured in the standardized exam taken at the end of Primary Four.

One of the considerations for the selection of the schools for the study was the ease of access to the sample. The researcher contacted two schools to seek approval to conduct the study. One of the schools, Bukit View Primary School, is a government school, and is also the primary school the researcher is teaching in. The other school, Tao Nan Primary School, is a government-aided school, and is chosen as the researcher had a friend teaching there. Contacts were made through emails and telephone calls to arrange for the questionnaires to be delivered to the schools.

There were 86 males and 91 females in the sample. Table 1 shows the gender distribution according to the two schools. Bukit View Primary has slightly more girls (51) than boys (46), while Tao Nan Primary has an equal number of girls and boys.

Table 1: *Distribution of Sample by School and Sex*

School	Girls	Boys	<u>N</u>	Percentage
Bukit View Primary School	51	46	97	54.80
Tao Nan Primary School	40	40	80	45.20
Total	91	86	177	100.0

In contrast to the total sample, which had an almost equal number of boys and girls, the gender distribution according to the three streams was not as equally distributed for EM1 stream (see Table 2). The number of girls in EM1 stream is 40 while the number of boys in EM1 stream is 28. The number of girls and boys in EM2 and EM3 streams are more equally distributed, with 34 girls and 36 boys in EM2 stream and 17 girls and 22 boys in EM3 stream.

Table 2: *Distribution of Sample by Sex and Academic Streams*

Academic Stream	Girls	Boys	Total	Percentage
EM1	40	28	68	38.42
EM2	34	36	70	39.55
EM3	17	22	39	22.03
Total	91	86	177	100.0

Table 3 shows the distribution of the sample by age. The children ranged from ages 10 to 13 years, with a mean age of 10.71 (SD = 0.68). The majority of the children are either 10 or 11 years of age.

Table 3: *Distribution of Sample by Age*

Age	N	Percentage
10	67	37.85
11	99	55.93
12	5	2.82
13	6	3.40
Total	177	100.0

Table 4 presents the sample distribution by race. Of the different ethnic groups in the sample. The majority were Chinese (75.7%), while Malays, Indians and others represented 15.3%, 7.9% and 1.1% respectively.

Table 4: *Distribution of Sample by Race*

Race	N	Percentage
Chinese	134	75.71
Malay	27	15.25
Indian	14	7.91
Others	2	1.13
Total	177	100.0

Table 5 shows the distribution of sample by School and Stream. Both schools have almost the same number of students in EM1 and EM2, with a slightly lower number in EM3.

Table 5: *Distribution of Sample by School and Stream*

School	EM1	EM2	EM3	Total	Percentage
Bukit View Primary School	38	40	19	97	54.80
Tao Nan Primary School	30	30	20	80	45.20
Total	68	70	39	177	100.0

Instrumentation

Research using the survey approach to examine parenting characteristics have generally surveyed parents, and/ or children or used multi-informants. Though there are advantages of conducting research using any of these approaches, only self-reports of children's perceptions were solicited for this study. Although multi-informant approaches would give a more reliable picture of parent-child relationships, such approaches however, require much time and effort. Self-report questionnaires were used mainly due to its convenience and relatively lesser use of time.

The present study consists of three parts. These are:

- 1) Background Information
 - 2) Parenting Behaviours
 - 3) Children School Competence
- Each part is described below.

(1) Background Information

The first part of the questionnaire sought the biographical data of the respondents in terms of sex, age, race, religion, nationality, academic stream and school type. It also queried about the respondents' family background in terms of parents' educational levels, occupation and monthly income.

(2) Parenting Behaviours

There are three parenting scales which comprises 40 items measuring children's perceptions of their parenting behaviours on three dimensions - warmth, control and communication. All three scales were taken from Ong's parenting instrument (1999). Her warmth scale comprises items taken or adapted from existing measures (e.g. Schaefer's Report of Parental Behaviour Inventory, 1956; the Child Parental Acceptance-Rejection Questionnaire (PARQ), Rohner, 1984). Items were selected or developed to approximate the warmth and control dimension suggested by Baumrind (1976) and Maccoby and Martin (1983). Ong developed a third scale to measure parent-child communication as previous research (Youniss & Ketterlinus, 1987) suggests that this dimension is particularly important in parent-child relationship.

The warmth scale consists of subscales: affection and support. The affection subscale comprises 5 items, which measured children's perception of the extent to which they experience their mother or father as loving, intimate and expressive of affection in words and actions. Questions include, "My mother/ father speaks to me with a warm and friendly voice", "My mother/ father shows that she/ he loves me through her/ his words and actions", "My mother/ father says nice things about me", "My mother/ father tries to be understanding when I am upset about something" and "My mother/ father acts as if she/ he doesn't care about me". The parental support subscale comprises 9 items, which assumed the extent of children's perception of father/ mother as providing emotional and resource support in their everyday life. The items measure both positive and negative aspects of parental support (reverse coding). For example, "My mother/ father spends time doing things for me", "My mother/ father does not seem to understand what I need or want", "I can always turn to my mother/ father for advice when I have problems", "My mother/ father shows an interest in what I do (everyday activities, school events, etc.)", "I cannot depend on my mother/ father for help when I am in trouble", "My mother/ father doesn't care if I have a good or bad grade in my examination", "My mother/ father encourages me to do my best in whatever I do", "If my mother/ father knows something is bothering me, she'll/ he'll ask me about it", and "My mother/ father is too busy to bother about me".

The Parental Control scale measures parental discipline. It has 5 subscales which measured negative parenting: parental strictness, parental inconsistency, coercive control, love withdrawal and guilt inducing and two subscales which measured positive parenting: autonomy support and induction method.

The strict control subscale includes 5 items measuring parental supervision and control versus lax discipline. For example, "My mother/ father does not lay down rules for me to follow", "My mother/ father lets me do just about anything I want", "My mother/ father has

too many rules and restrictions around the house”, “My mother/ father does not know who I mix around with or what I do after school”, and “My mother/ father is always checking on my daily activities (where I go, what I do, whom I am with)”.

The parental inconsistency subscale measures the extent of rules inconsistency in parenting. For example, “My mother/ father punishes me for doing something wrong one day, but ignores the same mistake on another day”, “My mother/ father often changes the rules I am supposed to follow”.

The coercive control subscale measures the extent to which parents use power assertive methods to discipline their children. Items include, “My mother/ father uses physical punishment on me when I disagree with her/ him” and “My mother/ father forces me to do what she/ he thinks is right even when I disagree with her/ him”.

The love withdrawal subscale measures the extent to which parents use love withdrawal methods in parenting. Items for the love withdrawal subscale includes, “When I upset my mother/ father, she/ he shows her/ his displeasure by being cold and distant, or refusing to talk to me” and “My mother/ father acts as if she/ he doesn’t care for me whenever I upset her/ him”.

Two items measures the extent of guilt-inducing: “My mother/ father says if I love her/ him, I’d do what she/ he wants me to do” and “My mother/ father makes me feel guilty for letting her/ him down”.

The autonomy support subscale and the induction subscale measure the extent to which parents use positive discipline in parenting. Items in these subscales include, “I know what my mother/ father expects of me and how she/ he wants me to behave”, “My mother/ father encourages me to make my own decisions”, “When my mother/ father disciplines me, she/ he would explain why”, and “When my mother/ father wants me to do something, she/ he explains why”.

The Communication scale measures the quality of affect in the parent-child interactions as well as the extent of openness with father/ mother. The extent of self-disclosure in communication is measured by 3 items: “When I am happy or unhappy about something, I always share it with my mother/ father”, “I can talk with my mother/ father about general things, e.g. hobbies, movies, TV, school, etc.” and “I am not comfortable to talk to my mother/ father about personal things, e.g. boy-girl relationship”. The quality of affect in parent-child interactions is measured by 3 other items: “I often end up arguing and disagreeing with my mother/ father when I try to talk to her/ him”, “My mother/ father criticises me more often than I deserve” and “My mother/ father does not get irritated or annoyed when we discuss things”.

(3) Children School Competence

The school competence scale is a composite scale assessing academic self-concept, school engagement, social efficacy and self-efficacy. Academic achievement was assessed based on the class stream of the pupil.

The academic self-concept subscale was derived from five items measuring feelings of competence with schoolwork (e.g. satisfaction with school performance, self-perception of own competence as well as perception of teachers’ evaluation, and ability to keep up with

schoolwork) (Ong, 1999). The school engagement scale comprises five items that measures the extent of engagement or disaffection with school. They include involvement in class/school activities, involvement with classmates and attitude towards school (Ong, 1999).

The social efficacy subscale measures the child's perception of his/her ability to relate to peers as well as adults (Ong, 1999). Items include the ability to get along with classmates, teachers and adults, and involvement in school excursions.

The self-efficacy subscale measures the child's perception of his/her ability to deal effectively with everyday life problems and challenges (Ong, 1999). Items include, "I talk to other people about my problem so as to help me sort it out", "I worry about what will happen to me", and "I look on the bright side of things and think of all that is good". The raw scores for all items were summed to give a total score. Higher scores indicated higher self-efficacy.

Procedure

The questionnaires were delivered and handed to teachers with clear instructions for the teachers and primary 5 pupils in EM1, EM2 and EM3. The students were assured confidentiality of the data. To ensure anonymity, the students were not required to write their names on the questionnaire. A total of 180 forms were collected. Those that had incomplete or missing data were discarded, resulting in a final sample of 177 respondents. Cronbach's Alpha was used to test the reliability of the different measures. The reliability coefficients for parenting scales ranged from 0.62 to 0.88 (Ong, 1999), while the reliability coefficients for school adjustment scales were approximately 0.65 (Ong, 1999). The reliability coefficients for social and self-efficacy were 0.62 and 0.66 respectively (Ong, 1999).

Statistical Analysis

Subjects responded to each of the question on a 4-point Likert Scale: A = Never True; B = Seldom True; C = Quite True; D = Always True. The four-point Likert Scale would then be coded as A = 1, B = 2, C = 3, D = 4. Higher scores indicated greater positive perception of the specific parenting behaviour. The coding of the question that illustrated negative communication would then be reversed to indicate A = 4, B = 3, C = 2, D = 1, with the higher scores to indicate a positive perception of the specific parenting behaviour. Coding of the data was done manually. The SPSS computer programme was used to record, score and analyse all the responses. Comparisons of parenting behaviours were made across gender and academic achievement, with parenting behaviour as the dependent variable. Correlational coefficients were calculated to investigate within-parent and between-parent comparisons of parenting behaviours, and to examine the relationship between parenting behaviours and school adjustment, parenting behaviours and social efficacy, and parenting behaviours and self-efficacy, according to child gender. The results, together with their test statistics and level of significance, are reported in the next chapter.

Chapter 4 Results

This chapter presents the results of the main research findings relevant to the study. The results are presented in two sections. Section One presents children's perceptions on parents' behaviours as well as differences in parental behaviours according to gender. Section Two presents the relationship between parenting behaviours and children's school competence.

Section One: Children's Perceptions of Parenting Behaviours

Investigations on children's perceptions of parenting behaviours were carried out in several ways. Pearson correlation analyses were used to examine the intra-correlations and inter-correlations among parenting behaviours. Paired samples t-tests were carried out to compare perceptions of fathers' and mothers' parenting behaviours. Independent sample t-tests were also carried out to examine gender differences in perceptions of parenting. One-way ANOVA and Tukey's post-hoc tests were performed to investigate academic achievement according to parenting behaviours, and correlations were used to examine the relationship between parenting behaviours and children's school competence.

Perceptions of Parenting Behaviours of Fathers and Mothers

Correlational analysis showed that fathers and mothers who were perceived as warm were autonomy supporting and open in their communication with their children.

