REVIEW OF LITERATURE

Only child is any person who does not have siblings. However, the understanding of being an only child as being the only child of one’s parents is inadequate. Those people who have lost their siblings in early childhood, or those that have siblings but there exists a large age difference between them, e.g., 20 years or more, could also be called only children (Pitkeathley and Emerson, 2007).

Being an only child is generally considered to be a disadvantage. Since parents are more inclined to giving in to the demands and expectations of their single-child, only children may turn out to be self-centered, dependent, temperamental, and maladjusted (Mancillas, 2006). Social and economic factors must be taken into account when examining any data on only children (Blake, 1989).

Kitzmann et al., (2002) found that only children were less liked by classmates and that they were more likely to be victimized and aggressive in the peer group. The studies that examine personality traits and psychological characteristics have yielded somewhat mixed findings, with some pointing to less positive outcomes of only children (Liu et al., 2005) whereas others have shown either few differences or only children faring better than children with siblings (Falbo and Poston, 1993).

Chow and Zhao’s (1996) reported that only-children were high academic achievers due to greater parental attention and educational investment. Lee (2006) discovered that single children perceive their family relations as more favourable than those with sibling(s). Downey and Condron (2004) noted in a study that teachers also rated children with siblings as exhibiting fewer externalizing problem behaviors than only children the results of this study made a compelling case for the position that children had social and interpersonal skills through sibling interactions at home, and that these skills then became useful outside the home.
Numerous studies have demonstrated that only children were not distinguishable from their peers who had siblings in self-esteem, relations with parents (Polit and Falbo, 1987), and social competence (Falbo and Polit, 1986).

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.

A. CONCEPTUAL FRAMEWORK

Following are the definitions of the variables being used in the study.

EMOTIONAL INTELLIGENCE

Definition

One can lead a contended and successful life only if one can control one's thought process and handle daily matters properly. If one can do so one is emotionally or practically intelligent. Eysenck (2004) rightly observed that Emotional Intelligence (EI) probably refers to an ability that is very important in coping successfully with everyday life.

Some researchers defined Emotional Intelligence (EI) as ability to reason about emotion; others equated the concept with a list of traits such as achievement motivation, flexibility, happiness, and self-regard. Still others found the addition of such traits, which seemed to be ad hoc, to be troubling, and wondered whether a theoretically sound conceptualization of EI could be identified (Locke, 2005).
Mayer and Salovey (1997) defined Emotional Intelligence (EI) as the ability to: (a) perceive and express emotion, (b) use emotion to facilitate thought, (c) understand and reason with emotion, and (d) regulate emotion in the self and others.

Emotional Intelligence (EI) is assumed to be related to the ability of self-regulation (Martinez, 1999-2000). Goleman (1995, 1998) suggested that Emotional Intelligence (EI) is a factor of paramount importance in adjustment to life in general, and to work and work performance in particular. He further stated that Emotional Intelligence (EI) will confer ‘an advantage in any domain in life, whether in romance and intimate relationships or picking up the unspoken rules that govern success in organizational politics’ (Goleman, 1995).

Some researchers define and measure Emotional Intelligence (EI) as a set of self-perceived skills, competencies, and personality traits, including optimism and self-esteem (Goleman, 1995; Bar-On, 1997).

According to Mayer et al. (2008), Emotional intelligence concerns the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought.

Goleman (1998) put forth five dimensions of Emotional Intelligence (EI) constructs:

1. **Self-awareness** – the ability to know one’s emotions, strengths, weaknesses, drives, values and goals and recognize their impact on others while using gut feelings to guide decisions.

2. **Self-regulation** – involves controlling or redirecting one’s disruptive emotions and impulses and adapting to changing circumstances.

3. **Social skills** – managing relationships to move people in the desired direction
4. **Empathy** - considering other people’s feelings especially when making decisions and

5. **Motivation** - being driven to achieve for the sake of achievement.

The present study used emotional intelligence scale developed by Schutte et al. (1998) who used the original model of emotional intelligence of Salovey and Mayer (1990) as a basis for the development of a self-report measure of emotional intelligence with a hope that this encompassing model of emotional intelligence would provide a solid foundation for a measure of individuals’ current level of emotional intelligence.

**STRESS**

Life is full of stresses. One situation may be stressful for one person and may not be the same for others. Many things cause stress in life. There are many effects associated with stress in life like emotional, physical, cognitive, psychological etc.

**Definitions**

Selye (1976) defined stress as the non-specific response of the body to any demand.

Lazarus (1966) defined stress as an organizing concept that includes a number or variables and processes – relationship between the person and the environment that is appraised by the person as taxing or exceeding his/her resources and endangering his/her well-being.

Lazarus and Folkman (1984) defined stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being".

Stress is defined neither by the conditions acting on the person (the stressor), nor by the state of the person (coping resources, ego
strength etc), nor by his reactions (stress responses), but rather by the interplay of the three (Korchin, 1986).

According to International Encyclopedia of Psychology (1996) stress is an adaptative reaction to circumstances that are perceived as threatening. Larsen (2000) opined that stress is the subjective feeling that is produced by events that are perceived as overwhelming and beyond one’s control. Events that typically elicit stress are called stressors.

Kelly (2010) stated that “Stress can come from any situation or thought that makes you feel frustrated, angry, nervous, or anxious”.

Samuelson (2011) stated that stress is a “state of extreme difficulty, pressure or strain”.

Type of Stressors

Selye (1974) drew a distinction between eustress and distress. Eustress was the good kind of stress because it was associated, presumably, with positive feelings and healthy bodily states; distress was the bad kind, associated with negative feelings and disturbed bodily states.

Lazarus (1966) drew a distinction among three kinds of stresses, harm, threat, and challenge (Lazarus 1966, 1981; Lazarus & Launier 1978; Lazarus & Folkman 1984). Harm refers to psychological damage that had already been done, e.g., an irrevocable loss. Threat is the anticipation of harm that has not yet taken place but may be imminent. Challenge results from difficult demands that we feel confident about overcoming by effectively mobilizing and deploying our coping resources. Stressors can also be grouped into two categories:

(a) Life Event Stress

(b) Chronic Stress or Daily Hassles
Stressful Life Events

According to Fink (2000), a life event stress is a comprehensive list of external events and situations (stressors) that are hypothesized to place demands that tend to exceed the capacity of the average person to adapt. The difficulty in adaptation leads to physical and psychological changes or dysfunction, creating risk for psychological disorder or physical disease.

Solanki and Ganguli (1987) stated that life stress refers to a state of imbalance with an organism that (i) is elicited by an actual or perceived disparity between environmental demands and the organism’s capacity to cope with these demands, and (ii) is manifested through variety of psychological, emotional and behavioural response.

Daily Hassles or Chronic Stressors

Hassles are conceptualized as the irritating, frustrating, annoying, and distressing demands that to some degree characterize everyday transactions with the environment. Some hassles may be situationally determined and infrequent, while others may be repetitive because the individual remains in the same context with consistent predictable demands (Crnic and Greenberg 1990).

Stress Symptoms

According to European Agency for Safety and Health at Work (2010), people experience stress when they perceive that there is an imbalance between the demands made of them and the resources they have available to cope with those demands.

Body shows definite physical, mental and behavioural symptoms in response to the Stress Symptoms. The present study used Perceived Stress Scale (PSS) developed by Cohen et al. (1983). It is designed to measure the degree to which situations in one’s life are appraised as stressful. To measure, effect of stress, Stress Symptoms Rating Scale by Heilbrun and Pepe (1985) was used.
COPING

Stress can cause many health problems and nobody can stay in stress for a long time. So coping strategies need to be adopted in one form or the other.

Lazarus (1966, 1981), Lazarus and Launier (1978) and Lazarus and Folkman (1984) defined coping as a process—a person’s ongoing efforts in thought and action to manage specific demands appraised as taxing or overwhelming. Although stable coping styles do exist and are important, coping is highly contextual, since to be effective it must change over time and across different stressful conditions (Folkman and Lazarus, 1985).

Coping can be defined as an effort to manage and overcome demands and critical events that pose a challenge, threat, harm, loss, or benefit to a person (Lazarus, 1991). In the context of a recent positive psychology movement, however, the conceptualization of coping is broadening and now includes self-regulated goal attainment strategies and personal growth as well (Snyder, 1999).

According to Schwarzer and Knoll (2003), coping can occur as a response to an event or in anticipation of upcoming demands, but it also can involve a proactive approach to self-imposed goals and challenges.

According to Mohan (2003) coping is a continuous cognitive and behavioural process of overcoming stress and stressful consequences of external forces.

Kelly (2010) stated that coping refers to the thoughts and actions one uses to deal with stress. To a great extent, feeling stressed or not depends on whether one believes that one has the coping resources to deal with the challenges facing us.
Folkman and Lazarus (1980) laid down two general types of coping:

- **Problem – Focused Coping**: is aimed at problem solving or doing something to alter the source of the stress.

- **Emotion – Focused Coping**: is aimed at reducing or managing the emotional distress that is associated with (or cued by) the situation.

Moos and Billings (1982) have organized the dimensions of coping into three domains:

- **Avoidance – Focused Coping**: it involves attempts to define the meaning of a situation and includes such strategies as logical analysis and cognitive redefinition.

- **Task – Focused Coping**: it seeks to modify or eliminate the source of stress.

- **Emotion – Focused Coping**: It includes responses whose primary function is to manage the emotions aroused by stressors and thereby maintain effective equilibrium.

A well-known approach has been put forward by Lazarus (1993), who separates problem-focused from emotion-focused coping. If a person’s relationship with the environment is changed by coping actions the conditions of psychological stress may also be changed for the better. This is called problem-focused coping. Other coping processes, which are called emotion-focused coping, change. Only the way we attend to or interpret what is happening.

Another conceptual distinction is between assimilative and accommodative coping, whereby the former aims at modifying the environment and the latter at modifying oneself (Brandstädter, 1992). Schwarzer and Schwarzer (1996) came up with two basic distinctions, such as (a) instrumental, attentive, vigilant, or confrontative coping on
the one hand, as opposed to (b) avoidant, palliative, and emotional coping on the other.

STATE–TRAIT ANXIETY

Spielberger (1966) defined anxiety as a complex state that includes cognitive, emotional, behavioral and bodily reactions. Worry refers to the cognitive aspect of anxiety where as Anxiety refers to its awareness. He laid down two dimensions of anxiety, i.e., State Anxiety and Trait Anxiety. He also proposed that trait anxiety reflects anxiety proneness that is stable, i.e., there were individual differences in the tendency to respond with increased state anxiety to various levels of stress.

American Psychiatric Association (1994) considers Anxiety as “a danger signal felt and perceived by the conscious portion of the personality. It is produced by a threat from within the personality – with or without stimulation from external situations.”

According to Kazdin (2000), anxiety is a stage characterized by heightened autonomic system activity, specifically activation of the sympathetic nervous system i.e., increased heart rate, blood pressure, respiration and muscle tone, subjective feelings of tensions and cognitions involve apprehensions and worrying.

Anxiety as a process refers to a sequence of cognitive, affective, physiological and behavioral events (Mohan et al., 2000).

Anxiety (also called angst or worry) is a psychological and physiological state characterized by somatic, emotional, cognitive, and behavioral components (Seligman et al., 2001).

The root meaning of the word anxiety is 'to vex or trouble'; in either presence or absence of psychological stress, anxiety can create feelings of fear, worry, uneasiness, and dread (Bouras and Holt, 2007). It is the displeasing feeling of fear and concern. (Davison, 2008).
Anxiety is a state of intense apprehension or worry often accompanied by physical symptoms such as shaking, intense feeling in the gut etc. common in mental illness or after a very distressing experience. (Dictionary.Com, 2013).

According to Spielberger et al., (1970) State anxiety (A-State) is conceptualized as a transitory emotional state or condition of the human organism that is characterized by subjective, consciously perceived feelings of tension and apprehension heightened autonomic nervous system activity. A-States may vary in intensify and fluctuate over time. Spielberger et al., (1970) defined trait anxiety (A-Trait) that it refers to relatively stable individual differences in anxiety proneness, that is, to differences between people in the tendency to respond to situations perceived as threatening with elevations in (A-State) intensity.

According to Spielberger’s (1972) State and Trait Anxiety are analogous in certain respects to kinetic and potential energy. State anxiety, like kinetic energy, refers to a palpable reaction or process taking place at a given time and level of intensity. Trait anxiety, like potential energy, refers to individual differences in reactions. Potential energy refers to differences in the amount of kinetic energy associated with a particular physical object, which may be released if triggered by an appropriate force. Trait anxiety implies differences between people in the disposition to respond to stressful situations with varying amounts of state anxiety. But whether or not people who differ in trait anxiety will show corresponding differences in state anxiety depends on the extent to which each of them perceives a specific situation as psychologically dangerous or threatening, and this is greatly influenced by each individual's past experience.

According to Mohan et al. (2000) A-State is characterized by feelings of tension, apprehension, worry and autonomic arousal occurring in response to perceptions of either threats to personal adequacy or objective physical danger. A-Trait specifically refers to the tendency of
individuals to response with A-State elevations to situations which are perceived as potentially threatening to self-esteem.

**Speilberger’s (1972)** State-Trait Anxiety test has been used in the present study to study the various dimensions of anxiety.

### GENERALIZED SELF-EFFICACY

**Bandura (1977)** introduced the concept of perceived self-efficacy in the context of cognitive behaviour modification. It has been found that a strong sense of personal efficacy is related to better health, higher achievement, and more social integration. This concept has been applied to such diverse areas as school achievement, emotional disorders, mental and physical health, career choice, and sociopolitical change. It has become a key variable in clinical, educational, social, developmental, health, and personality psychology. *(Bandura, 1977, 1986, 1991, 1992).*

Self-efficacy is defined as the “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” *(Bandura, 1977).*

The belief that one can succeed at something that one wants to do is known as self-efficacy *(Bandura, 1977).* One decides whether or not to carry out a healthy behavior by deciding whether it will achieve the desired effect and then whether one is capable of doing it. One may know that exercise will help one to be fit but we might not feel capable of doing it. Actions are pre shaped in thought, and people anticipate either optimistic or pessimistic scenarios in line with their level of self-efficacy. Once an action has been taken, high self-efficacious persons invest more effort and persist longer than those with low self-efficacy. When setbacks occur, the former recover more quickly and maintain the commitment to their goals. Self-efficacy also allows people to select challenging settings, explore their environments, or create new situations. A sense of competence can be acquired by mastery experience, vicarious
Albert Bandura created the concept of self-efficacy and although the labeling and definition of self-efficacy is fairly recent, many researchers have followed Bandura’s lead by studying self-efficacy further (Schwarzer and Jerusalem, 1995; Schwarzer and Fuchs, 1996; Fan and Mak, 1998; Armitage et. al., 1999; Scholz et. al., 2002; Klassen, 2004; Kim and Omizo, 2005; Kumar and Lal, 2006; Griffiths, 2006).

