DISCUSSION

Only children are people who grow up without siblings. Only children have been stereotyped as “selfish”, “lonely”, and “maladjusted”. Early in the twentieth century, the emerging discipline of psychology portrayed only children as inevitably pathological. However, since that time, many studies about only children have been conducted, and the over-all conclusion is that only children are no more selfish, lonely, or maladjusted than people who grow up with siblings. Thus, the maturing discipline of psychology no longer views only children as inevitably pathological (Hou, 2009).

Roberts and Blanton (2001) described the advantages of being only children. They were thankful for the absence of competition with siblings and were appreciative of not having to share parental resources and attention with anyone. They strongly contradicted the negative stereotypes about only children. Feng (2002) concluded that the only children would have superior nutrition and health care, overdeveloped intelligence, but be imbalanced on psychological development; and had less attention to moral qualities. Feng and Wang (2003) found no significant difference between only children and children with siblings in their occupational adaptability.

Lee (2006) discovered that single children perceived their family relations as more favourable than those with sibling(s). This study seemed to suggest that families with single children had a better family relationship than those with more than one child where sibling rivalry was common. According to Hou (2009), single children received comprehensive parental attention and support and were widely considered as spoiled “little emperors/empresses”. But at the same time they experienced great pressure to perform with academic excellence in order to be capable to excel in the competition of the global market economy.

Kramer (2010) said that children who grew up as an only child were not necessarily less socially competent than children who grew up with
siblings, but they were more likely to have developed social skills through friends as opposed to brothers and sisters.

The primary aim of the present investigation was to compare only children and children with siblings on psychosocial characteristics viz. on Emotional Intelligence, Stress Dimensions, Coping Styles, State-Trait Anxiety, Self Efficacy, Parental Bonding, Academic Achievement, Perceived Happiness and Perceived Health Status. The secondary aim was to study inter correlations among all the variables (viz. Emotional Intelligence, Stress Dimensions, Coping Styles, State-Trait Anxiety, Self Efficacy, Parental Bonding, Academic Achievement, Perceived Happiness and Perceived Health Status.

The sample of the study was selected from the tricities of Chandigarh, Panchkula and Mohali. Sample comprised of 400 adolescents in the age range of 16-18 years. 400 adolescents (200 males and 200 females) comprised the sample. Sample of 200 males consisted of only children (n=100) and children with siblings (n=100). Similarly sample of 200 females consisted of only children (n=100) and children with siblings (n=100). Each sample of 100 children, that is, male only children, female only children, male children with siblings and female children with siblings, comprised children of working mothers (n=50) and children of non-working mothers (n=50). While selecting the sample, important characteristics such as age, sex, working and non-working status of mothers, and status of children, i.e., with and without sibling were taken into consideration. For this purpose 2x2x2 ANOVA design was employed.

To measure dimension of Emotional Intelligence, Emotional Intelligence Scale developed by Schutte et al. (1998) was used.

For measuring dimensions of Stress, the Perceived Stress Scale developed by Cohen et al. (1983) and Stress Symptoms Rating Scale developed by Heilbrun and Pepe (1985) were used.

The Coping Styles Inventory by Carver et al. (1989) was used to measure three types of Coping viz. Task Focused Coping, Emotion Focused Coping and Avoidance Coping.
To measure dimensions of personality, the State Trait Anxiety Inventory (STAI) devised by Spielberger et al. (1970) was used to measure the variables of State and Trait Anxiety.

**Self Efficacy** was measured by using Generalized Self Efficacy Scale by Schwarzer and Jerusalem (1995).

**Perceived Parental Bonding** was measured by using Parental Bonding Instrument by Parker et al. (1979). It has two dimensions viz. **Perceived Parental Care and Perceived Parental Overprotection**.

**Academic Achievement** was assessed by averaging marks obtained by the students in the last two consecutive annual examinations.

**Perceived Happiness** was assessed on a 10 point scale.

**Perceived Health Status** was also assessed on a 10 point scale.

All the subjects were informed about the nature and aim of the study and were requested to volunteer as respondents. Their informed consent was obtained before they were enlisted as subjects.

The raw scores consisted of scores on all the above mentioned 14 variables viz. Perceived Happiness, Perceived Health Status, Academic Achievement, Emotional Intelligence, Perceived Stress, Stress Symptoms, Task Focused Coping, Emotion Focused Coping, Avoidance Coping, State Anxiety, Trait Anxiety, Self Efficacy, Parental Care and Parental Overprotection.

The raw scores were analysed using appropriate statistical analysis viz. Descriptive Statistics, t-tests, Anova, Inter-Correlations and Regression Analysis.

**Tables 1.1 to 1.7** show the Means and Standard Deviations of the Total Sample, Only Children, Children with Siblings, Male Children, Female Children, Children of Working Mothers and Children of Non-Working Mothers respectively. **Tables 2.1 to 2.7** show the Means, Standard Deviations and t-ratios comprising Only Children and Children with Siblings, Male and
Female Children, Children of Working Mothers and Non-Working Mothers, Male and Female Only Children, Only Children, Children of Working Mothers and Non-Working Mothers, Male and Female children with Siblings and Children with Siblings of Working Mothers and Non-Working Mothers respectively. Table 3.1 to 3.14 show the Analysis of Variance values for all the 14 variables viz. Perceived Happiness, Perceived Health status, Academic Achievement, Emotional Intelligence, Perceived Stress, Stress Symptoms, Task Focused Coping, Emotion Focused Coping, Avoidance Coping, State Anxiety, Trait Anxiety, Self Efficacy, Parental Care and Parental Overprotection. Tables 4.1 – 4.7 show the Inter-correlation Matrices for the Total Sample, Only Children, Children with Siblings, Male Children, Female Children, Children of Working Mothers and Children of Non-Working Mothers. Table 5.1 to 5.35 show Regression Analysis for the criterion variable of Perceived Happiness, Emotional Intelligence, Stress Symptoms, Perceived Stress and Trait Anxiety for the various groups.

A. GROUP COMPARISONS COMPARING CHILDREN WITH AND WITHOUT SIBLINGS

1. STRESS, COPING AND ANXIETY

Based on the review of literature the following hypotheses were proposed:

1.1 Only children were expected to score higher on Stress Dimensions viz. Perceived Stress and Stress Symptoms in comparison to children with siblings.

1.2 Only children were expected to score differentially on Coping Styles viz. Task Focused, Avoidance Coping and Emotion Focused Coping in comparison to children with siblings.

1.3 Only children were expected to score higher on State-Trait Anxiety in comparison to children with siblings.

Table 2.1 revealed that t-ratio comparing children with and without siblings emerged significant on Task Focused Coping (t=2.82, p<0.01).
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A glance at Table 2.1 showed that children with and without siblings did not differ significantly on Perceived Stress, Stress Symptoms, Emotion Focused Coping, Avoidance Coping, State Anxiety and Trait Anxiety. A perusal of Analysis of Variance (Tables 3.5.-3.11) revealed that F-ratios comparing children with and without siblings on Task Focused Coping (F=7.95, p< 0.01) emerged significant. The table also revealed that F-ratio comparing children with and without siblings on Perceived Stress, Stress Symptoms, Emotion Focused Coping, Avoidance Coping, State Anxiety and Trait Anxiety emerged insignificant.

Earlier research in this area has been found to be equivocal.

Zimbardo (1977) found that first-born and single children had a greater tendency to be shy than children who were born after siblings. Two explanations were put forward for this finding. Firstly, it was postulated that parents might set higher expectations for their first-born and only children, and as a result, these children might become more sensitive to social failure. Secondly, because they had a power disadvantage, later-born children might need to acquire social skills more quickly to negotiate personal needs in sibling relationships.

Snow et al. (1981) compared only children’s social skills with children who have siblings. Only children were actually more aggressive and sociable, while later born children displayed more passivity and withdrawal. They found that when faced with a difficult problem, only children were far more assertive and aggressive than later born children to confront a frustrating situation and no remain in close distance of their mothers. Only children were the highest for social behaviour and were not passive or withdrew when interacting with an unfamiliar peer. According to them, most people thought of laterborns being more sociable than firstborns or only children, but, only children were the most sociable out of the firstborns and laterborns. Only children were found to have the most parent-child interaction also.

Ernst and Angst (1983) administered a self-report personality inventory to nearly 8000 young adults and found that, compared with
children with siblings, only children were at no disadvantage on such dimensions as nervousness, dominance, and openness. In fact, contrary to expectations, this large-scale study of adults found only children to be significantly more extraverted than children with siblings.

Cooper et al. (1984) suggested that the intense parental contact characteristic of single-child families might be beneficial for domains such as intellectual development. This close parent-child relationship may present possible vulnerabilities in other domains such as precocious development in accommodating an adult world. He concluded that adolescent development is within normal limits when a healthy, active, parental subsystem exists. When it does not and the child is triangulated into a parental role, inappropriate relationships develop. When a marriage becomes contentious, the single child may become enmeshed within the couples subsystem and thus experience limitations in developing a range of personal beliefs.

Falbo (1984) posited that enhanced parental vigilance may encourage the development of an internal locus of control in only and firstborns. The development of an internal locus of control might be facilitated by parents who responded quickly to their children's behavior. Such children were more likely to develop the belief that their behavior caused their parents' reactions than were children whose behaviors go unnoticed and therefore unrewarded or unpunished. Both only and firstborns were found to have a more internal locus of control than the later borns.

Mao (1984) studied the degree of stress, displayed by children when first entering the kindergarten, in which the day to day emotional states of only and sibling children during their first month in kindergarten were compared. The results showed no significant difference. But those children who had previous nursery experience proved to have made better adjustment in kindergartens.

According to Meredith et al. (1989), although the one-child policy had been successful in controlling population growth, concern had been raised about the stress on families under such a policy and about the detrimental effects on the children themselves of growing up as “only”
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children. Traditionally, Chinese families valued the idea of having many children, and, in particular, having many sons. The agrarian society and patrilineal family system in the Chinese culture favored such developments. Moreover, in China, at least historically, the most prized quality in children was that they be well-behaved, able to get along well with others, and well-adjusted. These qualities were potentially threatened by the “only” movement, inasmuch as only children had been depicted as being more egocentric, less cooperative, less affiliative, and more maladjusted than children with siblings.

Tobin et al. (1989) observed that only children did not grow up isolated from other children. They had as much opportunity to fight, play, laugh and share with each other as did children with siblings. While comparing Chinese and American children, they found that Chinese only children could well exhibit same levels of social adjustment as achieved by children with siblings.

Meredith and Meng (1992) indicated no significant differences between only children and children with siblings suggesting that only children were not more apt to develop psychological or social maladjustment than children with siblings.

Wang et al. (1992) communicated that research on the only child in China yielded two opposite views. One view was that only children had severe disadvantages that would create problems for the children themselves in trying to fit into society as well as causing problems for society. Such research viewed only children as problematic and suggested that they would experience difficulties in life. The opposing view stressed that as they grew up only children would learn to cope with any difficulties through interactions with their peers at school and later at work. This line of research suggested that there were no significant differences between only children and children with siblings if not advantageous towards the only child (Falbo and Poston, 1993). Laybourn (1994) revealed that there was a fear of less help or dearth of kinship network, for the single child in later life. Single-children also found it harder to cope in case there was parental divorce.
Yang et al. (1995) observed that China implemented its one-child-per-family policy in order to control its burgeoning population. Subsequently, concern was raised about the policy and its potentially negative effects on children. In their study, they examined the presumed effects on 202 adolescents born before the policy went into effect, 290 preadolescents born during the period in which the policy was being implemented and 239 children who were born after the policy went into effect. Measures of fear, anxiety, and depression were obtained. Contrary to their hypotheses, based on concerns raised by the one-child policy, children with siblings reported significantly higher levels of fear, anxiety, and depression than only children, regardless of when they were born. For depression, this effect was qualified by a sibling status x age interaction. Children with siblings born after the policy went into effect, or during its implementation, reported higher levels of depression than did only children; however, only children and children with siblings born before the policy went into effect did not differ significantly from one another. They found that only children had lower levels of fear, anxiety and depression. His results showed that young children or adolescents with siblings had higher levels of anxiety, fear and depression.

Wu (1996) studied the home lives of young children in China and concluded that only children did not experience permissive child rearing from their parents. Instead, they experienced considerable pressure to perform, both academically and socially. Baydar et al. (1997) found that young children who experienced the birth of a sibling during early childhood initially showed increased conflict with and social withdrawal from peers, but this disruption subsided after about two years; with sufficient time to adjust to the new sibling, these children then had better peer relations than children who did not experience the birth of a sibling. Rivera and Carrasquillo (1997) found that the parents expressed concern about only children’s need for attention and shortage of playmates. They also felt that some things were worst for their only children like loneliness and missed opportunities to be around other children.

Tao (1998) reviewed of the literature and research including three major studies in Shanghai, Changsha and Beijing as well as the authors’ studies, including the 4 and 6 year follow-up studies in Nanjing. He found
that most of the research undertaken in the USA and other Western countries and in China challenges the negative view of the only child described as ‘selfish’, ‘lonely’ or ‘maladjusted’. The results of his study showed no significant differences between the only child and the child with siblings, in terms of the prevalence of behavior problems except that certain items needed attention. In 4 and 6 year follow-up studies the developmental impact of being an only child or being a child without sibling was found to be different. However, the difference was not at a clinical level, but in behavior patterns or traits which clearly revealed many variables that were ‘functional’ in nature and related to child rearing. The data from these studies reflected only the comparison between groups of only children versus children with siblings. As individuals, behavior problems dominated in only a few children without siblings. He found that only children ad children with siblings had common preferences and interests in activities but in gymnastic activities only children seemed less interested than children with siblings. They displayed imagination to a greater degree. Most only children showed marked food preference and refusal, obstinacy, demand for immediate gratification, disrespect to elders, timidity and temper tantrums. These items were significantly different from those of children with siblings.

Riggio (1999) indicated that although the mean neuroticism score of individuals without siblings in his study was not significantly greater than the normative score, individuals without siblings reported higher levels of anxiety, moodiness, depression and general emotional instability than individuals with siblings. Although, marginally significant, this finding corresponded to the traditional view of individual without siblings as the “lonely only”, as less well adjusted and more emotionally unstable than individuals raised in a multiple child family. It was clear that this result was not statistically significant and yet its implications fit with the view that siblings played an important role in individual, social and emotional development.

Tseng et al. (2000) showed that behavioral problems decreased over time in both groups of children with and without siblings and that there were no significant group differences.
Lavin (2001) documented how parents’ stressors could affect their only-child because the role of the parent was magnified, consequently creating extensive amounts of stress. He further stated, in a two-parent family, any interaction a child could have within his or her family would involve an adult component. Moreover, any interaction the child wished to observe would be exclusively between adults within his or her family. This created the issue of having to cope with a solely adult perspective of the world. Children growing up with siblings would typically not encounter this scenario because they did not have to depend on their parents alone so heavily for support. Furthermore, for only-children, expressing powerful feelings of love, hate, or anger could only be done in the family with an adult. Lavin (2001) further opined that it became difficult for only-children to express their deepest feelings and, consequently, they repressed their feelings in order to conciliate with the parent.

According to Fong (2002), when only-children were older, they frequently had the stress and pressure of caring for their parents, which encompassed emotional, financial, and physical demands. He found that for only-children having to support families only an elite job could supply enough income to enable one person to support so many dependents. His study found that this stress also applied to only-children outside of China. Fong (2002) further highlighted how the modern forces of single-child families were both a cause and an effect of the unrealistically high expectations often said to be put upon modern youth worldwide.

Kitzmann et al. (2002) reported that only children showed no difference in terms of social competence compared to their peers and there were no differences in the number of mutual friends for only children and those with siblings. Only children were reported to have more aggressive-disruptive behavior and were higher on being passive and withdrawing, but they were able to make friends just fine and in that regard were not any different from those with siblings. Even though only children did not differ in terms of sociable leadership or the use of relational aggression, They found that only children were disliked in terms of general acceptance. So even though only children were capable of making just as many friends as
other children, they were more disliked by their peers. This showed that only children did not have any special skills by not having siblings or by that one-on-one attention they receive from their parents compared to those children from larger households. They found that only children had social skills and were able to make friends and were not that different from other children.

In a study by Rebecca et al. (2002), children with more stressors were evaluated by their peers as more aggressive. In addition, their results suggested that having a sibling may act as a buffer for some children, a finding that was significant at the trend level. Specifically, among children whose mothers reported high levels of stress within their family environment, those with siblings exhibited fewer aggressive and disruptive behaviors than those without siblings. Thus, the lack of a sibling (the lack of a buffer) appeared to be problematic for children under high stress in this middle class sample. They also pointed out that having a sibling was associated with lower aggression regardless of the level of stress (a main effect), but that this benefit was especially great under high stress conditions. Perhaps having a sibling afforded extensive practice in conflict resolution skills that were generally helpful. In ongoing peer relations, but that were especially helpful when the child was under stress and might otherwise respond in ways that would provoke conflict with peers.

Zhong (2002) indicated that there is indeed a unique family dynamic in the only-child family. Most of it was due to both parents paying attention to the one child, particularly his or her academic achievements. The societal norm of promoting education adds pressure to the child and the family alike. This created conflicts in the only-child family centering around the child's school-related issues, and less on family-related ones. Due to differences between the two generations of parents in terms of time, energy, financial conditions, and education background, the older generation did not pay as much attention to their children and little communication was shown in their parenting patterns. The younger generation of parents was financially well-off and generally better educated. Therefore, they tend to focus much more on the one child and do everything to satisfy the child's needs. In family
conflict situations, mothers usually recognize potential problems and brought them up in the family, and they tended to communicate more. However, fathers were reported as being more dominant in important family decisions. There seemed to be a more open channel of communication between parents and children and styles are becoming more democratic, direct, and low context in nature.

Shwalb et al. (2004) indicated that while both father’s and mother’s responsiveness were very similar in their relationship to psychological distress, it was father’s responsiveness alone that was significantly related to delinquency among Chinese adolescents. They suggested that Chinese fathers exerted a unique and important influence on Chinese children especially in the behavioral aspect of children’s development.

Tavares et al. (2004) did not detect differences between only-children, first-children and not-first-children regarding the relationship with the parents, presence of a boy/girlfriend and practicing of sports. The differences appeared in some activities performed for leisure. For instance, only-children spent more time in the Internet, an individual activity without personal interaction, than first-children and children with siblings. The other leisure activities (going to the movies, dancing, and reading) were similar among them. They showed that due to higher direct parental supervision there were less number of cases of alcoholic intoxication among only children as compared to children with siblings The findings of this study suggested that being an only-child did not seem to be associated with a worse evolution in several assessed development areas.

Liu et al. (2005) studied the mental health of only-child in China. They selected a sample of students from two high schools, one in urban and the other in rural area of North-East China. Psychological instruments for self assessment were adopted to gauge adolescents’ mental health in terms of self-esteem, depression, interpersonal dependency, stress, and love awareness. Relative to the children with siblings, the only children in the urban high school were associated with significantly lower scores in all aspects of mental health. These differences however were not found among the rural high school
students. They found that relative to children with siblings, the only children in urban area experienced lower scores in all aspects of mental health. The only children’s disadvantages disappeared in rural area because similar to children with siblings, the only children were local born. The only children in urban area tended to have a larger proportion of migrants and hence they had lower mental health level.

Mancillas (2006) indicated that the parent–child relationship was a positive factor in an only child’s life and was considered to be a primary cause for the positive outcomes of only children. However, if parents failed to maintain a healthy relationship with their only child or were undergoing their own difficulties and transmitted an unhealthy level of stress to the child or if the only child had no other outlets to mitigate the severity of family life, the child would likely experience difficulties of his or her own. Parents might need support in coping with the crises that are bound to occur in order not to burden the only child with adult-size troubles. He further observed that helping only children maintain close friendships, beginning at a young age, will likely assist them not only in developing their sociability but would also help them cope with any stress or intensity they might feel at home by affording them a confidante.

According to Richardson (2006), a life with multiple siblings enabled children to try out a multiplicity of roles. It set them up to effectively address larger groups and in time, the world. To be able to win, lose, compromise, vie for dominion, compete with parents’ attention, and overall pull through the experience were things that an only-child was less likely to have available.

While considering the issue of loneliness, Yang (2007b) found that most parents were not available to take care of their children every hour of every day. Besides friends from kindergarten, a single child has no siblings to play with. This created a psychologically unhealthy environment for the child to grow up in. The one-child policy impeded children from having any siblings. Because of this, the generations after these children would not have many close cousins if any at all. Therefore, the atmosphere would not have been as lively as it used to be decades ago. Studies have also shown that the
prevalence for loneliness among older people had doubled in less than ten years. More and more elders are being left behind as younger generations kept themselves busy with their own careers. Fenstemacher (2008) suggested that while finding one’s way might be a little different for only children, only children faced the same challenges and developed the same complex human relationships as most people. In this way, adult only children were different and yet the same as anyone.

Hou (2009) found that parents gave comprehensive attention and put investment into raising their only child. Giving their single children as rich a material life as they could, one child parents also put heavy burdens on their children’s shoulders. The single children felt more stressed in competing for entrance to the best schools of higher education and for jobs in the job market in the future than did children from previous generations. He pointed out another reason of stress for the single children, i.e., the issue of caring for the aging population. Compared to previous generations where multiple children assisted in caring for aging relatives, the only children had to care for their two parents and four grandparents by themselves which put extreme pressure on the single children.