Table 6: *Intra-Correlations among Parenting Behaviours*

	Mothers' Warmth		Fathers' Warmth
Mothers' Affection	.87**	Fathers' Affection	.90**
Mothers' Support	.95**	Fathers' Support	.96**
Mothers' Control	.26**	Fathers' Control	.30**
Mothers' Strictness	.13	Fathers' Strictness	.20**
Mothers' Autonomy Support	.70**	Fathers' Autonomy Support	.62**
Mothers' Rules Inconsistency	-.29**	Fathers' Rules Inconsistency	-.24**
Mothers' Coerciveness	-.37**	Fathers' Coerciveness	-.24**
Mothers' Love Withdrawal	-.35**	Fathers' Love Withdrawal	-.32**
Mothers' Guilt Inducing	-.31**	Fathers' Guilt Inducing	-.16*
Mothers' Induction	.62**	Fathers' Induction	.62**
Mothers' Communication	.68**	Fathers' Communication	.68**
Mothers' Range	.54**	Fathers' Range	.62**
Mothers' Affect	.61**	Fathers' Affect	.43**

**Correlation is significant at $p < .01$ level (2-tailed)

*Correlation is significant at $p < .05$ level (2-tailed)

Mothers' warmth is significantly positively correlated with mothers' control ($r = .26$, $p < .01$) and communication ($r = .68$, $p < .01$). Mothers' warmth is significantly negatively related to mother's inconsistency in rules ($r = -.29$, $p < .01$), coerciveness ($r = -.37$, $p < .01$), love withdrawal ($r = -.35$, $p < .01$) and use of guilt ($r = -.31$, $p < .01$), but significantly positively related to mothers' autonomy support ($r = .70$, $p < .01$) and induction ($r = .62$, $p < .01$). Similar results are shown for fathers. Fathers' warmth is significantly positively correlated with fathers' control ($r = .30$, $p < .01$) and communication ($r = .68$, $p < .01$). Fathers' warmth is significantly negatively related to fathers' inconsistency in rules ($r = -.24$, $p < .01$), coerciveness ($r = -.24$, $p < .01$), love withdrawal ($r = -.32$, $p < .01$) and use of guilt ($r = -.16$, $p < .01$), but significantly positively related to fathers' strictness ($r = .20$, $p < .01$), autonomy support ($r = .62$, $p < .01$) and induction ($r = .62$, $p < .01$). The findings indicate that parents who are perceived to be warm were less likely to use negative parenting (e.g. inconsistency in rules, coercion, love withdrawal and guilt-inducing) in disciplining their children. The findings also suggests that parents who are perceived to be warm were also likely to use positive parenting (e.g. autonomy support and induction) to monitor their

children's activities, as well as enjoy an openness in communication with their children. Next, an inter-correlation comparison of mothers' and fathers' parenting behaviours was performed (Table 7).

Table 7: Inter-Correlations between Mothers' and Fathers' Parenting Behaviours

Mother Parenting Behaviours														
Father Parenting Behaviours	Warmth	Affection	Support	Control	Strictness	Autonomy support	Rules inconsistency	Coercion	Love withdrawal	Guilt	Induction	Communication	Range	Affect
Warmth	.59**	.47**	.59**	.21**	.02	.43**	-.10	-.22**	-.08	-.18*	.41**	.47**	.39**	.41**
Affection	.52**	.48**	.48**	.26**	-.03	.39**	.01	-.16*	.002	-.12	.41**	.39**	.34**	.33**
Support	.58**	.43**	.60**	.16*	.05	.41**	-.17*	-.23**	-.13	-	.37**	.47**	.38**	.42**
Control	.26**	.21**	.26**	.52**	.23*	.27**	.23**	.19**	.01	.05	.33**	.20**	.21**	.13
Strictness	.15*	.03	.20**	.22**	.47*	.01	-.06	.09	-.16*	-.03	.11	.18*	.15*	.16*
Autonomy support	.55**	.50**	.52**	.29**	.07	.60**	-.09	-.23**	-.17*	-	.39**	.40**	.31**	.37**
Rules inconsistency	-.19*	-.10	-.22**	.19*	-.14	-.09	.63**	.17*	.25**	.002	.000	-.13	-.001	-.23**
Coercion	-.20**	-.18*	-.18*	.25**	.10	-.16*	.26**	.48**	.10	.19*	-.02	-.27**	-.13	-.32**
Love withdrawal	-.23**	-.16*	-.24**	.20**	-.06	-.09	.27**	.34**	.29**	.19*	-.11	-.16*	-.10	-.18*
Guilt	-.18*	-.19**	-.15*	.13	-.003	-.08	.004	.11	.14	.46*	-.03	-.16*	-.17*	-.09

Induction	.52**	.45**	.49**	.32**	.09	.38**	-.01	-.11	-.14*	-.11	.53**	.44**	.36**	.38**
Communication	.39**	.28**	.42**	.11	.07	.27**	-.12	-.19**	-.11	-.11	.26**	.51**	.41**	.45**
Range	.33**	.23**	.35**	.19**	.10	.25**	-.03	-.08	-.10	-.08	.27**	.43**	.42**	.30**
Affect	.28**	.19**	.29**	-.04	-.003	.15*	-.17*	-.23**	-.07	-.10	.12	.36**	.21**	.40**

**Correlation is significant at $p < .01$ level (2-tailed)

* Correlation is significant at $p < .05$ level (2-tailed)

Mothers' warmth is positively correlated with fathers' warmth. ($r = .59, p < .01$), which indicates that children who perceived their mother as warm were likely to perceive their fathers in similar ways. Mothers' control was also positively correlated in fathers' control ($r = .52, p < .01$). Similarly, mothers' communication was also positively correlated with fathers' communication ($r = .51, p < .01$).

Differences between children's perception of their mothers' and fathers' parenting behaviours were next examined using paired sample t-tests. The results are presented in Table 8.

Table 8: Comparison of Mothers' and Fathers' Parenting Behaviours (N = 177)

	Mother		Father		T value
	Mean	SD	Mean	SD	
Warmth	45.29	(7.25)	43.76	(8.01)	2.95***
Affection	16.57	(2.96)	16.23	(3.21)	1.44
Support	28.72	(4.86)	27.52	(5.28)	3.50****
Control	50.38	(5.35)	49.22	(6.05)	2.77**
Strictness	13.33	(2.54)	12.51	(2.55)	4.17****
Autonomy	14.57	(2.98)	14.59	(2.77)	-1.11
support					
Rules	3.45	(1.52)	3.46	(1.53)	-1.11
inconsistency					
Coercion	4.13	(1.62)	3.88	(1.63)	1.99*
Love	3.90	(1.66)	3.59	(1.60)	2.17*
Withdrawal					
Guilt-	4.87	(1.42)	4.96	(1.33)	-0.87
Inducing					
Induction	6.10	(1.76)	6.19	(1.75)	-0.72
Communication	17.46	(3.59)	16.97	(3.24)	1.91
Range	8.59	(2.17)	7.93	(2.27)	3.64****
Affect	8.86	(2.05)	9.03	(1.86)	-1.05

* $p < .05$ ** $p < .01$ *** $p < .005$ **** $p < .001$

Table 8 showed that there were significant differences between mothers and fathers on two parenting dimensions. Mothers were significantly warmer ($t = 2.95, p < .005$) and more supportive ($t = 3.50, p < .001$) than fathers. At the same time, mothers were also found to be significantly more controlling ($t = 2.77, p < .01$) and stricter ($t = 4.17, p < .001$) than fathers. Mothers are also more likely to use coercion ($t = 1.99, p < .05$) and love withdrawal ($t = 2.17, p < .05$) methods in their parenting than fathers. On the communication dimension, mothers are significantly more open in their communication with their children compared to fathers especially on range ($t = 3.64, p < .001$), although no significant differences were found for affect. On the whole, these findings are consistent with existing research literature that mothers are perceived to be more nurturing and demanding than fathers (Shek, 1998).

Gender Differences in Perceptions of Parenting Behaviours

Gender differences in the perceptions of parenting behaviours were examined in two ways. First, differences were examined according to the gender of the parent for boys and girls separately (see Table 9). Next differences were examined according to the children's gender (see Table 10).

Table 9: *Boys' and Girls' Perceptions of Fathers' and Mothers' Parenting Behaviours.*

		Mother		Father		T value
		Mean	SD	Mean	SD	
Warmth	Boys	44.34	(7.08)	42.99	(7.81)	1.86
	Girls	46.21	(7.33)	44.49	(8.16)	2.29*
Affection	Boys	16.15	(3.03)	15.87	(3.17)	.79
	Girls	16.96	(2.85)	16.56	(3.22)	1.25
Support	Boys	28.18	(4.70)	27.11	(5.26)	2.24*
	Girls	29.24	(4.99)	27.92	(5.30)	2.68**
Control	Boys	50.65	(5.03)	50.48	(4.56)	.38
	Girls	50.13	(5.64)	48.04	(6.99)	3.10***
Strictness	Boys	13.63	(2.52)	13.19	(2.20)	1.64
	Girls	13.05	(2.54)	11.88	(2.71)	4.17****
Autonomy support	Boys	14.19	(2.87)	14.51	(2.51)	-1.20
	Girls	14.93	(3.06)	14.67	(3.00)	.88
Rules inconsistency	Boys	3.62	(1.54)	3.56	(1.55)	.39
	Girls	3.29	(1.48)	3.37	(1.51)	-.56
Coercion	Boys	4.28	(1.69)	4.20	(1.68)	.46
	Girls	3.98	(1.54)	3.58	(1.52)	2.28*
Love Withdrawal	Boys	3.92	(1.59)	3.77	(1.61)	.75
	Girls	3.89	(1.73)	3.42	(1.57)	2.25*
Guilt-inducing	Boys	5.04	(1.13)	4.94	(1.19)	.69
	Girls	4.71	(1.63)	4.98	(1.45)	-1.63
Induction	Boys	5.94	(1.81)	6.27	(1.50)	-1.65
	Girls	6.24	(1.70)	6.11	(1.96)	.84
Communication	Boys	17.04	(3.51)	16.97	(3.21)	.21
	Girls	17.85	(3.63)	16.97	(3.29)	2.41*
Range	Boys	8.28	(2.10)	8.24	(1.99)	.16
	Girls	8.89	(2.20)	7.65	(2.49)	4.77****
Affect	Boys	8.76	(2.10)	8.72	(2.04)	.15
	Girls	8.95	(2.01)	9.32	(1.63)	-1.66

* $p < .05$ ** $p < .01$ *** $p < .005$ **** $p < .001$

From Table 9, the results showed significant differences in girls' perceptions of mothers' and fathers' parenting behaviours but no significant differences in boys' perceptions of mothers' and fathers' parenting behaviours, except in the parents' support dimension. Girls perceived mothers as significantly warmer than fathers ($t = 2.29$, $p \leq 0.05$). Boys did not perceive mothers as significantly warmer than fathers, although the mean score for mothers was higher than for fathers. Boys, however, perceive mothers to be significantly more supportive than fathers ($t = 2.24$, $p < .05$). Differences in perceptions of mothers' and fathers' warmth were greater for girls than boys, indicating that girls, compared to boys, were more likely to view their mothers as being more affectionate and supportive than their fathers.

Girls perceived mothers as significantly more controlling ($t = 3.10$, $p < .005$) and stricter ($t = 4.17$, $p < .001$) than fathers whereas no significant difference was noted in boys'

perception of mothers' and fathers' control. Differences in perceptions of mothers' and fathers' control were greater for girls than boys, indicating that girls, compared to boys, were more likely to view their mothers as being the more controlling and stricter parent than fathers. Girls also perceived mothers to use more coercion ($t = 2.28$, $p < .05$) and love withdrawal ($t = 2.25$, $p < .05$) techniques in parenting than fathers.

On the communication dimension, girls also perceived mothers as significantly more communicative than fathers ($t = 2.41$, $p < .05$), whereas boys did not perceive mothers as significantly more communicative than fathers. The extent of self-disclosure to mothers was also significantly greater compared to fathers for girls ($t = 4.77$, $p < .001$). Overall, the findings for the warmth, control and communication dimensions suggested that girls were more likely to view their mothers as being warmer, more controlling and more communicative than their fathers compared to boys.

Independent sample t-tests were performed next to find if parenting behaviours differed according to children gender. The results were shown in Table 10.

Table 10: *Differences between Mothers' and Fathers' Parenting Behaviour according to Children's Gender*

	Boys		Girls		T value
	Mean	SD	Mean	SD	
Mothers' Warmth	44.34	(7.08)	46.21	(7.33)	-1.72
Mothers' Affection	16.15	(3.03)	16.96	(2.85)	-1.83
Mothers' Support	28.18	(4.70)	29.24	(4.99)	-1.44
Fathers' Warmth	42.99	(7.81)	44.49	(8.16)	-1.25
Fathers' Affection	15.87	(3.17)	16.56	(3.22)	-1.44
Fathers' Support	27.11	(5.26)	27.92	(5.30)	-1.01
Mothers' Control	50.65	(5.03)	50.13	(5.64)	0.65
Mothers' Strictness	13.63	(2.52)	13.05	(2.54)	1.50
Mothers' Autonomy support	14.19	(2.87)	14.93	(3.06)	-1.63
Mothers' Rules inconsistency	3.62	(1.54)	3.29	(1.48)	1.43
Mothers' Coercion	4.28	(1.69)	3.98	(1.54)	1.21
Mothers' Love Withdrawal	3.92	(1.59)	3.89	(1.73)	.12
Mothers' Guilt-Inducing	5.04	(1.13)	4.71	(1.63)	1.52
Mothers' Induction	5.94	(1.81)	6.24	(1.70)	-1.14
Fathers' Control	50.48	(4.56)	48.04	(6.99)	2.72**
Fathers' Strictness	13.19	(2.20)	11.88	(2.71)	3.50***
Fathers' Autonomy support	14.51	(2.51)	14.67	(3.00)	-0.40
Fathers' Rules inconsistency	3.56	(1.55)	3.37	(1.51)	.84
Fathers' Coercion	4.20	(1.68)	3.58	(1.52)	2.58*
Fathers' Love Withdrawal	3.77	(1.61)	3.42	(1.57)	1.46
Fathers' Guilt-Inducing	4.94	(1.19)	4.98	(1.45)	-0.18
Fathers' Induction	6.27	(1.50)	6.11	(1.96)	.61
Mothers' Communication	17.04	(3.51)	17.85	(3.63)	-1.49
Mothers' Range	8.28	(2.10)	8.89	(2.20)	-1.87
Mothers' Affect	8.76	(2.10)	8.95	(2.01)	-0.63
Fathers' Communication	16.97	(3.21)	16.97	(3.29)	-0.007
Fathers' Range	8.24	(1.99)	7.65	(2.49)	1.74
Fathers' Affect	8.72	(2.04)	9.32	(1.63)	-2.15*

* $p < .05$ ** $p < .01$ *** $p < .001$

The results showed that there were significant differences for fathers in that they demonstrated more control ($t = 2.72$, $p < .01$), strictness ($t = 3.50$, $p < .001$) and coercion ($t = 2.58$, $p < .05$) toward sons than daughters. On the communication dimension, fathers were perceived to show more affect ($t = -2.15$, $p < .05$) towards daughters than sons. There were no other significant gender differences in the perceptions of parents' parenting behaviours according to children gender.