The concept of generalized self-efficacy developed by Jerusalem and Schwarzer (1992) reflected a global reference in one’s coping ability across a wide range of demanding situations (Schwarzer, 1992).

Ormrod, (2006) defined self efficacy as the belief that one is capable of performing in a certain manner to attain certain goals. It is believed that our personalized ideas of self-efficacy affect our social interactions in almost every way.

The development of self-efficacy is a process shaped by environment (Bandura, 1994). Many of the crucial factors that shape an individual’s self-efficacy are a result of the environment, and the most important factors are family, peers, and school. The first element that influences self-efficacy is family.

General self-efficacy can be defined as “people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives” (Bandura, 1994). Self-efficacy determines how people feel, think, motivate themselves, and behave (Bandura, 1994).

According to Luszczynska and Schwarzer (2005), those with high self-efficacy will set higher and more ambitious goals due to their increased motivation. In addition, these individuals will be more driven in attaining their goals (Luszczynska and Schwarzer, 2005). Unfortunately, less efficacious individuals often imagine failure scenarios, have self-
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doubts, and procrastinate taking a risk or making a change in their life (Schwarzer and Fuchs, 1996). Those who have high self-efficacy attribute failure to a lack of effort, but quickly bounce back after a setback or disappointment (Bandura, 1994).

PARENTAL BONDING

Parental bonding is the foundation of any study on behavior and status of children. Bonding does not refer to mutual affection between a baby and an adult, but to the phenomenon whereby adults become committed by a one-way flow of concern and affection to children for whom they have cared during the first months and years of life (Klaus and Kenneth, 2011). Bonding is the process that a child goes through in developing lasting emotional ties with its immediate caregivers, which is seen as the first and most significant developmental task of a human being, and is central to that person's ability to relate properly to others throughout its life (Adoption.com, 2011).

According to Steinberg (2001), of the many different relationships formed over the course of the life span, the relationship between parent and child is among the most important.

Research has found that a loving, responsive and helpful parent who is always available for their child serves the function of binding the child to them and contributes to the reciprocal dynamics of that binding (Bowlby, 1988). Parental Bonding is an important predictor that gives a lot of insight into parent-child relationships (Lian and Han, 2008).

Parental bonding can be described as an attachment between the child and the parent. This attachment theory is based on the idea that there are individual differences in terms of how infants become emotionally bonded to their primary caregivers and how these first attachment experiences influence the future developments of infants in social, cognitive and emotional aspects (Bowlby, 1977; 1988). According to Bowlby (1977), attachment is determined by the parent’s attitude and behavior towards the infant’s needs. Secure attachment occurs when the
caregiver is always sensitive and consistent in responding to child’s need. In contrast, parents who often neglect or reject the child’s need for attention will lead to insecure attachment.

The parent-child relationship consists of a combination of behaviours, feelings and expectations that are unique to a particular parent and a particular child. The relationship involves the full extent of a child’s development (Encyclopedia of children’s health, 2010).

There are two types of parenting-authoritarian and permissive. Authoritarian parenting is defined by high level of control through rigid rules whereas permissive parenting is characterized by low or high warmth with low level of control (Lezin et al., 2004). The most favorable parenting style is authoritative parenting (high warmth-moderate control), in which parents are usually emotionally warm, affectionate, and able to combine with a set of firm, yet fair disciplinary style (Lezin et al., 2004).

According to Parker et al. (1979), parent-child bonds would be broadly influenced by characteristics of the child (e.g. individual differences in attachment behaviour), characteristics of the parent or caretaking system (e.g. psychological and cultural influences) and by characteristics of the reciprocal, dynamic and evolving relationship between the child and the parent. They also suggested that the parental contribution to bonding may be influenced by two principal source variables i.e. the first variable as “care” dimension and the second variable as “psychological control over the child” or “overprotection” dimension. Care has been associated with affection, emotional warmth, empathy and closeness. Overprotection has been associated with control, intrusion, excessive contact, infantilization and prevention of independent behaviour (Levy, 1970; Parker et al, 1979).

Close relationships, healthy open communication, and perceived parental support are especially important during adolescence, as children experience many physical and emotional changes. Research shows teens who have positive relationships with their parents are less likely to
engage in various risk behaviors, including smoking, fighting, and drinking. They are also less likely to report symptoms of depression and more likely to report high levels of perceived well-being (Aufseesser et al., 2006).

PERCEIVED HEALTH

Health is the most desirable need of the human beings. Health is one of the major factors in all kinds of developments like psychological, emotional developments and so on. Health has been defined in different way in different disciplines.

The word ‘health’ originates from health, an old English word meaning safe or sound and whole of body (Dolfman, 1973).

Parse (1981) defined health as a lived experience—a rhythmic process of being and becoming.

According to Orem (1995), health is defined as a state that is characterized by soundness or wholeness of bodily and mental functioning. It includes physical, psychological, interpersonal, and social aspects. Well-being is the individual’s perceived condition of existence.

According to Ryff and Singer (1998), health is a complete state consisting of not merely the absence of illness but the presence of something positive.

According to Kaplan and Sadock (2005), health refers to a reasonable, optimal state of functioning. Health is not the absence of negatives but the presence of positives.

HAPPINESS

Happiness is commonly understood as how much one likes the life one lives, or more formally, the degree to which one evaluates one’s life-as-a-whole positively. A central element in this definition is subjective ‘evaluation’ or ‘liking’ of life, also referred to as ‘satisfaction’ with life (Veenhoven, 2009).
Several definitions combine one or more of the above elements. Diener et al. (1997) defined Subjective Well-Being (SWB) as being satisfied with life (attitude), while feeling good (affect), in his own words: “Thus a person is said to have high SWB if she or he experiences life satisfaction and frequent joy, and only infrequently experiences unpleasant emotions such as sadness or anger. Contrariwise, a person is said to have low SWB if she or he is dissatisfied with life, experiences little joy and affection and frequently feels negative emotions such as anger or anxiety”. All three elements are involved in definition of happiness by Chekola (1974) and Clark et al. (2008) as realization of a life-plan and the absence of seriously felt dissatisfaction and an attitude of being displeased with or disliking one’s life.

Likewise Sumner (1996) describes ‘being happy’ as “...having a certain kind of positive attitude towards your life, which in the fullest form has both a cognitive and an affective component. The cognitive aspect of happiness consists in a positive evaluation of your life, a judgment that at least on balance; it measures up favorably against your standard or expectations...” The affective side of happiness consists in what we commonly call a sense of well-being, finding your life enriching or rewarding or feeling satisfied or fulfilled by it.”

Veenhoven (2009) discussed the following theories of happiness:

1. ‘Set-point’ theory, which holds that we are mentally programmed for a certain degree of happiness, and

2. ‘Comparison’ theory holds that happiness results from a rational mental calculus involving comparison with standard of the good life.

3. An alternative mental theory that fits better with utilitarian creed is the ‘Affect’ theory that happiness depends on unreasoned emotional experience, which reflects gratification of needs.
There are two perspectives of happiness - Hedonistic and Eudemonic. Hedonistic perspective says that happiness is composed of three related components: Positive affect, absence of negative affect and satisfaction with life as a whole (Argyle et al., 1989). The Eudemonic perspective added a forth component of happiness that concerns self fulfillment and other depth elements such as purpose in life and personal growth (Ryff, 1989).

Lyon (2012) described happiness as a value judgment, as an objective state, as a subjective state, as a continuum from illness to wellness, and as a utopian state (rarely achievable).

ACADEMIC ACHIEVEMENT

Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important — procedural knowledge such as skills or declarative knowledge such as facts (Ward et al., 1996).

Francis et al. (2004) defined academic performance as a student's performance in grades and standardized tests.

Academic achievement or (academic) performance is the outcome of education — the extent to which a student, teacher or institution has achieved their educational goals. (Wikipedia, 2013).

Individual differences in academic performance have been linked to differences in intelligence and personality. Students with higher mental ability as demonstrated by IQ tests (quick learners) and those who are higher in conscientiousness (linked to effort and achievement motivation) tend to achieve highly in academic settings. A recent meta-analysis suggested that mental curiosity (as measured by typical intellectual engagement) has an important influence on academic achievement in addition to intelligence and conscientiousness (Stumm et al., 2011)
B. REVIEW OF RELATED STUDIES

ONLY CHILDREN vs. CHILDREN WITH SIBLINGS

1. STRESS, COPING AND ANXIETY

Howarth (1980) found significantly lower anxiety in first-borns as compared to middle and last children and also as compared to single children. He found that in line with the bio-behavioural theory, children spaced in birth order were less afraid of being socially unacceptable, and children who reported being dominated by a sibling, regardless of position, reported higher state anxiety.

Sandler (1980) found that children who experienced a high number of life events had fewer emotional and behavioral problems when they had a sibling than when they did not. Yang et al. (1980) found that only children were similar to children with siblings in psychological attributes like adjustment, sociability.

According to Zuber (1982), a prominent difficulty of only-children was their capacious accountability for their achievements and failures and as a result, they felt heavily stressed and were unable to cope with challenges. He found that only-children were more likely to attribute their chances of passing an exam to their own abilities and skills rather than to situational factors.

Tao and Chiu (1985) observed that boys and girls in one-child families were more egocentric, less cooperative, less affiliative and more maladjusted than were children who had siblings. They also found that only children were less respectful and exhibited more frequent temper tantrums.

Jiao et al. (1986) indicated that only children were found high in frustration proneness and ego centerism.

Koontz (1989) asserted that single- children were unable to handle stress effectively; They faced anxiety disorders, neurasthenic,
psychosomatic and neurotic tendencies, like depression interpersonal dependency and perceive stressors complaints \cite{Liu2019}.

**Schibuk (1989)** contended that single children were more vulnerable than children with sibling of divorce, and parents might choose to "either abdicate the parental role or use the child as a focus for working through a discordant parental symbiosis".

**Bayrakal and Kope (1990)** studied single-child adolescents on an in patient psychiatric unit and observed that erosion of the parental boundary was a common factor with subjects who presented serious problems at the onset of puberty. When a mother alone represented a parental subsystem, the child was at increased risk during adolescence if the mother had not completed her own developmental tasks such as individuation, stability of lifestyle (e.g., maintaining a job), enhanced self- esteem, and separation from her family of origin.

**Wu (1994)** observed that parents needed to realize that the effective communication between them and their only children together with their deep understanding of their social and emotional development, was currently sustaining their children during stressful times. Caring about their everyday life, planning their future goals and providing them with a happy material life were behaviours that were interpreted by Chinese only children as ways parents cared and attended to their needs. When parents were willing to stand in their only child’s position, so that they really understand their child’s feelings of anxiety and pressures, they taught their children to cope. Parents also needed to realize that their expectations of academic as well as future achievement serve to exacerbate pressures as well.

**Tao et al. (1995)** claimed that only children were moody, bad tempered, self-aggrandizing, delinquent, neurotic, and emotional. In a study of 724 only-children and 806 children with siblings **Tao et al. (1996)** found that only-children were more likely to have internalization of problems. **Tao (1998)** found that there were no significant differences
between only children and children with siblings, in terms of the prevalence of behavior problems.

According to Chow and Zhao (1996), although the parents of only children spent more family resources on their children's education, they exhibited more frequent anxiety than parents of children with siblings did over children's education. They wanted to help their child but often did not know how to. Their greater anxiety may reflect the higher expectations they had for their sole offspring. Having experience with only one child may also magnify their anxiety and concern.

Sulloway (1996) found that only-children were the ‘least predictable subgroup. Lack of siblings, he opined, allowed them to be more variable and freer to occupy a variety of family niches. The absence of siblings also made only-children more susceptible to influences such as parents’ social values. His research showed that only-children were less extraverted than firstborns, because lack of siblings inhibits social practice. He also noted that only-children manifested greater conflict with parents than children with siblings. He believed that siblings might have direct conflict towards with one another because it is potentially less costly than directing it against parents. Sulloway (1996), like Mitchell (2003), believed that only-children experience an internal threat from unborn siblings, which caused them to find ways of maximising parental investment; however, he did not elucidate on this.

According to Greenberg (1998), as only-children become adults, they expressed anxiety over parenting. This is often because only-children were responsible for perpetuating their own family lines—which was the only way their parents could have grandchildren—and the stress to do so remained substantial. A balancing act of dividing attention appropriately among more than one child, if they chose to have several children, then became another stressor of only-children parents, as they did not have the memory of parents who did have to divide attention among siblings.
Irrespective of whether the sibling relationship was affectionate and supportive or hostile and irritable, Dunn (2000) stated that this relationship offered children unique opportunities for learning about themselves and also about others. According to him, siblings were also known to act as valuable sources of support in times of stress and might even act as therapists for siblings experiencing life difficulties as siblings provided a confiding and intimate relationship. Despite siblings eventually separating from each other due to their own individual life courses as well as the reality of death, siblings tended to provide something that more current members of the family circle cannot provide.

Wang et al. (2000) found in a study of 579 children that levels of undesirable personality characteristics such as irritability, withdrawal, dependence, frustration and assertiveness did not differ amongst only children, first borns and after borns. Bogels et al. (2001) found that first-born and only children reported less social anxiety than later-born children, were found by.