Liu et al. (2010) assessed the differences between only children and children with siblings in their experiences of psychological distress and delinquent participation, and the extent to which parental responsiveness (mother’s vs. father’s) accounted for such differences. Drawing on information provided by a sample of teens attending 7th or 8th grades in three middle-schools in Fuzhou, China, they observed that consistent with their expectations, only children adolescents in their sample reported significantly lower levels of psychological distress and delinquent involvement than children with siblings adolescents. Parental responsiveness accounted for the differences in distress and delinquency between only children and children with siblings. They emphasized that only children received more positive responses from their parents than children with siblings, which in turn was significantly associated with lower levels of psychological distress and delinquency. They also observed that mothers of only children tended to be more responsive to their children than mothers of multiple children. Similarly,
fathers of only children gave more positive responses than fathers of multiple children. Both mother’s and father’s responsiveness mediated the relationship between only children status and psychological distress while father’s responsiveness alone mediates the relationship between only children status and delinquent participation.

According to Shao et al. (2013), it was possible that in China only children played the role of only-child from birth. Only children, to fulfill family expectations, were rewarded for being agreeable, emotionally stable, and open to novel experiences. Shao et al. (2013) findings were consistent with and complementary to Sulloway’s theory (Sulloway, 1996). They pointed out the statewide one-child policy guaranteed positive regard toward only children. In contrast, society regarded siblings, especially laterborns, as less socially acceptable. They grew up sensing those negative perceptions, and thus might feel less satisfied about their lives. So, they found a discrepancy in life satisfaction between only borns and laterborns, but not between only borns and firstborns. They gave another possible explanation from the economic perspective that numbers of siblings might be negatively associated with available resources. Siblings could be less satisfied because they had limited resources. This notion might be refuted, as they found differences between only borns and siblings after controlling for family income by analysis and by experimental design. Therefore, the discrimination against siblings might explain the difference in life satisfaction.

2. SELF EFFICACY AND EMOTIONAL INTELLIGENCE

Based on the review of literature the following hypotheses were proposed:

2.1 Only children were expected to score higher on Self Efficacy in comparison to children with siblings.

2.2 Only children were expected to score lower on Emotional Intelligence in comparison to children with siblings.

A glance at Table 2.1 revealed that t-ratios comparing children with and without siblings on Self efficacy and Emotional Intelligence did not
emerge significant. A perusal of Analysis of Variance (Tables 3.4 and 3.12) revealed that F-ratios comparing children with and without siblings on Self Efficacy and Emotional Intelligence emerged insignificant.

Previous studies in this area yielded mixed findings.

Falbo (1978a, 1979) conducted a study to investigate the validity of many of the stereotypes about only children. The results provided little support for the negative stereotype of the only child. He suggested that only children were more trustworthy than children with siblings. This finding meant that people with siblings were more likely to take advantage of the cooperation of others than were only children. Perhaps because only children lacked the experience of “sibling rivalry,” they acquired the behavioral predisposition to respond cooperatively to the cooperative moves of others. He further pointed out that only children were more autonomous but not lonelier than children with siblings. Only children claimed to belong to fewer clubs, had fewer friends, and deviated from the group decision more than did children with siblings. In this study, only children claimed to have as many close friends, claimed to spend as much time alone, felt as popular as children with siblings, and held as many leadership positions. Taken together, the results suggested that only children were more autonomous than others, but not so autonomous as to be social isolates or to report feeling lonely. He indicated that children with siblings thought that only children suffered more as a result of being an only child than did only children themselves. In the present study, the conclusion that only children demonstrated less of an aversion to their only child status than did others was bolstered by the additional finding that a disproportionate number of only children claimed to want only one child. He brought out two possible interpretations. First, the amount of suffering only children were believed to experience was exaggerated by those who were not only children. Second, only children underestimate their suffering.

Li and Zhang (1984) made comparisons among 265, including 165 only children and 100 children with siblings. They found no systematic differences between only children and children with siblings. But the
standard deviations within the only-child group for most of the items of physical, mental development and characteristic traits were generally larger than those within the group of children with siblings. They indicated both physical and behavioral polarization among the only children, and suggested that the difference might be due to the rearing style of parents.

Jiao et al. (1986) found that only children were more egocentric than children with sibling, whereas children with sibling possessed the positive behavioral qualities of persistence, cooperation, and peer prestige to a greater degree than only children. Jiao et al. (1986) indicated that only children were found to be low in independent thinking, persistence, behavior control, co-operation with peers and peer prestige.

Meredith et al. (1989) observed that in terms of the psychological development, the only child boys seemed to fit into the normal scale and did not differ much from boys with siblings as time went on. They also had a better self concept.

Sifford (1989) found that only children showed more self-regard and self-confidence than only children. The reason why these children seemed to have higher self-estees was because they receive more reinforcement, praise and attention from their parents. The constant supply of these character building forms of attention, resulted in the formation of a self-assured, well rounded individual. Only children were able to collect this appropriate attention, offered by the parents, and used it to form a positive self-image. The surplus of self-confidence helped them to become risk takers. This is one of the reasons why only children became successful public figures. By being able to believe in themselves only children were able to maneuver others into believing in them too, opined Sifford (1989).

Byrd et al. (1993) explored differentiation among first-born, last-born, and single-children adults. They noted that single children were less autonomous and independent than both first-born and last-born children. Day et al. (1993) reckoned single-children to be less independent, they also found female single-child to be more dependent than male single-child.
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Fan et al. (1994) made observations on 265 pairs of only children and children with siblings and discovered that no difference existed in dependency, helping others and aggressive behavior. But for the 5- and 6-year old groups, children with siblings showed better independence than only children. As to the scores of the three levels, i.e., good, moderate and no good, the only children got higher scores both on 'good' and 'no good' than the children with siblings. Children with siblings fared better in friendly behavior.

Chen et al. (1995) showed that there was actually very little disparity in the intrinsic nature of social skills between only-children and children with siblings. In fact, due to overwhelming attention they received at home, some single-children might even appear to be more emotionally secure and confident. They also argued that, contrary to conventional beliefs, single children were not spoiled by their parents and they themselves were not a selfish group. According to them, single-children were actually very well adjusted amongst members of their peers, and had very apt social skills - so much so that they even exhibited elements of superiority (i.e. better leadership skills) in certain areas.

Travis and Kohli (1995) found achievement motivation to be higher in single-children. They had better academic status than others, and were found to be good students, with higher participation in extracurricular activities and few behavioural problems in the school. According to them, achievement motivation originated in the high standards of mature behaviour and relatively high expectations and vigilance that parents imposed on their single children.

Rivera et al. (1997), in an interview conducted with parents and teachers of only children showed that stereotypes against only children were still influencing popular opinion. Teachers viewed only children as more attention seeking, more mature and intelligent, and tending to have undeveloped social skills. Parents expressed concern about their children’s social skills, need for attention, and shortage of playmates, but felt that higher lifestyles and maturity levels were benefits of being only-children. In
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this survey, it was found that only children liked to take the leadership role when playing, the other children liked them and related to them well. They generally had successful interactions with their peers. It was also found that only children were more adult like, street smart and intelligent.

Riggio (1999) observed that the presence of siblings in the family of origin would affect individual development directly rather than only in an indirect manner by affecting the parent child relationship. In particular, the development of social skills, skills used in relating and communicating with others, would seemingly be more greatly affected by the presence or absence of siblings than by core personality traits. According to Riggio (1999), common beliefs suggested that individuals without siblings might experience social skill deficits because of a lack of sibling relationships during key developmental periods, but the results of his study did not support this contention. Indeed, the individuals without siblings did not differ in any meaningful way in their social skills from the individuals with siblings. He explained that only children were known to experience close interpersonal relationships with their parents, relationships that might compensate in the development of social and communication skills for the lack of sibling relationships. Conversely, because individuals with siblings might not experience the high degree of closeness with parents that only children did, the formation of close relationship with siblings might serve to facilitate their development of social skills, when the parent child relationship does not.

Lavin (2001) found only-children students to be bright, articulate, and motivated to do well. This might be because of strong parental involvement with only-children’s affairs. As there was no struggle of allocating attention to siblings, so it all went to the single child.

Roberts and Blanton (2001) examined the subjective experiences of only children by conducting in-depth interviews with 20 young adults. These adult only children described self-perceived advantages of their experiences of being only children: They were thankful for the absence of sharing, fighting, and competing with siblings; they were appreciative of not having
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to share parental resources and attention with anyone; they valued and enjoyed time alone; they felt being an only child facilitated creative and imaginary play in childhood; they had the advantage of parental financial resources to allow them to participate in various activities; they had close relationships with parents; and they felt they developed more maturity in youth than their peers and thus had the ability to connect well with adults. The empirical evidence strongly contradicted the negative stereotypes about only children. It had been consistently documented that only children were in many ways very similar to their peers with siblings, and when differences were found, they were typically to the only child’s advantage (e.g., in intelligence and achievement motivation). Although there was no evidence to substantiate the intensity and pervasiveness with which only-child stereotypes existed, the unique role that only children occupied yielded some challenges that were particular to them as individuals. The subjective experiences of being an only child that were described by young adults in the Roberts and Blanton (2001) study are an important complement to the empirical research on only children because they included assets and challenges that were perceived by only children themselves. Although the majority of respondents were not upset about their lack of siblings, some wished they had a sibling during preadolescence to serve as a confidante who shared in the same struggles of adolescence and family life. Because of sheer numbers, having just one child with one or two parents in the home creates a more intense dynamic than children in larger families experience. This too has its advantages and disadvantages. The parent–child relationship had been considered to be one of the primary factors behind the positive developmental outcomes of the only child.

Feng and Wang (2003) found that no significant differences existed between only children and children with siblings in their occupational adaptability, and only children were doing as well as children with siblings in their jobs, suggesting that the effect of being only or children with siblings on career development was minor.

The purpose of the study by Barbera et al. (2004) was to replicate and extend the finding that Emotional Intelligence was positively related to
family size (and Alexithymia was negatively related to it). Children who had no siblings had fewer social interactions in the home and fewer opportunities for their parents to teach them about understanding other people’s emotions. They, therefore, were expected to have lower levels of Emotional Intelligence than children who had siblings. It was hypothesized that children who were born later into a family would have higher levels of Emotional Intelligence (and lower levels of Alexithymia) than those that were born earlier or those who had no siblings. Children who were born later were born into families with siblings, while children who were born first were born into families with no siblings and only gain their siblings later. Therefore, later born children spend the first few years of their lives in larger families than their older siblings did, and might have higher levels of Emotional Intelligence.

Downey and Condron (2004) found that children with siblings exhibited better social and interpersonal skills, on average, than children without siblings. If children's social skills improved as a result of exposure to at least one sibling, the patterns they observed could cumulate over time so that the gap in social skills between only children and children with siblings would grow. They found that perhaps having siblings, even just one, more frequently put children in positions in which they experienced and were expected to control negative emotions. In this study, teachers' ratings of children's interpersonal skills (e.g., forming and maintaining friendships, getting along with people who are different, showing sensitivity to the feelings of others) suggested that children with one or two siblings were more skilled than those with no siblings, but that additional siblings beyond two were no better than having no siblings.

Falbo et al. (2005) found that Chinese only children were advantaged in academic skills, but disadvantaged in Social skills. In the present analysis, they found that the only-child advantage in academic skills and the only-child disadvantage in social skills was obtained regardless of whether only children were compared to children from two or three or more child families. In his study, only parents evaluated their only children as lower in autonomy, while teachers and students evaluated them similarly to students with
siblings. In terms of cooperativeness, however, all three evaluators rated only children lower than they evaluated children with siblings. They indicated that only children were regarded as less cooperative than children with siblings, but the results regarding autonomy are not as clear, since the finding appeared to be limited to parent and not teacher or student ratings. Their results concluded that the presence of siblings hindered school achievement and enhanced social development. In light of the failure to find strong differences between only children and others in Beijing, where only children predominated, they suspect that there were subjective differences between parents of one versus more children that they had not considered yet, and that these subjective differences bring about the only-child advantage in school achievement and disadvantage in social skills.

Mancillas (2006) stated that the negative stereotypes of only children were pervasive despite a growing trend toward single-child families and evidence of the only child’s strengths. People maintain definite beliefs about the characteristics of each ordinal position in a family, typically viewing only children as lonely, spoiled, and maladjusted.

A study by Mottus et al., (2008) demonstrated that the stereotypical personality profile of a typical only child differs consistently from the stereotypical profile of those who have siblings on 23 out of the 30 NEO-PI-R subscales. Ratings about only children demonstrated that they were believed to be emotionally unstable, cold, hostile, uncaring, obstinate, and arrogant. In turn, individuals who were raised together with brothers and/or sisters were perceived as more straightforward, altruistic, gregarious, happy, and liberal. Although a considerable agreement was reached in these opinions, the beliefs did not reflect self-descriptions of only children. Personality traits of only children, measured by the NEO-PI-R self-report form did not differ from the personality traits of those who had siblings. As compared to only children, children with siblings were more open to new ideas.

According to Hou (2009), many perceived characteristics of the post-1980s generation were closely associated with their status of being raised as
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an “only” child. They were often thought to be selfish and were accused of being indifferent to others. The post-1980s generation often said that was their time to boost individuality. They were proud of being different from others. Other crucial social issues concerning the post-1980s generation were their poor habits and their lack of ability to self-governing in contrast to previous generations. But these kids had other skills. They were creative and opinionated, and had the courage to do new things.

Williams (2009) remarked that, “only children do seem to miss out on some of the skills that siblings can give, but if there are too many siblings or the relationship is not a healthy one, they might be better off not having any siblings”. He observed that having siblings can be beneficial but can also harm a child based on amount of conflict. Only children seemed to miss out on some of the skills that siblings could give but if there were too many siblings or the relationship was not a healthy one, they might be better off not having any siblings.

According to Kramer (2010), who grew up as an only child were not necessarily less socially competent than children who grew up with siblings, but they were more likely to have developed social skills through friends as opposed to brothers and sisters. “Growing up just with parents is a different environment for young people”, she said. “Parents of only children might want to think about how they can help their child have social experiences with other children, whether through childcare or preschool or play dates”. Kramer (2010) stated “They may be encouraged by parents to develop deeper relationships, and that’s a good thing because it provides them an opportunity to develop some of these social competencies that they probably won't acquire if they were limited to interacting with their parents and teachers.”

A study by Liu et al. (2010) compared Chinese only children and children with siblings in domains of adolescent development, that is, school performance, peer association, psychological and behavioural adjustments. Their results were quite consistent with their hypotheses. They found that the Chinese only children were more likely to anticipate going to college
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than children with siblings. Further, only children were more associated with
canventional peers and they reported better adjustments both
psychologically and behaviorally than children with siblings. Their findings
of only children’s greater likelihood in affiliating with more conventional
peers was also consistent with the implication of resource dilution model.
The greater availability of family interpersonal resources such as attention,
time and energy that parents of only children had, might lead to better
parental guidance, management and supervision for their children and thus
facilitated their association with more conventional peers. They observed
one exception that they found inconsistent with their hypothesis was lack of
difference between only children and children with siblings in terms of self
reported school performance. They analysed that they could interpret this
observation by resorting to confluence model, according to which, children’s
intellectual development was greatly influence by the level of intelligence in
a family. A new born to the family would dilute the level of intelligence and
reduce the intellectual benefit in the family. The first born and only children
primarily interacted with adults, which stimulated their brain development.
Only children and children with siblings, however, were not different in
their self reported performance in four school subjects, namely, Chinese,
Math, English, and Political Studies.

Kozlowski (2012) observed that advantages of being only children
existed. They gained undivided attention, lack of resource division, and no
sibling rivalry. They scored higher on tests and were in advantageous
position when we joined the adult world as they had been treated as small
adults most of their lives. They were very intense in their relationships with
others and took those relationships seriously. They set high expectations for
themselves and those around them. They constantly analyzed the actions and
reactions of everyone and everything. Being an only child was overall a
rewarding experience.

Toombs (2012) showed that children without siblings exhibited more
advanced personal interaction skills when compared to children with siblings
while children with sibling exhibited more advanced skills in social
interaction parameters.
Cameron et al. (2013) collected data from 421 individuals born just before and just after the one-child policy’s introduction in 1979. They found that one child policy had produced significantly less trusting, less trustworthy, more risk-averse, less competitive, more pessimistic, and less conscientious individuals. They found that one child policy participants invested significantly less in the riskier investment. In the competition game fewer only child policy participants chose to compete than those born before the policy. Their data also showed that being an only child as a result of the one child policy was associated with taking less risk in the labour market. They also found that those born under one child policy and those who grew up as single children as a result of one child policy were significantly less optimistic than others. According to them differences in competitiveness might reflect beliefs in one’s ability. Participants were asked in which performance they expected themselves to be relative to others in the room. There was no significant difference in the self reported ranking between the pre and post one child policy cohorts although participants born under the one child policy completed significantly more sums correctly than their counterparts. This was consistent with the findings in the literature that only children perform better academically.

According to Lu and Chang (2013), parental perceived weaknesses of only children were coded into three variables, which were externalizing problems (e.g., having fights, verbally aggressive, disruptive), internalizing problems (e.g., shy, timid, fearful), and single child problems (e.g., selfish, spoiled, disrespectful). Out of 328 valid respondents, 47, or 14%, of the parental responses fell into the single child problem category; 104, or 32%, of the parents reported externalizing problems, whereas 203, or 62%, did not report externalizing problems; and 168, or 51%, reported internalizing problems; whereas 160, or 49%, did not report internalizing problems.

In a study, McAlister and Peterson (2013) examined whether having siblings at home versus being an only child might influence the development of Theory of Mind and Executive Functioning skills and their connections to one another. They relied upon past research which suggested that preschoolers often developed Theory of Mind understanding rapidly when they have one or
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more siblings to interact with at home. From the analyses, they learnt that influences form child siblings were relevant to Theory of Mind and Executive Functioning. Having any sibling (not being an only child) appeared to be consistently related to advanced Theory of Mind and Executive Functioning. Theory of Mind was more advanced for those with the largest family size. There was less consistent evidence for any distinct influence of particular birth order positions on Theory of Mind or Executive Functioning. In other words, sibling presence (versus absence) and total family size each were significantly related to Theory of Mind and Executive Functioning.

Zeher and Downey (2013) considered social science research questioning the benefit of siblings of which the most prominent example was the consistent negative association between sibship size and educational outcomes. But more recent work among kindergartners uncovered a potentially positive outcome, that is, children with siblings had greater social skills. Zeher and Downey (2013) extended this line of inquiry to adolescence to see if there were long-term negative consequences of growing up without any siblings. They found no evidence that only children received fewer peer nominations of friendship than youths with one (or more than one) sibling(s). Their results suggested that the previously observed social skills deficit among only children in kindergarten appeared to be overcome by adolescence.

3. PERCEIVED HEALTH STATUS, PERCEIVED HAPPINESS AND ACADEMIC ACHIEVEMENT

Based on the review of literature it was hypothesized that:

3.1 Only children were expected to score lower than children with siblings on Perceived Health Status.

3.2 Only children were expected to score lower than children with siblings on Perceived Happiness.

3.3 Only children were expected to score higher on Academic Achievement in comparison to children with siblings.

A glance at Table 2.1 revealed that children with and without siblings did not differ on Perceived Health Status, Perceived Happiness and Academic
Achievement. A perusal of Analysis of Variance (Tables 3.1-3.3) revealed that F - ratios comparing children with and without siblings on Perceived Health Status, Perceived Happiness and Academic Achievement emerged insignificant.

A glance at review of literature reveals inconsistent trends.

Howe and Madgett (1975) examined the records from a mental health clinic and found that only children did not differ from children with siblings, but their parents were twice as likely to bring them back for repeat visits. Health problems manifested by only children might be more likely to receive full treatment than were similar problems of children with siblings.

Claudy et al. (1979) found that only children were more mature, socially sensitive, tidy, and "cultured," but somewhat less sociable. They did not differ from children in two-child families in calmness, impulsiveness, self-confidence, drive, vigor, or leadership. Only children appeared to be more like adults than other children. They imitated not only adult linguistic behavior, but other adult behavior as well. Their "reference group" was more likely to be composed of adults than was the case for children having a sibling. With the effect of parents' occupations partialled out, the occupational interests of only children favored science, mathematics, music, and literary fields, whereas children from two-child families veered more toward sports, hunting and fishing, and mechanical pursuits. Only children preferred more solitary activities (like reading), over group-oriented and practical ones. As to health, only children did not differ from children with sibling. Only children had higher academic skills and higher need to achieve; however, the differences in this area were small. The follow-up, when the oldest subjects were age 29, showed only children to have greater academic achievement, to have married better educated spouses, to have had fewer children, to be less likely to divorce (at least by a young age), and to differ little in subjective "life satisfaction," from those subjects who had a sibling.

A study by Polit et al. (1980) was designed to extend knowledge about only children by examining a group of adults in terms of a number
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of important life outcomes. Data were obtained from a sample of 537 white, intact, married couples residing in middle to upper-middle class communities near Boston. In the sample, 70 wives and 62 husbands were only children. Compared with other first borns with siblings, and with individuals of higher birth orders, only children were found to have higher educational levels, higher occupational status, smaller families, and to be more secularly oriented. Female only children were more likely to be working, to have planned their families before marriage, and to have been more autonomous in deciding to work. The three groups did not differ in terms of perceived happiness or satisfaction with life. They were also similar in their social activities and in the ways their children viewed them as parents. The data thus did not support the notion that only children are emotionally or personally handicapped by their lack of siblings.