As a whole, the results of the section showed that parents who are warm were also high in autonomy support, induction and communication, but low in rules inconsistency, coercion, love withdrawal and guilt. Both parents were also perceived to exhibit similar parenting behaviours. However, mothers were perceived to be significantly more warm, controlling and communicative than fathers. T-tests results revealed that mothers were significantly perceived to be more warm, supportive, controlling and communicative than fathers by girls, whereas mothers were perceived to be more supportive than fathers by boys. Fathers were significantly perceived by boys more than girls to be more controlling, stricter and coercive whereas fathers were significantly perceived by girls more than boys to show more affect in communication.

Section Two: Relationship between Parenting Behaviours and Children's School Competence

The relationship between parenting behaviours and children's school competence were examined first for academic achievement and then for school adjustment, social efficacy and self-efficacy.

Relationship to Academic Achievement

Investigation on academic achievement according to mothers' and fathers' parenting behaviours were carried out using One-way ANOVAs and Tukey's post-hoc comparisons. Similar tests were performed to investigate boys' and girls' academic achievement according to parenting behaviours.

Table 11: *Comparison of Mothers' and Fathers' Parenting Behaviours according to Children's Academic Achievement (N = 177)*

	EM1 (n = 68)		EM2 (n = 70)		EM3 (n = 39)		F value
	Mean	SD	Mean	SD	Mean	SD	
Mothers' Warmth	47.20 ^a	(6.11)	45.72 ^b	(7.21)	41.21 ^{a, b}	(7.68)	9.50****
Mothers' Affection	16.86	(2.61)	16.88	(2.69)	15.50	(3.73)	3.34*
Mothers' Support	30.33 ^a	(3.95)	28.84 ^b	(5.15)	25.71 ^{a, b}	(4.46)	12.72****
Fathers' Warmth	45.18 ^a	(7.49)	44.53 ^b	(7.51)	39.89 ^{a, b}	(8.66)	6.30***
Fathers' Affection	16.53	(2.92)	16.44	(3.08)	15.32	(3.76)	2.04
Fathers' Support	28.65 ^a	(4.92)	28.08 ^b	(5.08)	24.57 ^{a, b}	(5.25)	8.74****
Mothers' Control	50.66	(4.59)	49.56	(5.55)	51.36	(6.06)	1.57
Mothers' Strictness	13.35	(2.44)	13.28	(2.74)	13.39	(2.37)	.02
Mothers' Autonomy support	15.01 ^a	(2.84)	14.72	(2.94)	13.55 ^a	(3.15)	3.17*
Mothers' Rules inconsistency	3.23 ^a	(1.38)	3.27 ^b	(1.44)	4.16 ^{a, b}	(1.70)	5.72***
Mothers' Coercion	4.05	(1.58)	3.90 ^a	(1.69)	4.67 ^a	(1.47)	2.95
Mothers' Love Withdrawal	4.06	(1.65)	3.55	(1.52)	4.27	(1.82)	2.93
Mothers' Guilt-Inducing	4.61	(1.25)	4.89	(1.46)	5.27	(1.55)	2.73
Mothers' Induction	6.31	(1.63)	5.93	(1.78)	6.02	(1.95)	.86
Fathers' Control	49.32	(5.54)	48.77	(6.92)	49.85	(5.22)	.40
Fathers' Strictness	12.75	(2.61)	12.12	(2.65)	12.83	(2.20)	1.42
Fathers' Autonomy support	14.96	(2.85)	14.59	(2.85)	13.96	(2.40)	1.61

Fathers' Rules inconsistency	3.25	(1.26)	3.44	(1.69)	3.88	(1.61)	2.09
Fathers' Coercion	3.65	(1.30)	4.02	(1.90)	4.04	(1.60)	1.09
Fathers' Love Withdrawal	3.42 ^a	(1.22)	3.37 ^b	(1.69)	4.27 ^{a, b}	(1.86)	4.77*
Fathers' Guilt-Inducing	4.78	(1.26)	5.09	(1.39)	5.04	(1.33)	1.03
Fathers' Induction	6.48	(1.58)	6.12	(1.80)	5.80	(1.88)	1.96
Mothers' Communication	18.17 ^a	(3.69)	17.58	(3.37)	15.95 ^a	(3.39)	5.03***
Mothers' Range	8.75	(2.22)	8.71	(2.05)	8.11	(2.25)	1.22
Mothers' Affect	9.42 ^a	(1.83)	8.87 ^b	(2.05)	7.84 ^{a, b}	(2.08)	7.93****
Fathers' Communication	17.85 ^a	(2.98)	16.70	(3.47)	15.89 ^a	(2.87)	5.14***
Fathers' Range	8.35	(1.98)	7.75	(2.39)	7.55	(2.47)	1.92
Fathers' Affect	9.50 ^a	(1.43)	8.95	(2.16)	8.33 ^a	(1.73)	5.18**

* $p < .05$ ** $p < .01$ *** $p < .005$ **** $p < .001$

^{a, b} Tukey's post-hoc multiple comparison test is significant at .05 level

The results in Table 11 showed that there were significant differences in perceptions of children amongst the EM1, EM2 and EM3 children in terms of mothers' and fathers' warmth and communication. On mothers' warmth, the mean score of the EM1 stream ($M = 47.20$) was more than the mean scores of the EM2 stream ($M = 45.72$) and the EM3 stream ($M = 41.21$) children ($F = 9.50$, $p < .001$), indicating that children who perceived their mothers as being warm tended to have better results. On mothers' support, the mean score of the EM1 stream ($M = 30.33$) was more than the mean score of the EM2 stream ($M = 28.84$) and the EM3 stream ($M = 25.71$) children ($F = 12.72$, $p < .001$), suggesting that parents of children with higher academic achievement provides more support than parents of children with lower academic achievement. Tukey's post-hoc tests further revealed that for mothers' warmth, there was a significant difference between the EM1 and EM3 streams ($F = 5.99$, $p < .05$) and between the EM2 and EM3 streams ($F = 4.51$, $p < .05$), indicating that perceived mothers' warmth differed between children with high/ average academic achievement and children with low academic achievement. Similarly, there were significant differences between fathers' warmth and support amongst the three academic streams. Therefore, children with higher academic achievement had parents who were warmer and more supportive than those with lower academic achievement.

On mothers' autonomy support, mothers of children with higher academic achievement were perceived to provide more autonomy support than others with lower academic achievement ($F = 3.17$, $p < .05$). Tukey's post-hoc tests further confirmed that there was a significant difference between EM1 and EM3 stream ($F = 1.46$, $p < .05$) in terms of mothers' autonomy support. On the other hand, mothers of children with lower academic achievement were perceived to be significantly more inconsistent with their rules than mothers of children with higher academic achievement. Tukey's post-hoc tests further revealed that there was a significant difference between the EM1 and EM3 stream ($F = -.93$, $p < .05$) and between the EM2 and EM3 stream ($F = -.89$, $p < .05$), indicating that perceived mothers' rules inconsistency differed between children with high/ average academic achievement than children with low academic achievement. There was a significant difference for fathers' love withdrawal amongst the three academic streams. Children of lower academic achievement

had fathers who uses significantly more love withdrawal methods in parenting than children with higher academic achievement ($F = 4.77, p < .05$).

On mothers' communication, there was a significant difference in the area of affect in mothers' communication but no significant difference in the range aspect of communication. The mean score of the EM1 children ($M = 9.42$) was more than the mean scores of the EM2 ($M = 8.87$) and the EM3 ($M = 9.42$) children ($F = 7.93, p < .05$) for mothers' affect in communication. Tukey's post-hoc tests showed that there were significant mean score differences between the EM1 and EM3 streams ($F = 1.58, p < .05$) and between the EM2 and EM3 streams ($F = 1.03, p < .05$), suggesting that perceived mothers' communication differed between children with high academic achievement and children with low academic achievement. Similarly, there were significant differences between fathers' affect in communication amongst the three academic streams. This finding suggests that parents who showed more affect in parent-child interactions contributed to better academic standing in their children.

Table 12: *Comparison of Perceptions of Mothers' and Fathers' Parenting Behaviours according to Boys' Academic Achievement*

	EM1 (n = 28)		EM2 (n = 36)		EM3 (n = 22)		F value
	Mean	SD	Mean	SD	Mean	SD	
Mothers' Warmth	46.50 ^a	(6.49)	45.29 ^b	(6.68)	40.00 ^{a, b}	(6.83)	6.52**
Mothers' Affection	16.37	(2.93)	16.85 ^a	(2.47)	14.72 ^a	(3.61)	3.67*
Mothers' Support	30.13 ^a	(4.00)	28.44 ^b	(4.91)	25.27 ^{a, b}	(3.83)	7.73***
Fathers' Warmth	44.56 ^a	(7.31)	44.93 ^b	(6.61)	37.80 ^{a, b}	(8.19)	7.54**
Fathers' Affection	16.25	(3.09)	16.46 ^a	(2.89)	14.41 ^a	(3.38)	3.31*
Fathers' Support	28.30 ^a	(4.61)	28.46 ^b	(4.80)	23.38 ^{a, b}	(5.15)	8.81***
Mothers' Control	50.83	(4.63)	50.24	(5.59)	51.09	(4.72)	.21
Mothers' Strictness	13.65	(2.62)	13.60	(2.67)	13.63	(2.25)	.002
Mothers' Autonomy support	14.44	(2.92)	14.37	(3.07)	13.59	(2.48)	.66
Mothers' Rules inconsistency	3.30	(1.38)	3.48	(1.49)	4.27	(1.69)	2.81
Mothers' Coercion	4.29	(1.71)	4.12	(1.89)	4.54	(1.33)	.41
Mothers' Love Withdrawal	4.13	(1.79)	3.71	(1.38)	4.00	(1.66)	.58
Mothers' Guilt-Inducing	4.88	(1.06)	5.01	(1.02)	5.27	(1.38)	.71
Mothers' Induction	6.11	(1.85)	5.92	(1.88)	5.77	(1.71)	.21
Fathers' Control	50.44	(3.14)	50.92	(5.44)	49.77	(4.60)	.42
Fathers' Strictness	13.67	(2.07)	12.91	(2.35)	13.02	(2.08)	1.03
Fathers' Autonomy support	14.50	(2.70)	15.00	(2.20)	13.70	(2.64)	1.85
Fathers' Rules inconsistency	3.23	(1.27)	3.55	(1.65)	4.02	(1.68)	1.57
Fathers' Coercion	3.97	(1.24)	4.40	(1.89)	4.17	(1.84)	.50
Fathers' Love Withdrawal	3.41	(.96)	3.70	(1.77)	4.34	(1.89)	2.16
Fathers' Guilt-Inducing	4.88	(1.31)	4.88	(1.06)	5.13	(1.28)	.35
Fathers' Induction	6.75 ^a	(1.28)	6.46 ^b	(1.37)	5.37 ^{a, b}	(1.65)	6.31**

Mothers' Communication	18.30 ^a	(3.69)	17.20	(3.13)	15.18 ^a	(3.20)	5.43*
Mothers' Range	8.69	(2.27)	8.40	(1.99)	7.54	(1.94)	2.01
Mothers' Affect	9.60 ^a	(1.93)	8.79	(1.86)	7.63 ^a	(2.23)	6.03**
Fathers' Communication	17.87	(2.81)	16.96	(3.66)	15.81	(2.55)	2.64
Fathers' Range	8.40	(2.04)	8.43	(1.84)	7.72	(2.14)	1.01
Fathers' Affect	9.46 ^a	(1.37)	8.53	(2.38)	8.09 ^a	(1.95)	3.23*

* $p < .05$ ** $p < .005$ *** $p < .001$

^{a, b} Tukey's post-hoc multiple comparison test is significant at .05 level

The results in Table 12 showed that mothers' and fathers' warmth and communication were generally highest for EM1 boys and lowest for EM3 boys. There were no significant differences in terms of control for both mother and father except for father's induction. A closer examination revealed that parents of boys with lower academic achievement practised more negative parenting in control as the mean scores for mothers' and fathers' rules inconsistency, coercion, love withdrawal and guilt-inducing measures were higher for EM3 boys than EM1/ EM2 boys. Mothers' warmth ($F = 6.52$, $p < .005$) and communication ($F = 5.43$, $p < .05$) as well as fathers' warmth ($F = 7.54$, $p < .005$) were significantly related to boys' academic achievement. Tukey's post-hoc analysis for mothers' warmth showed that there was a significant difference between EM1 and EM3 boys ($F = 6.50$, $p < .05$) and a significant difference between EM2 and EM3 boys ($F = 5.29$, $p < .05$). Mothers of boys with lowest academic achievement were perceived to be lower in warmth than mothers of boys with higher academic achievement. Tukey's post-hoc test for fathers' warmth revealed that there was a significant difference between EM1 and EM3 boys ($F = 6.76$, $p < .05$), and a significant difference between EM2 and EM3 boys ($F = 7.13$, $p < .05$). As with mothers' warmth, post-hoc analysis for fathers' warmth suggests that fathers of boys with lowest academic achievement were perceived to be lower in warmth than fathers of boys with higher academic achievement.