Kemppainen et al. (2001) stated that serious defects in social skills acquired during childhood may be associated with aggressive behavior in later life. The authors studied whether being an only child was associated with criminality in adulthood and, secondly, if parental factors increased the putative risk. These results supported the hypothesis that growing up as an only child was associated with violent criminality among male subjects. They found that male subjects were raised without siblings had higher rates of arrests for violent offences in later adulthood. When perinatal or parental risk factors were combined with being an only child the odds ratios increased fourfold to eightfold. The maternal risks combined with being the only child significantly predicted committing a violent crime but not a non-violent crime.

According to Roberts and Blanton (2001), some only-children faced a major problem of social interaction. In the beginning of middle school, they wished to ask questions of their “fantasy” to older sibling about how to interact with others, instead of using the trial-and-error method. Roberts
and Blanton (2001) also found that some only-children had even developed lifelong wishes of having a sibling, believing that friends did not necessarily know what it was like to live in their home and were unable to provide adequate social support. According to Roberts and Blanton (2001), in effect, only-children often felt immense pressure to succeed, seek undivided attention from others, experienced problems while connecting and negotiating with peers, and worried about later life issues such as parental care and death of parents. Roberts and Blanton (2001) also included implications for future research which included the following concerns: caring for aging parents, being the sole survivors of their family of origin, never becoming a biological aunt or uncle, and doubts about having children of their own. The majority of only children reported anxiety regarding being the only child to care for their parents once they were no longer able to care for themselves. They also reported feeling sad about no one being left to connect to once their parents died. In other words, they feared a lack of lifespan continuity.

Tang (2001) found only children finicky, selfish, jealous, complacent, petty, obstinate, vain, aloof, conceited, unscrupulous, hostile, and psychologically disturbed.

According to Li et al. (2002), internalization of problems usually led to depression which was attributed to receiving poor grades, being socially rejected, and thought about career issues. Only children often internalized more and hence were more likely to be depressed.

In a study by Wang et al. (2002), Chinese adolescents with siblings were found to have higher levels of anxiety, depression and fear. According to them, it might be due to family competition with their siblings to get parents’ attention and financial support for higher education as well as reduced social benefits. They pointed out that usually families with only child received more social benefits.

Chen (2003) observed many single-children often lacked a means to channel their stress (as they did not have a close sibling-confident), which
might lead to long-term problems. The type of pressure placed on only children by their parents might lead to irrevocable consequences, and only gradual communication and societal modifications (such as increased organized social affairs) might lead to the amelioration of such issues. She emphasized that the Chinese Association for Education, educational establishments and the Chinese media ought to reinforce to parents as well as grandparents the negative consequences of overindulging their “little emperors” and “empresses” along with the necessity and positive consequences of peer involvement and interaction. She proposed that the most effective means was to involve the Chinese society and the own government. She pointed out that only children were deprived of the childhood experiences undergone by their mothers and fathers. She emphasized on the importance of social outings and community outreach for children so as to compensate them from the absence of siblings. She hoped that, “it is undeniable that single children will create a different society for China. And for the betterment of that society, we must first enhance single-children’s opportunities and abilities at social communication, interaction and development.”

According to Marleau et al. (2004) only-children were reported for having psychiatric disorders because the presence of siblings might lessen the chance of parents perceiving their child’s behaviour as problematic. Only-children’s lack of siblings did not provide them with the opportunity for sibling differentiation, which might be a possible reason siblings cope with conflict and rivalry.

In a study Chen et al. (2005) examined, in three cohorts (1990, 1998, and 2002) of elementary school children (including only children and children with siblings), relations between social functioning and adjustment in different phases of the societal transition in China. Data were obtained from multiple sources. The results indicated that sociability-cooperation was associated with peer acceptance and teacher-rated competence, whereas aggression was associated with social and school difficulties in all 3 cohorts. The effect of different social contexts was reflected mainly in the
relations between shyness- sensitivity and adjustment. Whereas shyness was
associated with social and academic achievement in the 1990 cohort, the
associations became weaker or non significant in the 1998 cohort.
Furthermore, shyness was associated with peer rejection, school problems,
and depression in the 2002 cohort.

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.

Mancillas (2006) also indicated only children might need experience
managing conflict with peers. The positive benefits of not having to
compete and fight with siblings were offset by the need to learn skills of
conflict management with children in their own age group. These
experiences could likely be attained if only children had the opportunity to
have a great deal of exposure to peers and assistance from parents in
learning to relate to certain situations. Thus, Mancillas (2006) found that
perhaps conflict management at young age was under developed among
only children as compared to children who practiced conflict management
with siblings.

According to Myers (2006), only children were more likely to have
internalization of problem. Such internalization leads to depression which
can be due to poor grading, social rejection, career problems and one’s own
fault. Only children often did so and were more likely to be depressed.
According to Mottus et al. (2008), both expert and folk psychologists believed that only children were spoiled, selfish, lonely, and socially estranged. In a study, they demonstrated that the stereotypical personality profile of a typical only child differed consistently from the stereotypical profile of those who have siblings. These differences between stereotypical personality profiles did not reflect self-descriptions because the self-rated personality profiles made by only children coincided almost perfectly with the self-rated personality profiles of those who had brothers or sisters. Sorensen (2008) believed that as only-children were not exposed to sibling relationship, they might not have adequate opportunities to learn tolerance, boundaries and realistic expectations.

Seganfredo et al. (2009) was to evaluate the association between childhood trauma and the quality of parental bonding in panic disorder compared to non-clinical controls. Panic disorder patients presented higher rates of emotional abuse, mother overprotection and father overprotection as compared to controls. Among men with panic disorder, only mother overprotection remained independently associated with panic disorder. On the other hand, higher father overprotection and less father warmth were independently associated with panic disorder among female patients. Higher rates of different types of trauma, especially emotional abuse, are described in panic disorder patients as compared to controls. They pointed out that the differences regarding gender and parental bonding could be explained in the light of the psychodynamic theory. They interpreted it in the light of Freud’s theory about the Oedipus complex, in which the major anxious conflict is the castration complex. In males, the overprotection by their mothers, interpreted by an Oedipus’ conquest, lead to guilty feelings. Regarding females, conquest and guilt were described together with less warmth and neglect.

Sharma and Sharma (2010) while reviewing earlier research observed that according to Skinner’s behavioral theory of operant conditioning, only child would undergo conditioning to affect their behavior in social situations. They pointed out that an only child might have to reconcile dealing with loneliness and intrusion. They concluded that only
children would be conditioned to behave in an outgoing manner, if they were to win friends, because they have no guaranteed familial playmates.

According to Krynen (2011), although intellect and creativity prosper, only-children could suffer from a lower quality of living overall from much stress. The high parental expectations typically impeded an only-child’s chance at breaking free and becoming truly independent, especially with lack of siblings to provide support. This led to increased anxiety. Never fully emotionally separating from their parents, these children might suffer the entire burden of having to care for their parents when they grew older. All of these issues are compounded when the only-child felt responsible for his or her problems and consequently had to endure depression and even aggression.

In a study by Fu et al. (2013), found that in the only-children family, parents’ full energy was concentrated on the only offspring. If the child was treated with corporal punishment and he had no brothers or sisters to communicate with, he would develop strange, eccentric and cold characteristics more easily. According to them, if the children experienced stressful event and their coping style was still not mature, their emotional, behavioral and physiological reactions would be over expressed and it would influence the stability of their personality. They pointed out that stressful event could not be belittled and family support system should handle the impact of stressful event on the children’s personality as much as possible and even make it play the positive role.

2. SELF EFFICACY AND EMOTIONAL INTELLIGENCE

Johnson and Peck (1978) investigated the correlation between sibling position and adolescent runaways. They found that runaways tended to have a fair or poor relationship with their parents and that significantly fewer only children were represented than expected. The authors speculated that single children do not have to compete for parental attention, resulting in higher self-esteem and confidence. In addition, single children were seen as more socially conservative and internalized parental attitudes and values to a greater extent than did only children.
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The **Shanghai Preschool Education Study Group (1980)** compared a sample of 70 only children with a sample of 30 sibling children which demonstrated more undesirable behavioral traits. Among the 70 only children, 21 were not cooperative in group activity, compared with only two of the 30 sibling children. The three most common undesirable traits for only children were bad eating habits, willfulness and timidity.

**Falbo (1984)** indicated that only children had stronger tendencies to take responsibility for outcomes and they had more internal locus of control than children with siblings especially later borns. According to him, the development of an internal locus of control may be facilitated by parents who respond quickly to their children’s behavior. Such children were more likely to develop the belief that their behavior causes their parents’ reactions than were children whose behaviors go unnoticed and therefore unrewarded or unpunished. Both only and first borns were found to have a more internal locus of control than did little borns. He found that only children were largely engaged in extracurricular activities and their such participation was facilitated by the fact that they were only children and had to do fewer household chores than others.

**Falbo and Polit (1986)** observed when sociability data were based on self reports, only children scored lower than others. In contrast, when the sociability data were based on the evaluation of others, only children scored as high as children with siblings. They explained it in the way that because only children might spent more time alone or in the presence of adults than did other children, they might acquire preferences for more mature activities such as reading or stamp collecting.

**Brophy (1989)** felt that emotional difficulties that only children are prone to have such as excessive sensitivity, hypochondria or trouble expressing anger were results of environmental influence but not in the way most commonly assumed. These emotional difficulties could be attributed to an almost Freudian struggle between opposing forces: the natural tendency towards extraversion or introversion versus the environmental pressures to subdue those tendencies in order to function.
Sifford (1989) that the self esteem of only children was much higher that of children with siblings. Only children showed more self regard and self than children with siblings. The reason why these children seem to have higher self-esteesms was because they received 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 and well rounded individual. Only children are 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 become such successful public figures. By being able to believe in themselves only children were able to maneuver others into believing in them too. It has been said that the self esteem of the only child can be compared to this quote “A person who has grown up with money, who is accustomed to having money, always feels that he is wealthy, even he is virtually penniless” (Sifford, 1989).

Mellor (1990) found differences in resolution outcomes between birth order groups and between family size groups. His findings suggested that only children, compared with children with siblings, were generally more autonomous in terms of personal control, have higher levels of initiative or personal aspiration or motivation, were more industrious in terms of educational or occupational achievement, and had stronger identities.

Chen et al. (1994) revealed that only and children with siblings did not differ significantly in social, school, physical, and emotional adjustment. Perner et al. (1994) found that children with siblings showed higher perspective-taking abilities than children without siblings.

A study by Farver et al. (1995) suggested why Korean only children might be brattier than children with siblings. The study explained why White American only children had social competence levels that were comparable to those children who had siblings. As middle class White American culture values children’s play as providing valuable
lessons, children were provided with opportunities to play with other children, both at home and at school. These experiences probably compensated for the fact that only children did not have siblings to play with at home. *Falbo et al. (1996)* also found that only children did not differ significantly in social competence from children with siblings.

According to *Chow and Zhao (1996)*, since only children do not have siblings to play with, they may lack social skills to interact properly with other children. Similar concerns had been voiced in the Chinese literature that China’s one-child state policy was likely to produce a large number of social misfits. The emotional ties between siblings were commonly second in strength only to those between parents and children. Brothers or sisters could be a source of frequent companionship, help, or emotional support. Older siblings could serve as caretakers, teachers, or models; in some instances they can even help compensate for absent or distant parents. In their interactions with each other, siblings might acquire many social and cognitive skills that were central to healthy social development.

*Downey et al. (1999)* indicated that, while it was true that there were some discrepancies at preschool age in social skills between only children and children with siblings, these differences disappeared later on.

*Andeweg and Berg (2003)* found that only children were more likely to hold prestigious positions and only children held a disproportionate number of leadership positions as compared to later borns.

*Herrera et al., (2003)* conducted a study on people’s perceptions of birth-order positions. Consistent with the aforementioned studies, the authors found that college students viewed being only children as the most disagreeable of all positions. The participants who were only children actually rated themselves individually quite high in agreeableness, but overall as a group, they rated themselves low. They
found that people’s beliefs in personality differences according to birth rank showed strong and consistent patterns and that people did have stereotypes about birth rank differences with regard to personality and occupation. They concluded that it is entirely possible that people’s beliefs about birth rank differences might induce differences in parents’ expectations for their own children and about other people in general.

It is evident from a study by Downey and Condron (2004) that the siblings promote social skills. It is based on a sample of more than 20,000 children in the Early Childhood Longitudinal Study—Kindergarten Cohort of 1998-1999. The authors found that only children received poorer ratings from their kindergarten teachers in terms of self-control, interpersonal skills, and externalizing problem behaviors than children with at least one sibling. By using third-party teacher evaluations of social skills from a large, nationally representative data set, this study represents the strongest evidence to date that siblings may be important to children’s social development.

Stewart (2004) showed that individuals born in higher birth ranks were likely to attain higher occupational prestige and that the personality characteristics attributed to the individuals in those higher birth ranks favoured the attainment of higher occupational prestige. The negative stereotyping of only children had been documented as occurring among counselors and psychologists when making clinical impressions about a hypothetical client. This study viewed that an only child was “likely to experience problems”.

According to Fong (2005), children with few or no siblings received more parental investment and support. Many researchers already pointed out that the only child is overprotected by his or her parents and grandparents, which might adversely affect his or her physical, social, and emotional development (Xu et al. 2007).

According to Fussell et al. (2005) the sibling relationship was known to influence the social and behavioural development of children.
Milevsky et al. (2005) regarded the sibling relationship as the most enduring and longest-lasting relationships people have in their lifetime. It was particularly near the end of one’s life that relations with siblings seemed to take on a meticulous importance as sources of support for many individuals.

According to a study by Fazelinia (2006), one of the social harming factors to a family was children’s multiplicity. Decrease of parent-child interactions decreases the chances of being together as well as listening and positive attentions in crowded families. These were probably some reasons for the decrease in emotional intelligence in such families. The result indicated that there was a slight difference between the levels of emotional intelligence of early adolescents according to their family sizes. Moreover, early adolescents’ emotional intelligence showed a different ranking for the family size groups with the only child than those with more than one sibling in the family and more than two and more siblings in the family respectively. This meant that the early adolescents, who lived in the family with smaller size, had higher emotional intelligence.