Polit et al. (1980) further observed, that more objective measures of social and interpersonal adjustment similarly failed to support the view that only children grew up to be lonely or unsociable. In terms of leisure activities that were "social" in nature, such as volunteering, visiting with members of the same sex, helping relatives, and the like, only children did not differ in their degree of participation from people who had grown up with siblings.

A survey by Yang et al. (1980) showed that only children were superior in intellectual capacities. The survey sample consisted of 1741 children aged 3-15 years, 314 of whom were only children. They were judged to be superior to other children of the same age level in imagination, language ability, imitation, and productive thinking. The only children also demonstrated higher academic achievement. A survey was conducted in Beijing by Yang et al. (1980) on a sample of 1,741 children aged 3 to 15 years, 314 of whom were only children. They showed that only children were superior to other children of the same age level in imagination, language ability, imitation, and productive thinking.

Blake (1981b) in her study dealt with many questions whether family size was inversely related to child quality; Whether family size was
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important; How did it affect the child? She found that the only child did about equally well as those from two-child families, or just slightly better, but beyond the two-child family, performance started to drop off. She believed that these results gave quite consistent support to the dilution model. She indicated that the only child was not disadvantaged because of the absence of brothers and sisters. Although only children did not show up in all of the studies as more advantaged than children from two-child families, and sometimes they appeared to do slightly less well. She felt that only children did very well indeed and surpassed those from families of more than two siblings. She also found that only children attained higher levels of education and occupational prestige than children from larger families. She revealed that in adulthood, only children were not prone to disruptive family lives and that only children were satisfied with their lives, were high achievers and were not socially alienated.

According to Feiring and Lewis (1982), only children might be bright, cultured, and mature, but still felt unhappy and insecure. Being pressed albeit successfully into adult thinking and behavior, they could miss out on some of the rewarding experiences of childhood. Living up to their elders' expectations could set too high demands and estranged them from their peers. They indicated that low mood and self-doubt were likely to result. They investigated children in the first two years of life, comparing firstborns who later acquired siblings with firstborns who remained alone. At three months of age "only children to be" cried more and smiled less. However, at 12 and 24 months no such differences remained.

Yang (1983) attempted a clear summary about the difference between only children and children with sibling. Overall, he stated, “Only children were better in physical condition and intelligence worse in virtues and behavioral habits than children with siblings”.

Four hundred and ninety-eight only children and 67 sibling children, aged 8 and 10 years of old, residing in Shanghai, the People's Republic of China, were administered a peer assessment measure of social
behaviour and a sociometric nomination measure of peer acceptance. Teachers were requested to complete a behavioural rating scale for each participant. Data concerning children's academic achievement, normative school behaviour, and excellent scholarship (honourship) were obtained from the school administrative records. Unlike previous reports, the results of the present study by Chen et al. (1994) indicated that there were insignificant differences between only children and children with siblings in urban China in the areas of social behaviour, peer relationships, school-related social competence, and academic achievement. The difference in results reported in the present and earlier studies may be the result of social-historical changes in recent years.

Some studies reported very positive characteristics of Chinese only children. For example, the study by Poston and Yu (1985) of teachers’ evaluations of 1069 Chinese children ranging in age from 3-9 years old indicated that, as compared with children with siblings, only children scored higher in both mathematics and verbal achievement, and were rated as more cooperative and less hostile. Also, in Falbo’s research (Falbo et al., 1989), only children in China obtained highly positive evaluations.

In a comparative study of the ability of cognitive reasoning between only children and children with siblings, Zha (1985) found no significant difference between only children and children with siblings. But there were differences with regard to different family and educational backgrounds for the only children group as well as for the children with siblings group. It seemed that education at home did promote cognitive development, be he/she an only child and child with sibling. In a comparative study of cognitive reasoning in only children and children with siblings, he analyzed the analogical reasoning of 400 3-6-year-old children. The results showed that there were no significant differences in pictorial and numerical analogy scores between only children and children with siblings, but there were differences related to different family and educational backgrounds.

According to Falbo and Polit (1986), due to tendency for parental income to increase over time, the parents could devote more income to their
children. One consequence of having just one child was that this child could receive the entire benefit of the increased income. Furthermore, a family's having more income might help older children more than younger children. That is, public schooling is available to all children, but college and graduate training was not. Therefore, only children might benefit more than children with siblings from the enhanced financial resources of their family over time. This probably improved their chances of obtaining higher educations and other specialized experiences (e.g., summer camps for athletic training) conducive to achievement. Likewise, this meant that the only child was more likely than others to receive the material objects he or she needed to feel accepted, such as clothing or musical instruments. According to Falbo and Polit (1986), there were no significant differences in irritability, less independence, withdrawal, frustration proneness and assertive behaviour among only children, first born and later born children, except for somatic complaints. The results contradicted the traditional image which had described only children as resulting in the ‘little emperor syndrome’, ‘deprivation’, ‘only child uniqueness’ and ‘parent child relationship’ were used to discuss the mechanisms for outcome in the psychological development of the only children.

Jing et al. (1987) found that sometimes it could be difficult for the parents to keep their child amused or they had to spend more time with child as he/she had no siblings to play with. Jing et al. (1987) observed that economic incentives were used to encourage couples to have only one child. Health care funds were provided for single children. Government units, factories, and school provided health funds to only children beginning from birth. Parents who agreed to have only one child also received a bonus at the birth of the child and a monthly subsidy until the child reached age 14.

Polit and Falbo (1988) in a quantitative review of the literature on the intellectual achievement of only children indicated that only children were never at a disadvantage in relation to any comparison group; nor were they significantly different from first-born children or children from two-child families. Moreover, only children were at a significant advantage in comparison with later-born children and those from large families. The
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consistency of these findings across subgroups suggested that interpersonal mechanisms are largely responsible. The strong only-child advantage on tests of verbal ability, together with the overall pattern of findings, implicated parent-child interactions as responsible for the family size and birth order variations in intellectual achievement. This review suggested that only-child development can best be understood in terms of the experiences only children had with their parents, not in terms of the experiences only children had never had with siblings. Likewise, the advantages seen in first-born children and those from two-child families could probably best be understood in terms of their interactions with their parents. It was not argued that siblings played no role in development, nor that sibling tutoring had no beneficial effect on intellectual development. Rather it was suggested that interactions between parent and child were likely to play a more prominent role in cognitive development. Falbo et al. (1989) studied the physical, achievement, and personality characteristics of Chinese children in Beijing and Jilin province. The results of the Beijing survey suggested that only children had significant advantages in mathematics and language scores, especially among those in the first grade.

In a study Veenhoven and Verkuyten (1989) only children did not consider themselves better in school or less popular among peers. They found that the cultural belief about the only children’s disadvantages were unfounded. Relative to children with siblings, only children had similar levels of life satisfaction, mood level and global esteem.

Falbo and Poston (1993) found that only children were physically larger than their classmates in two provinces. This finding suggested that the benefits derived from possessing the one-child certificate could well be providing better nutrition and overall health care for only children in these two provinces. Children living in urban areas had more academic skills, less desirable personalities, and more height and weight. The fact that only children were disproportionately from urban areas meant that only children as a group had higher academic skills, less desirable personalities, and greater size than other children. Our statistical analysed control for region of residence when comparing the outcomes of children. But naive observers did
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not control for regional differences when evaluating only children. They saw big, smart children lacking in such traditional virtues as selflessness and enthusiasm for manual labor. This tended to confirm the "little emperor" stereotype.

Popkin et al. (1993) observed that the factor of being an only child or not was unlikely to affect the daily food consumption levels in the ordinary Chinese family at present excluding extremely poor families. Being an only child or not could be concluded not to be a key factor controlling children’s growth. On the other hand, because childhood obesity was increasing in urban areas in China, the relationship between childhood obesity and only children was suspected. Popkin et al. (1995) observed that higher income families and Durban residences were indicated to be associated with higher fat intake, lower physical activity level and higher rating of obesity in China.

Laybourn (1994) revealed that single child might feel lonely at times, eg., on holidays or raining weekends (Jefferies, 2001). Wan et al. (1994) pointed out the only children exceeded the children with siblings in achievement, while there were no differences in interpersonal skills and attitude towards manual labour. According to Chen et al. (1995), single children behaved better in school and demonstrated a higher level of academic excellence. Hill (1995) as adults, only-children typically had lower quality friendships and their overall life satisfaction rating was poorer than adults with siblings.

According to Chow and Zhao (1996), more one-child than multiple-child parents expressed concerns about accidents and illness that might befall their sole offspring. They also indicated that the parents of only children were more attentive to their children's education than parents with multiple children. In the total sample, improving parenting skills (41.8%) topped the list of measures parents took, followed by reliance on children's self-study (27.2%) and private tutoring for their children (10.4%). Although parents of both family types sought to improve parenting skills, more one-child than multiple-child parents reported taking this action. They reported that only children were high academic achievers due to
greater parental attention and educational investment. They further observed that there were negative stereotypes about the only children during the pre-industrial baby boom era. In contemporary times, there appeared to be a favourable change of heart towards the only child.

In a study by *Jiao et al. (1996)* 142 first- and 188 fifth-grade only children and children with siblings from the Beijing area were given 11 cognitive tasks to investigate the difference in cognitive abilities that may exist due to the special conditions resulting from the Chinese one-child family planning program. Overall superiority of grade 1 only children over children with siblings appeared in cognitive abilities involving memory processes, language skills, and mathematics. No differences existed for perceptual tasks. However, the differences in cognitive abilities between only children and children with siblings at grade 5 were less prominent than at grade 1. They explained the cognitive superiority of these younger Chinese only children over children with siblings by the fact that the fifth-grade only children were born before 1980 when the one-child family planning program was not strongly enforced. Parents might have tended to treat these children and children with siblings alike. In contrast, the first-grade only children were born at a time of government policy intervention that resulted in special investment in these children by parents and elders, suggesting the possibility of a time-related cohort effect.

*Stockman (2000)* found that only child parents had strong belief in the education of the only child. Such parents had high academic expectations from their only children. He observed that such child centered values had been encouraged by increasingly urgent sense that the family was the most reliable welfare agency for its members. Parents wished to transfer to their child whatever cultural capital they had and purchased more if possible in order to maintain or improve their families social position in a more unequal and competitive society.

In a study, *Wang et al. (2000)* evaluated the physical and personality traits of rural Chinese preschool only-children whose age ranged from 3 to 6 years old were evaluated. The sample included 197
only children and 367 children with siblings who came from seven kindergartens in rural areas in Fuzhou, Fujian province. The results showed no statistically significant differences in height, mass or BMI (degree of obesity) between the only children and siblings. Regarding the personality traits, the significant difference was that the only children exhibited more somatic complaints, however, the data didn't indicate any other undesirable personality traits for the only children. These results suggested that Chinese preschool children grew normally with or without siblings.

In a study by Wan et al. (2001) the behavioral traits of Chinese, urban, only children were investigated. The participants were 444 children with siblings and 473 only children from Grades 1, 3, and 5 in Beijing primary schools. An inventory consisting of 27 items covering three behavioral traits was developed. The children were rated on the inventory by the principal teacher of the class. Factor analysis revealed three main factors: achievement motivation, interpersonal skills, and attitude toward manual labor. The only children exceeded the children with siblings on achievement motivation. No differences were found between only children and children with siblings on interpersonal skills and attitude toward manual labor.

Tsui and Rich (2002) pointed out with a Confucian tradition that stressed the importance of education, such child-centered values have been encouraged by an increasingly urgent sense that the family is the most reliable ‘welfare agency’ for its members. Parents wished to ‘transfer to their child whatever cultural capital they have and purchased more if possible, and thus to maintain or improve their family’s social position in a more unequal and competitive society’

Hesketh and Tomkins (2003) determined whether only children differed in terms of morbidity, nutritional status, risk behaviours, and utilisation of health services from children with siblings in China. They found no significant differences between only children and those with siblings for some key indicators like being underweight, suicide ideation
and ever smoking. Only children were more likely to be overweight and to have attended a doctor or a dentist in the past year. Children with siblings were significantly more likely to be anaemic. Only children were more likely to have drunk alcohol and been drunk. They were less likely to have suffered anxiety and depression. Socially they seemed to be advantaged. They were more likely to say that they were liked by their peers and confided more readily in friends and parents. They were less likely to report being bullied.

Downey and Condron (2004) investigated the influence of growing up with siblings on the social and academic skills of American kindergarteners, based on a nationally representative sample. Consistent with previous research, they found that kindergarteners that lived without siblings (i.e., only children) were found to outperform children with two or more siblings on reading and mathematics skills. Contrary to previous research, they found that only children scored lower on teacher ratings of interpersonal skills than children with one, two, or three siblings. They pointed that, according to their teachers, only children expressed more externalizing problem behaviors and less social control than children with siblings. When the evaluations of parents were considered, they reported that parents rated their only children as well or better than children with siblings, although they agreed with teachers that only children exhibited higher levels of externalizing behaviors. Given their results, they argued that the presence of siblings hinders the acquisition of academic skills, while benefiting the acquisition of social skills, although they acknowledged that they could not discount the possibility that other factors, such as parent selectivity, were contributing to these differences between only children and others.

Marleau et al. (2004) hypothesized that a higher proportion of only children under age 5 years assessed in a psychiatric department do not present a psychiatric diagnosis, compared with preschool children with 1 sibling. The authors gathered data from 169 children under age 5 years seen in a psychiatric department of a large pediatric hospital. Findings did not support those of the previous study.
According to Jacob (2006), as urbanites in China, compared with their rural counterparts, especially those in the remote and minority areas, only-children enjoyed advantageous social-economic-cultural conditions that provided them with better access to higher education. He pointed out that the reasons for the strong interest in education, particularly higher education, among the only-child community might be multi-faceted. According to them only-children enjoyed advantageous social-economic-cultural conditions that provided them with better access to higher education.

Mancillas (2006) found that only-children completed more years of education and obtained more prestige than children with siblings did. He further stated, in fact, as adults, only-children reported having enjoyed the time spent alone in order to strengthen creativity.

Richardson (2006) found that creativity had great opportunity to abound in single children. According to him because only-children inevitably spent time alone, many had developed a strong creative muscle, inventing imaginary friends, siblings, landscapes or adventures.

According to Yang (2006), one of the purposes of China’s one-child policy is to improve child wellbeing. However, past studies overwhelmingly focus on policy effect on fertility, and thus, whether the policy has achieved this goal remained unclear. This paper explores the relationship between the one-child policy and educational wellbeing (measured as school enrollment and grade completion) among adolescent children in the 1990s, using CHNS data (1993-2000). Drawing on local variations in policy strength and sibship composition, Yang (2006) found a consistent, strong advantage of only children in school enrollment and grade completion relative to those with an older brother or 2+ siblings among children beyond compulsory education, regardless of residence and child gender. According to him, the quality of children decreased with quantity, particularly with the presence of an older brother. The results provided evidence to support the idea that restricting family size and promoting sibling equality would necessarily help to increase average
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human capital investment in developing settings. They proposed that policy makers who aimed to improve adolescents’ educational wellbeing should maintain small family norms. Nevertheless, restricting family size did not necessarily mean one child per couple. Strengthening the campaign efforts of “giving children better education” down to the local level, and particularly, promoting sibling equality among families with more than one child and those with older son(s) might remove the educational disparity of single children and 1-sibling children.

According to Anagnost (2008), despite intra-group disparities in social-economic status, generally speaking, only-child families constituted the main body of the newly emerging middle class in China, for whom education in general, and higher education in particular, was taken-for-granted for their children.

Mottus et al. (2008) pointed out that ratings about only children demonstrated that they were believed to be emotionally unstable, cold, hostile, uncaring, obstinate, and arrogant. In turn, individuals who were raised together with brothers and/or sisters were perceived as more straightforward, altruistic, gregarious, happy, and liberal. Only children were found to be more neurotic, lonely, selfish and obstinate compared to children with siblings. They emphasized that since there was nearly no trait level difference between only children and children with siblings, this added some weight to the conclusion that the presence or absence of siblings had no considerable effect on personality traits.

According to Nettles (2008), there were more home schooled only children now than ever before in modern home schooling history. Generally, there were three classifications of home educators to only children. The first would be couples who had only one child. The second are families who have children that were now grown and gone, but who later have another child whom they have chosen to home educate, making the remaining child at home in an only child position. There is an additional group of educators to add to this equation. They would be the grandparents of only children. The grandparents take over where the family cannot. While the parents of the
child were convinced that home schooling is the way to go, they either could not afford to stop working or were going to school themselves and just don’t have the time. Many of those working were single parents trying to make it on their own, and in these cases, the supportive grandparents step up and help out by educating the child themselves. In other cases, the grandparents might actually have custody of the child and have chosen home schooling on their own.

Bredenkamp (2009) examined the determinants of child nutritional status in China, focusing specifically on those determinants related to health system reform and only-child status. The empirical relationship between nutritional status, on the one hand, and income, access to quality healthcare and being an only-child, on the other hand, was investigated using ordinary least squares (OLS), random effects (RE), fixed effects (FE) and instrumental variables (IV) models. It was found that only children had height-for-age z-scores that were greater than children with siblings. The results were consistent with a conclusion that a policy measure that can effectively encourage parents to have only one child could have large positive consequences for child nutritional status. Moreover, it was likely that the difference in nutritional status between only-children and children with siblings in China was larger than one might find in other countries.

Hou (2009) observed that many only children were served with too much elaborate food which exceeded the degree at which they could absorb and digest what they were offered. Besides, some parent spoilt their children. They could not bear to refuse their children snacks, drinks and high calorie foods. He also pointed out that Chinese children were growing too fat and that the parents with good intentions for raising their children very healthily were creating situations that would harm their children eventually.

Kwan and Ip (2009) found that only children were more intelligent and had higher academic achievement. They made contribution to only children research by extending the study to other important psycho-behavioural areas. They indicated that except mental health the only children had advantages over the children with siblings in all areas of self assessed
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health. They had health advantages in three areas, overall health, physical health, and activity limitation. They further stated that in life satisfaction, they also had higher levels in overall life and most specific life domains. The only children had higher satisfaction in most aspects of life like overall life, family life, friendships, school experience and living place. They had less participation in both the ideation and action of three types of violent behaviour like fighting, self-injury, and suicide, and higher involvement in making donation to benevolent organizations. They were also more generous in donation, though in the aspect of participating in benevolent activities as volunteer, they were not different from children with siblings. They showed that only children were more satisfied with their lives than were siblings.

Dogra (2011) examined the socialization practices and personality traits of single children. All the single child respondents admitted that they had a good friendship network and most of them initiated the friendship on their own. A majority of them felt happy when people visited their homes. She also found that a substantial proportion of the single child respondents were average in their academic performance and all of them were actively involved in extra curricular activities. The single children affirmed that they possessed both positive and negative attribute.

Li and Lau (2012) compared children who were only children with children with siblings and found only children to be equally satisfied with their relationships with fathers, mothers, and friends. ‘Only children’ reported to be statistically significantly happier than those with siblings. All the children were equally healthy and had an equal sense of being able to control situations and events. But an average ‘only child’ perceived him/herself to be worth the same as other children while those with siblings tended to think they were inferior to others, and the difference was statistically significant. None of the children was under much pressure to study hard. Li and Lau (2012) also ranked statistically significantly only children higher on all the three subjects than those with siblings: Chinese, English, and Mathematics. The self-rated school performance by ‘only children’ was statistically significantly better than that by children with siblings.
According to Stachowiak (2013), only children felt happier than those with siblings. This was due to the fact that from an early age they did not have to compete with other children in the home and did not suffer violence from older siblings. He found that the generality of being an only child raises challenges not only with an only child and the child’s parents, but also other members of society, such as teachers who played a significant role in the process of school socialization. According to him, the structure of the classroom in terms of having siblings looked quite different than in the 1980s or 1990s. This generated new challenges for teachers, which might result from greater competition among students, as parents often projected all their ambitions onto the only child, etc.

4. PARENTAL BONDING

Based on the review of literature the following hypothesis was proposed:

Only children were expected to score higher on both Perceived Parental Care and Perceived Parental Overprotection dimensions in comparison to children with siblings.

A glance at Table 2.1 revealed that children with and without siblings did not differ significantly on Perceived Parental Care and Perceived Parental Overprotection. A perusal of Analysis of Variance (Tables 3.13-3.14) revealed that F-ratios comparing children with and without siblings on Perceived Parental Care and Perceived Parental Overprotection emerged insignificant.

Present results are at variance with some of the earlier studies.

Hawke and Knox (1978) stated that single child families were more close knit families resulting in the development of intimate relationships between child and parents. They argued that there was no sibling rivalry, jealousy and potentially fewer family arguments in single child family. They insisted that single children were less expensive and they provided greater financial flexibility to the family. According to Lewis and Feiring (1982), the parents of only children frequently reported taking a more didactic approach in their communications with their children. They found that
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single-children were more inclined to communicate with their parents, often with greater confidence and versatility in their conversations. According to Claudy (1984), additional time devoted by parents of only children aided their social development. The parents had time to support their child’s participation in extracurricular activities. This was evident that only children were more likely to participate in extracurricular activities in high school than others.