Similar to earlier findings, for mothers' Communication dimension, Tukey's post-hoc analysis revealed that there was a significant difference between EM1 and EM3 boys ($F = 3.11$, $p < .05$), suggesting that mothers of boys with lowest academic achievement were perceived to show less affect in communication than mothers of boys with highest academic achievement. As noted earlier, fathers' communication though not significantly related to boys' academic achievement, was highest for EM1 boys ($M = 17.87$), relatively lower for EM2 boys ($M = 16.96$), and lowest for EM3 boys ($M = 15.81$). A further examination at the fathers' affect subscale from Tukey's post-hoc analysis showed that there was a significant difference between EM1 and EM3 boys ($F = 1.37$, $p < .05$), also suggesting that fathers of boys with lower academic achievement were perceived to show less affect in their communication than fathers of boys with higher academic achievement.

Table 13: Comparison of Perceptions of Mothers' and Fathers' Parenting Behaviours according to Girls' Academic Achievement

	EM1 (n = 40)		EM2 (n = 34)		EM3 (n = 17)		F value
	Mean	SD	Mean	SD	Mean	SD	
Mothers' Warmth	47.68	(5.86)	46.17	(7.81)	42.78	(8.61)	2.78
Mothers' Affection	17.20	(2.34)	16.91	(2.94)	16.50	(3.75)	.36
Mothers' Support	30.48 ^a	(3.96)	29.26	(5.44)	26.27 ^a	(5.24)	4.56*
Fathers' Warmth	45.62	(7.68)	44.10	(8.44)	42.60	(8.73)	.87

Fathers' Affection	16.73	(2.83)	16.41	(3.32)	16.49	(4.01)	.09
Fathers' Support	28.89	(5.18)	27.68	(5.41)	26.11	(5.12)	1.72
Mothers' Control	50.54	(4.62)	48.85	(5.51)	51.72	(7.59)	1.68
Mothers' Strictness	13.14	(2.32)	12.94	(2.82)	13.07	(2.56)	.05
Mothers' Autonomy support	15.40	(2.75)	15.08	(2.78)	13.50	(3.94)	2.44
Mothers' Rules inconsistency	3.19	(1.40)	3.05	(1.36)	4.02	(1.75)	2.67
Mothers' Coercion	3.89	(1.49)	3.67 ^a	(1.45)	4.83 ^a	(1.66)	3.45*
Mothers' Love Withdrawal	4.01	(1.56)	3.38 ^a	(1.66)	4.64 ^a	(2.00)	3.31*
Mothers' Guilt-Inducing	4.42	(1.34)	4.76	(1.82)	5.28	(1.79)	1.68
Mothers' Induction	6.46	(1.46)	5.94	(1.68)	6.35	(2.23)	.90
Fathers' Control	48.53	(6.66)	46.50	(7.64)	49.95	(6.08)	1.57
Fathers' Strictness	12.10	(2.78)	11.27	(2.72)	12.58	(2.39)	1.56
Fathers' Autonomy support	15.28	(2.95)	14.16	(3.38)	14.29	(2.07)	1.45
Fathers' Rules inconsistency	3.26	(1.28)	3.33	(1.75)	3.70	(1.56)	.49
Fathers' Coercion	3.43	(1.31)	3.61	(1.85)	3.86	(1.26)	.49
Fathers' Love Withdrawal	3.43	(1.38)	3.01 ^a	(1.54)	4.18 ^a	(1.86)	3.27*
Fathers' Guilt-Inducing	4.71	(1.23)	5.32	(1.66)	4.93	(1.43)	1.61
Fathers' Induction	6.30	(1.76)	5.76	(2.13)	6.37	(2.05)	.85
Mothers' Communication	18.08	(3.74)	18.00	(3.61)	16.96	(3.45)	.61
Mothers' Range	8.78	(2.22)	9.02	(2.09)	8.85	(2.47)	.11
Mothers' Affect	9.30	(1.77)	8.97	(2.26)	8.10	(1.89)	2.13
Fathers' Communication	17.83	(3.13)	16.43	(3.29)	15.99	(3.33)	2.68
Fathers' Range	8.31	(1.96)	7.02	(2.71)	7.34	(2.91)	2.68
Fathers' Affect	9.52	(1.50)	9.41	(1.84)	8.64	(1.41)	1.83

* $p < .05$

^a Tukey's post-hoc multiple comparison test is significant at .05 level

Table 13 shows that for girls, there were very minimal significant differences for mother's and father's parenting behaviours. The mean scores for mothers' and fathers' warmth and communication were generally highest for EM1 girls and lowest for EM3 girls. The mean scores for mothers' warmth were highest for EM1 girls ($M = 47.68$), slightly lower for EM2 girls ($M = 46.17$) and lowest for EM3 girls ($M = 42.78$). Mothers' support ($F = 4.56$, $p < .05$) was significantly related to girls' academic achievement. Tukey's post-hoc analysis revealed that there was a significant difference between EM1 and EM3 girls ($F = 4.21$, $p < .05$). Similarly, for fathers' warmth, EM1 girls had higher mean scores ($M = 45.62$), followed by EM2 ($M = 44.10$) and EM3 girls ($M = 42.60$). For communication, there were no significant difference between mother's and father's communication although the mean score for EM1 girls were higher compared to the others.

Similar to the boys, EM3 girls had the highest mean score for mothers' control ($M = 51.72$), with lower mean scores for EM1 ($M = 50.54$) and EM2 girls ($M = 48.85$). EM3 girls also had the highest mean score for fathers' control ($M = 49.95$), with lower mean scores for EM1 ($M = 48.53$) and EM2 girls ($M = 46.50$). Mothers of girls with lower academic achievement was perceived to use more coercion and love withdrawal methods than mothers of girls with higher academic achievement. Tukey's post-hoc analysis revealed that there was a significant difference between EM2 and EM3 stream ($F = -1.16$, $p < .05$) for mothers' coercion and a significant difference between EM2 and EM3 stream ($F = -1.26$, $p < .05$) for mothers' love withdrawal. Tukey's post-hoc analysis also revealed that there was a significant difference between EM2 and EM3 stream ($F = -1.17$, $p < .05$) for fathers' love withdrawal. As with boys, the findings revealed that parents of girls with lower academic achievement practised more negative parenting as the mean scores for mothers' and fathers' rules inconsistency, coercion, love withdrawal and guilt-inducing subscales were higher for EM3 girls than EM1/ EM2 girls. The findings suggest that both parental warmth and communication were perceived to be higher for girls with higher academic achievement than girls with lower academic achievement. Mothers and fathers of girls with lowest academic achievement were perceived to be more controlling in terms of negative parenting than mothers and fathers of girls with higher academic achievement.

To summarise, the results revealed there were little gender differences in terms of perceptions of parenting behaviours, especially for girls. Mothers and fathers of both boys and girls with lower academic achievement were perceived to be more negative in their parenting than parents of boys and girls with higher academic achievement.

Relationship between Parenting Behaviours and Children's School Adjustment

In this section, parenting behaviours and children's school competence were investigated in two ways. First, correlations were computed between school competence and parenting behaviours, separately for mothers and fathers. Next, correlations were computed to examine whether there were gender differences between parenting behaviours and children's school competence.

Table 14: *Relationship between Parenting Behaviours and Children's School Adjustment (N = 177)*

Measures	Overall School Adjustment	Academic self-concept	School Engagement	Social Efficacy	Self-Efficacy
Mothers' Warmth	.40**	.28**	.35**	.32**	.34**
Mothers' Affection	.25**	.18*	.26**	.17*	.26**
Mothers' Support	.44**	.31**	.36**	.37**	.35**
Fathers' Warmth	.43**	.29**	.39**	.33**	.38**
Fathers' Affection	.33**	.24**	.30**	.25**	.33**
Fathers' Support	.44**	.30**	.41**	.35**	.38**
Mothers' Control	.006	.04	.05	-.04	.19**
Mothers' Strictness	.02	-.11	.01	.09	.17*
Mothers' Autonomy support	.25**	.20**	.22**	.18*	.28**
Mothers' Rules inconsistency	-.21**	.01	-.13	-.29**	-.06
Mothers' Coercion	-.26**	-.17*	-.16*	-.24**	-.13
Mothers' Love	-.22**	-.04	-.16*	-.26**	-.18*

Withdrawal						
Mothers' Guilt-Inducing						
Mothers' Induction	-.19**	-.19*	-.19**	-.11	-.14	
Fathers' Control	.35**	.29**	.33**	.24**	.33**	
Fathers' Strictness	.07	.15*	.06	.008	.20**	
Fathers' Autonomy support	.09	.05	.06	.09	.21**	
Fathers' Rules inconsistency	.33**	.30**	.23**	.25**	.25**	
Fathers' Coercion	-.19**	-.05	-.07	-.25**	-.06	
Fathers' Love Withdrawal	-.26**	-.11	-.19**	-.27**	-.12	
Fathers' Guilt-Inducing	-.21**	-.06	-.19**	-.21**	-.10	
Fathers' Induction	-.11	-.08	-.14*	-.05	-.14	
Mothers' Communication	.28**	.23**	.27**	.19*	.35**	
Mothers' Range	.44**	.33**	.38**	.33**	.39**	
Mothers' Affect	.31**	.27**	.31**	.20**	.32**	
Fathers' Communication	.43**	.30**	.33**	.37**	.35**	
Fathers' Range	.36**	.27**	.25**	.31**	.24**	
Fathers' Affect	.26**	.24**	.22**	.17*	.23**	
	.31**	.16*	.16*	.33**	.13	

* Correlation is significant at the .05 level (2-tailed)

** Correlation is significant at the .01 level (2-tailed)

The results in Table 14 showed that children overall school adjustment ($r = .40, p < .01$; $r = .43, p < .01$), academic self-concept ($r = .28, p < .01$; $r = .29, p < .01$), school engagement ($r = .35, p < .01$; $r = .39, p < .01$), social efficacy ($r = .32, p < .01$; $r = .33, p < .01$) and self-efficacy ($r = .34, p < .01$; $r = .38, p < .01$) were associated with parental warmth, with stronger associations for fathers. Both mothers' and fathers' support were more strongly correlated to children's school adjustment than parental affection. In addition, mothers' and fathers' warmth were more significantly related to children's school engagement than academic self-concept. Similarly, children overall school adjustment ($r = .44, p < .01$; $r = .36, p < .01$), academic self-concept ($r = .33, p < .01$; $r = .27, p < .01$), school engagement ($r = .38, p < .01$; $r = .25, p < .01$), social efficacy ($r = .33, p < .01$; $r = .31, p < .01$) and self-efficacy ($r = .39, p < .01$; $r = .24, p < .01$) were associated with parental communication, with stronger associations for mothers. Mothers' affect in communication was more strongly correlated to children's school adjustment than mothers' range in communication whereas fathers' range in communication was more strongly correlated to children's school adjustment than their affect in communication. On the control dimension, both mothers' and fathers' control were significantly positively correlated with children self-efficacy ($r = .19, p < .01$; $r = .20, p < .01$). Both mothers' and fathers' autonomy support and induction were significantly positively correlated to children's school adjustment, indicating that autonomy support and induction are positive parenting methods. However, both mothers' and fathers' rules inconsistency, coercion and love withdrawal are significantly negatively correlated to children's overall school adjustment and social efficacy, indicating that negative parenting techniques result in poor school adjustment and social efficacy. Children overall school adjustment and social efficacy were not significantly correlated with parental control. On the whole, children's

school adjustment were significantly positively correlated with parental warmth, autonomy support, induction and communication.