Liu (2008) explored the identity construction of a number of young-adult only-children who were winners in the fierce competition for a seat at university. The purpose was to gain an understanding of the choices and decisions these young people viewed as significant and how, in negotiating these choices and striving for their life goals, a particular understanding of the self might emerge. The study showed that striving for the middle-class lifestyle, which they viewed as the norm of the good life, the young people, as winners, do not dare to stand still on the academic road. Moreover, as much as possible, they wished to secure other forms of capital by joining the Party and entering for the Civil Servants’ Examination. In planning their lives and attempting to achieve their life goals, the young people adopted an individualized approach, displaying a form of the self consistent with the autonomous, self-authoring and individualistic neoliberal subject.
Krynen (2011) analysed how despite only children typically being more creative and intellectual, many problems surface due to having no siblings. The study found that only-children lacked social and emotional ability because of not having siblings with which to interact. Only children also tended to experience increased parental pressure. These problems typically lasted throughout an only child’s lifespan. He indicated that disadvantages of single child families overwhelmed the advantages.

In a study, Trent and Spitze (2011) concluded that as the number of families with only one child increased over time, concern and stereotypes continue about growing up as only children. They examined whether adults who grew up with and without siblings differed in terms of their social activities. They found that compared with adults who grew up with siblings, adults who grew up without siblings had significantly less frequent social activities with relatives. They suggested that adult only children were not less family oriented than others. They also pointed out that at younger adult ages growing up without siblings affected the frequency of engaging in certain social events but these differences decreased with age. They observed that adults without siblings might be less sociable and engaged in fewer social activities with friends. Adults who grew up without siblings did not appear to be different from others in their pattern or frequency of interaction across a wide variety of social interactions such as with neighbours and with coworkers. Adults who grew up without siblings did not differ from others in their engagement in other social activities such as those involving group recreation, non professional groups or personal hobbies.

In a study by Naghavi and Redzuan (2012), three groups of family size (being the only child, with one sibling in the family, and with two and more siblings in the family) were compared; however, the analysis for this particular hypothesis concerned with the question of the difference between early adolescents’ emotional intelligence and the statistics dealing with the three samples mean by family sizes. The mean score for the emotional intelligence of early adolescents, with respect to their family
size (being the only child, with one sibling in the family, and with two and more siblings in the family). The obtained results indicated that there was a statistical significant difference between early adolescents’ emotional intelligence in term of their family size.

Bosacki (2013) observed that as studied by many researchers, conflict might give rise to negative emotions that call forth instructive, emotional and mentalistic explanations and sibling conflicts as well as cooperative and competitive games. In sharing, talking and playing with siblings, with children and young adolescents were likely to gain exposure to imaginary ideas. She pointed out that all of these could possibly assisted theory of mind development in a manner not so readily available to an only child.

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

Zajonc (1976) introduced the confluence model, proposing that as the family size went up, the intellectual environment of the family went down, because the progressively younger children received less parental attention. Additionally, in large families, older children become pseudo-parents and thus become more intellectually developed. Only children did not score as well as firstborns because they lacked a younger sibling to tutor.

In intelligence, the reverse relation was found between effect sizes and age. The intelligence advantage of only children was smaller among older than younger subjects. This may reflect the fact that relatively few intelligence studies contained adult subjects. Alternatively, this age shift may reflect the maturational changes described by the confluence model (Zajonc and Markus, 1975). Stated simply, the confluence model hypothesized that only children scored higher than others in early childhood, but that this advantage declined and reversed during adolescence, when siblings serve as intellectual resources for each other. Thus, the model would predict that the effect sizes comparing adolescent and older only children to others would be negative. The intelligence results did not support the confluence model because not one of the comparisons between only children and others was negative. Nonetheless, the decline in the only child advantage with age was somewhat consistent with the model's predictions.

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

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.

The findings of a study by Poston and Falbo (1990) did not support reports in the Chinese and Western press that China's one-child-per-family policy was creating a generation of spoiled children. Overall, the only children performed significantly better than children with siblings on academic measures but scored similarly on personality ratings. When the children were subdivided by urban vs. rural residence and by grade level, urban children without siblings scored significantly higher than their peers with siblings on academic measures; there were no differences on these measures among the rural children. Although the children's teachers tended to rate the only children as more virtuous and more competent than the children with siblings, the parents' ratings of their own children on the same scales indicated no significant differences between the two groups. They further observed 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 has in school. Because of the resulting higher academic achievement, teachers may take a positive view towards the only children.

According to a Zhejiang Academy of Social Sciences survey by Zhu (1992), 55% of the parents considered the good school achievement of their only children as the happiest moment of their families, and more than half of the parents said they would punish if the child failed an exam. Parents of only children devoted more time than parents of children with siblings to work with their children on their studies.

Man (1993) found that parents of only children usually had great expectations and encourage their children's studying for academic achievement because they believed that it was critical for their children's success in an increasingly competitive world.
Laybourn (1994) pointed out that 'comparing only children with all other children from a variety of family sizes is not a good guide as to whether or not having a sibling made difference'. This was because children from small families always tended to do better in studies or ability and attainment, and only children were from small families.

In a study by Rivera and Carrasquilla (1997), fifty percent of the surveyed believed that their only child always seemed to be generally happy, thirty percent said, their child was often happy and 20% were neutral. Makihara et al. (1998) found higher chance of mental health problems for only child.

Iacovou (2001) explored the relationship between sibship structure and educational outcomes, in the context of theories of dilution of parental time. Special efforts were made to disentangle the effects of family size and birth order, since these effects had often been confounded in the past. Children from larger families were found to do worse than children from smaller families, and children lower down the birth order did worse than those higher up the birth order. He suggested that inputs from parents, interactions with other children may be important in children’s educational development. This idea was supported by the finding that mixing with other children outside school reduced the disadvantage otherwise associated with being an only child. Additionally, the important finding emerges that only children were at much more of a disadvantage on mathematically-based measures of performance than on language-based measures, suggesting that these skills might be acquired via different processes.

Liu (2002) showed that, from the very beginning of life, the only-child seems to be tied up with education and there seemed to be a strong relationship between the only-child family and higher education. This is evident by, among other things, a strong belief and shared interest among only-child parents in the education of the child, for whom the parents typically cherished high academic expectations. Research shows that only-child parents of both boys and girls take 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, are much framed by how to reach the goal of entering a university, preferably a prestigious one.

Tavares et al., (2004) found in a study that only-children had higher school achievement than adolescents with siblings. They conducted a study which was composed by 8% only children, 35% first born and 57% not first born adolescents of a homogenous socio-economic sample. This study found a better school achievement in only children than in not-first-children but could not detect independent and significant characteristics between only children and first-children. This study did not detected differences between only children, first children and not first children regarding the relationship with parents. This study also found lower number of alcoholic intoxication among only children. They found a better school achievement in only children than children with siblings. The concerns with college entrance and career were similar among first children, not first children and only children.

James (2006) observed that the family size was also marked by the over pampered treatment given to only children by their parents and grand parents. This resulted into the generation of spoiled only-children: Another problem associated with this over-pampered treatment was the rising rate of childhood obesity due to consumption of over nutritious diet by those only children.

Li and Zhang (2007) found that student who was the single child or had only one sibling in the family was more likely to be enrolled in elite universities in China. Thus, according to him, family environment especially sibling size played a prominent role in shaping the educational expectations of children.

Yang (2007a) found that the prevalence of overweight children in China has increased, and the one-child policy had been suggested as a cause. But he found that in his study while there were substantially gross
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differences in overweight by policy variations and sibsize (i.e., number of siblings), single children and those in strict one-child policy communities did not differ from other children, after adjusting for household and community characteristics. Thus, the policy did not seem to bear an independent relationship to child overweight risk. This analysis provided little to support the public perception that the one-child policy was associated with the rising epidemic of child overweight in transitional China. However, the only exception was for urban only children who had a slightly lower percentage of overweight than children with siblings.

Jin (2009) found that the only children consumed the family’s maximum income. Much of this consumption of their parents’ income was directly involved in the child’s education and parent’s saved to pay for the child’s college education without the benefit of loans or access to scholarships.

According to Wang and Fong (2009), parents, not daring to risk the future success of their ‘only child’, tried their very best to organize learning and social activities to help them excel as long as the costs were affordable. Popularly called “little suns” and “little emperors”, “these singletons are lavished with parental attention, luxuries, and opportunities not experienced by any previous Chinese generation”. Using data from the China Health and Nutrition Survey (CHNS) 2000 wave and multilevel logistic regression models, Zhai and Gao (2010) found that children without siblings consistently had higher odds of receiving center-based care than those with siblings, while there was no evidence that child gender mattered. According to Chen and Escarce (2010) children with no siblings were reported to be at a higher risk for overweight or obesity and number of siblings was a possible risk factor for the development of overweight and obesity. Research by Farhadian et al., (2010) investigated whether the number of siblings in the family facilitated the development of theory of mind (Theory of Mind) in pre-school children and found that the children in the only child situation had the lower performance in Theory of Mind scores, compared to the children who had one sibling or who had two or more siblings.
A study by Ochiai et al. (2012), investigated the relationship of the number of siblings and birth order with childhood overweight and evaluated the impact of having younger or older siblings on childhood overweight among elementary schoolchildren in Japan. Data from 4026 children were analyzed. It was found that being an only or youngest child was associated with childhood overweight, and having a larger number of younger siblings was negatively associated with overweight. The present study suggested that public health interventions to prevent childhood overweight needed to focus on children from these family backgrounds.

Shirasawa et al. (2012) indicated that there were a statistically significant differences in some baseline characteristics, such as birth weight and the number of siblings, between the overweight and non-overweight children. They further observed that only children were more likely to be in the overweight group. Children who did not exercise, ate quickly, or did not chew thoroughly were more likely in the overweight group.

4. PARENTAL BONDING

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.

Blake (1989) found that the advantaged academic outcomes of only children may well reflect the values and abilities of their parents. However, even when parents' educational levels were statistically controlled, the advantages for only children were maintained, suggesting that there may be something about the relationship between only children and their parents conducive to intellectual development.
Miller (1993) explored to what extent parents’ belief about the effects of sibling status on children were reflected in their perceptions of their only children. Parents of more than one child tended to describe their firstborn children more positively than their last born children and more positively than did the parents of only children. For parents with more than one child, there was a fair level of internal consistency between how they rated their own children and how they rated hypothetical children of similar ordinal position. Parents with only one child, however, showed less consistency in how they viewed their child, compared with their beliefs about only children in general. Perhaps the social stereotypes about only children are tempered by parental experience in such a way that parents of only children were less negative about their own child. Nevertheless, they might continue to hold negative views of only children in general. Alternatively, parents of two or more children had more child rearing experience, which possibly lead to a greater level of internal congruence in their attitudes and expectations about their own children and children in general.

Falbo and Poston, (1993) reported that only children appeared to be more competent than children with siblings, which might be due to the fact that parents and grandparents of only children were more involved in the child’s social activities and school performance. In a study Rosenberg and Hyde (1993) attempted to explain that parents of only children were higher on authoritarian control and overinvestment in the only children as compared to parents of first-born children with siblings. They also found that over investment in the child was greater for only children than for first-borns.

Wang et al. (1998) found that Chinese only children might be exposed to more one-on-one interaction with parents and grandparents than were children with siblings, and might also be exposed to more discussion about their own past behavior and experiences. This exposure might help only children to mentally frame memories, and might strengthen their personal past memories through reminding. The data also
suggested that how children came to think about their own role in society. When children learnt that their own thoughts, desires and feelings were of paramount importance across many situations, they might be inspired to attend to, collect, organize and revisit events associated with their personal histories. Such children might grow up to be more self-oriented, and to have earlier, more specific, more self-focused autobiographical memories than their peers. Clarfield (1999) looked at the differences in parenting behaviours between parents of only children and parents of children with siblings and found parental investment did not differ between the two groups. This suggested that the parent-child relationships of only children might be no more or less trusting than those of siblings.

In order to study the perception of Chinese parents of their children (majority of them were only children), audio tape free descriptions of children’s personality characteristics were obtained from 401 Chinese parents living in Beijing and Fuzhou. Zhang et al. (2002) showed, as children’s age increased, different categories of descriptions were typically used. Only for children at ages 3-5 negative descriptions associated with so-called “little emperor” stereotype prevailed in parents’ free descriptions. On the other hand, the proportion of negative descriptions in the Conscientiousness category increased with children’s age. This was an indication of the persisting importance given by Chinese parents to characteristics associated with school performance, effort, and diligence. The results showed that there were no sign of a spoiling attitude in Chinese parents.

Festini and Martino (2004) found that many families were structured as 4-2-1 since the first generation of only children has reached their age of marriage. A young married couple had to take care of four parents without help from siblings. If the one child policy persisted, the care burden of second generation of only-child couples would be doubled or even tripled and the pool of family support of aged parents would shrink. Only 17% of Chinese elders currently had some form of pension and more than 70% relied only on the support of their children.
Zhan (2004) explored the influence of familial and social factors on the maturing cohort of China’s one-child generation students’ attitudes toward filial responsibilities. Based on survey data collected in 1997 and 1998 among 777 Chinese young adults, he found that family economic conditions had a significant impact on young adults’ attitudes; higher family income was positively related to respondents’ willingness toward accepting filial responsibility; higher educational levels, were negatively related to their commitment to parent care when they foresaw job and care conflicts. Family socialization was not found to enhance young adults’ attitudes toward filial responsibility. Sharing the same household with grandparents and having dependent grandparents in the family were negatively associated with respondents’ sense of obligation for parental care. He pointed out only children born after the implementation of one-child policy in China scored lower than other children in their willingness to provide parental care when they foresaw job and care conflicts. He further argued that social structure, rather than socialization, played an increasingly important role in shaping one-child generation students’ attitudes toward filial responsibility in China, and would continue to do so in the future. He emphasized that increased family well-being and the increased educational levels of the only children were not necessarily positive for future elder care. As the only-child generation reached midlife, most would face the dilemmas of work and parental care. Upon reaching middle age, a married couple of two only children might have to care for four elderly parents, one or more grandparents, with no siblings to assist them. As these only children came of age their attitudes toward filial duties were influencing decisions about where to live and work, and their willingness to fulfil their filial responsibilities could illuminate the future prospects for elder care in China.