Falbo and Polit (1986) conducted six meta-analyses of the research literature on the only child in order to evaluate the status of the only child and to guide theory development in this area. Their 115 studies generated enough information to justify meta-analyses on achievement, adjustment, character, intelligence, parent-child relationships, and sociability. Only children were found to surpass all others except firstborns and people from two-child families on achievement and intelligence. They also surpassed all children with siblings, especially in character and in the positivity of the parent-child relationship. Across all developmental outcomes, only children were found to be indistinguishable from firstborns and people from small families. Theories relating to only child deprivation and only child uniqueness were discredited by the results of the six meta-analyses. The meta-analysis supported parent-child relationships as an important factor in producing the developmental outcomes attained by only children, firstborns, and people from two-child families. According to Falbo and Polit (1986), parental anxiety motivated parents to have high-quality interactions with their only children. This, in conjunction with the tendency for such parents to have more time to attend to their children, meant that their children were more likely to experience greater quantities of high-quality parent-child interactions. These interactions were thought to bring about the developmental outcomes of the only children. They further found that parents of only children recognized that their child was the only one they would ever have, so it motivated them to establish and maintain positive relationships with their child and to encourage achievement. They also viewed that the positivity of this relationship might help to temper the high parental expectations so that the child could establish a positive self image.
while still reaching for higher achievement. They also observed that the enhanced parental attention probably aided the child in acquiring more sophisticated intellectual skills, such as vocabulary, as well as more mature behaviour patterns. Both of these characteristics probably helped only children to score higher on tests of intellectual ability and character than children from larger families. They also observed that due to the tendency for parental income to increase overtime, only children received the entire benefit of increased income. Only children benefitted more than other children from the enhanced financial resources of their family over time. This improved their chances of obtaining higher education and other specialized experiences like summer camps for athletic training which were conducive to achievement. This also showed that the only child was more likely than others to receive the material objects such as clothing or musical instruments.

A study by Pian (1986) found that the parents of only child spent more time with them, tried to build better communication, and more frequently assisted with homework. A survey of Tianjin families by Bian (1987) indicated that parents of only children reported devoting more of their time and income to their single children than they thought they should. Applying to Adler’s theory of effect of birth order on personality,

The results of the meta-analysis conducted by Polit and Falbo (1987) suggested that only children were fairly similar with respect to a broad range of personality characteristics to other children raised with siblings. According to them, the parental attention/warmth mechanism could explain findings in both the achievement motivation and personal adjustment areas. In these areas, only children were advantaged relative to middle-born children and to those from large families but were similar to firstborns and those from small families. Heightened parental attention might presumably lead to both greater expectations for performance and more opportunities to witness reward achievements. It also seemed plausible that increased parental vigilance and contact influenced the child’s self-confidence and feelings of self-worth. The results suggested that the effect was especially strong among younger children, who presumably were more affected by the
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parent-child relationship than were older children. Polit and Falbo (1987) suggested that only children were advantaged because they received more motivated and interactive parenting. In comparison to children with siblings, only children tended to have more concentrated surveillance from their parents. They were more likely to learn that their behavior elicits a reaction from their parents, and that they affected their environments (i.e. their parents' behaviors), and were more likely to develop a sense of personal control. Polit and Falbo (1988) showed that only children were generally at an advantage in their intellectual achievement over children raised with siblings, particularly middle born children and those from large families. Only children were usually similar in their intellectual outcomes to first born children and those from two child families. The results suggested the importance of parent child interaction, in that parents have more opportunity for higher quality interactions when they have fewer (i.e., one or two) children. High quality parent child interactions are thought to facilitate intellectual development. According to them, parent child interaction would account for the similarity between only and first born children in intellectual outcome. That is, first born children were themselves only children for a limited time and their early experiences would therefore be similar to those of only children. Less obvious from this mechanism was the similarity observed in children from one and two child families. The results also suggested that the significant loss in parent child interaction begins at the birth of the third child. At this point children outnumber adults in the family and the possibility for high levels of one- two- one parent- child interaction was substantially reduced.

Mellor (1990) found qualities of the parent-child relationship were apparently similar for only children, firstborns, and children from two-child families but dissimilar to qualities of the parent-child relationship for later borns and others from larger families. They suggested that the definition of the only child be expanded to include firstborns and others from two-child families in future studies that used the parent-child mechanism to explain the outcome differences of only children. Xie and Hultgren (1994) found that the parents of only children did not let them play more than once on a
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This indicated that parents gave study a very important place in their children’s life. This was consistent with the report that Chinese only children’s parents put very high expectations on their children’s.

Chow and Zhao (1996) explained that more number of the parents of only children reported celebrating their only children’s birthdays every year as compared to multiple-children parents who did so. Family outings, including social visits, trips to amusement parks, and movie theaters attended by the whole family also differentiated the two types of families. Distinctly more multiple- than one-child families reported that they "seldom" went on such outings. According to them, for a society in which children served as the primary care providers for their aging parents, having only one child meant greater insecurity for parents. Prompted by this insecurity, parents and grandparents alike tended to give in to their children’s demands in the hope of having better relationships with them. They noted that one-child families were much more child-centered in their family relationships than families with multiple children, and that only-child parents were more involved in caring for their child than those who had multiple children.

According to Jing and Zhang (1998) only children did not differ from their peers in their attitudes toward supporting, assisting, and respecting the family. The lack of differences according to sibling status might be the net result of countervailing forces that simultaneously increased and decreased the sense of family obligation of only children. The potentially greater sense of obligation to assist the family that would result from being the only non adult member of the household could be undermined by the greater indulgence of Chinese parents toward the only child whom they will be permitted to bear. Weiten (1998) hypothesized that only children were likely to be spoiled due to parental indulgence.

Bakken (2000) showed that contrary to the ‘spoiled brat’ image often associated with the Chinese single child, only-children young-adults were responsible individuals actively coping with and making sense of their role as their parents’ one-and-only child, on whose shoulders their parents’ old-
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age care presumably rested - given the socio-cultural context of today’s China. In so doing they were trying their best to balance their own interest with those of the collective-familial — within a context where de-traditionalization and re-traditionalization forces were equally strong. Chen et al. (2000b) collected data on parental warmth, control, and indulgence from children's self-reports. Information concerning social, academic, and psychological adjustment was obtained from multiple sources. The results indicated that parenting styles might be a function of child gender and change with age. Regression analyses revealed that parenting styles of fathers and mothers predicted different outcomes. Whereas maternal warmth had significant contributions to the prediction of emotional adjustment, paternal warmth significantly predicted Later social and school achievement. It was also found that paternal, but not maternal, indulgence significantly predicted children's adjustment difficulties. They found non-significant differences between only children and children with siblings on parenting and adjustment variables.

According to Roberts and Blanton (2001), the majority of the participants viewed their child-parent relationship as more of a friendship than authority-like. They described their parents as “best friends” and being able to talk to them about anything. Nevertheless, some only children who were not as close to their parents discussed feeling pressured to succeed or excel because of the fact they were the only children. In a sense, they were their parent's “only chance” and their successes and/or failures greatly impacted their parents'. Many of these same interviewees expressed an awareness and belief that having their parents' sole attention negatively affected their development. They further observed that many only children felt like “small adults” and were comfortable connecting with other adults at an early age. They also saw this trend carry over into adulthood, with friends and relationship partners typically being a few years their seniors.

Tsui and Rich (2002) found that in accepting the one-child policy, parents in cities would dedicate more energy and money to the future of their only child, for example, by increasing the family educational fund and arranging private classes other than the regular ones the child had in school.
Because the single child would be the only person responsible for the support and care of parents (in some cases grandparents), his or her academic and career success had become the major concern of the family.

According to Chen (2003), the sheer existence or absence of a sibling did not determine the outcome of a child’s social growth. For the single-child, the nature and structure of his or her family system could be the adjusting factor for his or her lack of sibling contact. It could be that parents of only-children tended to demonstrate higher care and caution when raising their children - to the point that such children often adopted a more active and enthusiastic stance towards group-orientated activities. Also, it was often believed that because only-children and their parents often shared a higher level of intimacy, their parents would be more attentive to them, they would make a greater effort to maintain good relations and be more supportive towards their children’s personal and academic endeavors.

A survey by Lee (2004) concluded that parents of only children made concerted efforts to excel and educate themselves in regards to their parenting skills. Only child parents gave importance to their children and educated them on manners, values, and social conduct. According to him “Nearly 80% of OCP’s (only child parents) tend to frequently review their ways of dealing with their children”. It seemed as if there was a conscious awareness among only child parents on how they were raised, what advantages they had, what they would have done differently, and how could they best raise their children to be prepared for the world. A survey administered by Li (2004), provided results that only child parents made concerted efforts to excel and educate themselves in regards to their parenting skills. Only child parents gave great importance to educating their children on manners, values, and social conduct. According to him, nearly 80% of only child parents had frequently reviewed their ways of dealing with their children. He opined that it seemed as if there was a conscious awareness among only child parents on how they were raised, what advantages they had, what they would have done differently, and how they could best raise their child to be prepared for the world.
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According to Carroll (2005), since parents were afraid of losing their only children in the future, children who have no siblings tended to be “over loved”. These parents, also called “helicopter parents”, were extremely obsessed with their kids that they “hover” above them; they “painstakingly [plan] their lives...[but] treat them like little princes and princesses”. Fong (2005) showed that parents played important role in the welfare of children. Parents of only children might be more willing to sacrifice their own needs and do everything to secure their children’s welfare and future than parents who had multiple children. Moses (2005) found that there was no significant difference between only children and children with siblings in the age at which they disclosed their sexual orientation for the first time to a parent. There were no significant difference in levels of parental trust between only children and children with siblings. Parental solidarity was significantly greater among those who had decided to come out to a parent. No differences were found between only children and children with siblings in the reported level of influence of parental pressure.

Deutsch (2006) examined the effects of China’s one child policy on two traditional effects of Chinese family life: filial piety and patrilineality. Eighty four graduating university seniors, who were part of the first cohort born under the one child policy, were interviewed about their life plans. Comparisons between only children and those with siblings showed that only children were as likely to plan on helping their parents as were those with siblings and were more likely to intend to reside in the same city. The only children seemed to feel especially responsible for their parents’ happiness because of their being only child status. Among only children and those with siblings, patrilineal norms seemed weak. Students’ mentioning of family structure to explain their decisions suggested that the one-child policy was undermining patrilineal norms.

Lee (2006) discovered that only children perceived their family relations as more favourable than those with sibling(s). He suggest that families with only children tended to have a better family relationship than those with more than one child where sibling rivalry was common. In order
to promote family relations no matter for single children families or for those with sibling(s), he made some recommendations. The parents should understand children’s developmental needs; have trust on them; believe in their abilities; understand/tune in their culture, perspectives, and feelings; to have dialogue with them (not preaching); to provide chances for them to participate/make decisions; to allow trials and errors for problem-solving; emphasize the here and now rewards; create the right atmosphere for sharing; share the responsibility of doing household cores; and be role models.

According to Richardson (2006), single-child parents typically had much more control over their child’s agenda; therefore, only-children often had to be more aggressive in establishing their own agenda. Unfortunately, exploring and discovering their own agenda posed threat of damaging their relationship with their parents, leaving the only-children with nobody else in the family in whom they could find support. Because there was no sibling to avert the attention while they “rebelled,” most only-children never completely separated from their parents. Many only-children adults still felt their parents’ influence on them into their forties and beyond. Moreover, most only-children saw themselves as an extension of their parents’ hopes and fears, never realizing the potential to break free. This parental pressure was felt much more by only-children than by those with siblings. When many only-children tried to live outside of themselves, they often experienced self-hatred and felt that they had no right to have their own identity.

A study by Chen (2007) was based on the clinical observation of children brought to a child mental health center for guidance. This study showed that those parents with one child only focused excessively on their one child. He analysed several reasons that caused parents focus excessively on their “only” child. There was no other child, therefore, consequently the parents invested all of their attention, concern, emotion, and energy on the sole child that they had. He further observed whether it was a boy or girl, as the only child, the child received full attention and the full force of parental expectations. In addition, only children needed to fulfill the expectation of
four grandparents (from the paternal and maternal side). It was said that, “There are six pairs of eyes watching over one child!”. Contemporary Chinese believed that parents of single children tend to had “four fears” and “five excesses.” “Four fears” referred to the fear of the child becoming delinquent, becoming a nonachiever, becoming un-filial (to his/her parents), and becoming sick, or dying. If parents had more than one child, and if one of them did not turn out as hoped, there was still a hope that the other children would turn out well. But if a couple had only one child, the concerns of the child’s future become magnified. As for the five excesses, these referred to excessive anxiety and concern, excessive interference in the child’s life decisions, concerns about the child’s nutrition, excessive engagement in the child’s day to day existence, and excessive expectations of future success.

Leung and Zhang (2008) pointed preference for sons appeared to be responsible for a disadvantaged environment for daughters, which may also contribute to a biased sex ratio. The article showed that parental preference for sons is insufficient for explaining lower parental investments in daughters in single-child households. They considered parental investments in sons and daughters that are linked via a competitive marriage market. If the sex ratio was independent of preference for a child’s gender, then biased preference for sons and their child services will produce a cohort of sons with higher parental investments. But daughters will also benefit from higher parental investments due to assortative marriage. They observed the overall quality of children was raised in the light of the preference for sons. They pointed out that when health investments in young children determined the sex ratio, preference for sons would result in son-biased health investments and a son-biased sex ratio. However, the rise in the sex ratio had convoluted effects on subsequent investments in children. Particularly, investments in daughters may or may not be decreased. They opined that such findings thus defeated the argument that son preference will surely work against daughters.

Hou (2009) observed that the role of parents had changed in one child families. In traditional Chinese families, parents had absolute
authority. Filial piety was a very strict hierarchy between parents and children. Children had to obey their parents without speaking out their thought. In contemporary one child families, the strict hierarchy did not exist any longer between parents and the only child. The only children quarreled with their parents occasionally which could hardly happen in feudal families. Besides taking responsibility of child rearing, parents took the role of “friends” and “siblings”. The traditional role of parents being the educators had also changed in one child families. Parents were still educators but they took this responsibility much more specifically. One child parents bore a heavy burden in rearing their only child to become a successful member of society. The reality that they had only one child drove them to increase their investment to rear the perfect one child. The desire for parents to give all the best stuff to their single children and educate them to become the best able persons for the future society drove or even forced parents to put much investment into child rearing: financially, physically and psychologically.

Rainer and Siedler (2009) formulated a model to explain how parental care, responsibilities and family structure interacted in affecting children’s mobility characteristics. The mobility of young adults crucially depended on the presence of a sibling. Siblings competed in location and employment decisions so as to direct parental care decisions at later stages towards their preferred outcome. Only children were not exposed to this kind of competition. This caused an equilibrium in which siblings not only exhibited higher mobility than only children, but also had better labor market outcomes.

Garcia (2010) pointed out that large number of participants viewed their status as an only child as an asset rather than a challenge and all of them were concerned about caring for their aging parents. Participants defined this relationship as undiluted, uninfluenced by other children, and therefore intense. The majority of the only children reported having particularly close relationships with their parents. Almost all of the participants expressed their appreciation for having their parent’s undivided attention. Furthermore, the majority of the only children reported feeling
privileged to have financial rewards, material goods, and opportunities such as music lessons, dance lessons, and sports equipment and memberships.

Goh and Kuczynski (2010) presented the role played by grandparents in contemporary China as joint caregivers with parents in raising only children. Grounded on empirical data, collected through ethnographic and survey methods in urban China, they identified the ‘intergenerational parenting coalition’ as a culturally appropriate unit of analysis for understanding child rearing within the multigenerational family in China. The social forces that gave rise to the contemporary multigenerational family in China were reviewed. Qualitative analyses of four such families were used to illustrate the unique family dynamics and patterns of influence particular to the intergenerational parenting coalition. They further found the common goal shared between different members of ‘intergenerational parenting coalition’ was to jointly raise the precious only child. However, this coalition was far from a harmonious unit. The members of the coalition rarely acted with a united front while dealing with the only child. Popular experience was that the grandparents for the one spoiled the grandchildren but this study experienced the reverse. They further explained how the grandparents endured bullying from their grandchildren and it included a refusal to cooperate, whining and deliberate misbehavior to provoke the grandparents anger. Different parents handled it in a different manner and sometimes the conflicting relationship between mother in law and daughter in law created difficulty in discipling the only grand child.

Dogra (2011) observed that single child parents were very cautious in socializing their child. The most significant aspect of the only child families was that the parents spent high quantity and quality time with their child. However, mothers were more closely involved in various activities with their child. They were overprotective and possessive about their child. They take special care in fulfilling the demands of their child. These efforts were visible in the personality and academic performance of the only child respondents. Over vigilant attitude of the parents was appreciated. Most of them were developing as a normal child with both positive and negative personality traits. Only a few only children expressed a desire to have a
sibling for interaction or company, while a vast majority of them rated their family as better or not different from other families.

According to Kozlowski (2012), myths about only children were nothing but myths. The negative connotation given to this birth order could, in fact, be given to anyone. Being an only child was not for better or worse, but it was just different. At the end of the day, a large part of personality was determined by the parental interaction and life experiences and not by ordinal birth order. Kozlowski (2012) further observed that the way the parents raised their child would determine the level of multidimensional perfectionism. If the parents did everything for the child, the child would most likely be a non-perfectionist similar to the lastborn “babies” of the family. If the parents pushed the child to be the best at everything and tried to implant the idea that the child had to be better than everyone else, maladaptive perfectionist behavior was likely to result. If the parents were not neurotic and managed to raise their child in a balanced, healthy manner, the child would most likely turn out to be an adaptive perfectionist.

Fu et al. (2013) indicated that the father’s role was important to the normal development of the only children. The results suggested that father’s should avoid oppressive and autocratic educational way and used few fixed outlooks of value and concepts to interfere the children’s understanding of the world. The research further suggested that parent’s status of emotion and attitude to the life directly affect children’s personality of introversion and extroversion. If the parents hoped that the children were optimistic and easy to communicate with the outside world, the parent’s themselves should firstly experience the joy of giving, thus the children could be influenced by close association. While it was not necessarily a bad thing for a child to experience negative life, it would be easier for the child to have the personality of extroversion if correcting the cognition positively and rightly.

Lu and Chang (2013) reported about parenting beliefs and practices with respect to their only children. They found that the parenting of only children in urban China was predominantly authoritative rather than
authoritarian. The parenting strategies and beliefs were child-centered, egalitarian, and warmth-oriented rather than control-oriented. Chinese parents encouraged prosocial assertiveness and discouraged behavioral constraint and modesty. The parenting of only children was also gender egalitarian in that there were few gender differences in child social behaviors and little gender differential parenting and socialization of these only children. In this study, the parents were asked to describe the strengths and weaknesses of their parent-child relationships. The strengths were coded according to two variables. One, labeled as the "egalitarian relationship", exemplified more egalitarian and two-way parent-child relationships that were respectful of the child's interests. They pointed out that the parents not only had authority but they also respected the child's interests. The other variable, which was labeled as the “authoritarian relationship,” exemplified traditional, authoritarian, and one-way parent-child relations which meant that parents commanded and the child listened and that the child must be obedient. Lu and Chang (2013) further mentioned that the perceived relationship weaknesses were coded into five categories, which were dependency problems (e.g., the child was too dependent on parents), communication problems (e.g., their child and they had difficulty communicating), disobedience problems (e.g., the child disobeyed the parents), aggression problems (e.g., the child fights the parents), and single-child problems (e.g., the parents indulged themselves the child). These results supported their prediction that Chinese parents believed in an egalitarian rather than an authoritarian parent-child relationship. The parents preferred two-way communication over one-way parental authority in resolving parent-child conflicts and viewed communication and parent-child interaction as the main focus areas for improving parent-child relationships. Similar to their Western counterparts, Chinese parents also perceived their child's excessive dependence or disobedience as potential parent-child relationship problems.

In the same study by Lu and Chang (2013), the parents were asked to list the strengths and weaknesses in their parenting behavior. The responses about perceived parenting strengths were grouped in two
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categories of “control and discipline” and “warmth and support.” Each of these two categories was coded on two dimensions, reciprocal parenting behavior and unilateral parenting behavior. Reciprocal parenting behavior indicated whether the desired parenting behavior was reciprocal and interactive and involving the child's input (e.g., “respecting the child’s views” for warmth and “listening to him first before punishing” for control). Unilateral parenting behavior indicated a unilateral action taken by the parent alone (e.g., “being nice to the child” and “being supportive of the child” for warmth and “being strict,” and “setting and enforcing rules” for control). For warmth, out of 323 valid responses, 154 (48%) emphasized unilateral warmth without an emphasis on child input, 120 (37%) indicated parental warmth that also reflected respect for the child, and 49 (15%) did not mention warmth as a parenting strength. For control, 105 respondents (32%) reported parental control strategies on the part of parents without emphasizing parent-child communication, 128 (40%) reported parental control that also emphasized understanding on the part of the child, and 90 (28%) did not list any control behaviors as parenting strengths. Answers to perceived parenting weaknesses were grouped into two categories, which were “too harsh or cold” (e.g., “losing my temper too often,” “not showing enough love or care”) and “too lenient and indulgent” (e.g., “too yielding to the child” and “spoiling the child”). Out of 328 respondents, 92, or 28%, reported their parenting weakness as “too harsh or cold,” whereas 201, or 62%, reported their parenting weaknesses as “too lenient or indulgent.” Considering these two categories together, 148 (46%) reported only leniency-indulgence weaknesses, 40 (12%) reported only harshness-coldness weaknesses, 53 (16%) reported both types of parenting weaknesses, and 83 (26%) reported neither type of weakness.