Next, correlational analyses were performed to examine the relationship between parenting behaviours and school adjustment according to parent gender and children gender. The results are presented in Tables 15 and 16.

Table 15: *Correlations between Parenting Behaviours and Boys' School Adjustment (n = 86)*

Measures	Overall School Adjustment	Academic self-concept	School Engagement	Social Efficacy	Self-Efficacy
Mothers' Warmth	.35**	.21*	.33**	.31**	.34**
Mothers' Affection	.18	.08	.22*	.14	.20
Mothers' Support	.42**	.26*	.36**	.37**	.38**
Fathers' Warmth	.52**	.30**	.51**	.43**	.49**
Fathers' Affection	.38**	.24*	.39**	.30**	.38**
Fathers' Support	.54**	.30**	.53**	.46**	.50**
Mothers' Control	-.006	.10	.05	-.09	.19
Mothers' Strictness	.10	-.09	.07	.19	.16
Mothers' Autonomy support	.17	.16	.23*	.08	.34**
Mothers' Rules inconsistency	-.24*	.04	-.23*	-.30**	-.13
Mothers' Coercion	-.17	-.02	-.11	-.21	-.12
Mothers' Love Withdrawal	-.22*	.03	-.14	-.32**	-.18
Mothers' Guilt-Inducing	-.33**	-.27*	-.32**	-.25*	-.23*
Mothers' Induction	.33**	.30**	.29**	.24*	.30**
Fathers' Control	.02	.12	.02	-.03	.17
Fathers' Strictness	.19	.06	.20	.17	.27**
Fathers' Autonomy support	.32**	.29**	.23*	.26*	.25*
Fathers' Rules inconsistency	-.18	-.08	-.12	-.19	-.07
Fathers' Coercion	-.33**	-.11	-.29**	-.34**	-.18
Fathers' Love Withdrawal	-.31**	-.05	-.27**	-.35**	-.19
Fathers' Guilt-Inducing	-.20	-.14	-.18	-.16	-.22*
Fathers' Induction	.31**	.18	.27**	.28**	.34**
Mothers' Communication	.37**	.23*	.39**	.30**	.44**
Mothers' Range	.22*	.15	.27*	.14	.34**
Mothers' Affect	.41**	.23*	.39**	.36**	.39**
Fathers' Communication	.41**	.22*	.30**	.41**	.31**
Fathers' Range	.32**	.22*	.33**	.25*	.39**
Fathers' Affect	.32**	.13	.14	.39**	.10

* Correlation is significant at the .05 level (2-tailed)

** Correlation is significant at the .01 level (2-tailed)

The results in Table 15 shows that parental warmth and communication were significantly positively related to boys' school adjustment. Boys' overall school adjustment showed stronger association with fathers' warmth ($r = .52, p < .01$) than mothers' ($r = .35, p < .01$). Fathers' warmth also had a greater influence on boys' social efficacy ($r = .43, p < .01$) and self-efficacy ($r = .49, p < .01$) than mothers' warmth on boys' social efficacy ($r = .31, p < .01$) and self-efficacy ($r = .34, p < .01$). Similar to correlations between parenting behaviours and children's school adjustment, parental support were more strongly correlated to boys' school adjustment than parental affection. Similarly, fathers' communication showed stronger association for boys' overall school adjustment ($r = .41, p < .01$) and social efficacy ($r = .41, p < .01$) than mothers' communication for boys' overall school adjustment ($r = .37, p < .01$) and social efficacy ($r = .30, p < .01$). Mothers' affect in communication was also more strongly correlated to boys' school adjustment than mothers' range in communication. In contrast, fathers' range in communication was more strongly correlated to boys' school adjustment compared to fathers' affect in communication. Both mothers' and fathers' rules inconsistency, coercion, love withdrawal and guilt-inducing measures were negatively correlated to boys' school adjustment, indicating that negative parenting results in poor school adjustment for boys. Mothers' induction and fathers' autonomy support and induction were significantly positively related to boys' school adjustment.

In general, these results highlight the importance of the parental warmth and communication dimension to boys.

Table 16: *Correlations between Parenting Behaviours and Girls' School Adjustment*
($n = 91$)

Measures	Overall School Adjustment	Academic self-concept	School Engagement	Social Efficacy	Self-Efficacy
Mothers' Warmth	.43**	.33**	.33**	.31**	.32**
Mothers' Affection	.29**	.26*	.27**	.17	.30**
Mothers' Support	.46**	.33**	.33**	.36**	.30**
Fathers' Warmth	.31**	.27**	.25*	.21*	.26*
Fathers' Affection	.24*	.21*	.18	.17	.26*
Fathers' Support	.34**	.29**	.27**	.23*	.25*
Mothers' Control	.04	.001	.09	.01	.21*
Mothers' Strictness	-.01	-.10	.02	.03	.21*
Mothers' Autonomy support	.29**	.21*	.17	.25*	.21*
Mothers' Rules inconsistency	-.15	.01	.02	-.26*	.02
Mothers' Coercion	-.33**	-.31**	-.18	-.26*	-.11
Mothers' Love Withdrawal	-.23*	-.11	-.18	-.20*	-.18
Mothers' Guilt-Inducing	-.06	-.12	-.07	.005	-.07
Mothers' Induction	.35**	.28**	.35**	.21*	.35**
Fathers' Control	.19	.21*	.19	.08	.27**
Fathers' Strictness	.13	.09	.08	.11	.23*

Fathers' Autonomy support	.35**	.31**	.24*	.24*	.24*
Fathers' Rules inconsistency	-.18	-.02	.02	-.30**	-.04
Fathers' Coercion	-.11	-.07	.01	-.008	-.14
Fathers' Love Withdrawal	-.06	-.04	-.06	.007	-.04
Fathers' Guilt-Inducing	-.04	-.04	-.13	.03	-.08
Fathers' Induction	.30**	.28**	.33**	.13	.38**
Mothers' Communication	.49**	.41**	.34**	.35**	.33**
Mothers' Range	.38**	.35**	.32**	.22*	.27**
Mothers' Affect	.46**	.36**	.27**	.39**	.29**
Fathers' Communication	.33**	.31**	.21*	.23*	.18
Fathers' Range	.28**	.30**	.21*	.15	.15
Fathers' Affect	.24*	.17	.11	.22*	.14

* Correlation is significant at the .05 level (2-tailed)

** Correlation is significant at the .01 level (2-tailed)

The results in Table 16 show that similar to boys, parental warmth and communication were significantly positively related to girls' school adjustment. However, girls' overall school adjustment showed stronger association with mothers' warmth ($r = .43$, $p < .01$) than fathers' warmth ($r = .31$, $p < .01$). Mothers' warmth also had a greater influence on girls' social efficacy ($r = .31$, $p < .01$) and self-efficacy ($r = .32$, $p < .01$) than fathers' warmth on girls' social efficacy ($r = .21$, $p < .01$) and self-efficacy ($r = .26$, $p < .01$). Again, parental support was more strongly correlated to girls' school adjustment than parental affection. Similarly, mothers' communication showed stronger association for girls' overall school adjustment ($r = .49$, $p < .01$), academic self-concept ($r = .41$, $p < .01$), school engagement ($r = .34$, $p < .01$), social efficacy ($r = .35$, $p < .01$) and self-efficacy ($r = .33$, $p < .01$) than fathers' communication for girls' school adjustment ($r = .33$, $p < .01$), academic self-concept ($r = .31$, $p < .01$), school engagement ($r = .21$, $p < .01$), social efficacy ($r = .23$, $p < .01$) and self-efficacy ($r = .18$). Thus, in contrast to the results for boys, girls' school adjustment showed stronger associations for mothers' warmth and communication than fathers' warmth and communication. For the control dimension, both mothers' and fathers' rules inconsistency, coercion, love withdrawal and guilt-inducing subscales were negatively correlated to girls' school adjustment, indicating that negative parental control methods also tend to lead to poor school adjustment for girls. Positive parental control like autonomy support and induction were both significantly positively correlated to girls' school adjustment, suggesting that positive parenting results in better overall academic self-concept, social efficacy and self-efficacy in girls.

To summarise, since earlier results showed little gender differences in perceptions of parenting behaviours, similarly, Tables 15 and 16 also showed little gender differences between parenting behaviours and school adjustment. The results based on children gender further also supports the above findings. Parental warmth, autonomy support, induction and communication had a significant association with both boys' and girls' school adjustment. Fathers' warmth and communication had stronger association with boys' school adjustment than mothers' warmth and communication. In contrast, mothers' warmth and communication

had stronger association with girls' school adjustment than fathers' warmth and communication.

Overall, this study suggests that generally, children's school competence was strongly correlated to positive parenting such as parental warmth, autonomy support, induction and communication. In contrast, negative parenting methods such as rules inconsistency, coercion, love withdrawal and guilt-inducing were negatively correlated to children's school competence, indicating that negative parenting methods have adverse effects on a child's school adjustment. While boys' school adjustment was more strongly associated with fathers' warmth and communication than mothers' warmth and communication, girls' school adjustment was more strongly associated with mothers' warmth and communication than fathers' warmth and communication. Girls also did not seem to be adversely affected by parental control. Parental control, on the other hand, had a negative link to boys' school adjustment and social efficacy. This seems to suggest that boys may react to parental control in a more negative manner though girls may not.

Chapter 5

Discussion and Conclusions

This chapter first discusses the main findings of the study. Next, it will look at the implications of the research findings. The chapter will conclude with the limitations of this study and suggest some recommendations for further research.

Discussion of Main Findings

Perceptions of the Parenting Behaviours of Fathers and Mothers

The findings showed that there was intra-parental consistency among the parenting variables. Parents who show warmth and are involved in their children's lives also see the need to be responsible for setting limits on their behaviors and monitoring their activities. These findings are supported by Ong's (1999) and Latika's (2000) research findings, which showed that parents who are warm are more likely to use positive methods of control and less likely to use power assertive parenting control measures. This finding also supports Lau and Cheung's (1987) study, which showed that functional control was positively correlated to paternal warmth. Functional control, as opposed to dysfunctional control, conveys care and helps parents set rules to maintain the necessary order and organization in the family.

Second, there was also consistency between fathers and mothers in parenting suggesting that both parents within a family use similar parenting behaviors. These findings are consistent with other research findings and observations that despite differences in mothers' and fathers' behaviours, mothers were not qualitatively different in parenting behaviours from fathers. (Latika, 2000; Ong, 1999; Forehand and Nousiainen, 1993). In particular, Ong's (1999) research, Ding's (2002) study and this study showed that mothers were perceived as warmer and more supportive than fathers.

The findings also indicated that mothers score higher on control than the fathers. Mothers also seem to pay more attention to daughters than sons. Various studies have also shown that mothers are more demanding than fathers (Shek, 1998; Paulson and Sputa, 1996; Forehand and Nousiainen, 1993). Similarly, Ong (1993) showed that mothers in Singapore were more demanding than fathers.

There are several reasons why perceptions of fathers' and mothers' parents behavior varied. Shek (1998) noted that, in the Chinese culture, women are encouraged more than men

to express their emotions. Such an expression of emotions can lead children to perceive their mothers as being warmer. Chinese mothers are also seen as the ones most responsible for basic socialization. This may explain why they are seen as being more strict and controlling than the fathers. Through Shek's observations were made with regards to the Chinese in Hong Kong, it is likely that these observations hold true for the Singapore Chinese as well as the other ethnic groups as they all share the same Asian values.

Likewise, mothers seem to be more controlling to daughters than sons as sons in Asian culture, have been taught since young to be independent. Daughters are seen as needing more protection than sons do. It is typical of Asian mothers to be more worried for the daughters than the sons, as they believe that daughters are easily taken advantage of if not well-protected and controlled. Fathers are not as concerned since most mothers generally adopt the traditional role of women in looking after the needs for the child.

Fathers are not more coercive than mothers are. This may be explained by the role of fathers as the main breadwinners, which leaves them with less time for and involvement in their children's lives. Hence, they are less likely to make demands on their children. The findings of this study suggest that the traditional roles of mothers as caregivers and as the main socialization agents in families are still relevant in Singapore despite the changes brought about by the greater involvement of women in the work force.

The results also implied that mothers, generally being home with the child more, have a way of communication with their child. Mothers are generally more involved in the day-to-day lives of their children and have more time to try to understand their child's daily events and likewise, the child generally tells their mother everything that goes on in his/her life. As there has been little focus on parent-child communication for younger children and its relationships to academic achievement, parent-adolescent communication had to be used as a comparison.