According to Yang (2006), couples of single children were less constrained in finance, time and energy, and presumably were able to invest more resource per child than did parents of children with siblings. This enhanced attention and investment might facilitate child intellectual development and increase the competition of the child in school,
contributing to a higher likelihood of school enrollment and completion. It was also possible that parents of single children had better internalized the “quality children” norm. With a higher expectation for children in mind, they translated this norm into behavior by giving children better education.

Clark (2008) referred to ‘4-2-1’ syndrome which was parent child interaction pattern indicating the focus of six adults, a child’s parents and grandparents, pouring their attention onto only child. This created the image of ‘Little Emperor’. He analysed that little emperors were only children who were presumed to be spoiled by the overindulgence of their parents and grandparents. They were regarded as selfish, lonely and maladjusted, ending up incapable of leading a confident future life.

Pettersson and Malmberg (2009) revealed that an only child seemed to be more prone to moving very close to their elderly parents, which was an expected outcome as there is no other sibling to take care of the parents. They opined that this interpretation seemed to be partly contradicted by the next result – it is more likely that someone will move close to their parents if there is already a sibling living within the same parish as the parents. If care-taking were the main reason for proximity, a close-living sibling would rather have decreased the likeliness of another child moving in. Instead, it seems that an additional family member close by adds to the attraction.

Lau and Li (2011) showed variations in family and school social capital which could be explained by child’s differing socioeconomic and demographic background and school characteristics. Children who were the only child at home, family with household registration in Shenzhen, parents with higher education attainment and monthly family income had strong interactions with parents and peers, and also close perceived parent-child and peer relationships. On the other hand, children who had two or more sibling and did not have household registration had close perceived teacher-student relationship, and their parents had close connections with schools. They also found that children, whose parents
had higher education attainment and monthly family income, had close child parent relationship and social interactions with friends than those who were in disadvantaged positions. The latter perceived that they had close ties with school teachers and their parents with close connection with schools. Children studying in public schools and top rank schools had strong ties with their parents and peers, whereas children studying in private schools and lower rank schools cognitively had close student teacher relationship and close bonds between parents and teachers.

In a study where 91% of children were only children, Lee et al. (2013) tested bidirectional relations between child temperament (effortful control and anger/frustration) and global parenting styles (authoritative and authoritarian parenting) in a two-wave longitudinal study of Chinese children between early and late elementary school. Their study provided a unique opportunity to test the cross-cultural generalizability of the developmental transactional model. They pointed out that 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. They opined that neither authoritative parenting did predict child temperament over time, nor did child temperament predict authoritative parenting. In contrast to the findings for authoritarian parenting, they found no cross-time relations between authoritative parenting style and child temperament. There were few significant correlations between authoritative parenting and children’s temperament effortful control or anger/frustration. They observed that the lack of association between authoritative parenting and child temperament in this Chinese sample might not be attributed to cultural differences. Because they did not assess temperament dimensions (e.g., positive emotionality) that tended to elicit positive parenting behaviors (rather than merely decreasing negative parenting behaviors), their measures might not be sensitive to detecting bidirectional relations between positive parenting and child temperament.
According to Stachowiak (2013), the only child, like any person, faced many challenges in life, some of which were specific and result from the family situation, such as stereotypical opinions about people not having siblings, etc. However, the basic life test for them was dealing with loneliness, which can be seen in various contexts. From the point of view of an only child, diagnosis and assessment of the state of loneliness was dependent on age and family considerations. The situation of an only child who suffered from a lack of companions to play with and was a bit overwhelmed by the adult world around it was different than the situation of a lonely, mature man without immediate family. Parents were more aware of this than they used to be, especially when they were only children themselves. By analyzing their own childhood experience, they supported their child not only in finding companions, but also in extracurricular socialization. They further observed that parents of only children also have to face their own challenges. Initially, they must deal with questions from the environment on why they only had one child, as well as stereotypical opinions about only children in a family environment, at school, etc. Over time, new issues emerged, one of which was experiencing one’s own old age and communicating this with their only child, but in such a way as to not dominate the child’s life with their own. His study found that only children did not have closely family to consult regarding the care of their parents. They could count on their relatives 20 or 30 years ago, but in the present circumstances such support was unlikely.

GENDER DIFFERENCES

1. GENDER DIFFERENCES IN STRESS, COPING AND ANXIETY

Smith and Rosenberg (1970) concluded that the only boy was more feminine than other males and the only girl more masculine. Belmont et al. (1976) reported that only children are more likely to be diagnosed as psychologically disturbed. Gupta and Murthy (1984) studied role conflict and coping strategies among Indian women. They showed that the most commonly used coping strategy was personal role re-definition. The
qualitative results also indicated that ‘Adjustment* and ‘Compromise* were most commonly used as successful methods of coping. Tseng et al. (1988) compared the behavior problem profiles of a large sample of children who were their parents' only children and those who had siblings. Boys who were only children did not differ significantly from boys who had siblings in their profile of behavior problems. However, girls who were only children received significantly higher ratings on the depression and moody factors than girls with siblings.

According to Smith (1990), boys might be prone to 'Irritability' and being 'Less Independent' than girls. He pointed out that China had a long history of feudalism and since ancient times parents had treasured boys much more than girls because boys had been viewed as the carriers of family line and contributors to the future welfare and security of the parents. These had always played a prominent part in shaping gender stereotypes. He showed how boys occupied a prominent place in the family and received more favourable treatment than girls specially in rural areas. Results of his study also indicated that the boys obtained at higher scores in irritability and less independence than girls were. Carson et al. (1992) revealed that male single children were found to be engaged in delinquent behavior. They acquired anti-social traits which can be linked to more aggressive behavior and criminality in adulthood later in life.

Wu (1994) addressed the research gap in the literature in the areas of social and emotional development regarding Chinese adolescents as only children by elicting the unique perspective of adolescents. Their experiences were documented through qualitative interviews that elicited their perspectives on social relationships with parents and extended family members, as well as perspectives on pressure and coping strategies. This investigation identified significant themes for Chinese educators, policymakers and parents. Results revealed that adolescents experienced the love and support of their parents and noted that parents played significant roles; adolescents experienced pressures related to academics, exams and parental expectations, and; some adolescents adopted an active coping strategy to manage their pressures, while some used an avoidant coping strategy to
dodge their pressures. Recommendations based on the research findings that are unique to China’s social context was made. Several sub-themes emerged in this research that appeared to have gendered features. For example, all the male participants had a closer relationship with their mother, while all the female participants liked their father more.

Stein and Nyamathi (1999) found that there were gender differences in the use of coping strategies have been reported in a number of studies. They suggested that females tend to favor social support, emotion focused and avoidant coping strategies in comparison to males. Tao et al. (1999) conducted a ten-year follow-up longitudinal study of psychological development of only children and children with siblings in Nanjing, a city in East China. A total of 697 pre-school children were first investigated at age 5.7 years old. Then three follow-up studies were conducted when children were 9.7, 11.7 and 15.7 respectively. There were 274 children in all four studies with 156 boys and 118 girls. A Chinese version of “A Chenback Behavior Scale” was used in the study. The authors did not describe in detail the origin of the scale. The results showed that only child boys and only child girls had different developmental trajectory when compared to their sibling counterparts. Differences between only child boys and boys with siblings disappeared when they entered adolescence. However, with only child girls, some introvert behavior problems, such as “troubling adults”, “talking about loneliness”, “picking food” and “childish behaviors not matching age” remained. The authors suggested that parents might treat only child boys and only child girls with different attitudes.

Chen et al. (2005) indicated that there were gender differences in social functioning and adjustment. Boys were more aggressive and had more difficulties in social and school performance. They found that Chinese boys had higher scores on depression than did Chinese girls. According to them, boys had more adjustment problems than did girls in social and academic areas, and that these problems were associated with depression in Chinese children. They also pointed out that girls were more shy-sensitive than boys in the 1990 and 1998 cohorts, but not in the 2002 cohort. The gender difference in the earlier cohorts might be related to gender
stereotypical ideologies in socialization. Girls had traditionally been expected to be obedient, passive, and behaviorally restrained in Chinese culture. These traditional expectations and beliefs may be less emphasized in recent years because they are in conflict with the requirements of self-direction and assertiveness in the new environment. As the influence of the stereotypical norms and values are gradually weakened and assertiveness was encouraged, Chinese girls might adjust their behaviors accordingly and regulate their shy and wary reactions in social interactions, which might attenuate gender differences in shyness-sensitivity.

**Liu et al. (2005)** observed that awareness about love was desirable for the child’s mental health. Children who exhibited low love awareness, particularly from parents, had higher negative mental health tendencies than those who perceived high love awareness. In the rural area, the only-children seemed to perceive more love awareness from peers than do the urban only-children. In the urban group, it might be inferred that the presence of a sharing brother/sister sibling in the home, which the urban only-children lacked, accounted for the better mental health of the urban children with siblings than the urban only children. They pointed out that urban child with siblings showed significant higher self-esteem than the urban only child who showed higher neurotic, social depression, and interpersonal dependency tendencies. They also indicated that urban male/female, and rural male/female children had common experiences in their environments as evidenced by the nonsignificant differences between them. Thus, the compact, solitary urban neighborhood impacted negatively on male children as it did on females; similarly, the spatial rural community positively affected female as well as male children.

**Sweeney and Hazell (2005)** described sibling-related investigations conducted within the first stage of a prospective study of the mental health of 347 children (aged 4-11) in foster and kinship care in New South Wales, Australia. They provided new insights into the significance of sibling relationships on their development. They found that girls living with at least one of their siblings in care had better mental health than separated girls. They opined that prospective data were needed to test various hypotheses
for why this is so, including: that placement with one’s siblings was a protective experience for girls; that girls with poor mental health were progressively excluded from sibling placements; and that girls develop poor mental health as a consequence of being separated from their siblings. A converse trend was observed for boys, suggesting that they were more likely to be separated from their siblings for reasons other than their behavior.

Updegraff et al. (2005) provided some insights for professionals working with parents of girls. Although girls and boys were equally likely to experience relational aggression from their siblings, links between some elements of parenting and relational aggression were specific to families with girls. When parents intervened in girls’ sibling conflicts, higher levels of relational aggression were apparent between siblings. Parents’ efforts to coach adolescents in resolving sibling conflict, in contrast, were not associated with relational aggression for girls. They highlighted the importance of attending to the ways parents handle sibling conflicts with daughters when relational aggression was a problem in the family. They found that younger girls received more favorable treatment from fathers than their older siblings.

Kochanska and Aksan (2006) observed that anxiety sensitivity, which is more typical of girls than boys and they were more susceptible to parenting. Therefore, one might expect a relatively large effect size for the relation between parental control and anxiety in girls. The results of the present study clearly support this expectation. In contrast, parent anxiety and parental control were only associated in samples with an overrepresentation of boys.

Liu and Lin (2007) explored the relationship between strain and delinquency participation among Chinese adolescents. Using survey reports of over 1,700 middle-school students in Fuzhou, China, the study yielded results consistent with expectations. They observed that there was a significant relationship between reports of overall strain and delinquency after controlling for common correlates. They pointed out that adolescents
in Fuzhou, China were more likely to engage in delinquency in response to strain over status achievement. Whereas boys were more susceptible to status-related frustration, girls were more responsive to strain over physical well-being.

According to Connell et al. (2008), demographic variables such as child age, gender and parental education also have a well-established history of being related to competence and problems. They indicated that social difficulties and behaviour problems are more common in boys and younger children than in girls and older children. Bornstein et al. (2010) pointed out that girls generally had more positive social behaviour and fewer behaviour problems than did boys. They also observed that gender differences had rarely been found on the relations between competence and psychopathology from 4 years of age to adulthood.

2. GENDER DIFFERENCES IN SELF EFFICACY AND EMOTIONAL INTELLIGENCE

Yee and Eccles (1988) found that the belief that boys were more intelligent than girls might influence parents causal attributions about their children’s success and failure, the experiences and the opportunities parents provided for the child in various activity domains and this developed children’s self concept. Meredith et al. (1989) conducted a study in a city in Southern China to compare only children and children with siblings in terms of their self-concept and selected social behaviors. The participants included 51 only children and 113 children with siblings from fifth grade. Students were asked to complete a Self-Perception Profile for Child that included scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct, and global self-esteem. The child needed to decide which kind of child was most like him or her as well as whether this was only ‘sort of true’ or ‘really true’ for him or her. The results showed that boys scored higher than girls on the scholastic subscale, athletic competence, behavioral conduct and global self-esteem. The peer and teacher evaluation favored only children.
Fan et al. (1994) compared the personality among elementary school only children and children with siblings in a Mid-West Chinese city. A total of 396 only-children and 371 children with siblings from grades 1, 3, and 5 were selected in the study. Parents and teachers were asked to answer 18 questions based on a 5-point scale. Four areas of personality were identified from these questions: interpersonal skills, self-centeredness, achievement motivation and independence. It was found that the only children scored higher in self-centeredness and achievement motivation but lower in independence. The first grade only children scored higher both in self-centeredness and achievement motivation. In addition, girls were rated higher in interpersonal skills, achievement motivation and independence. The first grade girls scored higher in achievement motivation and independence. The third and the fifth grade girls scored higher in interpersonal skills, achievement motivation, and independence. The authors concluded that Chinese parents’ attitude toward gender had changed from the traditional viewpoint.

Chen et al. (2000a) found no significant differences between only children and children with siblings. In general, female only children appeared more naive and infantile. Colarossi and Eccles (2000) pointed out greater sensitivity in women to interpersonal relationships, especially within the family environment. The female’s link was a key element in healthy development throughout the life. So they emphasized that while girls self esteem and life satisfaction were clearly linked with interpersonal relationships, for boys, other sources such a academic or sporting performance tended to be more important.