B. GENDER DIFFERENCES COMPARING MALE AND FEMALE ONLY CHILDREN AND CHILDREN WITH SIBLINGS

Based on the review of literature it was hypothesized that gender differences may emerge on Stress, Coping, Anxiety, Self Efficacy, Emotional Intelligence, Perceived Health Status, Perceived Happiness, Academic Achievement and dimensions of Parental Bonding.
1. GENDER DIFFERENCES IN STRESS, COPING AND ANXIETY

Table 2.2 revealed that t-ratios comparing male and female children emerged significant on Emotion Focused coping (t=2.88, p<0.01), Trait Anxiety (t=2.61, p<0.01), Avoidance Coping (t=2.78, p<0.01) and State Anxiety (t=2.24, p<0.05). A glance at Table 2.2 showed that male and female children did not differ significantly on Perceived Stress, Stress Symptoms and Task Focused Coping. Table 2.4 depicted that t-ratios comparing male and female only children emerged significant on Perceived Stress (t=2.34, p<0.05). Table 2.4 further showed that male and female only children did not differ significantly on Stress Symptoms, Task Focused Coping, Emotion Focused Coping, Avoidance Coping, State Anxiety and Trait Anxiety. Table 2.6 depicted that t-ratios comparing male and female children with siblings emerged significant on Emotion Focused Coping (t=2.71, p<0.01), Avoidance Coping (t=2.23, p<0.05) and Trait Anxiety (t=2.04, p<0.05). Table 2.6 further showed that male and female children with siblings did not differ significantly on Perceived Stress, Stress Symptoms, Task Focused Coping and State Anxiety. A perusal of Analysis of Variance (Tables 3.5-3.11) revealed that F-ratios comparing male and female children on Emotion Focused Coping (F=8.22, p<0.01), Avoidance Coping (F=7.81, p<0.01), State Anxiety (F=4.97, p<0.05) and Trait anxiety (F=6.81, p< 0.01) emerged significant. The tables also revealed that F-ratios comparing male and female children on Perceived Stress, Stress Symptoms and Task Focused Coping emerged insignificant.

Asher et al. (1990) pointed out that boys often reported fewer internalizing symptoms such as depression than did girls. This might be because boys who displayed externalizing social and behavioral problems tended to overestimate their competencies and developed biased or inflated self-images. Ikels (1990) found that many rural Chinese do not have any pension and follow the practice of village exogamy, so the birth of sons remained an important feature of security. He also observed that although elder care had been viewed as the responsibility of the son, the actual care was mostly given by the daughter-in-law. When the only child was a girl, her parents had no one else to care for them and were in no hurry to severe
their ties with her. He found that the lack of formal services for the elderly and the increasing length of life would cause stress for the only adult child who was no longer young and might be responsible for a large group frail elderly.

Tao et al. (1995) revealed that the developmental impact on boys and girls of being a “single child” or a “child with siblings” was different. When the behavior problems were divided into internalizing behavior problems and externalizing behavior problems for comparison, it was revealed that boys retained the same behavior patterns from preschool age to early school age and late school age, i.e., boys who were single children had more internalizing behavior problems (such as somato-neurotic or somatic complaints factors), and boys with siblings had more externalizing behavior problems (such as aggressive, misconduct, or hyperactive factors.) In contrast to this, the patterns of behavior problems for girls switched back and forth through the three stages studied, i.e., girls who were single children had more internalizing behavior problems at preschool stage; when they were older, at early school stage, they changed to more externalizing behavior problems; and, later at late school stage, they reversed to more internalizing behavior problems.

Tao (1998) revealed in the second stage of his study that 3-5 years old boys in the only children group in comparison with those in the children with siblings group had significantly higher scores on the somatoneurotic factors and higher scores on the emotional factor. Children with siblings group had higher scores on the aggressive factor than only children. For the girls of ages 3-5 years, the only children had significantly higher scores on the somato neurotic factor than children with siblings. Children with siblings had higher scores on the aggressive factor than only children. In the third stage, the self-aggrandizing factor scores were higher than male children with siblings. Male children with siblings, in comparison with male only children continue to have significantly higher scores on the aggressive factor as well on the misconduct factor. When girls reached the early school ages of 7-9 years, the situation was reversed, that is, female children with siblings had significantly higher score on the somato neurotic factor ad the female
only children had significantly higher scores on the delinquent factor. When the boys were 9-11 years old, only children had higher scores on the somatic complaints factor than children with siblings. The boys with siblings in comparison with only male children had higher scores on the inferior-worries factor and hyper active factor. When the girls reached ages 9-11 years, the female only children had higher scores on the insecure-neurotic factor and emotional factor. Through these findings he illustrated that among boys only children tended to have internalizing behaviour problems and children with siblings tended to have externalizing behaviour problems at the preschool age. Female only children began to have externalizing behaviour problems when they reached early school ages of 7-9 years but then reverted to internalizing behaviour problems when they reached the late school age of 9-11 years.

In a study Chen et al. (2000a) found that male and female adolescents did not differ in the mean level of emotional distress. Self-reported depression was moderately stable over time among Chinese children and adolescents. For example, the stability of depressed mood in our Shanghai Longitudinal Project was .43 from age 12 years to age 14 years, suggesting that children who reported depressed mood are likely to continue suffering emotionally two years later. They observed that early emotional distress had significant contributions to the development of social adjustment difficulties, including social isolation and feelings of low social status. The results suggested that the social performance of such children might increasingly decline with time. The mechanisms for the developmental links between emotional problems such as and later social difficulties might involve motivational, behavioral, and cognitive factors.

Tseng et al. (2000) studied 310 subjects. When the total behavior problems scores were compared with that obtained in the previous studies conducted for the stage of preschool, early school, and preadolescence respectively, it was revealed that the total scores declined significantly in association with time, showing maturation effect. Furthermore, for boys, in comparing only children with children with siblings, there were no significant differences in term of the total behavioral scores throughout the
four stages of development from preschool to adolescence. However, girls who were single children, in contrast to girls with siblings, had significantly higher scores of total behavior problems throughout each stage of development.

Courtenay and Sabo (2001) opined that men responded to stress in less healthy ways than women do. They were more likely to use avoidant coping strategies such as denial, distraction and increased alcohol consumption and were less likely to employ healthy, vigilant coping strategies and to acknowledge that they needed help. Instead, men might deny their physical or emotional distress or attempted to conceal their illnesses or disabilities. Liu et al. (2001) suggested that Chinese boys were more susceptible to the harmful effect of interparental conflict in terms of developing aggression. Boys who witnessed parental aggression towards a spouse and/or who were being triangulated in interparental conflict might be more likely to express their distress through anger, aggression and externalizing behaviours. In contrast, no significant associations were found between interparental conflict and girls’ aggression in the structural model results. Instead, the correlation results suggested some negative associations between maternal conflict styles and girls’ overt aggression. They showed that Chinese girls generally had a higher level of internalizing problems than did boys.

Thapar (2002) observed that female adolescents scored on the use of express emotions and avoidance coping strategies. Male adolescents scored higher on problem solving, social contact and social withdrawal coping strategies. Leaper (2002) found that found that parents tend to be more controlling towards girls than boys, which might create a ceiling effect for girls. Consequently, the relation between parent anxiety and parental control might be relatively strong in boys. Caprara and Steca (2004) suggested internal locus of control, high desire for control and being female as well as perceived control over the testing situation, were found to predict reports of better psychological adjustment. They revealed that men reported significantly higher positive thinking and hedonic balance.
In a study by Downey and Condron (2004), having siblings versus not having any was associated with better teacher evaluations of self-control. Children with siblings were rated as exhibiting more self-control than only children. They considered the effect of brothers versus sisters in models restricted to comparisons between only children and children with siblings so that the gender composition variable was not confounded with sibship size. Children with siblings did not appear to gain this skill any more from sisters versus brothers. The results suggested that when children had just one sibling there was no social skills advantage to having a sister versus a brother. The effects for birth order and spacing were modest but hinted at more closely spaced siblings as promoting self-control better than those widely spaced.

Zheng et al. (2004) found that the only children reported better adaptation and it contradicted the hypothesis that the only children would have more difficulty adapting to campus life. They pointed out that the reason was that children without siblings started living on their own earlier than did those with siblings. Another reason might be the fact that many of the children with siblings were the younger siblings in their families and might be therefore more dependent on their parents and/or older brothers/sisters. Most of the Chinese students had not left their parents' home until they started their university studies. Zheng et al. (2004) asked the respondents to rate their level of adaptation to campus life, more specifically, their adaptation to the local climate, general school atmosphere, accommodations, teaching and learning style, relationship with fellow students, living without parents, pressures from studies, and their management of expenses, spare time, and food. Higher rating scores indicated better adaptation reports. Compared to the children with siblings, the only children had higher scores in adaptation to the school atmosphere, pressures from studies and spare time management. A gender difference was found in adapting to life with roommates, i.e., the girls had a higher average score.

Halloran et al. (2006) studied gender differences in the relationship of family environment to the management of stressful life events and
psychological well being. Growth oriented/ fun loving families are found to be associated with decreased odds of a male indulging in maladaptive coping strategies. Gender differences were found in teacher- student relationships and peer relationships.

Spitze and Trent (2006) examined affective closeness, contact, and helping among adult siblings using data for over 1,500 respondents in 2-child families from the National Survey of Families and Households. Using this sub-sample allowed the researchers to investigate differences by gender of respondent and of individual siblings. They found that siblings are central to the lives of adults; most sibling relationships involve frequent contact and positive feelings. Sister pairs phoned and exchanged advice more often than do other sibling pairs. Women were more likely than men to report feeling close to or getting along with their sibling.

Lin and Wong (2007) surveyed Chinese school-aged children in urban areas of Beijing, in 1985, 1993, and 2003 consecutively regarding their behavioral problems. The results revealed that total behavioral problems increased remarkably over the 18-year period of time for both genders. By further analysis, it was found that externalizing behavior problems (namely antisocial behavior) was higher for boys than girls in general. Yet, for boys, externalizing behavior problems were gradually decreasing in terms of time, while that for girls was gradually increasing. Therefore, the gap between them was becoming less over time. Regarding internalizing behavior problems (namely neurotic behavior), it was obviously increasing for both boys and girls over time. They observed that the differences between boys and girls were becoming less emphasized in contrast to the past. In association with this, the society was becoming more tolerant and accepting towards girls’ outward behavior, and there is no need for girls to show traditionally expected submissive and humble roles. This might explain why the gap in externalizing behavior problems between boys and girls was decreasing. They also pointed out that there was an urgent need to identify the underlying reasons for the increase in behavior problems over recent years, but there was also a need to explore effective intervention on both individual and societal levels.
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Wang et al. (2007) studied 102 subjects. Their ages ranged from 21 to 25 years with a mean age of 22.4 years. About half were men and half were women. In term of their residence, 43.1% of them were living in city and 56.9% in rural areas. Among them, 70.3% were only children, and 29.7% had siblings. Based on the above information, it seemed that there were differences in personality traits between males and females. Male participants were more daring, and aggressive. In contrast, female participants are more sensitive, empathic, and they felt less secure and were more nervous or felt guilty, corresponding to the Neuroticism subscale. While differences in behavior patterns between only children and children with siblings were apparent when they were young, particularly for girls, this difference gradually diminished over time. Wang et al. (2007) further observed that when the total behaviour problems scores were compared with that obtained in the previous studies conducted for the stage of pre-school, early school and pre adolescence respectively, it was revealed that the total scores declined significantly in association with time, showing maturation effect. For boys, when only children were compared with children with siblings, there were no significant differences in term of the total behavioural scores throughout the four stages of development from pre-school to adolescence. However, girls who were single children, in contrast to girls with siblings had significantly higher score of total behaviour problems throughout each stage of development.

Bruggen et al. (2008) observed that parental control might enhance child anxiety and parents may exert control in anticipation of their child’s anxiety-related distress. High levels of anxiety in parents could influence the development of parental control. A substantial association between child anxiety and parental control was found. Moderator analyses yielded the strongest effect sizes for studies with an overrepresentation of girls, for school-aged children, for families from higher socioeconomic backgrounds, and for studies using a discussion task to assess parental control. Although a nonsignificant relation was found for the relation between parent anxiety and parental control, small but significant effects were found for school-aged children, for studies using a discussion task to assess parental control, and for samples with an overrepresentation of boys.
Mokashi et al. (2012) assessed the gender differences on anxiety and academic achievement. They revealed a significant difference between boys and girls on their anxiety. The mean scores showed that boys were more anxious than the girls. The results also reported no significant difference between the children of VIII, IX and X standards in relation to their anxiety. The interaction between gender and standard also indicated no significant difference in relation to their anxiety. They observed that the analysis of difference between boys and girls on the components of anxiety clearly meant that boys were higher than girls in anxiety components as well as on anxiety. A significant difference was observed between the boys and girls in relation to their lack of self sentiment development, ego-weakness, guilt proneness and frustration tension and overall anxiety, whereas no significant difference was observed on suspiciousness. These results related to anxiety conformed that boys are higher in their anxiety than girls and also in lack of self sentiment development, ego-weakness, suspiciousness, guilt-proneness and frustration tension. They pointed out that there was a need for counseling the residential high school children, who were on anxiety, to cope up with the highly competitive school environment and to overcome their school anxiety.

Lee et al. (2013) tested bidirectional relations between temperament and parenting in a longitudinal study of Chinese children. They found support for bidirectional relations between authoritarian parenting and children’s temperament effortful control and anger/frustration. The Chinese parents whose children were low on effortful control or high on anger/frustration became more authoritarian in their parenting styles over time. Conversely, the Chinese children whose parents were high on authoritarian parenting became less regulated and more prone to anger/frustration over time. By contrast, authoritative parenting did not predict child temperament over time, and neither did child temperament predict authoritative parenting. They also tested whether there was variation between boys and girls. The found no evidence for moderation by child sex.
2. GENDER DIFFERENCES IN SELF EFFICACY AND EMOTIONAL INTELLIGENCE

Table 2.2 revealed that t-ratio comparing male and female children emerged significant on Emotional Intelligence ($t=3.24$, $p<0.01$). A glance at Table 2.2 showed that male and female children did not differ significantly on Self Efficacy. Table 2.4 depicted that t-ratio comparing male and female only children on Emotional Intelligence ($t=2.27$, $p<0.05$). Table 2.4 further showed that male and female only children did not differ significantly on Self Efficacy. Table 2.6 depicted that t-ratio comparing male and female children with siblings emerged significant on Emotional Intelligence ($t=2.31$, $p<0.05$). Table 2.6 further showed that male and female children with siblings did not differ significantly on Self Efficacy. A perusal of Analysis of Variance (Tables 3.12 and 3.14) revealed that $F$-ratio comparing male and female children on Emotional Intelligence ($F=10.51$, $p<0.01$) emerged significant. The table also revealed that $F$-ratio comparing male and female children on Self Efficacy emerged insignificant.

Steelman and Powell (1985) found that birth order seemed to have an effect on a child’s social competence. The later borns showed increased social skills in comparison to early born children. The effects of being later born depended on the child’s gender. Girls were found to be more outgoing and got along well with other children, while boys had all four of the aspects, i.e., more outgoing, getting along well with others, including being one of the ones who was chosen first and being a leader. They further observed that there was an advantage to later born children that included social skills, popularity, and ease in making friends which came from having siblings. Later born children had an opportunity that early borns and only children lacked because they were able to interact with other siblings from birth. They further indicated that later born children were more sociable and this was due to the fact that they were overpowered by their older siblings so they had to “sharpen” their social skills to adapt and meet their siblings’ social skills and to stand out from their siblings and be noticed.
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Riggio (1986) reported gender differences on various social skill dimensions. Women were found to score higher on the emotional expressivity, emotional sensitivity, social expressivity and social sensitivity scales whereas men scored higher on the emotional control scale. Blake (1989) anticipated that children’s social skills would improve more from exposure to sisters than to brothers. There had been remarkably little research on the relationship between family size and social skills, but existing evidence suggested little social skills benefit from having even one sister or brother.

Meredith and Meng (1992) investigated differences in self-concept between 360 only children and 555 children with siblings. Comparisons of children with siblings and only children showed no differences on self-concept and boys scored higher than girls. Based on the children’s self evaluations, peer evaluations and teacher assessments no support was found for the existing stereotype that only children in China were less cooperative, less affiliative and exhibited more antisocial behavioural problems than children with siblings. In contrast, the results suggested that only children were as likely to demonstrate pro-social qualities highly valued in Chinese society such as an ability to get along with others and a desire to help others. Only children and children with siblings were very similar in most social and psychological characteristics.

Nyman (1995) asked college students to provide adjectives to describe their own personality and the way they perceived personalities of other birth ranks. Only children were rated as the least favored position and were described negatively as self-centered, selfish, spoiled, alone, and dependent. Nyman (1995) described males as being closed-minded and insecure and females as being shy. Along with the negative descriptions, only children were described with positive descriptors of “independence, ambition, sociableness, dominance, responsibility, thoughtfulness, and intelligence”.

Garner et al. (1997) studied orientations of 120 adolescents and found that females tended to model emotional expression more freely than males. They reported that females expressed more positive emotion in the presence of their same gender peers and friend group than of the opposite gender.
He (1997) compared the personality of senior high only-children and children with siblings in a city in Mid-North China. In this study, He and her colleagues selected 219 only-children and 219 children with siblings randomly from 12 classes from two senior high schools. They matched the only-children and children with siblings according to the schools, grades, classes they attended, children’s age, gender and parents’ occupations, educational levels and family economical conditions. The results showed that only child boys were emotionally more stable than boys with siblings. Only child girls were less competent in adjusting to the environment and in cooperation with others. Among the only children, only child boys were better in terms of adjusting to the environment and in cooperation with others.

Petrides and Furnham (2000) did not find significant gender differences in overall trait Emotional Intelligence. The results of their study showed that in spite of the evidence that females seem to be more socially skilled than males and scored higher on existing EI tests their self-estimated EI scores tended to be lower than those of males. They hypothesized possible explanations for this in terms of the nature (self enhancement versus self-derogation) and source (male versus female) of the bias. They opined that males self-enhance and females self-derogated. Both genders self-enhance with males more so than females; or that males were accurate and females self-derogated. They argued that the bias was more likely to be self-derogatory and on the side of females since, on the whole, the correlations between measured and self-estimated EI were lower for females than for males.

Mayer et al. (2002) found that overall emotional intelligence was potentially useful in reducing stress for some people, but irrelevant or unnecessary for others. Specifically, higher emotional intelligence was correlated with lower stress for only those individuals who were high in attention to emotion, clarity to emotion and emotional intensity. Besides, overall emotional intelligence was negatively correlated with certain coping styles, such as, behavioral disengagement and alcohol-drug engagement. Further analysis showed that managing emotion was positively correlated with certain other coping styles, such as, seeking social support- emotional,
seeking social support instrumental and religious coping styles. They pointed that women had scored higher than men in emotional intelligence.

Liang (2007) observed in his study that with regard to only children’s independence most of the parents mentioned that the only children were quiet independent. The majority of parents mentioned that the children made their own decisions. These responses showed that only children enjoyed a high degree of self control and parents of only children were not very interfering. The majority of the parents expected the only children to be confident except when they pointed out their high ego, timidity or lacking in modesty. Differences between parents who had boys and parents who had girls were not evident.

Shah and Thingujam (2008) aimed at studying coping in relation to emotional intelligence. The sample comprised of 197 students, between the age of 18 and 25 years. Participants completed self-reported measures of emotional intelligence and ways of coping. It was found that appraisal of emotions in the self was positively correlated with plan-full problem solving and positive reappraisal coping styles. Appraisal of emotions in others was positively correlated with problem solving and positive reappraisal. Emotional regulation of the self was positively correlated with problem solving, confronting coping, self-controlling, positive reappraisal and with distancing, but negatively correlated with escape avoidance. No gender differences were found in perceived emotional intelligence and ways of coping except for self-control, where males reported higher than females.

Kashdan et al. (2009) found that women were generally more emotionally expressive than men and with the exception of anger, experience emotions more intensely and frequently compared with men. Albert et al. (2010) studies adolescents in various situations and found that there was no support for emotion expressiveness as a mechanism of action in men.

Trent and Spitze (2011) found that men without siblings might be on average more socially isolated than women in terms of family social activities. On the other hand, it might also be the case that men without siblings were more likely to maintain kin ties than other men who relied on
sisters to do “family work.” They also found gender differences in the frequency of participation in sports, youth or school related activities among men those who grew up as only children participated frequently in such activities as compared to those who grew up with siblings. They also observed that women had less frequent participation in these activities if they grew up without siblings. They suggested that only children experienced gender role socialization than other children.

In a study, Toombs (2012) compared the pragmatic skills possessed by second born children to those of only children. Participants for this investigation were 56 fourth-grade children. Participants were identified through questionnaires distributed through area public schools. Based on the information obtained from the parent completed questionnaires, participants were assigned to one of two groups, depending on the presence of siblings. The classroom teachers of each participant then completed a Pragmatic Language Skills Inventory (PLSI), an instrument used to rate pragmatic skills exhibited by children, as they compared to other children of the same age and gender. The data obtained from the inventory were then analyzed to determine if a significant difference existed among the three subtests of the PLSI for the two groups of participants. Additional analyses were performed to determine if there were significant differences among student group performance on the subtests and between groups. He showed that only children exhibited greater classroom interaction skills as compared to children with an older sibling.