This study showed that mothers believe in good communication with their children. In a study by Barnes and Olson (1985) on parent-adolescent communication, mothers consistently reported more positive communication with their adolescents than fathers did. Tatar's (1998) findings showed that mothers are better informed than fathers about the details of daily school life, because mothers have more intense daily contacts with their children and this keeps them more informed about the education setting. Ong's (1999) study also found that adolescents communicate their needs and demands more to mothers than to fathers, and more often choose mothers over fathers. When they seek advice on how to solve problems, Ding's (2002) study on children implied that mothers, generally being home with the child more, have a way of communicating with their child.

Gender Differences in Perceptions of Father's and Mother's Parenting Behaviors

One of the key questions of the present study is whether boys and girls have different perceptions of their relationship with fathers and mothers. Results for this study suggest that differences in perceptions of parents are more significantly linked to parent gender than to child gender.

The results of this study showed that both boys and girls perceived mothers to be warmer, more controlling than fathers. Both boys and girls also have better communication with mothers than fathers. On the warmth dimension, the study also showed that girls more than boys perceived mothers to be warmer than fathers.

Similarly, Latika's (2000) study found that girls were more likely than boys to perceive their fathers as less caring than mothers. On the control dimension, boys, compared to girls have more perceptions of parental control. Fathers are more punitive towards sons than daughters, a finding that is consistent with other findings that reported that boys were more likely than girls to receive physical punishment from fathers (Ong,1999; Ferreira and Thomas,1984). Mothers also exercised more control over boys than girls. These findings are consistent with studies that found that Chinese parents are stricter in the discipline of sons (Ho,1989).

On the communication dimension, fathers in particular, were perceived as differentiating much more than mothers do in their affectionate love toward daughters. Although boys talk more with fathers than girls do, there is a significantly higher level of positive affection in girl's interactions with father. This findings does not support Steinberg's (1987) conclusion that the father-daughter relationship is characterized by emotional distance and low level of interactions. This is somewhat surprising as one would expect greater distance between fathers and daughters in the Asian society where fathers are traditionally more detached from the nurturant aspects of parenting.

Overall, the results of this study do not concur with the conclusion of a meta-analysis by Lytton and Romney (1991) that there are very few differences in parental treatment of boys and girls. The present study indicates that parents do differentiate between sons and daughters in their parenting behaviors and fathers differentiate more than mothers in their parenting of boys and girls. The differential socializations of boys and girls may be expected to have important implications for their development as well as for parental education programs.

Parenting Behaviors and Children's Academic Achievement

This study showed that parents who were perceived as warm tend to have children in EM1 and EM2. One way to explain this could be that parental warmth contributes to the confidence and positive self-image that a child may feel and this in turn contribute to academic achievement. Children who experience more warmth may do better in their studies than those who do not experience any warmth from their parents. This is in line with what Linver and Silverberg's (1997) study on parenting practices found, that warmth, psychological autonomy and monitoring, were significantly associated with children school grades.

Dubois, Eitel and Felner (1994) explained that strong bonds with parents may indirectly facilitate school outcomes for example, by deterring delinquent behavior. Parental control is not found to be significantly associated with academic achievement. This finding does not support previous studies (Dornbusch et al,1987; Steinberg et al,1992) that found that in Chinese families which are controlling, academic achievement is high. It lends support to Leung et al's (1998) conclusion that too much negative control has deleterious academic outcomes regardless of cultures.

The study revealed that parents who showed more positive affect in parent-child communication contributed to better academic standing in their children, suggesting that affect in communication is more important than the range in communication. Steinberg (1990) found that children who enjoy open lines of communication with their parents tend to be more competent, industrious, self-reliant, persistent and determined. They tend to have a

stronger sense of their own abilities and are less susceptible to feelings of depression and anxiety.

The present findings also revealed that boy's academic achievement were more significantly linked to parenting behaviors than girls' academic achievement which were not as significantly linked to parenting behaviors. Boys' academic achievement was significantly linked to both mothers' and fathers' warmth in terms of support and affection, as well as their affect in communication, whereas girls' academic achievement was only significantly linked to mothers' support. This finding is supported by Crouter et al. (1990) study which noted the importance of parental monitoring for academic achievement and conduct, especially for boys. This could be due to boys being generally more playful than girls and hence need more parental supervision in their studies when they are younger in order to excel. This finding has significant implication on the role of fathers in their children's lives.

Parenting Behaviours and Children School Adjustment

Parental warmth, autonomy support, induction and communication had a significant association with both boys' and girls' school adjustment. Fathers' warmth and communication had stronger association with boys' school adjustment than mothers' warmth and communication. In contrast, mothers' warmth and communication had stronger association with girls' school adjustment than fathers' warmth and communication. One possible explanation lies in the greater identification with the same gender parent so that any disruption of the relationship would create more distress.

Parental control is linked significantly to girl's self-efficacy but had no significant association with boys' self-efficacy. Boy's greater need for autonomy and independence may lead them to perceive control more negatively and to react with greater emotional distress.

Another finding that deserves mention is the outcome relating to autonomy support. Psychological autonomy granting by mother and father are associated with positive outcomes for both genders, which suggest that children have a psychological need to be free from parental over-protection. The results showed stronger associations for girls than boys, which suggest that girls have a greater psychological need to be free from parental overprotection. This is to be expected as parents tend to be overly protective of girls. A lack of willingness to support the autonomy development of children would limit children's self-confidence that is necessary for developing adequate coping strategies and which may then exacerbate psychological distress. The results of the study confirm findings that parental efforts to over-regulate children will impede children attempt to learn competencies, resulting in reduced self-esteem (Adam and Jones,1983). These findings have important implication for parent education in the light of the growing problem of children suicide in Singapore.

Implications of the Study

Significant numbers of parents in Singapore today have less time, energy and other resources available to them, which makes it difficult for them to parent effectively. As interventions designed to improve parenting practices have some success in reducing children adjustment problems, so parent-training techniques may be useful in enhancing children school competence. The content of parent education programs can include teaching them how they may provide support and encouragement to their children such as inquiring regularly about their participation in school for conferring with teachers about their strengths.

The results reveal that the father's role is by no means peripheral in the healthy finding of their children. Thus there is a need for a concerted effort to develop programs for fathers in order to achieve consistent parenting, as well as to help increase intimacy between fathers and their children. Counseling programs should also highlight the importance of father's role and aim at helping them develop age appropriate discipline such as the induction method, which at the same time result in enhanced cognitive abilities.

Educators could target children and both parents in the design and marketing of parent education programs. Parents may benefit not only from a structured setting for interacting with their own children, but also from hearing other children. Parent education programs should be designed for parents of children, providing information regarding parenting and children's development.

As families in Singapore faced increasing stress and are providing less support to their children, the schools may be asked to carry more of the burden of meeting the developmental needs of children. The risk of children failing to meet performance demands in school and the ensuring loss of confidence are important factors in the emergence of child's deviance. School intervention should therefore aim to minimize the experience of academic failure among students as academic failure has been shown to be a significant risk factor in problem behavior (Hurrelmann & Engel, 1992).

The school setting is a complex social network that offers many relationships for students involved. The peer group is an important resource that takes over socializing functions in the area of personal development and by offering opportunities for leisure time participation. It is therefore important that interventions strategies focus on increasing social competencies that will help children develop positive experiences in relating to peers and adults will contribute to promoting a sense of well being which in turn would increase motivation in school. Such interventions can adopt a psycho-educational approach by providing direct instruction in pro-social behaviors and skills of relating not only to peers, but also to those in authority – teachers and parents. This will increase the likelihood of effective participation in school activities and in turn contribute to their academic achievement.

Teaching profession and counselors should be made aware of the importance of ensuring successful socialization. Teachers should adopt an authoritative teaching style for classroom management, and employ effective counseling skills when seeking to develop positive relationships with individual students. Teachers can promote a positive classroom climate by assuring students that their contributions are valued in the classroom and creating a psychologically safe classroom environment in which they can express their opinions and make mistakes. Students who are academically at risk may be referred to classes that improve their test taking and study skills. This will help children with low academic self-concepts to improve grades and thereby foster school success and increase school engagement.

More efforts could also be directed to developing broad-based programs involving schools, parents and communities working together to provide support for family life. As children spend increasing time in school, it is important that school personnel recognize the importance of the parent-child relationship. Schools should work with the families together to elicit their support for school programs. Recruiting parent support and participation by encouraging and helping parents to carry out their role as their child's primary educator, getting them to support the school's effort to teach positive values, informing parents about

their children's academic achievement, are some ways the school can involve parents in providing the nurturance and support to their children.

The use of media are alternative ways to reach out to educate parents. A national campaign can raise awareness of the critical rate that parents have in raising healthy, productive young children. It is also important to emphasize that raising well-adjusted children is a community responsibility. Schools should encourage school-parent partnerships in values education that teach parents how to provide support to their children to do better academically in school.

Limitations of the Study

Although the study yielded some noteworthy results that were consistent with past studies regarding children's perceptions of fathers' and mothers' parenting characteristics and their impact on children's school competence, a number of limitations have to be acknowledged.

First, the study adopted a quantitative approach. It relies solely on the questionnaire for data collection. Interpretation of the data is based on quantitative data against a range of theoretical perspectives and empirical research. In future research, a range of methodologies will be required to clarify some of the results. For example, interviews with respondents may throw additional light on the findings.

Second, the study was based on a limited sample of 171 Primary Five pupils from two schools. Hence the findings may not be generalized to children across other age or social-economic groups. The sample is also over-represented by Chinese and under-represented by Indians. Additional investigations need to examine further the issue of ethnicity similarities and differences in the importance of parents and their relations to children school competence in the different domains.

Also, in this study, the streamed classes EM1, EM2 and EM3 were used as indicators of academic achievement. This is only a rough measure of academic achievement and it is not precise because between each stream, there is also a range of achievement and level of competence.

Suggestions for Future Research

The findings of this study are to be considered as exploratory rather than confirmatory, prompting the need for further study and verification. Findings for this study identified several important areas for future research. Although the current study found significant associations between certain parents behaviors and children school competence, the correlation nature of the study do not necessarily indicate casual relationships between these variables. Future research needs to understand the interactions of intra-psychic variables and the direction of the relationship of these variables.

The present study focused on the importance of parenting behaviors in relation to children school competence. Subsequent research efforts may examine the role of other possibly important predictors.

Finally, the exclusion of single-parent families from this investigation limits the scope of the study. Future research should be undertaken to include the single-parent families and the impact on children functioning. This would broaden the generalizability of the findings.

References

- Adams, G. & Jones, R. (1983). Female adolescents' identity development: Age comparisons and perceived child rearing experience. *Developmental Psychology, 19*, 249-256.
- Allen, J.P., Hauser, S. T., Bell, K. L., & O'Connor, T. G. (1994). Longitudinal assessment of autonomy and relatedness in adolescent-family interactions as predictors of adolescent ego development and self-esteem. *Child Development, 65*, 179-194.
- Amoroso, D.M., & Ware E.E. (1986). Adolescents' perceptions of aspects of their home environment and their attitudes toward parents, self, and external authority. *Adolescence, 81*, 191-204.
- Armentrout, J., & Berger, G. (1972). Children's reports of parental child-rearing behavior at five grade levels. *Development Psychology, 7*, 44-48.
- Bandura, A. (1977). Self-efficacy: Towards a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.
- Barber, B.K. (1992). Family, personality, and adolescent problem behaviors. *Journal of Marriage and the Family, 54*, 69-79.
- Barber, B.K., & Rollins, B.C. (1984). Parent-adolescent relationships. *Family Perspective, 21*, 4.
- 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*, 27-36.
- Barnes, G.M., & Farrell, M. (1992). Parental support and control as predictor of adolescent drinking, delinquency, and related problem behaviors. *Journal of Marriage and the Family, 54*, 763-776.
- Barnes, H.L., & Olson, D.H. (1985). Parent-adolescent communication and the circumflex model. *Child Development, 56*, 438-447.
- Barrera, M., Jr., & Garrison-Jones, C. (1992). Family and peer social support as specific correlates of adolescent depressive symptoms. *Journal of Abnormal Child Psychology, 20*, 1-15.
- Baumrind, D. (1965). Parental control and parental love. *Children, 12*, 230-234.
- Baumrind, D. (1967). Child care practices anteceding three patterns of pre-school behavior. *Genetic Psychology Monographs, 75*, 43-88.
- Baumrind, D. (1971). Harmonious parents and their pre-school children. *Developmental Psychology, 4*, 99-102.
- Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed). *Child Development, Today and Tomorrow* (pp. 349-378). San Francisco: Jossey Bass.
- Baumrind, D. (1991a). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence, 11*, 56-95.
- Becker, W. C., (1964), Consequences of different kinds of parental discipline. In M. L. Hoffman & L.W. Hoffman (Eds). *Review of Child Development Research (Vol. 1)*. New York: Russell Sage Foundation.
- Berk, L.A. (1997). *Child Development*. (4th ed). Massachusetts: Allyn and Bacon.
- Berndt, T. J., Cheung, P. C., Lau, S., Hau, K.T., & Lew, W.J.F. (1993). Perceptions of parenting in Mainland China, Taiwan, and Hong Kong: Sex differences and societal differences. *Developmental Psychology, 29*(1), 156-164.
- Block, J.H. (1983). Differential premises arising from differential socialization of the sexes: Some conjectures. *Child Development, 54*, 1335-1354.
- Bowlby, (1969). *A Secure Base: Parent-Child Attachment and Healthy Human Development*. New York: Basic Books.