A study by Wan et al. (2001) revealed that the only children exceeded the sibling children on achievement motivation. It may be due to the high expectancy of parents. But no difference was found between only children and sibling children on interpersonal skills. While comparing boys and girls on achievement motivation and interpersonal skills, the girls received higher ratings than the boys on both. Lu (2002) showed that the psychological well-being of only-girl undergraduate students, measured by the University Personality Inventory (UPE), was significantly...
advanced than that of students with siblings. Compared to children with siblings, only children tended to be more advanced in the development of certain cognitive, emotional, and physical domains.

In the search for effects of interaction between parental support or supervision and sibling adjustment in order to predict personal adjustment levels or peer relationships, Steinberg and Silk, (2002) revealed an additive or accumulative model, in which both parents and siblings had positive, independent effects. Girls with greater parental acceptance and better sibling adjustment demonstrated higher levels of self-esteem and life satisfaction. In the case of relationships with peers, parental supervision replaced parental acceptance as the family variable most closely related to intimacy with the best friend and attachment to peers.

A principal objective of the study by Oliva and Arranz (2005) was to analyse sibling relationships during adolescence, within the context of parent and peer relationships, and their link with socioemotional adjustment. To this end, 513 adolescents (including only children and children with siblings) aged between 13 and 19 completed instruments relating to parent - child relationships, sibling adjustment, relationships with peers, self-esteem and life satisfaction. They found important gender-based differences in the meaning and importance that sibling adjustment seemed to have for adolescents. For girls, a good relationship with their siblings was linked to good relationships with their parents and peers, as well as increased self-esteem and life satisfaction. For boys, sibling relationships had no relation with other family or personal variables. They further showed that having siblings was related to adolescents’ social and personal adjustment, although only among girls and only in cases of good sibling relationships. In cases of poor sibling adjustment, it was probable that the negative effects of everyday situations of rivalry and conflict outweighed the benefits of any support that may be provided.

Bracket et al. (2006) used Mayer and Salovey’s (1997) theory of emotional intelligence (EI) as a framework to examine the role of emotional abilities (assessed with both self-report and performance
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measures) in social functioning. Self-ratings were assessed in ways that mapped onto the Mayer Salovey-Caruso Emotional Intelligence Test (MSCEIT), a validated performance measure of emotional intelligence (EI). In Study 1, self-ratings and Mayer Salovey-Caruso Emotional Intelligence Test (MSCEIT) scores were not strongly correlated. In Study 2, men’s MSCEIT scores, but not self-ratings, correlated with perceived social competence after personality measures were held constant. In Study 3, only the Mayer Salovey-Caruso Emotional Intelligence Test (MSCEIT) predicted real-time social competence, again, just for men.

Bosacki (2008) suggested that researchers needed to investigate additional socialization agents who might influence the development of emotional competence and gender role, including children’s peers, teachers, siblings and other family members as well as the influence of media experiences with text, websites, television and film.

Tong et al. (2010), examined gender differences in the correlations between intelligence and developmental problems as well as social competence in first graders. The findings clarified that the processing speed of boys significantly correlated with their peer relationship. On the other hand, the emotional symptoms exhibited by girls had a more common association with their intellectual abilities. The correlations between parenting and intellectual abilities differed in boys and girls. They observed that boys tended to be characterized by mischievousness, like engaging in outside activities and being more engaged in sports. As school-aged children, they spent a considerable amount of time with their peers. Children interacted more with peers in the classroom, while playing sports, and during after-school programs. In such settings, children prefer playing with other children of the same gender and tend to stereotype members of the opposite gender. The processing speed of boys affects their sports skills, self-esteem building, and peer group acceptance, thus eventually affecting their peer relationship. On the other hand, girls’ holistic intellectual level was negatively correlated with their emotional and behavioral problems. Though no clear relationships were found in the boys’ profile, the girls’ ability in vocabulary and their verbal
comprehension were found to be highly associated with the development of their autonomy. They also viewed that the popular conception is that girls develop all communication skills earlier than boys.

A study by Yu and Winter (2011), examined the developmental pattern of Gender Atypical Behaviours (GABs) in Chinese boys and girls. Gender Atypical Behaviour (GAB) is the ability to consistently categorize and identify with one gender. Parents of 486 boys and 417 girls completed a Child Play Behavior and Activity Questionnaire (CPBAQ) in regard to their own children, and a demographic information sheet. Although most Gender Atypical Behaviours (GABs) (by their very nature) were exhibited infrequently in Chinese children, it was found that girls displayed Gender Atypical Behaviours (GABs) more frequently than boys did. The prevalence of GABs rose for girls as they grew older, but fell slightly for boys. They also indicated that Chinese school aged boys and girls also exhibited Gender Atypical Behaviours (GABs) uncommonly. They observed that gender played a role in determining the frequency of children’s participation in Gender Atypical Behaviours (GABs) with the prevalence of Gender Atypical Behaviours (GABs) for girls being higher than for boys. They emphasized that the parents might be more reluctant to report their sons Gender Atypical Behaviours (GABs) than to report their daughters’ because behaviours and personalities associated with boys were more valued than those associated with girls. According to the parental reports, for both boys and girls, their participation in boy typical behaviour and girl typical behaviour declined with age.

Wu and Bao (2013) found that female students were more likely than male students to become student leaders and only children were more likely than children with siblings to become student leaders. The results indicated that females were advantaged not only in entering universities in general but also in attaining leadership roles in elite universities.

Zhang (2013) examined the longitudinal relations between psychopathology and social competence in a sample of 115 Chinese children during the transition to preschool initiated in their third year of
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life. Social competence was assessed by maternal reports at three months after preschool entry. Internalizing and externalizing symptoms were assessed by maternal reports. He observed that whereas internalizing problems might upset the development of social competence within a particular preschool year, exhibiting these problems at preschool entry might forecast growth of competence in the long run. The effect of externalizing symptoms on social competence seemed to be much simpler. The follow-up analyses suggested that the observed effects operated similarly for boys and girls and proved robust to the inclusion of potential common causes.

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

When trying to explain the gender difference in achievement in mathematics, Fox et al. (1979) focused on the influences of cultural values and parental expectations. They argued that in most societies, mathematics was considered a men’s subject, while women are seen as better at language and the arts and are not encouraged to work hard at mathematics. They pointed out that since support and encouragement from parents were crucial for girls in their decisions to elect or decline mathematics courses in high school girls’ relatively poor math performance should not be a surprise, and the performance gap should narrow with increasing beliefs in gender equality. They supported their view by the increase in female college enrollment in science and mathematics in the United States.

A study by Mott and Haurin (1982) used data from the young men's and women's cohorts of the National Longitudinal Surveys of Labor Market Experience to measure the independent effects of sibling number and placement on a number of educational, family, career, and social-psychological outcomes. In particular, the study compared separately the effects of being an only child with being the older of two children as well as the general importance of coming from a smaller rather than a larger family in men and women. The authors conjectured that this sex discrepancy might reflect a greater likelihood that the tutoring role within the family might be
substantially affectively based, thus making it an activity that was more likely to be associated with female intra family behavior.

A study Polit and Falbo (1988) observed that only children scored significantly better on tests of general ability than those from medium and large families and better than middle born, last born and all later born children. They were consistently similar to first born children and those from small families. They found that the only child advantage was consistent for males and females.

In a study, Hoffman et al. (1988) revealed that boys obtained higher scores in general information at both grades and vocabulary in the first grade. They also mentioned that Western studies had shown that boys obtained better scores than girls obtained in tests of mathematics and spatial ability, and girls obtained better scores in vocabulary.

Poston and Falbo (1990) found that only child girls’ academic performance was better than only child boys’ even in subjects like maths that typically were believed to be in the males’ domain. Stevenson et al. (1990) found that female first and fifth graders in China either did equally well or surpassed their American female and male counterparts on mathematics tests, although the girls scored a little lower than their Chinese male classmates. These variations in female mathematical performance suggested important sociocultural factors in the development of mathematical ability. According to Becker (1991), the effect of siblings on education returns was different for males and females. He found that children’s educational attainment was the result of family decision making in which the household balances efficiency and equity issues to determine the optimal distribution of educational resources.

In a study by Falbo and Poston (1993), height and weight constituted indicators of physical outcomes and they were measured using professional scales. They found that only children were significantly taller than later borns who were taller than first borns. Only children weighed significantly more than later borns who in turn weighed more than first borns. The findings suggested that the benefits derived from possessing
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one child certificate could well be providing better nutrition and overall health care for only children. Children living in urban areas were taller and heavier as compared to children living in rural areas.

Butcher and Case (1994) examined the effect of the number and gender composition of a boy or girl’s siblings on that children’s educational attainment. They found that in the United States between 1920 and 1965, women’s educational choices had been systematically affected by the gender composition of her siblings, and that men’s choices had not been affected. Hence, a child’s education might be affected by the size and gender composition of siblings if the family faced loaning constraints, especially in the developing countries such as China. They further observed sons and daughters had different earning potentials during the period in which they contributed to household income. Women historically spent less time in the labour force than men and for this reason the returns to education investment might have been lower for daughters than for sons. If sons received a higher return to each level of schooling, they should expect to see not only sons received more education, but also that the presence of sons reduced the educational attainment of daughters. Therefore, they found a girl with only sisters would receive more education than a girl with brothers, under the assumption of loaning constraints and not upon the exact shape of the parents’ utility function.

Wu (1996) reported that both fathers and mothers of only children expressed the belief that boys and girls should enjoy equal levels of education—an idea dramatically different from the traditional Chinese parents’ gender-differentiated expectations. In view of these findings, it was possible that contemporary Chinese parents’ expectations about children’s gender-related behaviors might be less stereotyped than before, and only children may experience less pressure from parents to adhere to typical gender-role behaviors and display more Gender Atypical Behaviour (GAB) than children with siblings.

Hesketh and Zhu (1997) found that without competition from siblings, children without siblings (i.e., only children), including only girls, might be
more likely to receive better child care and education compared to those with siblings. Huang et al. (1997) compared high school only children with children with siblings in terms of their health behaviors and academic performance in a Mid-West city in China. This study targeted 1,671 students from three junior high schools. There were 834 male students and 837 female students. Among all the students, there were 561 only children, in which there were 272 male students and 229 female students. The survey used in this study included behaviors in personal hygiene, health habits, and observing discipline. The survey was administered in classrooms with help from classroom teachers. For the academic performance, the researchers used test scores. The results showed that girls had better performance on behavioral measures. In addition, more only child girls achieved high scores than only child boys in test scores. One hundred and six only child girls had scores within the range from 85-100; however, only 57 only child boys obtained scores within this range. Although limited information regarding the type of behavioral and academic performance tests were used, this study revealed some general characteristics between among boys and girls in terms of their behaviors and academic performance.

Liu et al. (2000) found that the education of a girl would be affected if she had another sister. Having no male descendant would bring structural breaks in family decisions on consumption, saving and children education investment. Taking into account the influence of Chinese traditional cultural norms on women’s marriage and care responsibilities, the responsibility of caring for old parents is mainly upon their sons and daughters-in-law.

In a study by Wan et al. (2001), the behavioural traits of Chinese, urban, only children were investigated. The participants were 444 children with siblings and 473 only children. They found that the only children exceeded the children with siblings on achievement motivation. No differences were found between only children and sibling children on interpersonal skills and attitude towards manual labor. Gender differences were evident; girls consistently received higher ratings on achievement motivation and interpersonal skills. They indicated that in the process of socialization, children were much influenced by family members especially by parents. In China intra family dependency was very strong. Parents treasured boys much more than girls.
because boys were viewed as the carriers of the family line. This had always played a prominent part in shaping gender stereotypes. According to them, in China, boys still occupied a prominent place in the family and received more favourable treatment than girls. Boys were more privileged, in general and even more so when there was only one child in the family. The gender differences occurred because boys were over protected and thus became less competent in interpersonal skills and less achievement motivated than girls in primary school.

Brown and Park (2002) found that over and above the natural biases that gave rural households lower demand for education, the systematic differences between urban and rural economies stemming from the hukou system should almost certainly be expected to change the supply and demand for schooling. In this way, the rural-urban divide most likely was an important factor to consider in understanding China’s gender inequality in education. In urban areas, higher incomes and better welfare services, and perhaps higher returns to education, had been thought to reduce the gender bias against girls.

Ma (2004) observed that families with presence of both boys and girls have found that parents tend to hold higher expectation of boys, and that boys were given opportunities to continue study (such as going into high school or college) whereas girls were not granted similar opportunities. Furthermore, evidence has shown that women have received serious discrimination and disadvantages in the job markets. They opined that women in China faced tremendous disadvantages when it came to education opportunities and workplace practices. These same studies have also noted that physical attractiveness (beauty and youth) rather than the intellectual ability of girls has been emphasized. Girls with good looks have better opportunities to be hired and women’s advancement promotions in the workplace might depend on their appearances.

Fong (2005) showed that, from the very beginning of life, the only child seemed to be tied up with education and particularly there seemed to be strong relationship between the only child family and higher education. This was evidenced by a strong belief and shared interest among parents of only children.
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in the education of the child for whom the parents cherished high academic expectations. He emphasized that only child parents of more 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. He found that daily lives of the whole family especially that of the child was much framed by how to reach the goal of entering a university preferably a prestigious one.

In a study Wang (2005), examined children’s educational opportunities, and investigated the relationship between parents who held the son preference value and their unequal treatment when rearing children. The results demonstrated that the continued son preference value, based on traditional views as well as on perceived financial returns to families, led to a lower level of educational attainment among daughters in rural areas of China. The lower educational attainment and higher labor force participation rates of rural female adolescents reflected unequal opportunities provided by their parents in addition to social inequality in China. Children who lived in urban areas with educated parents received better educational opportunities and experienced less gender bias.

The strong gender-stereotypic expectations held by the parents in the study by Liu (2006) showed that one would be over-optimistic to believe that only-child status had totally erased all the deep-rooted gender-specific expectations based on the division of the sexes. When it came to parental views and ideals for their children, all the interviewees thought it was imperative that boys turn out masculine and most of them believed it is important that girls turned out feminine. Unaware of the constraints such expectations might have on their children’s full development, these parents contradicted themselves in their best wishes for their children when they wanted their children to have the highest education possible and meanwhile developed according to gender stereotypes.