Bosacki (2013) investigated the longitudinal relations between theory of mind (ToM) understanding and perceptions of self and social conversations in 17 school-aged children (12 girls, 5 boys, age 8–12 years). Significant negative longitudinal associations were found between children’s number of siblings and their perceptions of self-worth and number of cognitive terms in their perceptions of peer and family conversations. Frequency analysis suggested that girls’ perceptions of conversations referred to more social and psychological aspects of self and relationships, whereas boys focused mainly on physical activities. Most children were more likely to prefer listening to talking during social conversations. The majority of children reported feelings
of mixed or ambiguous emotions during experiences of silence. She suggested that compared with boys, girls used a relatively higher number of mental state verbs, and reported a relatively higher number of emotion words. She observed that perhaps girls in the sample who were more likely to understand mental states in others, were capable of imagining social judgments of others in a negative sense. The findings regarding the influence of siblings on children’s perceptions of self-worth and their responses regarding their emotional experiences during family conversations suggested that the family context and interactions with siblings might provide a rich context for children to develop a sense of self and also their understandings of mental states in others.

3. GENDER DIFFERENCES IN PERCEIVED HEALTH STATUS, PERCEIVED HAPPINESS AND ACADEMIC ACHIEVEMENT

A glance at Table 2.2 revealed that male and female children did not differ significantly on Perceived Happiness, Perceived Health Status and Academic Achievement. Table 2.4 depicted that t-ratio comparing male and female only children emerged significant on Perceived Health Status (t=2.07, p<0.05). Table 2.4 further showed that male and female only children did not differ significantly on Perceived Happiness and Academic Achievement. Table 2.6 depicted that male and female children with siblings did not differ significantly on Perceived Happiness, Perceived Health Status and Academic Achievement. A perusal of Analysis of Variance (Tables 3.1-3.3) revealed that F-ratio comparing male and female children on Perceived Health Status (F=3.80, p< 0.05) emerged significant. The table also revealed that F-ratios comparing male and female children on Perceived Happiness and Academic Achievement emerged insignificant.

Blake (1981b) found that the occupational advantage enjoyed by male singletons, relative to those from families with different sizes was not so clearly reflected in the behavior of the women either with regard to their own occupational achievement or to that of their spouses. Female only children did not do as well as did those from two and three families. Female singletons did not marry men of as high occupational status as did females from two or three child families.
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A study by Veenhoven and Verkuyten (1989) suggested that being an only child could be disadvantageous under certain conditions. The data suggested that the unemployment of parents is one such condition. Female only children, at least, reported less life satisfaction and lower hedonic level and self-esteem when their fathers did not work, while male only children and children with siblings showed very little such difference. This could be interpreted as partial support for the view that only children tended to be overprotected. Continuous surveillance, combined with less freedom for girls, could result in a smothering family climate. The effect of unemployment of father was greater than nonemployment of mother, possibly because unemployment among males tends to be more closely linked with psychological problems. If true, this still implied that only children was more vulnerable to parental pathology than were children with siblings.

Gee (1992) traced differences in development into adulthood between women who were only children and women who grew up with siblings, and found that female adult only children tended to have large families, to marry and have their first child at older ages, and to achieve higher educational level. However the differences disappeared when background variables were controlled.

According to Falbo and Poston (1993), only children outscored the children with siblings in academic skills, but they found girls outscored boys in verbal tests. There were no significant differences between boys and girls in mathematics achievement. They found that only children never scored significantly lower than first and last borns and they usually scored higher than children with siblings. They had predicted that parents and teachers would not describe only children differently from children with siblings. This was supported in three of the four provinces. In Gansu only children received lower evaluations from their parents than did children with siblings, a finding which was inconsistent with the hypothesis. Teachers, parents and children did not regard only children as lacking in positive attributes. In Hunan, there were birth order effects, in both peer and teacher evaluation of boys, but the scores of only children were always
similar to the other group. Falbo and Poston (1993) found that only children would receive lower personality evaluation from their peers than would children with siblings. This hypothesis was supported only in Beijing and for male only children.

Chow and Zhao (1996) examined the effects of child gender and siblings on child care in China. They found that compared to families with multiple children, one-child families invested substantially more in child care services, academic tutoring, toys, and family activities. They specifically expressed that the gender of only children did not have significant effects on parents’ attitudes regarding devoting family resources to children. Chow and Zhao (1996) also investigated the relative roles of Chinese women and men in child rearing. They noted that women tended to be more child-focused and that they expressed stronger child-centered attitudes than their male counterparts. This was because traditionally Chinese women tended to derive their status security through their fulfillment of child-birth and child rearing. They further observed that when this role was limited, mothers might cling to the one child as the embodiment of their life fulfillment and sense of security.

Jiao et al. (1996) observed none of the studies had successfully demonstrated a biological basis for gender differences in cognition. They maintained that the sex differences in their study were mainly caused by the family and social environment. In modern China, the implementation of the one-child family planning policy has placed the son in a special position to be the hope of the family and the carrier of progeny. Undoubtedly, parents and grandparents in the family are concerned more about the academic success of boys than girls. They opined that this might be the reason for the superiority of boys over girls in general information at both grades and vocabulary in the first grade.

Schmid et al. (1996) reported that men might be more afraid than women of losing their jobs when taking time off for medical appointments. Wizk et al. (1999) women consistently reported poorer health status than men. They revealed that this health difference typically
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consisted of higher self reports of physical symptoms and illness behaviour by women.

In a study conducted by Zhang et al. (1999) thorough comparison of the math scores, the results showed that girls’ scores were above boys’ in junior high school; while in senior high school, girls’ scores were below boys’ scores in the first year and their performance were about the same in the second year. The only child girls’ performance in grade one in junior high school was above only child boys’ performance with statistical significance. The differences decreased in grade two and three. The only child boys’ performance in grade one in senior high school was above only child girls’ performance with statistical significance. However, the differences decreased in grade two.

Tiedemann (2000) studied parents’ gender stereotypes and teacher beliefs as predictors of children’s concept of mathematical ability in elementary school in Germany. There were 589 students in grades 3 and 4 from 28 elementary schools in which 489 students were used in analysis. Their teachers and parents participated in the study and answered questions concerning perceptions of ability in mathematics, and gender stereotypes. Students were asked to fill out questionnaires regarding beliefs and attitudes concerning mathematics. For instance, they were asked what grade they thought they would get on the next math test using a 5-point Likert scale. Parents’ questionnaire included parents’ evaluations of their children’s ability, gender stereotypes, and expectations of their children’s future success. Parents were assessed by statements such as “My child will show good results in math in the next years of school” to find out their expectations. Teachers were asked to evaluate students’ mathematical ability and to record past and current grades in mathematics. The results showed gender differences in boys’ and girls’ perception of their competence as well as parents’ and teachers’ perceptions of boys’ and girls’ performance. Boys perceived themselves as more competent in mathematics than girls. Mothers and fathers perceived boys to be more competent in mathematics than girls. Both mothers and fathers rated higher expectations for boys than girls. Teachers’ ability perceptions were higher for boys than girls. Parents’
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stereotypes about gender differences in math performance interacted with the
gender of children and predicted their beliefs about children’s ability. Parents’ beliefs about children’s ability were related to children’s self-perceptions of math ability.

Bergman and Scott (2001) reported that there was a marked difference in gender well being. Girls reported greater unhappiness and past worries. They believed that the gender differences could be explained through socialization, gender identity construction as well as existing power inequalities between men and women in the society.

Florencio et al. (2001) found that only children were prone to obesity but they did not differ from children with siblings. The prevalence of child obesity varied by sex. The gender pattern of obesity in China differed from that in other developing countries where girls commonly had a higher risk of obesity than boys.

Huang (2001) found that traditional perspectives on education and gender still manifested in China. Parents still value education and tried to create schooling opportunities for their children, and boys were still considered preferrable than girls for a lot of parents. Furthermore, the policy-induced structural challenges, the household registration system and one child policy complicated the situation even more. He reported even though China implemented 6-year compulsory education policy, migrant workers requested their children, especially girls to start working on unskilled low-pay jobs at an age below ten instead of sending them to primary schools.

Liu (2002) found that parents of only children of both boys and girls took higher education as a norm for their child and they wished their children to achieve as much formal education as possible. Daily lives of the whole family, especially that of the child, were much framed by how to reach the goal of entering a university, preferably a prestigious one.

Tsui and Rich (2002) showed that the only-child policy had an unintended consequence of engendering a child centered culture with a strong belief and shared interest among the urban community in educating
the only-child regardless of the child’s gender. Little difference related to education (in terms of desired educational level and readiness for educational investment) between only-girl and only-boy families was found. This formed a striking contrast with the Chinese tradition in which parents’ academic expectations and investments were limited to their sons. They found that one child family structure reduced or eliminated gender differences and facilitated the mathematical achievement of girls.

Williams et al. (2002) reported gender differences in depression in adolescents. They pointed out that by the age of 15 girls were about twice as likely to be depressed as boys. They revealed that gender differences first emerged between the ages of thirteen and fifteen and peaked between the ages of 15 and 18. Women rated their health more poorly as compared to men.

Sehgal (2003) explored gender differences on adolescent health. Results showed that there were gender differences on perceived health status with girls scoring higher than boys, exercise/fitness, body mass index, life events stressors, state anger and psychoticism with boys scoring higher than girls. Fathers involvement may be another factor associated with positive child outcomes but it received limited attention in recent psychological research.

Lee (2004) found that Chinese people also tended to believe that status achievement was among a few channels to attain personal happiness. Thus Chinese children who were unable to excel in school or who did not have much prospect of success might be considered a failure or a disgrace. Furthermore, they might face constant scolding, blame, and other forms of mistreatment as their family compares their failed children with other more successful counterparts. He pointed out Anecdotal stories of Chinese children and youth who were compelled to suicides because of overwhelming pressures to perform in school and their physical and psychological tortures as a result of inability to meet their personal and family expectations were reported. Li (2004) observed that the potential conflicts between the one-child policy and the traditional preference to have
many children, especially sons, may affect parents’ investment in their children, including child care arrangements. He showed that boys were more likely to receive breast-feeding, quality food, education, child care, immunizations, and medical treatment than girls.

**Fong (2005)** studies 768 only child families with the child in 8th grade and found no differences in parent’s educational aspirations for their boys and girls. He proposed that parents’ attitudes toward daughters were changing because of their singleton status, and he argues that parents increasing support for and pride in their daughter’s achievement may represent their own interests, something that had previously only occurred with male children.

**Yang (2006)** found that single children were more likely to enroll in school than other children, particularly than those with an older brother or more than two siblings. Thus the presence of an older brother or more than two siblings had a detrimental effect on siblings schooling. He felt that not only number of siblings but also sibling gender and birth order are important for child education. He compared only children with children with sibling, and found that only children were advantaged in education as compared to those with an older brother. He also found that rural children with an older sister were marginally more likely to enroll in school than single children. In settings with son preference, he also found that in settings with son preference among parents with limited resources, a common strategy to raise son’s education was to educate daughters a little, send them out to work and then use daughters income to better educate sons.

**Kaur (2007)** in a study on psychological and family characteristics in adolescents at risk for developing Type II Diabetes found significant gender differences in male and female adolescents. Male were found to be higher on body mass index, health habits, personality dimensions, coping and problem solving. Females were found to be higher on anger experienced and anger expressed, depression, measures of stress and distancing, self controlling, seeking social support, accepting responsibility, escape avoidance and positive reappraisal.
Ornelas et al. (2007) observed that physical inactivity was increasing among adolescents in the U.S., especially among girls. They examined how the relationships between parental influences and adolescent physical activity differ by gender and tested whether these relationships are mediated by adolescents' self-esteem and depression. They found that family cohesion, parent-child communication and parental engagement positively predicted moderate to vigorous physical activity (MVPA) for both genders one year later. For both females and males, self-esteem mediated the relationship between parental influence and physical activity. Depressive symptoms were only a mediator among males. Females reported higher levels of parent-child communication and lower family cohesion compared with males. There were no gender differences in levels of parental monitoring and engagement. Females had significantly lower levels of self-esteem and higher levels of depressive symptoms than males. Strategies to promote physical activity among adolescents should focus on increasing levels of family cohesion, parental engagement, parent-child communication and adolescent self-esteem.

Leung and Zhang (2008) opined that preference for sons, health investments and the sex ratio were related nontrivially. They asserted that son preference would induce more health investments in sons. But higher health investments in sons would trigger strategic reactions from parents of daughters. Also, higher health investments in children would influence parental investment decisions in both sons and daughters in the later stage via the sex ratio. In general, on the one hand if health investments in children are strategic complements and the partial effect of preference for sons on health investments in sons is positive, then preference for sons would increase health investments in both sons and daughters. They indicated that, the son preference effect on health investment in sons was higher than in daughters at the margin. On the other hand, if health investments in children are strategic substitutes and the partial effect of preference for sons on health investment in sons is positive, then the preference for sons would raise the health investments in sons but lower health investments in daughters.
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Basu and Jong (2010) found that in some Asian (China was not included) and North African countries, girls were born into larger families and that they have to share resources. This may put them at a disadvantage even when parents did not discriminate against girls. Furthermore, they suggested that the fact that girls were born at relatively earlier parities might also worked to their disadvantage. In poorer and larger families, parental responsibility for younger children is passed on to older girls, who might not be able to devote their full time and energy to their own education or recreational activities. They pointed out that this was not very likely in the current Chinese culture or two-child families. The new patterns of sibling structure might not have any health implications, but they were likely to influence family dynamics.

Chun and Mobley (2010) studied Problem Behaviour Syndrome (PBS) in male and female adolescents. It was found that gender differences in academic failure, substance use, anger, mental health, optimism and gratitude existed. Males were reported to be very high on anger and substance abuse as against females.

Li and Wu (2011) found that the mothers with first birth of girl would have less bargaining power on intrahousehold resource allocation and had less resource for children’s education. This result was consistent with the view of feminist scholars that social and cultural norms were important determinants of women’s education. They did not find this kind of distortion in older cohorts, because females with sisters did not mean that they have no brother before the “One-Child Policy”. Thus, as feminist economists argued, the seemingly gender neutral policies implemented through social and cultural norms that bore and transmitted gender biases can impede gender equity, and that gender inequality, in turn, could hinder the attainment of other human development objectives.

Kang and Peng (2012) investigated the intrahousehold resource allocation on children’s education and its earnings consequence in Chinese labour market. In order to overcome the endogeneity problem of schooling, they considered the siblings structure and the available public facilities as
instrumental variables. Females’ education was negatively affected by siblings (brothers or sisters) number, while males’ education was also negatively affected by their brothers but much less by their sisters. For the youngest cohort born after 1980, the education of a girl would be heavily impeded by her sisters, reflecting strong distortion of “One-Child Policy” on intrahousehold resource allocation.

Mokashi et al. (2012) revealed significant information that there was a significant difference between girls and boys of different classes on their academic achievement. It meant that girls were higher in their academic achievement compared to boys. Correspondingly as the respondents go to the higher classes the academic achievement has decreased as there was a significant difference between VIII and X, correspondingly IX and X. There was no significant difference among the girls of VIII, IX and X standards but significant difference between the students of VIII - X and IX - X were observed. These results confirmed that academic achievement of girls was significantly higher compared to boys and also confirmed that there were more individual differences among boys compared to girls. These results clearly confirmed that gender contributed significantly to the academic achievement. Girls were superior in their academic achievement but boys differed significantly in their academic achievement. They opined that these results were due to the fact that girls were nurtured more or less similarly in all the families in the Indian culture and they matured early physically and psychologically. Therefore there is every chance to find individual differences among girls to a minimum extent.

Shao et al. (2012) indicated that only children were more extraverted and emotionally stable than were first borns. Only children were more satisfied with their lives than children with siblings. They also found that women were more extraverted, agreeable and satisfied with life than were men. In contrast, men were more conscientious, emotionally stable and open than were women.

Shirasawa et al. (2012) analyzed data from a total of 3168 subjects (1645 boys and 1523 girls). They found that parents with overweight children...
had significantly higher Body Mass Index than those with non-overweight children. Children with one or both parents being overweight were more likely to be in the overweight group. The employment status of the parents (fathers and mothers) was not related to the child’s overweight. While showing the characteristics of overweight and non-overweight children, they observed that the proportion of boys was significantly higher in the overweight group than in the non-overweight group.

According to Music et al. (2013), women had lower levels of life satisfaction and it was attributed to the traditional education of women. Traditionally number of prohibitions, control and monitoring in the education of girls as compared to boys. This study was done on a sample of adolescents at first and second year of high school in which period of life the physical appearance was very important, especially when it comes to girls. As regards boys, they were often allowed gaps in learning and behavior, while the parents of the girls often do not expect breaking the rules. It was possible that the same requirements existed when it came to respect for the rules of behavior and learning, set by teachers which were different for boys and girls. Level of satisfaction was lower in girls than boys. They pointed out that there is no statistically significant difference in the level of life satisfaction in relation to the predictor variable- success in school. It followed that the young regardless of the success achieved in the school showed just the same life satisfaction. Although it was originally planned that the success achieved significantly affects the experience of life satisfaction. These results in this study had not been confirmed. There was no significant difference in the level of life satisfaction in relation to the predictor variable success in school. It followed that the young regardless of the success achieved in the school showed just the same life satisfaction. There was a statistically significant difference in the assessment of general life satisfaction so that only child in the family showed greater satisfaction with life than young people living with a brother or sister, while the lowest life satisfaction had young people living with multiple siblings.

Qian (2013), in her paper estimated the effect of family size on school enrollment for first-born children. It resolved the problem of joint
determination by exploiting the plausibly exogenous variation in family size caused by relaxations in the One Child policy. The results showed that both the One Child Policy and the previous four-year birth spacing policy were well enforced; and that the one-son two-child relaxation increased family size for girls born in relaxed areas. Then, it used the variation in family size caused by this relaxation to show evidence that a second child increased school enrollment of the first child by 10-12 percentage-points. The effect was slightly larger for girls. In addition, using variation in family size caused by the occurrence of twins, the results showed that a third child most likely had a negative effect on school enrollment of the first child. These findings, together, suggested that the net effect of quantity on quality is "inverse-U" shaped. They rejected models where quality is monotonically decreasing in quantity. A richer theoretic model is needed for understanding the mechanisms underlying this reduced form effect of family size on child quality. It was suggested that in the meantime, policy makers should note that "one" is not the optimal number of children per household.

4. GENDER DIFFERENCES IN PARENTAL BONDING

A glance at Table 2.2 revealed that t-ratio comparing male and female children emerged significant on Perceived Parental Care ($t=7.18, p<0.01$) and Perceived Parental Overprotection ($t=2.00, p<0.05$). Table 2.4 depicted that t-ratio comparing male and female only children emerged significant on Perceived Parental Care ($t=3.59, p<0.01$). Table 2.4 further showed that male and female only children did not differ significantly on Perceived Parental Overprotection. Table 2.6 depicted that t-ratios comparing male and female children with siblings emerged significant on Perceived Parental Care ($t=6.71, p<0.01$) and Perceived Parental Overprotection ($t=2.92, p<0.01$). A perusal of Analysis of Variance (Tables 3.13 and 3.14) revealed that F-ratios comparing male and female children on Perceived Parental care ($F=51.47, p<0.01$) and Perceived Parental Overprotection ($F=4.02, p<0.05$) emerged significant.

Parental child rearing practices may differ by gender and status of the child. It has a direct bearing on attachment with parents.
Katz and Boswell (1984) observed that gender role socialization differed between only children and children with siblings. They found that only children experienced less “stringent” gender role socialization compared with children with siblings. However, the parental socialization practices and the gendered behaviors of only boys exhibited inconsistent patterns and for only daughters both the behaviors of parents and children were more consistent and tended to be more androgynous. They concluded that only children were more “gender-role flexible,” with girls more so than boys. Thus, taken together, these studies suggest that differences in the social behaviors between those who grew up with and without siblings may vary by gender. Wu (1985) indicated that there were consistent gender differences across a variety of measures among American children but few gender differences were found among Asian group. He observed that in Chinese families, early child-rearing practices did not differentiate between gender and parents tended to treat their young boys and girls in similar ways.

Xie and Hultgren (1994) compared parental expectations among only child boys and only child girls. The study indicated that fathers of only sons had higher expectations and they were still influenced by traditional belief in son superiority, while mothers of daughters chose modern value in male and female equality which benefitted them more.

Deckard and Dodge (1997) observed that Chinese fathers were reported to use more control than mothers and also more with boys than girls, whereas Chinese fathers and mothers were equally warm and indulgent with both boys and girls. They opined that despite these reported parenting differences, it was not clear how maternal and paternal control and warmth related differently to child aggression. They also pointed out that boys and girls may respond to maternal and paternal coercive control differently.

According to Short et al. (2001), gender bias in family formation in China was well documented. Much less was known about how children fared once they become part of a family. Drawing on fieldwork and survey
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data, they described the care of young children, and investigated the relationship between the one-child policy and parental involvement in care. Results indicated that the one-child policy, in so far as it limited couples to one or two children, lead to greater involvement by parents in child care. Additional effects of policy varied by children's gender. Boys received similar care regardless of the one-child policy in their communities. Girls, living in communities where couples were permitted another child if their first was a girl, were more likely to receive parental care than girls in other communities.