- Bronfenbrenner, U. (1961). Some familial antecedents of responsibility and leadership in adolescents. In Luigi Petrullo & Bernard Bass (Eds.). *Leadership and Interpersonal Behavior* (pp. 239-271). New York: Rinehart, Holt and Winston.
- Canetti, L., Bachar, F., Galili-Weisstub, E., Kaplan De-nour, A., & Shalev, A. Y. (1997). Parent bonding and mental health in adolescence. *Adolescence* 32, 381-394.
- Capaldi, D.M., & Patterson, G.R. (1991). Relation of parental transitions to boys' adjustment problems: I. A linear hypothesis. II. Mothers at risk for transitions and unskilled parenting. *Developmental Psychology*, 27, 489-504.
- Chen, X., & Rubin, K.H. (1994). Family conditions, parental acceptance and social competence and aggression. *Social Development*, 3, 269-290
- Clarke-Stewart, K.A. (1978). And daddy makes three: The father's impact on mother and young child. *Child Development*, 49, 446-478.
- Coleman, J.S., Campbell, H.Q., Hobson, C.J., McPartland, J., Mood, A.M., Weinfeld, F.D., & York, R.L. (1966). *Equality of educational opportunity*. Washington, DC: U.S. Office of Education
- Collins, W., & Russell, G. (1991). Mother-child and father-child relationships in middle school and adolescence: A developmental analysis. *Developmental Review*, 11, 99-136.
- Compas, B.E., Howell, D.C., Phares, Williams, R.A., & Guinta, C.T. (1989). Risk factors for emotional/behavioral problems in young adolescents: A prospective analysis of adolescent and parental stress and symptoms. *Journal of Consulting and Clinical Psychology*, 57, 732-740.
- Coopersmith, S. (1967). *The Antecedents of Self-Esteem*. California: Palo Alto: Consulting Psychologists Press.
- Crouter, A. C., MacDermid, S. M., McHale, S.M., & Perry-Jenkins, M. (1990). Parental monitoring and perceptions of children's school performance and conduct in dual and single-earner families. *Developmental Psychology*, 26, 649-657.
- Cox, S.H. (1970). Intrafamily comparison of loving-rejecting child rearing orientation: Relations to parental, marital, family, and child characteristics. *Child Development*, 60, 1025-1034.
- Darling, N., & Steinberg L., (1993). Parenting style as context: An integrative model. *Psychology Bulletin*, 113, 487-496.
- Debaryshe, B. D. (1993). Family effects on academic achievement: Longitudinal comparisons at 5th and 7th grade. Paper presented at the meeting of the Society for Research in Child Development, New Orleans.
- Dekovic, M., & Meus, W. (1997). Peer relations in adolescence: Effects of parenting and adolescents' self-concept. *Journal of Adolescence*, 20, 163-176.
- Demo, D.H., Small, S.A., & Slavin-Williams, R.C. (1987). Family relations and the self-esteem of adolescents and their parents. *Journal of marriage and the Family*, 49, 705-715.
- Ding, G. (2002). *Parental Behaviours and Academic Achievement*. Unpublished master's thesis. Nanyang Technological University, Singapore.
- Dishion, T.J. (1990). The family ecology of boys' peer relations in middle childhood. *Child Development*, 61, 874-892.
- 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.
- Dubois, D. L., Eitel S.K., & Felner, R.D. (1994). Effects of family environment and parent-child relationships on school adjustment during the transition to early adolescence. *Journal of Marriage and the Family*, 56, 404-415.

- Easterbrooks, M.A., & Goldberg, W.A. (1984). Toddler development in the family. Impact of father involvement and parenting characteristics. *Child Development, 55*, 740-752.
- Elder, G.H. (1962). Structural variations in the child rearing relationship. *Sociometry, 34*, 241-262.
- Ellis, G.J., Thomas, D.L., & Rollins, B.C. (1976). Measuring parental support: The inter-relationship of three measures. *Journal of Marriage and Family, 38*, 713-722.
- Farrell, M., & Barnes, G.M. (1993). Family systems and social support: A test of the effects of cohesion and adaptability on the functioning of parents and adolescents. *Journal of Marriage and Family, 55*, 119-132.
- Feldman, S.S. & Wentzel, K.R. (1990). The relationship between parenting styles, sons' self-restraint, and peer relations in early adolescence. *Journal of Early Adolescence, 439-454*.
- Ferreira, A., & Thomas, D.L. (1984). Adolescent perception of parental behavior in the United States and Brazil. *Parental Studies, 1*, 19-20.
- Foo, S.L., & Kwok, T.C. (Eds.). (1999). *Singapore 1999*. Ministry of Information and the Arts.
- Forehand, R., & Nousiainen, S. (1993). Maternal and parental parenting: Critical dimensions in adolescents functioning. *Journal of Family Psychology, 7(2)*, 213-221.
- Franz, C.E., McClelland, D.C., & Weinberger, J. (1991). Childhood antecedents of conventional social adjustment in midlife adults: A 36-year prospective study. *Journal of Personality & Social Psychology, 60*, 586-595.
- Fulgini, A.J. & Eccles, J.S. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. *Developmental Psychology, 29*, 622-632.
- Gecas, V., & Schwalbe, M.L., (1986). Parental Behavior and adolescent self-esteem. *Journal of Marriage and the Family, 48*, 37-46.
- Gecas, V., & Seff, M. A. (1990). Families & adolescents: A review of the 1980s'. *Journal of Marriage and the Family, 52*, 941-958.
- Gerlsma, C., & Emmelkamp, P.M.G. (1994). How large are gender differences in perceived parental styles? A meta-analytic review. In Perris, C., Arrindell, W.A., & Eisemann, M. (Eds.). *Parenting and Psychopathology*. New York, Chichester: Wiley.
- Gilligan, C. (1982). *In A Different Voice: Psychological Theory in Women's Development*, MA: Cambridge: Harvard University Press.
- Goldin, P.C. (1969). A review of children's reports of parent behaviors, *Psychological Bulletin, 71*, 222-236.
- Grolnick, W.S., & Ryan, R.M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Education Psychology, 81*, 143-154.
- Grotevant, H.D., & Cooper, C.R. (1985). Parents of interaction in family relationships and the development of identity exploration in adolescence. *Child Development, 56*, 415-428.
- Hart, C.H., DeWolf, M., Wozniak, P., & Burts, D. (1992). Maternal and paternal disciplinary styles: Relations with preschoolers' playground behavioral orientations and peer status. *Child Development, 63*, 879-892.
- Harter, S. (1990). Self and identity development. In S. Feldman and G. Elliot (Eds.), *At the Threshold: The Developing Adolescent* (pp. 352-287). Cambridge, MA: Harvard University Press.
- Hauser, S.T., Powers, S.I., Noam, G.G., Jacobson, A.M., Weiss, B., & Follansbee, D.J. (1984). Familial contexts of adolescent ego development. *Child Development, 55*, 195-213.
- Hess, R.D., & Holloway, S.D. (1984). Family and school as educational institutions. In R.D. Parker (Ed.), *Review of Child Development Research* (Vol 7, pp. 179-222).

- Ho, D.Y.F. (1987). Fatherhood in Chinese Culture. In M.E. Lamb. *The Father's Role: Cross-Cultural Perspective* (pp. 227-245). NJ:Erlbaum
- Ho, D.Y.F. (1989). Continuity and variation in Chinese patterns of socialization. *Journal of Marriage and the Family*, 51, 149-163.
- Hoeltje, C.O., Zubrick, S.R., Siburn, S.R., & Garton, A.F. (1996). Generalized self-efficacy: Family and adjustment correlates. *Journal of Clinical Child Psychology* (Vol. 4, pp.387-467), New York: Wiley.
- Hoffman, M.L. (1975). Moral Internationalization, Parental Power, and the Nature of Parent-Child Interaction. *Developmental Psychology*, 11, 228-239. EJ 116 432.
- Hunter, F.T. (1985). Adolescents' perceptions of discussions with parents and friends. *Developmental Psychology*, 21, 1092-1099.
- Hunter, F.T. & Youniss, J. (1992). Changes in functions of three relations during adolescence. *Developmental Psychology*, 18, 806-811.
- Huston, A.C. (1983). Sex-typing. In E.M. Hetherington (Ed.), *Handbook of Child Psychology* (Vol. 4, pp. 387-467), New York: Wiley.
- Johnson, B.M., Shulman, S., & Collins, W.A. (1991). Systemic patterns of parenting as reported by adolescents: Developmental differences and implications for psychosocial outcomes. *Journal of Adolescent Research*, 6, 235-252.
- Kleinman, A., & Kleinman J. (1985). Somatization: The interconnection in Chinese society among culture, depressive experiences and the meaning of pain. In A. Kleinman and B. Good (Eds), *Culture and Depression*. Los Angeles, CA: University of California Press.
- Kochanska, G. (1993). Toward a synthesis of parental socialization and child temperament in early development of conscience. *Child Development*, 64, 325-347.
- Kon, I.S., & Losenkov, V.A. (1978). Friendship in Adolescence: Values and behavior. *Journal of Marriage and Family*, 40, 143-155.
- Kurdek, L.A., & Fine, MA (1994). Family acceptance and family control as predictors of adjustment in young adolescents: Linear, curvilinear or interactive effects. *Child Development*, 65, 1137-1146.
- Lamb, M.E. (Ed.). (1981). *The Role Of The Father In Child Development*. New York: Wiley.
- Lamborn, S.D., Mounts, N.S., Steinberg. L., & Dornbusch, M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarians, indulgent and neglectful families. *Child Development*, 62, 1049-1065.
- Latika, D. (2000). *Adolescents' perceptions of parenting styles*. Unpublished master's thesis. Nanyang Technological University, Singapore.
- Lau, S., & Cheung, P.C. (1987). Relations between Chinese adolescents' perception of parental control and organization and their perception of parental warmth. *Developmental Psychology*, 23(5), 726-729.
- LaVoie, C. (1976). Ego identity formation in middle adolescence. *Journal of Youth and Adolescence*, 5, 371-395.
- Linver, M.R., & Silverberg, S.B., (1997). Maternal predictors of early adolescent achievement-related outcomes. Adolescent gender as moderator. *Journal of Early Adolescence*, 17(3), 294-318.
- Litovsky, V.G., & Dusek. J.B. (1985). Perceptions of child rearing and self-concept development during the early adolescent years. *Journal of Early Adolescence*, 14(5), 373-387.
- Leung, K., Lau, S., & Lam, W.L. (1998). Parenting styles and academic achievement: A cross-cultural study. *Merrill-Palmer Quarterly*, 44, 157-172.