In his paper Bredenkamp (2008) examined the determinants of child nutritional status in China during the 1990s, focusing specifically on the role of two areas of public policy, namely health system reforms and the one child policy. The empirical relationship between income and nutritional status, and
the extent to which that relationship was mediated by access to quality healthcare and being an only-child, was investigated using ordinary least squares, random effects, fixed effects, and instrumental variables models. In the preferred model – a fixed effects model where income is instrumented – the author found that being an only-child increases height-for-age z-scores by 0.119 of a standard deviation. Being an only child was found to be one of the most important predictors of nutritional status, on average and controlling for other factors, only children had height-for-age z-scores that were greater than those of children with siblings. The magnitude of effect was found to be largely gender and income neutral. By contrast, access to quality healthcare and income was not found to be significantly associated with improved nutritional status in the preferred model. He found that only children were better off than other children, regardless of household economic status. With respect to gender disparities, there was no evidence that boys who were only-children have z-scores that were significantly different from girls who were only-children.

Li et al., (2008) in their paper tested the theory of quantity-quality trade-off of children by using a representative census data set from China. They found evidence that family size is negatively correlated with children's education. The negative effect of family size was robust to various specifications, including those that control for parental characteristics and birth order effect. They then instrumented family size with twin births to explore the causal link between family size and child education and found supportive evidence. It was further found that the effect of quantity on quality was not uniform between rural and urban areas. More precisely, the tradeoff relationship was more evident in rural China, but the effect diminished or even vanishes for urban China. It was also found that the effect differed according to the gender of the child and the mother’s educational level.

Maimaiti and Siebert (2009) investigated school dropout rates among girls in rural China and argued that a girl's education suffered when her larger water need for female hygiene purposes after menarche was not met because her household had poor access to water. They found that menarche was associated with an increase in the school dropout rate, and indeed the effect was weaker for girls who had good access to water. Oster and Thornton
(2011) argued that differences in dropout rate by girls in China could not be explained by access to water without good attendance data as in Maimaiti and Siebert's (2009) study. They observed that access to tap water could be a proxy of public facility investment by local government which affected education of both males and females but might affect girls more than boys.

Fleisher et al. (2010) pointed out that women's increased care burden caused them to seek their children's help in household tasks, often cutting short their daughters' education. Even though good education facilities were located in large urban areas and provincial capitals, their locations were determined by historical factors, geographic characteristics, fiscal policy, political considerations, defense goals, and the like.

Li (2012) found that offering compulsory education to females did not require harsh enforcement techniques, and, therefore might help improve China's human rights record. The education could change the convention relief that more children were better or boys were better than girls. Li and Lau (2012) found that girls spent statistically significantly less time with parents but interacted more with friends and engaged more with classmates in school. The study did not find that girls were disadvantaged because, boys and girls had comparable subjective well-being and girls ranked statistically significantly higher than boys on both Chinese and English, but not on math. Furthermore, girls were self conscious about their better academic outcomes and their self-rated school performance was statistically significantly better than that of the boys.

Zheng et al. (2013) reviewed the existing literature on the gender inequality in education in China. They observed that discrimination against girls still existed in modern China. Girls' access to education improved noticeably with China's economic development during the 1980s, 1990s and 2000s, which was concomitant with a series of government policies which addressed issues that likely affected education inequality. Gender inequality in educational attainment varied between urban and rural areas. In urban areas, gender inequality reduced dramatically. Urban girls seemed to have advantages in educational opportunities. The educational penalty for living in a rural area
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was substantially greater for girls than boys. They pointed out that there was nearly no gender inequality against girls within the compulsory education system, even in poor areas. Beyond the compulsory level, however, gender was still linked to educational attainment. Girls were still significantly less likely to matriculate to senior high school than were boys, and they were less represented in higher education. Females from rural areas especially ones that are high school aged and above (and especially minorities) faced the greatest obstacles to enrollment in schools. Despite lingering gender inequality in educational attainment, girls did not seem to face significant disadvantages in school performance. In fact, in many cases, girls performed better than boys.

4. GENDER DIFFERENCES IN PARENTAL BONDING

A study by Maccoby and Jacklin (1974) relied on adult subjects’ recall of socialization behaviors by their parents and revealed surprising similarities in mother and father behaviors towards their children. Parents did not discriminate on the basis of gender of their child in practices emphasizing achievement, independence, and overprotectiveness, though first-borns received more encouragement for independence from both parents than did only children. Generally, the results indicated greater even-handedness by mothers, while fathers showed more differential treatment based on the sex of the child with greater openness in expressing affect and greater investment in daughters than sons.

A study by Rosenberg and Hyde (1993) found that both mothers and fathers exerted more authoritarian control with boys than girls. There were no differences in authoritarian control for male and female only children. Both parents exerted more control with only children than first-borns. They further viewed that mothers did not differentiate by sex of the child, while fathers did show significantly higher expression for girls than boys. Neither parent differentiated expression of affect with the only child, whether male or female, but among first-born children, however, both parents showed greater affect with girls than boys. Similarly, for overinvestment in the child, mothers did not distinguish between male and female children, while fathers again showed overinvestment in the girl rather than the boy. Both parents showed greater
overinvestment in the only child regardless of gender than the first-born. Both parents suppressed aggression more with girls than boys. These patterns held true for first-borns as well as only children. No differences were found in first-borns contingent on the gender of the sibling.

Strom et al. (1995) observed that parents of sons experienced more difficulties and greater frustrations than parents of daughters. Raising a daughter brought greater satisfaction than raising a son. This favorable impression about bringing up a daughter in an urban home stood in sharp contrast with the unfavorable view which observers continued to report as being normative in the countryside. They further pointed out that a cross relationship (father- daughter; mother- son) had an influence on certain aspects of parenting, particularly teaching. Lessons by parents directed to their opposite gender child emphasized personal decision making, respecting the rights of others and caring about other people's feelings. These learnings went well beyond the norms of the past and support the goal of gender equality. They indicated that the Chinese public was concerned that boys and girls growing up in small families would be spoiled. Certainly lavishing gifts on children and providing superficial attention could not match the greater benefit that came when parents showed a willingness to listen and got to know them as individuals. They also indicated that Mothers and fathers of only child did not have to divide their limited time at home among siblings.

Wu (1996) investigated child-rearing practices in Shanghai and in two villages in a neighboring country trying to answer questions such as whether or not only children and children with siblings families practiced child care differently; whether or not there was a difference in child rearing between urban and rural areas; whether boys and girls were raised in a different manner; and whether those children who cared for at home were different from those who were under the care of a nursery or kindergarten. Participants were randomly selected out of 7,542 families with children 3-6 years old. He showed that only boys and only girls were cared for in a similar manner by parents and other adults except for a few variables such as number of care takers, self reliance training, obedience training and punishment of aggressive behavior against parents. In terms of the expectations of the child there was no
significant difference between single child boys and single child girls. He observed that the parents were shown to emphasize achievement and investment for both genders as opposed to only for males in the traditional culture. Parents of kindergartners in Shanghai also believed that boys and girls should receive an equal amount of education and were pushing both genders to greater levels of academic achievement.

According to Tiedemann (2000), one critical factor that might contribute to the variation in boys and girls’ developmental outcomes was the parents’ attitudes, beliefs, and expectations of their only child boys and only child girls. Parents, as socializers of children’s life, played an important role in terms of mediating gender differences in children’s academic and psychological development by setting up their expectations for only child boys and only child girls. As learned from the earlier literature review, parents’ gender differentiated expectations and perceptions were associated with children’s own expectations and perceptions of their own ability.

Wang et al. (2000) pointed out that parents invested a great deal of family resources in their only children, but only girls might still be perceived as risky by some parents. They might worry about having nothing to count on if their only children were not able or willing to provide care for them in old age. They opined that the one-child policy might exacerbate discrimination against girls especially in rural areas.

Yeung et al. (2001) found that gender stereotypes had been shown to cause additional unequal treatment among siblings. They observed that parents allocated their time differently depending on the gender of the child, both qualitatively and quantitatively. They spent different amounts of time in different activities. They pointed out that mothers did not differentiate much based on the child’s gender.

Using data from the authors’ 1998-99 survey of 1,040 eighth graders in Wuhan, China, a study by Tsui and Rich (2002) explored the differences between single-girl and single-boy families with regard to parental expectation and investment in children’s education, children’s own educational aspirations, and mathematics performance. The researchers found that contrary to the
known intra-family discrimination against girls common among families of pre-one-child generations and still common among contemporary rural families with more than one child, there were no gender differences related to education between single-girl and single-boy families in modern urban China. The authors found equally high educational aspirations and similar mathematical performance for male and female only children. They suggested that this gender equality in education was an unintended consequence of the one-child-per-family policy and that under China’s current social and economic conditions, girls were better off living in one-child families in the big cities of modern China. The high parental expectations and high family spending on girls’ education might have increased girl only children’s sense of their right to a good education. They believed that because true liberation for women was only possible when women started to believe that they deserve the same rights as men, these changes signaled a real emancipation for Chinese women who were lucky enough to live in large cities and grew up as only children.

Meulenberg (2004) indicated that in many families, children still served as the primary caregivers for their aged parents and even grandparents. Therefore, parents with only one child may worry more about their elderly care. Those couples whose only child was a daughter see themselves particularly at risk because, once married, the daughter usually moves away to join her husband’s family and may be much less likely to return to provide elderly care to her own parents.

Lu and Trieman (2005) estimates separate models for males and females. As expected, there was no sibship size effect for males in any cohort, but for females there was a strong negative effect of sibship size in the two periods characterized by a competitive educational agenda. The sharp gender contrast was consistent with their claim that during periods in which educational competition was strong, girls, who in China are valued less than boys, suffered when family resources were diluted by the presence of many children. The absence of a sibship size effect for males even in competitive periods suggested that whatever their circumstances, families tended to invest in the education of their sons. But investments in daughters were relatively less common, and only during the Cultural Revolution (as well, of course, as
the Pre-Liberation period) did girls from large families manage to attain as much schooling as girls from small families.

**Lundberg (2005)** studied that a gender of the child affected the treatment and attention of the parents. He observed that fathers gave different amounts of resources to their children in accordance with sex stereotypes. **Schwarz et al. (2005)** observed that in predicting the likelihood of belonging to the “daughter receives more” group only one significant effect was found. The more instrumental support the daughters received, the more likely they were to belong to the “daughter received more” group. Another effect, which was marginally significant, indicated that the more instrumental support the daughters gave, the less likely they were to belong to the “daughter receives more” group. The analysis of the difference scores revealed very similar results. The more that instrumental support to parents exceeded the support from parents, the less likely daughters were to belong to the “daughter receives more” group. The more that emotional, instrumental, and financial support to the parents exceeded the support from the parents, the higher the likelihood that daughters belonged to the “daughter gives more” group. With respect to the difference scores, again emotional support was the strongest predictor.

**Liu (2006)** reported that studies on the effect of only-child status on girls’ education indicated 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. He further observed that as the distribution of education by gender was frequently argued to be a key determinant for gender inequality, this finding seems to carry an unquestioned message that gender equality has been largely achieved for the only-child generation. Based on data collected through semi-structured interviews with 20 families in north China, he explored parental gender-specific expectations of their only-children. Parents’ SES is also considered in order to see how class may interact with gender in parents’ expectations for boys and girls as only children. He revealed patterns of differences in parental expectations based on gender, and to a lesser degree, class. He argued that it would be over-
optimistic to believe that only-child status and the equally high academic aspirations parents hold for boys and girls had done away with all the deep-rooted factors against gender equality in Chinese society.

Yang (2006) studied that the potential resources used to help children with their schools were parental quality time and energy. Parents favoured sons for their economic and cultural values. If the child was both an older child and son, he would be entitled to advantages for both older children and sons and the family had greater incentives to invest more in his education. Older brother always posed a risk to other siblings' schoolings. Although younger sons were also highly valued and parents were willing to invest in their schooling, parents might not be able to treat them the same way as they did for the older son because of financial constraints. Thus, the gap in schooling among single children and other children, particularly those with an older brother or more than two siblings, might increase in the long run.

Yueh (2006) found that single-girl households on the average spent 2.55% more on children's education than all households with children. In addition, single-girl households spent significantly more on children than single-boy households. Zhan et al. (2006) studied the attitudes of Chinese elderly parents and their family members towards institutional elder care. Based on a sample survey of 265 elderly residents in 67 elder home institutions and 114 family members, this study finds that elders and family members generally had high evaluations of institutions' quality in terms of facility, medical, and direct care conditions. Elders who reported improved health and emotional well-being after entering institutions gave higher ratings to those institutions' quality. Among adult children, those who had more siblings tended to rate institutions higher than those who had fewer siblings. Factors that influenced elders' willingness to stay in an institution included marital status and financial ability. Widowed elders were more willing to stay at home due to the high cost of institutional care. In the family relatives' sample, gender was found to be related to willingness to place elderly parents in an institution. Female children were less willing to place elderly parents in the institution.
Fong (2007) observed that parents felt upset when their children wanted to avoid family ties. In his survey 86 percent of girls and 73 percent of boys indicated that they wanted to live locally after marriage; 18 percent of girls and 10 percent of boys indicated that they did not want to eventually marry; and 32 percent of the girls and 16 percent of the boys indicated that they did not want to eventually have children. The higher proportion of girls who indicated that they preferred staying local, marriage avoidance, and childlessness was probably because of recognition that family ties imposed especially heavy responsibilities on women. Because the socialization of male and female only children was very similar, many girls felt uncomfortable about the extra responsibilities that were expected of women in family relationships.