Fong (2002) reported that only daughters enjoyed unprecedented parental support because they did not have to compete with brothers for parental investment because their mothers had already proven that daughters could provide their parents with old age support. As only daughters had no brothers for their parents to favour, daughters had more power than ever before. He found that the benefits enjoyed by singleton daughters resulted from the demographic pattern produced by China's one-child policy, and not necessarily from the compulsory nature of that policy. Global processes of industrialization, modernization, and urbanization led to low fertility in all developed countries and many developing countries worldwide. A daughter with one brother was also likely to enjoy more resources than a daughter with several brothers. Only daughters dealt with gender norms in ways that seem likely to further their own interests. People of every generation had tried to use gender norms to attain their own desires (whether they involved socioeconomic success or the maintenance of strong ties to one's parents), but the efforts of Chinese daughters born prior to the one-child policy were severely hindered by a patrilineal system that overwhelmingly favored sons at the expense of their sisters. In contrast, urban only daughters enjoy unprecedented support for their effort to challenge norms that worked against them while utilizing those that worked in their favor. When daughters were not systematically excluded from familial resources, norms that once went hand in hand with patriarchy became tools that girls as well as boys could use. Daughters empowered by the support of parents with no sons to favor were able to defy detrimental
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norms while strategically using ones that gave them advantages in the educational system and the job and marriage markets. Parents of only children complained about their children’s gender when they believe their children are conforming to disadvantageous gender norms, not when their children were conforming to advantageous ones.

Zhan and Montgomery (2003) observed if only children ended up living far from their parents, they might be unable to help them as much as they plan to. Although many of the students said that they would bring their parents to the city where the students settled, it remained to be seen whether that will be financially feasible for them. Moreover, involvement in employment has been shown to be negatively related to providing care for elders. To the extent, only children including daughters pursued career ambitions, their ability to care for aging parents will be diminished. They warned that because elder care fell disproportionately on women, the absence of siblings might be particularly deleterious for them.

According to Fuligni and Zhang (2004), only children did not differ from those with siblings in terms of their attitudes toward family support and respect. A sense of family obligation was generally associated with more positive family relationships and a higher level of academic motivation among Chinese adolescents. They found that there were few overall location and gender differences in adolescents’ sense of obligation to support, assist, and respect the family. Instead, Location Gender interactions emerged for all three measures such that urban male adolescents reported a lower sense of family obligation than did urban females and both males and females in rural areas. To the extent that urban - rural comparisons tested the impact of China’s economic reforms, these results suggested that the changes taking place in contemporary China were affecting the sense of obligation of boys but not girls. It is possible that gender norms that favoured the economic participation of men over women in China mean that urban males were more likely to see individual economic opportunity in the market reforms, thereby lessening their sense of obligation to the family. Urban females, in contrast, might not sense the same opportunity for individual advancement in the market economy and
did not adjust their sense of duty to their families. An alternative interpretation is that regardless of the larger economic system, the demands of rural life tended to equalize the family obligations of male and female adolescents whereas urban life demanded relatively more assistance from females than from males because the required duties in urban areas are largely domestic.

Zheng et al. (2004) found that as only children, a child could receive all the financial resources that parents invested in their offspring. At the same time, he/she would also bear the full responsibility for his/her family and parents, thus caring more about the events at home than children with siblings did. Female students made and expected more frequent contact with their parents than their male counterparts. The main two reasons for both parents and students to contact each other were firstly, they wanted to tell they were safe and sound and secondly, they also wanted to know about the important events at home. Zheng et al. (2004) pointed out that there were significant difference between the only children and the children with siblings with respect to the second reason. The only children were more concerned about important events at home. Parents also gave the reason for contacting that they would offer advice when their children had problems with studies. Another reason which was commonly accepted by both only children and children with siblings was the concern that the parents should not feel lonely during their absence. Parents also often called to ask if their children needed more money. This was the least important reason to call.

Carroll (2005) observed that since parents were afraid of losing their only children in the future, children who had no siblings tended to be “over loved”. These parents, also called “helicopter parents”, were extremely obsessed with their kids that they “hovered” above them; they painstakingly planned their lives and treated them like little princes and princesses.

In a study by Shek (2005), Chinese secondary school students were asked to respond to instruments that measured subjective evaluation of
parental behavioral control, parental psychological control, and parent-child relational qualities. They showed that Chinese adolescents perceived their fathers and mothers to be different in terms of the above indicators, and they suggest that the notion of “strict father, kind mother” in traditional Chinese culture has changed to “strict mother, kind father” in contemporary Chinese culture. Results also showed significant main effects of the child (boys vs. girls) and interaction effects of parents and gender of the child. Parental educational levels were positively related to perceived parental control processes and parent-child relational qualities. They indicated that adolescent boys and girls did not differ in their perceived paternal knowledge. Girls had a higher perceived maternal knowledge than did boys. Although adolescent boys had higher levels of perceived paternal expectation monitoring and parental control based on Chinese concepts than did adolescent girls. Adolescent boys and girls did not differ in the indicators. Although paternal and maternal psychological control did not differ in adolescent boys, maternal psychological control was lower than paternal psychological control in adolescent girls.

Deutsch (2006) observed that one-child policy would ultimately bring enormous benefit to women in the present and future generations. There might be a sign that there was value being placed on the female child as the population had shifted to an unbalanced gender breakdown. Since married couples were allowed only one child and the new marriage laws allowed for adoption of either parents’ surname, the idea that female children could carry on the family line appeared to have come into vogue. Women were viewed as just as capable as men in other realms as well. He further observed that parents of only daughters support and encourage their academic achievement. Patrilineal norms which reflected gender inequality seemed weak in this study. Men and women preferred that their own parents provide child care. He pointed out that when parents had something to say about gender to their daughters, parents of only children were more likely to encourage their daughters to resist gendered norms than to comply with them. This parental support for non-traditional behaviour was consistent with liberal gender ideas in daughters.
A study by Liang (2007) investigated parental expectations of only child boys and only child girls in urban China in terms of the educational achievement, future careers and gender role related behaviors. Through the examination of parental expectations, this study also attempted to investigate the impact of the One-child policy on Chinese parents in terms of their expectations and attitudes toward gender. Two studies were conducted. Study one was an exploratory study, in which twenty-four individual interviews were conducted with twelve couples who had only children attending elementary schools. Among these couples, six of them had only child boys and six of them had only child girls. Study Two used a survey method to obtain broader views on the topics of interest. A total of 163 couples who had only children completed surveys. Participants of this study came from six elementary schools in two cities in Southern China. The results of this study showed that parents had similar expectations for the educational level they expected their children to achieve regardless of the gender of the only children. However, gender-differentiated expectations were seen in some areas. For instance, more parents of boys than parents of girls chose physics as the subject that they expected their only children to do well in. In addition, among careers that were considered as “male” associated jobs, such as engineer and scientist, or “female” associated jobs, such as teacher, gender-differentiated expectations were found. Furthermore, gender-differentiated expectations were seen in gender role related behaviors from parents’ answers. More parents of boys than parents of girls expected their only children to be the leader of their future family. Thus, on the one hand, the societal changes and the reinforcement of the One-child Policy in China did help change parents’ attitudes toward gender and cultivated parents to have similar expectations of both only child boys’ and only child girls’ intellectual development; on the other hand, parents still held gender-differentiated expectations for boys and girls in certain careers and some gender role related behaviors. In addition, parents speculated that their educational expectations were not strongly influenced by the implementation of the One-child Policy.
Leung and Zhang (2008) mentioned that preference for sons appears to be responsible for a disadvantaged environment for daughters, which might also contribute to a biased sex ratio. Using a unitary utility model of households with pooled resources, they showed that parental preference for sons was insufficient for explaining lower parental investments in daughters in single-child households. They considered parental investments in sons and daughters that were linked via a competitive marriage market. The marriage probability of a child was the weighted sum of the relative competitiveness of a child for finding a partner and the demography in the marriage market. If the sex ratio was independent of preference for a child’s gender, then biased preference for sons and their child services would produce a cohort of sons with higher parental investments. But daughters would also benefit from higher parental investments due to marriage. Hence, the overall quality of children was raised in the light of the preference for sons. If a rise in sex ratio and a preference for sons occur concurrently, then investments in sons and daughters can move in either the same or opposite directions. Which scenario would prevail depended crucially on how parents revised the weight of a child’s relative competitiveness in the marriage probabilities when there was a rise in the sex ratio. They suggested that differential parental values derived from a child’s marital status and services might serve as conceivable candidates for explaining differential parental investments in children.

Liu (2008) explored how a group of first-generation young-adult only-children negotiate the filial self in the specific socio-cultural context of today’s China and with their cultural baggage as only-children. He interviewed 22 young adults, both women and men from various backgrounds. In their narratives, the young people unanimously indicated an imperativeness to be dutiful to their parents in old age. They offered both normative and practical explanations for such a ‘choice’. However, the construction of the filial self, and their overall meaning-making in relation to their parents, was done not without negotiation between the individual self and the collective-familial entity, which was embedded in
the specific socio-cultural context of today’s China. The construction of the filial self in relation to the collective-familial was meanwhile heavily framed by one’s only-child status, often in interaction with one’s family’s economic condition. He further showed that due to their being only children, the women only-children have become ‘substitute sons’ who were to assume the filial duty traditionally prescribed for sons.

According to Settles et al. (2008), the long term consequences of population aging and smaller families (which do not have the lateral kin or siblings of former years) are to increase the burden and responsibility of caregiving on the single adult child and his or her spouse. They opined that later, when the adult child has health or aging problems of his or her own, services and support from the larger society would be required. They further observed the closeness that a young woman has with their own parents and grandparents, due to their sponsorship of her in education and achievement, would be a challenge to the traditional expectations of her role with her in-laws. They pointed out that in rural areas many daughters also took the responsibility of supporting the family. Girls might leave their hometown to go to cities, searching for a job or entering university. Although they might not get a high salary, they still kept a link between them and their parents. Some chose to bring their older parents to the cities and others sent money home.

According to Hou (2009), single children received comprehensive parental attention and support and were widely considered as spoiled “little emperors/empresses”. But at the same time they experienced great pressure to perform with academic excellence in order to be capable to excel in the competition of the global market economy. Gender norms were in transition. Urban single daughters are empowered by the benefits brought by low fertility produced by only child policy in China. Children of the post-1980s generation are often accused of being the "spoiled" generation. The phenomenon of spoiling children mainly includes two points. The first concern was that the one-child family gives the child a rich or even luxurious material life. In urban DaHan, the one-child family was also nicknamed the "one mouth, six pockets" family, which refers to
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an only child that is raised by six people, meaning the two parents, the two maternal grandparents, and the two paternal grandparents. Six pockets of money may easily expand their little emperors' and little empresses' appetites. Besides the great improvement in living standards compared to previous generations, spoiled children were also criticized as defiant and disrespectful which was the result of their parents' compliance to their children's every desire and request. Although not every parent treats their child like this, fond indulgence existed in a number of one-child families and had become a noticeable social issue. However, from some parents' perspective, it was reasonable for them to take such good care of their children or even spoil them. These parents found their reasons in the great changes of the socioeconomic conditions.

Pettersson and Malmberg (2009) observed women move more than men did and ended up further away from their parents compared with their brothers. They opined that women were more prone to moving close to their parents during later stages of their life course, or that the parents move closer to their daughters so that the daughters could provide support for their fathers or mothers. The impact of family relations and gender on mobility propensity and the destination of parents and adult children is a major part of this study from Sweden.

Chang et al. (2011) observed that the parenting of only children was gender egalitarian in that the same socialization strategies were equally applied to the only child, regardless of whether that child was a son or a daughter. According to them, both parents were found to be less authoritarian and to give the strongest endorsement to masculine values, such as independence and self-confidence, and the lowest endorsement to obedience, as desired child qualities. They further observed whereas nature normally bestowed parents a second chance for a different gender of offspring if the parents so desired, the single child policy eliminated this second chance. Despite the fact that a large number of Chinese parents might still prefer sons over daughters, once they have a daughter and there is no second chance, their gender views and corresponding parenting attitudes and behaviors changed in favor of the traditionally disadvantaged
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gender. Together, these findings provide fresh insights into contemporary urban Chinese parenting and help to resolve some of the controversies identified in the literature about Chinese parenting.

Kang and Peng (2012) observed that the parents without male descendants might expect no financial support and care from daughters in their old ages and would not reduce their current consumption for daughters’ education investment. In other words, parents without son might save more money from reduction of their daughters’ education to help their older life in case of no financial support and care from daughters. They further observed that under the stricter policy, those parents choose to, legally or illegally have another child after the first birth of a girl were more likely to prefer sons and large family size. They were a selected subgroup of parents of sample in the cohort born after 1980. Hence, they were also more disappointed with the second girl and relocated less intrahousehold resource on children’s education.

In a study by Li and Lau (2012) all the participant children were more satisfied with their relationships with their mothers than fathers. Compared to girls, boys were more satisfied with their relationships with both parents. Gender did not make any difference in children’s levels of satisfaction with relationships with siblings and friends. Boys and girls were equally happy and healthy. Boys and girls equally perceived themselves to be worth the same as others. But boys had a stronger sense of being able to control situations and events than girls. None of the children was under much pressure to study hard.

Lu and Chang (2013), found that the results from the child social behavior variables also showed few gender differences. There was no statistically significant difference between boys and girls in peer acceptance, prosocial leadership, or aggression. There was only one gender difference, which was observed in social withdrawal. Together, these results supported our prediction about reduced gender differences in the socialized behaviors of Chinese only children and about reduced gender differential parenting and socialization of only children in China.
Under the single child policy, Chinese parenting and socialization tended to be more masculinized to achieve these reduced gender differences.

C. GROUP COMPARISONS COMPARING CHILDREN OF WORKING AND NON-WORKING MOTHERS

Based on the review of literature it was hypothesized that children of working and non-working mothers may differ on Stress, Coping, Anxiety, Self Efficacy, Emotional Intelligence, Perceived Happiness, Perceived Health Status, Academic Achievement and dimensions of Parental Bonding.

1. STRESS, COPING AND ANXIETY

Table 2.3 revealed that t-ratio comparing children of working and non-working mothers emerged significant on Stress Symptoms (t=2.02, p<0.05). A glance at Table 2.3 also showed that children of working and non-working mothers did not differ significantly on Perceived Stress, Task Focused Coping, Emotion Focused Coping, Avoidance Coping, State Anxiety and Trait Anxiety. Table 2.5 depicted that only children of working and non-working mothers did not differ significantly on Perceived Stress, Stress Symptoms, Task Focused Coping, Emotion Focused Coping, Avoidance Coping, State Anxiety and Trait Anxiety. Table 2.7 depicted that children with siblings of working and non-working mothers did not differ significantly on Perceived Stress, Stress Symptoms, Task Focused Coping, Emotion Focused Coping, Avoidance Coping, State Anxiety and Trait Anxiety. A perusal of Analysis of Variance (Tables 3.5-3.11) revealed that F-ratio comparing children of working and non-working mothers on Stress Symptoms (F=4.05, p< 0.05) emerged significant. The table also revealed that F-ratios comparing children of working and non-working mothers on Task Focused Coping, Emotion Focused Coping, Avoidance Coping, Trait Anxiety, and Task focused coping emerged insignificant.

McCord et al. (1963) found that in middle-class homes, delinquency was greater for sons of employed mothers than for sons of
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non employed mothers, even when the factor of broken homes was eliminated. Among working-class families, however, delinquency was greater among sons of employed than non employed mothers only in unstable homes.

According to Gold and Andres (1978), that the sex-role concepts of the 15-year-old children are less strongly related to maternal employment status than are those of younger children. They predicted that the sons of employed mothers would have more adjustment and academic problems than the sons of non-employed mothers is not supported. They also found that both sons and daughters were better adjusted when the mothers were employed. The better adjustment of the adolescent children of employed mothers could be due to the less restrictive childrearing attitudes and greater paternal activity reported in the family when the mothers were employed. It was possible that the adjustment of the daughters is also facilitated by the stronger feminist attitudes and the greater satisfaction with the mothers’ roles reported by both parents when the mothers are employed.

Sharma (1986) compared the personality, total adjustment, study habits and attitudes of the children towards their parents. The sample of the study was 600 children of working and non-working mothers. He found that the children of non-working mothers were found to be more excited, tender-hearted, sensitive, dependent and more protected.

Gershaw (1988) found that children of working mothers did not suffer any differently from anxiety, antisocial behavior, or stress-related problems than those of non-working mothers. He observed that children of working mothers held fewer stereotyped gender role attitudes and felt their mothers were more competent. He further pointed out that daughters of working mothers were found to set higher goals for themselves. Children of working mothers were also seen as feeling that they had control over their environment.

According to Bridges and Orza (1992), working mothers’ parental ineffectiveness could serve as an additional source of psychological
stress. According to Carson et al. (1992), inability to handle stress effectively in childhood had been associated with adjustment problems, anxiety disorders, antisocial behavior, hyper-vigilance and psychosomatic illness. Yet it is the bond between siblings, and parents and children that had been implicated as key determinants of resiliency to stress in childhood. They further observed that compatibility between the individual’s characteristics and those of the family, and parental expectations has also been associated with individual coping styles. Han et al. (2001) found that maternal employment sometimes led to behavioral problems in children. This finding could be related to children being cared for by several people (both out-of-home care providers and parents). Children likely received varying amounts and types of discipline in this situation, which could lead to confusion and ultimately behavior problems.

Deding et al. (2007) found no support for a negative effect of maternal employment in the first year of the child’s life on children’s behaviour. They found that the association of early maternal employment, if any, was positive and stronger for boys than for girls. Sharma and Dharmawat (2009) conducted a comparative study of behavioural adjustment of pre-adolescent children of working and non-working mothers. Sample consisted of 120 Pre-adolescent children which was further divided into three groups:- (A) Pre-adolescent Children of working mothers. (B) Pre-adolescent Children of non-working mothers. (C) Groups of Pre-adolescent Children divided on the basis of Gender (Boy & Girls) of both working and non-working mother. Pre-adolescent adjustment Scale (P. A. A. S.) was administered to know about the adjustment level of the children. Findings revealed significant differences among three groups and girls were found to be higher in adjustment level in all the groups. (A,B,C) in comparison to boys.

Sharma and Sharma (2010) showed that the mothers working status influenced and affected the psychosocial adjustment of the only children. With no siblings and absence of mother due to her job responsibilities the only children of working mothers found no one to share their problems with,
therefore even a simple problem looked highly complicated and a fear of becoming a failure aroused anxiety and stress in them. The only children of working women generally remained alone which created a kind of psychological imbalance within an individual which may lead to a number of psychological problems like depression, anxiety, pessimistic behavior towards life etc.

2. SELF EFFICACY AND EMOTIONAL INTELLIGENCE

A glance at Table-2.3 revealed that children of working and non-working mothers did not show significant difference on Self Efficacy and Emotional Intelligence. Table 2.5 depicted that t-ratio comparing only children of working and non-working mothers emerged significant on Emotional Intelligence (t=2.06, p<0.05). Table 2.5 further showed only children of working and non-working mothers did not differ significantly on Self Efficacy. Table 2.7 depicted children with siblings of working and non-working mothers did not show significant difference on Self Efficacy and Emotional Intelligence. A perusal of Analysis of Variance (Tables 3.12 and 3.4) revealed that F-ratios comparing children of working and non-working mothers on Self Efficacy and Emotional Intelligence emerged insignificant.

Eccles and Hoffman (1984) revealed that employed mothers who spent little time in shared activities with the first born had less cognitively and socially developed children. Further it was noted that daughters of working mothers were more independent and outgoing and were socially and personally better adjusted. Sons of working mothers however, tended to be socially less adjusted and obtained lower grades in school.

According to Brophy (1989), the emotional difficulties that only children were prone to have were excessive sensitivity and trouble expressing anger as no one was at home to interact, they remain in themselves and not indulge much in outdoor activities. The greatest loss to these children was their lack of social interaction within the family structure due to absence of siblings as far as only child of working mothers were concerned, there was no need to rush home as no one was there to received them, talk about their activities in school, it resulted in low sensitivity.
Since they spent most of their time alone, they shrugged off any responsible work given to them. Desai et al. (1989) found adverse effects of maternal employment on middle class boys when their mothers started working in the early years of life. They reported that the negative effect of maternal employment was absent when mothers start working once the child was older.

According to Veenhoven and Verkuyten (1989) only children did not differ from children with siblings in the global appreciation of themselves. In fact, they showed somewhat more self-esteem. Specification by employment status of parents showed significantly higher global self-esteem of female only children with a working mother (three-way interaction effects among only child, sex, and working mother. Female only children with an unemployed father, on the other hand, distinguish themselves from children with siblings by lower global self-esteem (three-way interaction effect among only child, sex, and working father. This latter pattern reflected the case of happiness.

Claxton (1994) suggested that only children of working mothers had poorer interpersonal skills which resulted in less effective or fulfilling relationships. Mueller and Vandell (1995) found that only children of working mothers had no siblings with whom they could interact. Even their mothers were not at home most of the time. In such a situation they acquired a more autocratic and less cooperative interactive style than the other children. They also observed that older siblings, when offered an outlet for interacting, were socially more responsive to other children of their own age. First and only children compared themselves to their parents, whereas laterborns compared themselves to their older siblings. The former, an adult to child comparison, will yield a greater discrepancy than the latter child to child comparison. This was hypothesized to result in lower self-esteem for first born and only children.