- Lui, H.W. (1987). The development of the self-esteem checklist as a new measurement of the self-esteem of pupils in Singapore lower secondary schools. Thesis. Michigan State University.
- Lytton, H., & Romney, D.M. (1991). Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin*, 109(2), 267-296.
- Maccoby, E.E. (1986). *The Development of Sex Differences*. Stanford University Press, Palo Alto, California.
- Maccoby, E.E., & Martin J.A. (1983). Socialization in the context of the family: Parent-child interaction. In E. Mm Hetherington (Ed.), P. H. Mussen (Series Ed.), *Handbook of Child Psychology: Vol 4* (pp. 1-101). New York:Wiley & Sons.
- Manscill, C.K., & Rollins, B.C. (1990). Adolescent self-esteem as an intervening variable in the parental behavior and academic achievement relationship. In Barber, B.K., & Rollins, B.C. *Parent-adolescent Relationship, Family Perspective*, 21, 4.
- Marsiglio, W. (1991). Paternal engagement activities with minor children. *Journal of Marriage and the Family*, 53, 973-986.
- Matteson, R. (1974). Adolescent self-esteem, family communication, marital satisfaction. *Journal of Psychology*, 86, 35-47.
- McCormick, C.B., & Kennedy, J.H. (1994). Parent child attachment working models and self-esteem in adolescence. *Journal of Youth and Adolescence*, 23(1).
- McFarlene, A.H., Bellissimo, A., & Norman, G.R. (1995). Family structure, family functioning and adolescent well being: The transcendent influence of parenting style. *Journal of Child Psychology and Psychiatry*, 36, 847-864.
- Melby, J.N., & Conger, R.D. (1996). Parental behaviors and adolescent academic performance: A longitudinal analysis. *Journal of Research on Adolescence*, 6(1).
- Montemayor, R. (1982). Parent-adolescent conflict and the amount of time adolescents spend with parents, peers and alone. *Child Development*, 53, 1512-1519.
- Montemayor, R. (1983). Parents and adolescents on conflict: All families some of the time and some families most of the time. *Journal of Early Adolescence*, 3, 83-103.
- Moos, R.H., Cronkite, R.C., Billings, A.G., & Finney, J.W. (1982). *Health and daily living form manual*. Palo Alto, CA: Stanford University.
- Muller, C. (1993). Parent involvement and academic achievement: An analysis of family resources available to the child. In B.Schneider & J.Coleman (Eds.), *Parents, their children and schools* (pp. 77 – 113). San Francisco: Westview Press.
- Ngiam, T.L. (1989, December). Balancing parents' priorities and children's needs. *Nurture*, 3-4.
- Ong, A.C. (1999). *Parenting behaviors and their relationships to adolescent adjustment*. Phd. Dissertation, Nanyang Technological University, Singapore.
- Papini, D.R., Farmer, F.F., Clark, S.M., Micka, J.C., & Barnett, J.K. (1990). Early adolescent age and gender differences in patterns of emotional disclosure to parents and friends. *Adoloscence*, 15, 959-1001.
- Parish, T.S., & McCluskey, J.J. (1992). The relationship between parenting styles and young adults' self-concepts and evaluation of parents. *Adolescence*, 27(108), 915-918.
- Parke, R.D. (1995). Fathers and families. In M.H. Bornstein (Ed.), *Handbook of Parenting, Vol. 3*, Mahwah, NJ: Lawrence Erlbaum Associates.
- Parker, G. (1979). Reported parental characteristics of agrophobics and social phobics. *British Journal of Psychiatry*, 135, 260-264.
- Paterson, J.E., Fields, J., & Pryor, J. (1994). Adolescents' perceptions of their attachment relationships with their mothers, fathers and friends. *Journal of Youth and Adolescence*, 23(5), 579-600.

- Patterson, G.R. (1982). *A Social Learning Approach: Vol. 3. Coercive Family Process*. Eugene, Oregon: Castalia Publishing Company.
- Patterson, G.R., Reid, J.B. & Dishion, T.J. (1992). *Antisocial boys*. Oregon: Castalia.
- Paulson, S.E., (1994). Relations of parenting style and paternal involvement with ninth grade students' achievement. *Journal of Early Adolescence, 14*, 250-267.
- Paulson, S.E., & Sputa, C.L. (1996). Patterns of parenting during adolescence: Perceptions of adolescents and parents. *Adolescence, 31*(122), 370-381.
- Pearlin, L.I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2-21.
- Peery, J.C., Jensen, L., & Adams, G.R. (Eds.), (1985). The relationship between parents' attitudes toward child rearing and the sociometric status of their preschool children. *The Journal of Psychology, 119*, 567-574.
- Peterson G.W., & Rollins, B.C. (1987). Parent-child socialization as symbolic interaction. In M. Sussman and S. K. Steinmetz (Eds.). *Handbook of Marriage and the Family* (pp. 471-508). New York: Plenum Press.
- Peterson G.W., Rollins, B.C., & Thomas, D.L. (1985). Parental influence and adolescent conformity: Compliance and internalization. *Youth and Society, 16*, 397-420.
- Peterson, J.L., & Zill, N. (1986). Martial disruption, parent-child relationships, and behavior problems in children. *Journal of Marriage and the Family 48*, 295-307.
- Pettit, G.S., & Bates, J.E. (1989). Family interaction patterns and children's behaviour problems from infancy to 4 years. *Developmental Psychology, 25* (3), 413-420.
- Pettit, G.S., Bates, J.E., & Dodge, K.A. (1997). Supportive parenting, ecological context, and children's adjustment: A seven-year longitudinal study. *Child Development, 5*, 908-923.
- Phares, V., & Compas, B.E. (1992). The role of fathers in child and adolescent psychopathology: Makes room for daddy. *Psychological Bulletin, 111*, 387-412.
- Pipp, S., Shaver, P., Jennings, S., Lamborn S., & Fischer, K.W. (1985). Adolescents' theories about the development of their relationships with parents. *Journal of personality and Social Psychology, 48*, 991-1001.
- Power, T.G., & Shanks, J.A. (1989). Parents as socializers. Maternal and paternal views. *Journal of Youth and Adolescence, 18*, 203-217.
- Putallaz, M., & Heflin, A.H. (1990). Parent-child interaction. In S.R. Asher & J.D. Coie (Eds.). *Peer Rejection in Childhood*. New York: Cambridge University Press.
- Richardson, R. A., Galambos, N.L., Schulenberg, J. E., & Petersen, A. C. (1984). Young adolescents' perceptions of the family environment. *Journal of Early Adolescence, 4*(2), 131-153.
- Reynolds, A.J. (1992). Comparing measures of parental involvement and their effects on academic achievement. *Early Childhood research Quarterly, 7*, 441-462.
- Robinson, N. (1995). Evaluating the nature of perceived support and its relation to perceived self-worth in adolescents. *Journal of Research on Adolescence, 5*(2), 253-280.
- Rohner, R.P. & Rohner, E.C. (Eds). (1980). World-wide tests of parental acceptance-rejection theory. *Behavior Science Research, 15*, 1-88.
- Rohner, R.P. (1984). *Handbook for The Study of Parental Acceptance and Rejection* (Rev. ed.). Storrs: Centre for the Study of Parental Acceptance and Rejection, University of Connecticut.
- Rohner, R.P. (1986). *The Warmth Dimension: Foundation of Parental Acceptance-Rejection Theory*. Beverly Hills, CA: Sage Publications.
- Rohner, R.P., Borque, S.L., & Elordi, C.A. (1994). Children's perceptions of corporal punishment, caretaker acceptance, and psychological adjustment in a poor, biracial Southern community. *Journal of Marriage and Family, 56*, 842-852.

- Rohner, R.P., & Pettengill, S. M. (1985). Perceived parental acceptance-rejection and parental control among Korean adolescents. *Child Development, 56*, 525-528.
- Rollins, B.C., & Thomas, D.L. (1979). Parental support, power and control techniques in the socialization of children. In W. R. Burr, R. Hill, F. I. Nye, and I. L. Reiss (Eds.), *Contemporary Theories about the Family: Research-Based Theories. Vol 1*, pp.317-364. New York: free Press.
- Roopnarine, J.L., & Adams, G.R. (1987). The interactional teaching patterns of mothers and fathers with their popular, moderately popular, or unpopular children. *Journal of Abnormal Child Psychology, 15*, 125-136.
- Rosenburg, M. (1965). *Society and the Adolescent Self-Image*. Princeton University Press, Princeton, NJ.
- Rothbaum, F., & Weisz, J.R. (1994). Parental caregiving and child externalizing behavior in nonclinical samples. A meta-analysis. *Psychological Bulletin, 116*, 55-74.
- Russell, A., & Russell, G. (1989). Warmth in mother-child and father-child relationships in middle childhood. *British Journal of Developmental Psychology, 7*, 219-235.
- Santrock, J.W. (1996). *Adolescence: An introduction*. W. C. Brown Communications, Inc. U.S.A.
- Schaefer, E.S. (1959). A circumplex model for maternal behavior. *Journal of Abnormal and Social Psychology, 59*, 226-235.
- Schaefer, E.S. (1965a). Children's reports of parental behavior. An inventory. *Child Development, 36*, 413-424.
- Schludermann, S., and Schludermann, E. (1983). Sociocultural change and adolescents' perceptions of parent behavior. *Developmental Psychology, 19*, 674-685.
- Shek, D.T.L. (1995a). Chinese adolescents' perceptions of parenting styles of fathers and mothers. *The Journal of Genetic Psychology, 156*, 175-190.
- Shek, D.T.L. (1997). Family environment and adolescent psychological well being, school adjustment, and problem behavior: A pioneer study in a Chinese context. *The Journal of Genetic Psychology, 158*(1), 113-128.
- Shek, D.T.L. (1998). Adolescents' perceptions of paternal and maternal parenting styles in a Chinese context. *The Journal of Psychology, 132*(5), 527-537.
- Shek, D.T.L. (1999a). Parenting characteristics and adolescent psychological well being: A longitudinal study in a Chinese context. *Genetic, Social and General Psychology Monographs, 125*(1), 27-44.
- Shek, D.T.L. (1999b). Paternal and maternal influence on the psychological well being of Chinese adolescents. *Genetic, Social and General Psychology Monographs, 125*(3), 269-296.
- Shucksmith, J., Hendry, L., & Glendinning A., (1995). Models of parenting: Implications for adolescent well being within different types of family. *Journal of Adolescence, 18*, 253-270.
- Siegelman, M. (1965). Evaluation of Bronfenbrenner's questionnaire for children concerning parental behavior. *Child Development, 36*, 164-174.
- Sim, T.N. (1998). A model of susceptibility to antisocial peer pressure for Singapore adolescents. Integrating process, person, context and time. Doctoral Dissertation, University of Wisconsin, Dissertations Abstracts International; Section B: The Sciences and Engineering, 58(8-B), 4494.
- Simons, R.L., & Miller, M.G. (1987). Adolescent depression: Assessing the impact of negative cognitions and socio-environmental problems. *Social Work, 32*, 326-330.
- Soin, K (1996). National Policies – The Impact on Women. *In the ties that Bind: In Search of the Modern Singapore Family*. Singapore: Armour Publishing, pp. 190-208.

- Steinberg, L. (1987). Recent research on the family at adolescence. The extent and nature of sex differences. *Journal of Youth and Adolescence*, 16(3), 191-197.
- Steinberg, L. (1990). Autonomy, conflict and harmony in the family relationship. In S. Feldman & G. Elliot (Eds.), *At The Threshold: The Developing Adolescent*. (pp. 255-276). Cambridge, MA; Harvard University Press.
- Steinberg, L., Elmen, J., & Mounts, N. (1989). Authoritative parenting, psychosocial maturity, and academic success among adolescents. *Child Development*, 60, 1424-1436.
- Steinberg, L., Lamborn, S.D., Dornbusch, S.M., & Darling, N. (1992). Impact of parenting practices on adolescent achievement: Authoritative parenting, school involvement, and encouragement to succeed. *Child Development*, 63, 1266-1281.
- Stevenson, D.L., & Baker, D.P. (1987). The family-school relation and the child's school performance. *Child Development*, 38, 1348-1357.
- Steward, S.M., Rao, N., Bond, M.H., McBride-Chang, C., Fielding, R., & Kennard, B.D. (1998). Chinese dimensions of parenting: Broadening Western predictors and outcomes. *International Journal of Psychology*, 33(5), 345-348.
- Tan, E. (1999). At odds with society: The problem with juvenile delinquency. In A. S. Chang, S. Gopinathan & W. K. Ho (Eds.) *Growing Up in Singapore: Research perspectives on adolescents*, Singapore: Prentice Hall.
- Tatar, M. (1998). Extent and source of parents' school-related information. *Journal of Educational Research*, 92 (2), 101-106.
- The Straits Times (1998, October 18). Gang Violence by Girls on the Rise. Singapore p.31).
- The Straits Times (1999, September 14). Bad Girls: The Problem and Some Solutions. Singapore, p. 32-33).
- Thomas, D.L., Gecas, V., Weigert, A., & Rooney, E. (1974). *Family Socialization And The Adolescent*. Lexington, MA: Heath.
- Thompson, R.A. (1986). Fathers and the child's best interests: Judicial decision making in custody disputes. In M.E. Lamb, (ed). *The Father's Role: Applied Perspectives*, New York: John Wiley & Sons.
- Walker, L.S., & Greene, J.W. (1986). The social context of adolescent self-esteem. *Journal of Youth and Adolescence*, 15, 315-322.
- Wierson, M., Forehand, R., Fauber, R., & McCombs, A. (1989). Buffering young male adolescence against negative parental divorce influences: The role of good parent-adolescent relations. *Child Study Journal*, 19, 101-115.
- Yee, D.K., & Flanagan, C. (1985). Family environments and self-consciousness in early adolescence, *Journal of Early Adolescence*, 5, 59-68.
- Youniss, J., & Ketterlinus, R. (1987). Communication and connectedness in mother and father adolescent relationships. *Journal of Youth and Adolescence*, 16, 265-280.
- Youniss, J., & Smollar, J. (1985). *Adolescent Relations with Mothers, Fathers and Friends*. Chicago: University of Chicago Press.
- Zhang, J.X., & Schwarzer, R. (1995). Measuring optimistic self-beliefs: A Chinese adaptation of the general self-efficacy scale. *Psychologia*, 38, 174-181.