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 Zhan et al. (2008) women become more highly educated and career oriented, the gendered cultural expectations for daughters and daughters-in-law to take care of dependent parents may be expected to change. In a future with independent elders and unavailable caregivers, elders will likely seek alternative means of elder care outside the home. One such option will be institutional care.
A study by Tong et al., (2010) examined gender differences in the correlations between intelligence and developmental problems as well as social competence and concluded that parenting also influenced the development of children in various ways. It was found that children whose autonomy is well established frequently communicate with parents or peers, possibly promoting their capability of expressing verbally. In this study, parenting practices, especially the parents’ sensitivity toward children, were found to be significantly correlated with the children’s intelligence in both boys and girls. In this study, most of the caregivers were mothers who were generally considered to be more sensitive toward girls than boys. They pointed out that the parents’ responsiveness was related to the girls’ verbal IQ and the scoring in the similarities subtest. The fostering of the girls’ cognition development by the parents partially benefited their intellectual growth. It indicated that the approach of parents positively interacting with girls and consciously teaching them during their daily interactions were good indicators of their intellectual development. Compared to girls, diverse correlations were found in boys. The parents’ respect for the boys’ autonomy was positively associated with their arithmetic skills. They observed that boys tended to perform better in math and this was possibly another reason explaining parents’ high respect for the boys’ autonomy, since they believed that boys would do well in that field.

Lau and Li (2011) summarized that family and school social capital accrued among children with different socio economic and demographic background and school characteristics. They found that females had relatively weak interpersonal interactions with their parents at home than males. On the other hand, girls had strong peer relationships at school than boys. They also observed that only child status would contribute to have strong interpersonal interactions between children and parents and perception of collectedness to their parents while those children were not the only child at home perceived that they had close teacher student relationship and their parents had active involvement in whole activities.
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.

CHILDREN OF WORKING MOTHERS AND NON-WORKING MOTHERS

1. STRESS, COPING AND ANXIETY

Hoffman (1974) predicted that both sons and daughters of employed mothers would have broader, less differentiated conceptions of sex roles. He also predicted that sons of employed mothers would have lower cognitive performance and more adjustment problems than sons with non employed mothers, although the effects would not be as great as those found with younger children. Since the findings relating maternal employment to the cognitive performance of daughters have been inconsistent, no specific predictions regarding the daughters’ cognitive performance was made.

Bayrakal and Kope (1990) studied single-child adolescents in an inpatient psychiatric unit and observed that erosion of the parental boundary was a common factor with subjects who presented serious problems at the onset of puberty. When a mother alone represented a parental subsystem, the child was at increased risk during adolescence if the mother had not completed her own developmental tasks such as individuation, stability of lifestyle (e.g., maintaining a job), enhanced self-esteem, and separation from her family of origin.
Berger et al. (2008) revealed that children of non-working mothers’ got a lot of affection and care from their mothers. Most of their needs were satisfied by their mothers. Non-working mothers got ample time to attend their children. The chances of their deviant behavior were rare. These mothers, if they were educated, helped their children in their homework also.

In a study of 460 adolescents in Kolkata, India, Deb et al. (2010) compared anxiety across gender, school type, socio-economic background and mothers’ employment status. They examined adolescents’ perceptions of quality time with their parents. They found that boys were more anxious than girls. Adolescents from Bengali medium schools were more anxious than adolescents from English medium schools. Adolescents belonging to the middle class (middle socio-economic group) suffered more anxiety than those from both high and low socio-economic groups. Adolescents with working mothers were found to be more anxious. Results also showed that a substantial proportion of the adolescents perceived they did not receive quality time from fathers and mothers. A large number of them also did not feel comfortable to share their personal issues with their parents (60.0% for fathers and 40.0% for mothers).

2. SELF EFFICACY AND EMOTIONAL INTELLIGENCE

Nanda and Monochas (1971) revealed that employment of mothers had negative influence on their children and they became less cooperative, less sympathetic and exhibited different social behaviour.

According to Capizzano et al. (2000), working mothers perceived more cohesion and organization in their families and had greater self esteem. He also observed that daughters of full time working mothers had higher academic achievement. Lee (2002) showed that the creative ability score of children aged four to six years was higher for those children raised by a full-time homemaker than those raised by working mothers, although the difference was not significant. Ruhm (2004) argued that maternal employment was detrimental for child outcomes. He pointed out that being working mothers had negative impact on the cognitive development of their children.
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Gennetian et al. (2008) completed a study that examined school performance and participation in extracurricular activities. Their study found that children of stay-at-home mothers were more likely to have above average school performance. This study found that children who attended out-of-home care were more likely to participate in extracurricular activities, with ninety percent of children participating compared to eighty-two percent of children with stay-at-home mothers. Leigh and Yamauchi (2009) found that the association between maternal employment and child outcomes varies according to child and family characteristics. Maternal employment might have more negative effects on child outcomes for children of two-parent families, high income or highly educated families. They observed that by contrast, early employment was not linked to poorer outcomes of children in sole-parent families, nor of children from ethnic minorities such as African-Americans.

A study by Sharma and Sharma (2010) compared only children of working and non-working mothers with regard to their emotional maturity, need for achievement and overall emotional profile. Findings revealed that only children of working mothers scored slightly higher than the children of non-working mothers on measures of achievement but they showed more signs and symptoms of emotional disorders and interpersonal deficits. They further observed that the only child of working mothers were emotionally less stable as compared to only child of non-working mothers and suggested that only children of working mothers were not able to keep their emotions under control. As children did not find anyone at home to release their pent up feelings, it resulted in unreasonable fears and anxiety, whereas the non-working mothers tried to fill up the place of siblings and gave way to child’s expressions which working mothers would not do presumably because of the time constraint.

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

Hoffman (1974) argued that inconsistencies in findings resulted from failure to take account of differential effects in particular subgroups. She concludes that the effects of mother’s employment on achievement were
generally positive for children in lower-class families but potentially negative for boys in middle-class families.

According to Gold and Andres (1978), the lack of differences in the academic data between sons of employed and non-employed mothers indicated that maternal employment was a much less salient factor in the development of adolescent children than in younger children. The average age of the children in the study when their mothers commenced employment was approximately seven years. By this time the children's gender identity and cognitive skills might have been firmly established, with maternal employment consequently having relatively little effect. They found that the sex-role concepts of 10-year-old children and the cognitive performance of four and 10-year-old boys are much more strongly related to maternal employment status than those of the adolescent children support this contention.

Mody and Murthy (1988) reported poorer intelligence scores in children of working mothers at the age of 12 years. Children of working mothers were careless in the early years, slightly emotional but independent in nature at later years compared to the children of non-working mothers. Hoffman et al. (1988) found that daughters benefited from their mothers working and they were more self confident, got better grades and were more likely to pursue careers themselves than children of non-working mothers. Tehys suggested that the reason that daughter of working mothers did better than non-working mothers was that they had female model of social competence and high status and they got more training in independence within their families than the daughters of non-working mothers. They opined that achievement motivation originated in the high standards for mature behaviours that working parents imposed on their only children.

Ju and Chung (2000) found that children of working mothers had lower educational aspirations, compared with children with non-working mothers. They also reported that maternal employment had negative direction for boys and positive direction for girls. Anderson et al. (2003) determined whether a causal relationship existed between maternal employment and childhood weight problems. They used matched mother-child data from the National...
Longitudinal Survey of Youth (NLSY) and employed econometric techniques to control for observable and unobservable differences across individuals and families that might influence both children’s weight and their mothers’ work patterns. Their results indicated that a child was more likely to be overweight if his/her mother worked more hours per week.

Reynolds et al. (2003) examined what women felt were the effects on their family that arose because of their employment. Working mothers in the study felt that they were helping to meet the needs of their families by providing financially but at the same time their family relationships did suffer as a result of their employment. Many working mothers also felt that they were being good role models for their children. The working mothers highly valued the time spent with their children and also realized the negative impact of their employment on their children because after work mothers were sometimes too tired to interact as much with the children as the children would have liked. Also, working sometimes got in the way of completing activities with children that mothers and children would have liked to do. Ruhm (2004) observed that the children of working mothers during the child’s first early years of life had significantly lower academic achievement than those children whose mothers stayed at home in the same period.

Sherlock et al. (2008) observed that more mothers were choosing to return to work during the first two years of child’s life with an uncertain impact on early developmental outcomes. They determined the association between duration of maternity leave and motor and social development of toddlers. They concluded that there was an association between duration of maternity leave and impaired performance in motor and social development in children up to 2 years.

Gennetian et al. (2010) found that employment among low-income women had a modest adverse effect on the general health status of young children. A percentage point increase in employment induced by a welfare reform program is shown to decrease the probability of a child being in very good or excellent health by 0.6 percentage points. They revealed that the adverse effects of maternal employment were larger among boys as compared.
to girls, but do not vary by child age. They opined that health status could interrupt other aspects of children’s development, including their cognitive preparation for school.

Morrissey et al. (2011) showed that mothers’ employment was associated with increased in children’s body mass index (BMI), a measure of weight for height. They pointed out that nonstandard work (working evenings or nights, weekends, or an irregular shift) might also be associated with children’s BMI. This article examines the association between maternal work and children’s BMI and considers the influence of mothers’ nonstandard work schedules. They found that an increase in the total time a mother is employed is associated with an increase in her child’s BMI. They also observed that the association between maternal employment and children’s weight was much stronger at 6th grade relative to younger ages. There was no evidence that maternal or home characteristics or children’s time use mediated these associations, nor was there any evidence that nonstandard work was associated with children’s BMI. Implications for policy and future research are discussed.

Anderson (2012) investigated the relationships among maternal employment, family routines and obesity. He pointed out that more hours working by the mother tended to be negatively related to positive routines like eating meals as a family or at regular times or having family rules about hours of television watched. He opined that many of these routines were significantly related to the probability of being obese, implying that family routines might be a mechanism by which maternal employment intensity affected children’s obesity.

Sheikh and Jahan (2012) aimed to find out whether the study habits of higher secondary school students of working mothers differed significantly from those of non-working mothers. The study further compared the study habits of higher secondary school students of working and non-working mothers on the basis of gender. They revealed that there were insignificant differences between the adolescent students of working mothers non-working mothers on the measure of comprehension, study sets, interaction, drilling, recording and language dimensions of study.
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habits but significant differences were found between the students of working and non-working mothers on the measures of concentration, task orientation and supports. Regarding the total study habits the higher secondary school students of working mothers had significantly better study habits than those having non-working mothers. Further the study revealed that female students of working mothers had significantly better study habits followed by male students of working mothers, female students of non-working mothers and male students of non-working mothers.

4. PARENTAL BONDING

Blau (1999) opined that parental financial resources and preferences for expenditures on children’s cognitive development were positively correlated with amount of childcare time spent and number of years of schooling completed by children. He found that a higher level of family income and wage rate was expected to translate into higher proportions of income spent on children’s cognitive development and education. Hoffman and Youngblade (1999) opined that daughters of working mothers had higher academic achievements than daughters of non-working mothers. He observed the opposite effects for boys.

Capizzano et al. (2000) found that 5% of six to nine year olds had self-care as their primary child care arrangement while the parent was working. Overall, 10% of six to nine year old children regularly spent any time in self-care. Like the younger children, a significant percentage of 10 to 12 year old children rely on relatives as their primary care provider (17%). 24% of 10 to 12 year old children had self-care as the primary form of care while the mother was working. 35% of 10 to 12 year old children regularly spend any time in self-care each week. The percentage of children regularly spending any time in self-care increased as children grow older. Fuller et al. (2002) examined whether young children’s social development was related to maternal employment among 405 women. He found that mother’s employment duration was significantly associated with a lower incidence of aggressive behaviour and inattentiveness.
According to Boca et al. (2005), found that in spite of relatively generous public subsidies and a reputation for high quality, only a very limited proportion of Italian families used public child-care and a large proportion used informal care. They attempted to explore the determinants of the use of child-care among dual workers families. They found evidence that the availability of public child-care affected in an important way its demand. They also found that increases in costs of public child-care reduced the use of public as well as private indicating a shift to informal child-care. The presence of a grandmother who lived near and is in good health is an important explanation of the choice especially in presence of very small children. They pointed out that an understanding of the importance of those factors were relevant in the evaluation of child-care policies. This is particularly important in Italy, where the majority of families with children have only one child and children would benefit also from the socialization aspects of the child-care system.

Hesketh et al. (2005) pointed out that when both parents worked, only children were expected to rely on the market place than the family for vital social support and even socialization. Due to absence of their parents at home, they were either left to their own devices or were sent to school at early ages where they learnt various social norms originally taught within the family. They observed that these children would continue to move towards an individualistic perspective on themselves and their culture. They lived on their own and pursued their own ambitions rather than the ambitions of their parents.

Nomaguchi (2006) found that children that attended out-of-home care received less discipline and less support from their mothers. These results were not surprising considering the amount of time worked by parents. In fifty-two percent of cases, both parents worked at least forty hours per week. Because so much time is spent working, it is likely that more discipline must be left to children’s caregivers and less to the parents. Also, although all of the participants stated that they felt family was more important that work, it was likely that children of parents who work many hours would feel they receive less support because they spend less time in the care of their parents.
Review of Literature

Giele (2008) interviewed female college graduates in the United States in an attempt to learn if certain characteristics made career women more likely to remain in the home after they became mothers. She found that homemakers felt that being a mother was their most important life role. In contrast, working mothers felt that careers were their main role and that family was an additional part of their lives that helped make life more meaningful. Saadat (2009) stated that women employment had its own disadvantages such as mental and physical fatigue and they did not have enough time for their children and family members.

Fox et al. (2013) found that working parents devoted less time to childcare than their non-employ counterparts. Children with single-parents were much less likely to have a nonworking parent now than in the past and, although primary childcare time had trended upwards for both working and non-working single mothers, the increase for those who are employed had been modest. The average child in a single-mother family received fewer hours of primary childcare from the mother than the average child in a two-parent family; and, of course, the shortfall was even greater if one adds in the childcare provided by fathers in two-parent families (which has been increasing over time). Nor had the extra employment increased family incomes for the single-parent group. They further pointed out that while employed mothers in two parent families now spent about the same amount of time caring for young (0-4 year old) children as their nonworking peers did in the 1970s, the same was not true for 5-17 year olds. Moreover, time in primary childcare by two-parent families with a non employed parent increased, so that children with two working parents still received less care time than their peers in that group. And even when child time is protected, the lives of working parents are likely to have become more stressed and hurried, possibly with harmful effects on children. On the other hand, for children in two-parent families, increased parental employment has been accompanied by substantial growth in family incomes. The authors did not know how the time crunch associated with more parental employment had affected the quality of time spent between parents and children.