A study was conducted by Doh and Falbo (1999) in South Korea that compared the social competence of those who had no siblings to those who did have. Korea was selected as the site of this study because most
urban mothers were homemakers there. The three factors of social competence considered in this study were: popularity, sociability, and brattiness. These three were measured in terms of the combined ratings of mothers and teachers. Maternal attentiveness and overprotectiveness was measured in terms of the mothers rating their own behaviour. Only children were found to score similarly to others on popularity and sociability, but scored worse than others on the brattiness scale. Maternal attentiveness was found to be correlated significantly with all three social competence scores, indicating that mothers who evaluated themselves as more attentive to their children had children who were evaluated as being more popular, sociable, and less bratty. However, mothers of only children were not found to score differently than other mothers on attentiveness or overprotectiveness. The study found some support for popular assumptions that home-makers were more attentive than nonhomemaking mothers. However, no difference was found between homemaking mothers and employed mothers in terms of overprotectiveness. Homemaking mothers of just one child were no more attentive or overprotective than employed mothers of just one child. Thus, it is difficult to blame the extra brattiness among only children as related to their mothers’ attentiveness and overprotectiveness.

Harvey (1999) examined the effects of early parental employment on children's later cognitive, academic, behavioral, and emotional functioning. There were no significant main effects of early maternal employment status. Among mothers who were employed during the first 3 years, the only significant effects of the timing of the return to employment and discontinuity of early employment were on compliance in 3- to 4-year-olds and these effects were small; returning to work later and greater discontinuity were associated with somewhat higher compliance. Working more hours was associated with significantly lower achievement scores in 5- to 6-year-olds. Early maternal employment hours was associated with children's behavior problems only at probability levels that approached significance and was not associated with children's compliance or self-esteem.
Lareau (2003) suggested that motherhood was not only about the absolute hours a woman spent with her child, but about the quality of interactions they had when they spent time together. He pointed out that the fact that a mother worked many hours did not necessarily mean that she was not allocating enough time to her child. She might make up the loss in quantity of time through quality of time spent with her child. Gregg et al. (2005) found that children of mothers who work part time in the first eighteen months did not have negative influences on child development, and argued that mothers should have the option of working part-time since it might benefit (or at least not hurt) the child’s cognitive development. Shpancer et al. (2008) observed that the quality of care provided by mothers was influenced by their working status. They rated ‘at home’ mothers as providing better care than ‘working mothers.’

According to DeJong and Chao (2010), children faced several cognitive and behavioral effects that were the result of maternal employment during their early developmental years. In this study, a questionnaire was distributed to thirty-two participants (twenty-eight female, four male) ranging in age from twenty-six to fifty-nine years. All participants had at least one child. Participants provided information about themselves, their spouse (when applicable), and their children, as well as their and their spouse’s work. Several cognitive and behavioral differences were noted between children of working and nonworking mothers. Differences were found in school performance, participation in extracurricular activities, and abnormal behavioral issues.

Shirazi (2012) revealed that children of working mothers were more intelligent, emotionally more suitable, excitable, competitive, enthusiastic, venturesome, reflective shrewd, apprehensive and tense while children of non-working mothers were less intelligent, emotionally less stable, phlegmatic, inactive, sober, shy, zestful forth right confident and relaxed. They were similar on factors i.e., reserved, warmhearted, expedient – conscientious, tough minded – tender minded and undisciplined controlled. He pointed out that the male children of non-working mothers were more
emotionally stable, excitable enthusiastic, venturesome and shrewd than male children of working mothers. The children of non-working mothers were more intelligent and tender minded. They were more similar on factors reserved — warmhearted obedient, dominant expedient — conscientious, zestful — reflective, confident apprehensive, undisciplined self conflict — controlled and relaxed — tensed. He also observed that female children of working mothers were found to be warmhearted, intelligent, emotionally stable, excitable, competitive Enthusiastic, venturesome, reflective, shrewd apprehensive, controlled and tense than female children of non-working mothers. They were similar on factors like expedient — conscientious and tough minded — tender minded. He found that female children of non-working mothers were more emotionally stable, competitive and tender minded. On the other hand the male children of working mothers were found to be more intelligent, venturesome, reflective, shrewd and controlled. They were similar on factors reserved — warmhearted, inactive — overactive, sober — Enthusiastic, expedient — conscientious, confident apprehensive and relaxed — tensed. He indicated that the female children of non-working mothers were more excitable and competitive while male children of non-working mothers were found to be venturesome and apprehensive.

Dunifon et al. (2013) estimated the causal effect of employment among Danish women on children’s well-being. They stated that there were several ways that a mother’s employment decisions might affect her child’s cognitive development and academic performance. They pointed out that working mothers’ income could be used to purchase inputs that directly or indirectly improved academic performance. They also observed that a working mother would spend less time with her child than one who did not work. Depending on the quality of the time a mother spent with her child and the quality of the alternative, this might either improve or diminish cognitive development.

Nelen et al. (2013) analysed the relation between maternal work hours and the cognitive outcomes of young school-going children. They
found when children attend school, the potential time working mothers miss out with their children, is smaller than when children do not yet attend school. They also observed that working might benefit children through greater family income. They found no negative relation between maternal working hours and child outcomes as is often found for pre-school aged children. They did not observe that a richer home environment in terms of the number of parent-child activities provided to the child explained the relation between maternal work hours and children’s test scores.

*Peter (2013)* was interested in the potential effect of maternal involuntary job loss on children’s non-cognitive skills. They opined that although mothers were often second earners in German households, they are on the other hand the main caregivers of children. Thus an exogenous shock does not affect the household’s financial situation in a substantial way, yet it might affect the emotional stability of mothers causing stress and discouragement at home. Maternal satisfaction might decrease after job loss and thus might be closely related to children’s development and in particular to the development of non-cognitive skills, such as motivation or socio-emotional regulation. They found the negative effect of maternal job loss on the children that the children were less likely to believe in self determination if their mothers experienced an involuntary job loss.

### 3. PERCEIVED HAPPINESS, PERCEIVED HEALTH STATUS AND ACADEMIC ACHIEVEMENT

A glance at Table 2.3 revealed that children of working and non-working mothers did not show significant difference on Perceived Happiness, Perceived Health Status and Academic Achievement. Table 2.5 showed that only children of working and non-working mothers did not differ significantly on Perceived Happiness, Perceived Health Status and Academic Achievement. Table 2.7 showed that children with siblings of working and non-working mothers did not show significant difference on Perceived Happiness, Perceived Health Status and Academic Achievement. A perusal of Analysis of Variance (Table 3.1-3.3) revealed
that F-ratio comparing children of working and non-working mothers on Perceived Health Status (F=3.80, p<0.05) emerged significant. The table also revealed that F-ratios comparing children of working mothers and non-working mothers on Perceived Happiness and Academic Achievement emerged insignificant.

**Heyns (1982)** concluded that that with very few exceptions, the children of working mothers differed very little from the children of non-working mothers on achievement. **Mercy and Steelman (1982)** concluded that the results for white middle-class children were inconsistent at best and that mother’s employment might have a negative effect on the ability and achievement of middle-class boys. This appeared to be most true among elementary school boys; the evidence was weaker for high school boys.

**Milne et al. (1986)** found that mother’s employment had a negative impact on achievement for white students from two parent families. Working mothers appeared to benefit their children by providing less help with homework and by attending fewer parent teacher conferences. Non-working mothers had more time for both. Children whose mothers work full time spent less time on homework and reading and more time watching T.V. than children whose mothers did not work. Therefore, their achievement was lower mothers part time employment had a smaller negative effect partially because children whose mothers work only part time spent time on homework and less time on watching T.V. than children whose mothers work full time.

**Kalmijn (1994)** found that while mothers’ increased financial contributions may alter schooling differences between children of employed mothers and children of non-employed mothers, they did not necessarily affect the socioeconomic influence of employed mothers themselves (i.e., differences between mothers who work in high-status occupations and mothers who work in low-status occupations). He pointed out if the effect of occupational status on earnings among married women has increased, and if differences in parental income affected schooling
outcomes, then the effect of maternal occupational status among employed mothers had probably increased. He opined that mothers had become less influential over time. He also indicated that because married women’s labor force participation had increased, children and young adults spent much less time with their mothers than before. So the children of employed mothers have a disadvantage in school compared to the children of mothers who did not work outside the home.

**McGroder et al. (2005)** found that maternal employment neither affected the quality of the mother-child relationship, nor the academic achievement of children. **Ruhm (2008)** This study investigated how maternal employment was related to the cognitive development and body weight of 10 and 11 year olds, controlling for a wide variety of child, mother and family characteristics. Maternal labor supply was estimated to have more uniformly harmful consequences for “advantaged” adolescents. The negative cognitive effects for these youths probably partly occurred because maternal labor supply reduced the time spent in enriching home environments. He reported that some of growth in obesity might be related to determinants of excess weight common to the child and mother.

**McLellan and Uys (2009)** explored how the working mothers bore the primary responsibility for nurturing their families and assuring their well being. In their study one of the participants responded that she placed value on being able to spend individual time with each of her children through planned activities. Her family was her first priority and she structured her work around her family responsibilities. She felt that breaking her children’s routine was destructive to them.

**Brown et al. (2010)** observed the alarm about the increasing prevalence of childhood obesity which had focused attention on individual life style behaviours that might contribute to unhealthy weight. They pointed out that more distal predictors such as maternal employment might also be implicated since working mothers had less time to supervise children's daily activities. They used two waves of data from the
Longitudinal Study of Australian Children to investigate whether mothers' working hours shaped young children's television viewing, snacking and physical activity, and through those life style behaviours, children's weight at ages 4 to 5 years and 6 - 7 years. At both ages, children's life style behaviours were interrelated and associated with weight status. Cross-sectional analysis confirmed small, direct associations between longer hours of maternal employment and child weight at age 4 e 5 years, but not with child's weight measured two years later. In both the cross-sectional and prospective analyses, the children of mothers who worked part-time watched less television and were less likely to be overweight than children of mothers who were not employed or who worked full-time. They indicated that mothers who undertook paid work had less time available to encourage physically active play or prepare home cooked meals from fresh ingredients. They opined that if mothers were not available children would lie in front of television eating junk food (being ‘couch potatoes’) instead of being active outdoors.

Sharma and Sharma (2010) observed that the situation became grave for the only child of working mothers as in this case the mother was also not there a major part of the time for the child to listen to her and share her concerns. While on the other hand the mother who was a homemaker could compensate for the absence of siblings by involving herself in child’s activities. Still variations seen in the results suggested that not only the maternal employment but the quality of substitute care and parent child relationship also had impact on the development of a child. They concluded that only child of working mothers might be high on need achievement but still felt unhappy and insecure. It suggested that only child became relatively positive with regard to intellectual qualities and relatively unfavorable in the realm of physical and social performance. To live up to the expectations of their parents might alienate them from their peers which resulted into lack of social interaction. Forced too much into adult thinking and behavior, they may miss out some rewarding experiences of childhood which the children may enjoy whose mothers stayed at home.
Moeser et al. (2011) examined the relationship between maternal employment and time spent with children in physical activity or meal preparation. They observed that since working mothers spent many hours away from their children, it was important to examine whether it was the child care arrangement which was resulting in poor eating patterns or physical activity or some other facet of mother’s work. Their results showed that maternal employment reduced the probability that a child would eat at home under supervision and increased that a child spent eating food away from home. They also pointed out that from the mothers side her work decreased the time she spent preparing and eating food and doing physical activity with her children.

Morrill (2011) observed that maternal employment might affect children’s health through a variety of mechanisms. Positive channels included income, health insurance, and the mother’s self-esteem. Employment might hinder a mother from supervising or otherwise contributing to time intensive, health promoting activities. He pointed out that a mother’s decision to work could reflect underlying (and unobserved) ability, skills, or preferences, so that a mother that worked might be different in important ways from a mother who did not work. Or, a mother whose child is chronically ill might choose to remain home to care for her child, inducing a positive correlation between working and good health through a reverse relationship.

Cawley and Liu (2012) found that maternal employment was associated with an increased risk of childhood obesity. They estimated models of instrumental variables using a unique dataset, the American Time Use Survey, that measure the effect of maternal employment on the mother’s allocation of time to activities related to child diet and physical activity. They found that employed women spent significantly less time cooking, eating with their children, and playing with their children, and were more likely to purchase prepared foods. They also found suggestive evidence that these decreases in time were only partly offset by husbands and partners. Their findings offered plausible mechanisms for the association of maternal employment with childhood obesity.
Shirazi (2012) revealed that children of working mothers had better academic achievement than children of non-working mothers. He found that female children of working mothers were slightly better than male children of working mothers. He also pointed out that male children of working mothers had better academic achievement than male children of non-working mothers. He indicated that female children of working mothers were better in academic achievement than female children of non-working mothers. He reported that male children of working mothers did not differ from female children of non-working mothers so far as their academic achievement was concerned.

Using a Danish data set that follows 135,000 Danish children from birth through 9th grade, Dunifon et al. (2013) examined the effect of maternal employment during a child’s first three and first 15 years on that child’s grade point average in 9th grade. They found that maternal employment had a positive effect on children’s academic performance in all specifications, particularly when women work part-time. This was in contrast with the larger literature on maternal employment, much of which took place in other contexts, and which finds no or a small negative effect of maternal employment on children’s cognitive development and academic performance. They opined that mothers whose children were not doing well socially or academically might reduce their work hours to invest more time in child-rearing. Conversely, mothers with relatively high ability and education might be both more likely to work and to have children who received good grades in school. They also opined that maternal employment might improve academic performance if working mothers serve as positive role models for their children.

Fox et al. (2013) pointed out that fewer children lived in households with a non-working parent than in the past and having all adults in the family work full time and full year was increasingly common. While the lives of families had probably become more hurried and stressed, the time parents spent caring for children had not necessarily fallen because there were numerous ways in which time could be reallocated. They found that working mothers spent significantly less time in child care than their non-
Discussion

working counterparts. They also indicated that both working and non-working parents spent more time with children in 2003-08 than did their 1975 counterparts. They observed that increased parental employment was accompanied by substantial growth in family income and other benefits that employment provided and these may compensate for the parental employment.

Kohara and Lee (2013) examined the effect of maternal labor supply at the time the child was three years old on the child’s test score around the age of eighteen, using South Korean panel data. Considering that maternal labor in the estimation of the child’s educational outcomes was endogenous, and that the effect of maternal labor on outcomes was non-linear. They found that there was an opposite effect between high and low educational groups. Specifically, when the child’s educational level was high, the outcome may be deteriorated by maternal employment, while it can be positively affected when the child’s educational level was low. Maternal labor most likely resulted in improved financial resources, yet less time available to child’s educational activities. The effect of increased monetary input seemed to have a stronger effect than did the decreased time input in lower educational groups, although the opposite effect was observed in higher educational groups in South Korea.

4. PARENTAL BONDING

A glance at Table 2.3 revealed that children of working and non-working mothers did not differ significantly on Perceived Parental Care and Perceived Parental Overprotection. Table 2.5 depicted that only children of working and non-working mothers did not differ significantly on Perceived Parental Care and Perceived Parental Overprotection. Table 2.7 showed that children with siblings of working and non-working mothers did not differ significantly on Perceived Parental Care and Perceived Parental Overprotection. A perusal of Analysis of Variance (Tables 3.13-3.14) revealed that F-ratios comparing children of working and non-working mothers on Parental Care and Parental Overprotection emerged insignificant.
Hock (1980) observed as more mothers of infants entered the work force, behavioral scientists and concerned laymen raised questions about the effectiveness of the working mother in her maternal role and about the impact of her employment on the infant. Conflicting viewpoints confuse even the most well-informed behavioral scientists. They suggested that stresses of outside employment impair the working mother’s functioning in her maternal role.

According to Bianchi (2000), despite the rapid rise in mothers’ labor force participation, mothers’ time with children tended to be quite stable over time. In the past, nonemployed mothers’ time with children was reduced by the demands of unpaid family work and domestic chores and by the use of mother substitutes for childcare, especially in large families. Employed mothers seek ways to maximize time with children: They remained quite likely to work part-time or to exit from the labor force for some years when their children are young; they also differ from nonemployed mothers in other uses of time (housework, volunteer work, leisure). In addition, changes in children’s lives (e.g., smaller families, the increase in preschool enrollment, the extended years of financial dependence on parents as more attend college) were altering the time and money investments that children required from parents. Within marriage, fathers are spending more time with their children than in the past, perhaps increasing the total time children spent with parents even as mothers work more hours away from home.

Sandberg and Hofferth (2001) examined changes in the time American children spent with their parents between 1981 and 1997, and the contribution to these changes of shifting patterns of female labor force participation, family structure, and parental education. Changes are decomposed into the parts attributable to changes in demographic characteristics and parts likely due to changes in behavior. In general, children’s time with parents did not decrease over the period, and in two parent families it increased substantially. Population level changes in demographic characteristics were found to have only small direct effects
on time children spent with parents. The behavioral increases over the period for mothers, fathers, and either parent are, highly pronounced in these families. The minor structural effects of increased female labor force participation were completely offset by large, non-structural (most likely behavioral) increases in time children spend with their parents. Time with mothers in two-parent families generally increased over the period, regardless of whether mothers were working or not, but time with fathers only increased significantly in families in which mothers were working. They pointed out that children spent less time with parents those days than several decades ago because of changes in maternal labor market behavior and in patterns of family formation and dissolution.

Brooks-Gunn et al. (2002) argued that maternal employment adversely affected the home environment, and the non-maternal care used during the early years of life turned out to have negative impact on cognitive outcomes. They pointed that mothers who return to work in the early years of a child’s life might inadvertently be less patient, less sensitive and less nurturing to their children, and thus created a negative home environment hindering their child’s cognitive development. They indicated that the timing & intensity of maternal employment was important in explaining the negative effects of maternal employment on children. They found that the children of mothers who worked long hours after the child was three years old had lower cognitive development scores.

Gregg and Washbook (2003) reported data which explored the effects of early maternal employment on child cognitive and behavioral outcomes. The results indicated that full-time maternal employment began in the 18 months after childbirth has small negative effects on later child outcomes. Part-time work begun later than 18 months, however, did not seem to have any adverse consequences. They explored the mechanisms linking maternal employment to children’s development. The mechanisms examined relate to the parenting behaviors of the mother and father, breastfeeding behavior, maternal tiredness and stress, household income
and the use of non-maternal childcare. They found that a number of factors work to minimize the effect of mothers labour market participation on their children. Fathers were significantly more involved in child rearing in households where mothers returned to work early and this more equal division of parenting had strongly beneficial effects on later child outcomes. They indicated that negative employment effects were concentrated in those families where mothers work full time and also relied on unpaid care by a friend or relative. The use of paid childcare protected children from negative effects and attendance at a centre-based provider might actually lead to better cognitive outcomes than if the children were at home with a non-working mother.

Gauthier et al. (2004) concluded in their study that paid work does not appear to substantially impinge on the investment that parents are making in children—at least not directly. Employed parents devoted slightly less time to their children than non-employed parents, but the difference is small compared to the difference in time devoted to paid work. Parents appeared to be preserving their time with children, mainly by reducing time devoted to leisure and personal activities (including sleep). Paid work might have the consequence of lowering the “taste” for children because it involved devoting more time to paid and non-paid work. The results showed that employed mothers in the 1990s devoted 10.6 hours per day to paid and non-paid work (housework and childcare) as compared to 8.7 hours for non-employed mothers. Activities that involve a higher degree of parent-child interactions, such as playing, appear to have mostly driven the overall increase in time spent on childcare (along with baby-care). Both mothers and fathers had increased their time investment in children. Fathers devoted less time to childcare than mothers, but the gender difference has narrowed in many nations including Canada. The results for employed and non-employed mothers suggested that a selectivity effect might be operating involving a greater concentration of mothers with a higher “taste” for spending time with children among the non-employed mothers. An alternative explanation for the different historical trends among employed and non-employed mothers
might be that they might be a general social trend asking for parents to devote more time to their children. However, employed mothers might already be so time-crunched that they might be unable to devote more time to their children.

**Hill et al. (2005)** observed that the children whose mothers were housewives, got maximum attention in the upbringing and proper education of the child. On the other hand if mother went for service outside the home, she became unable to perform the duties of real and true mother. Due to her engagement outside the home and responsibility of the works she was not in position to cater to the needs of the child. They opined that this was the reason that’s why it was said that children of working mothers suffer to a great extent. Though this was not true in all case but some time absence of mother for longer period of time pushes child in bad company.

**Huerta et al. (2011)** indicated the possible negative effects of maternal employment on child development. They examined data of five OECD countries with different types and intensity of support provided to families to reconcile work and family life. They suggested that a return to paid work by mothers within six months after childbirth may have negative effects on child outcomes, particularly on cognitive development, but the effects were small and not universally observed. **Okimoto and Heilman (2012)** found that working mothers were less effective parents than nonworking mothers. They also pointed out that the bad parent assumption was apparent only for mothers and not fathers.

**Shirazi (2012)** observed that there was a great effect of working mothers on personality characteristics of their children. He pointed out that the parental attitude towards children, their love, affection and care played a critical role in the personality development. **Shuster et al. (2012)** found that the mothers who reported valuing social and interpersonal harmony were also likely to refrain from using psychological control with their children.
Sultana (2013) focused on the difficulties encountered by working women when their children fell sick. She observed that although they were able to manage these problems with some advantages provided by their organization, in most cases working mothers had to face number of problems to deal with during their children’s sickness. It was essential for mothers to be with their children when they fell sick.