

COMPARISONS OF FAMILY ADAPTABILITY AND
COHESION BETWEEN CHINESE FAMILIES OF
CHILDREN WITH AND WITHOUT
LEARNING DISABILITIES

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CHAPTER I

INTRODUCTION

The environment in which a child grows and develops has a significant impact on the child. One particularly important influence is the family in which childhood experiences are provided. Family experiences are crucial to the child's development of intellectual and social competence. Research provides evidence to demonstrate the important influence of family on children (Clark, 1983; Hess, Holloway, Price, & Dickson, 1982; Pettit, Dodge, & Brown, 1988). At the same time, many researchers recognize that children's influence on their family is as important as the family's influence on children (Sameroff, 1975; Sameroff & Chandler, 1975; Sun, 1983). Certain characteristics of children may be a cause of family stress and disturbance. Additionally, the interactions and transactions between family functioning and children's characteristics are more complicated when the family has a child with disabilities (Abrams & Kaslow, 1977; Michaels & Lewandowski, 1990; Yura, 1987).

The birth of a child with disabilities has a significant effect on family dynamics (Hallahan & Kauffman, 1991). The child might interrupt family integration by extreme behavior, alter relationships among the family members, change family power through increasing intrafamilial conflict, and shatter family economic conditions due to the expense of medical care. A cycle of upset, anxiety, changing demands, and adaptations occurs throughout the child's lifetime, and causes considerable ongoing stress (Seligman, 1991). Under such conditions, many families with such children frequently have difficulties in making adjustments to cope with continuous demands and stress.

Not all research suggests the disastrous effects of a handicapped child on the family system (Dyson, 1991). In spite of being stressed, parents of children with disabilities do

not display greater signs of depression or psychological symptoms than do parents of nonhandicapped children (Gowan, Johnson-Martin, Goldman, & Appelbaum, 1989; Harris & McHale, 1989). Parents of children with disabilities have family relationships that are comparable to that of families with nonhandicapped children (Dyson, 1991; Kazak, 1987; Mahoney, O'Sullivan, & Robinson, 1992). There is no doubt that families with handicapped children have more stress than families without handicapped children (Dyson, 1991; Mahoney et al., 1992), but stress is not a necessary indicator of family dysfunction (Mahoney et al., 1992). Rather the way the family manages and adapts under stress determines the levels of family functioning (Boss, 1988).

Fewell (1991) mentioned in her study that parents of children with learning disabilities go through similar emotional stages as those parents who have children with different disabilities, and that they even face added uncertainty and stress due to the ambiguous nature of learning disabilities. The negative impacts of learning disabilities on the child and the family are manifested as the child enters into school, which demands higher levels of cognitive ability to deal with learning tasks. Parents may experience severe strain through continuously negotiating with the school system, exhausting different diagnoses and resources, and facing a society which stigmatizes their children. Under continuous stress, parents of children with learning disabilities are found to reveal more feelings of anxiety (Margalit & Almoughy, 1991). This affects family interactions, limits emotional expressions, decreases opportunities for conflict-solving, and lessens the family's cohesiveness and support (Margalit & Almoughy, 1991). Incohesive and unsupported family relationships increase a child's emotional difficulties as well as social and academic maladjustment (Margalit & Almoughy, 1991). Margalit & Almoughy (1991) reported most of the learning disabled children who have classroom misbehaviors or functional difficulties in the school settings are more likely to be from dysfunctional and conflictual families.

The value of children in Chinese culture is different from that of western cultures. Having a child with disabilities is more disastrous for a Chinese family than for a western family (Chou, 1993). Children, under the Chinese sociocultural context, are mainly considered as family properties. They are under obligation to bring honor to their family names. Parents take the responsibility to raise and educate their children to meet the society's standards and to prepare them to benefit the family. Children's achievements usually reflect the success and status of the family. Parents of a disabled child not only are exhausted and frustrated by a strong disappointment, but also experience negative attitudes from other family relatives and the society (Chou, 1993).

Education is an especially important issue in Chinese culture since the Chinese believe that higher education could improve the welfare of the next generation (Wu & Tseng, 1988). Academic accomplishment is often considered as a reflection of social status of an individual and the family. The pressure that parents put on their children to succeed academically may cause problems to the family (Hsu, 1988). When children fail to reach parental expectations, parents may feel hurt and anxious. This, in turn, may cause children to have lower achievement motivation, self-esteem, and more emotional problems. Since Chinese society attributes children's academic failure to lack of discipline and poor parenting rather than possessing disabilities, learning disabilities, the unobservable handicaps, becomes a stress to the family.

Feagans, Merriweather, and Haldane (1991) noticed the differences in families' dealing with the stress associated with children's disabilities. The way that a family responds to stress determines whether the family is vulnerable or invulnerable to the stress (Olson & Lavee, 1991). Cohesion and adaptability are identified as critical qualities in explaining family response to stress (Olson & Lavee, 1991). Boss (1988) pointed out that stress response is unique for each family system. A variety of outcomes may occur from the reciprocal influence between a child and the family environment (Mittelmeier,

1987; Sameroff & Chandler, 1975). Children, handicapped or nonhandicapped, take an active part in determining the functioning of the home environment.

Significance of Study

A learning disability is identified when a child is found to have a severe discrepancy between achievement and intellectual ability (Smith, 1991). Underachievement may occur in any academic area. Given their continuing failures, children with learning disabilities perceive their efforts and skills as being incapable of leading to success. They learn to give up and have low self-esteem (Smith, 1991). Yet Margalit and Almoughy (1991) indicate that not all of the children with learning disabilities suffer from continuous academic failure and low self-concepts. The family plays an important role in fostering children's intellectual development, maintaining their positive self-images, and providing children a sense of security (Margalit & Almoughy, 1991; Tsai, 1985).

Seligman (1991) mentioned that research focusing on the nature of the child's disability is short-sighted because it neglects the dynamics of the family system. Perspectives of family system examine individuals within the context of their interactions and relationships with other family members. The concept of inter-dependence of all system components highlights interpersonal relationships instead of individual dyads, and emphasizes the functioning within a family (Crownwell & Olson, 1975). A well-functioning family in which family members are allowed to express themselves and learn to respect each other can provide children a stable environment to develop healthy personalities and stimulate their motivation of learning (Tsai, 1985).

The impairment of a family in coping with its stress can aggravate the child's disability and even create a secondary handicap. McCubbin and McCubbin (1987) indicated that family adaptability and cohesion determine the capability of a family in effectively managing stress.. A child's development can be stunted when the family fails to satisfactorily negotiate stressful episodes (West, Hosie, & Mathews, 1989). It is

unavoidable to raise the question why some families are more adaptable and draw close together as a team in their response to pressure and stress. Seligman (1991), Walberg and Marjoribanks (1976), and Sameroff and Chandler (1975) speculated about the relationship between a family's socioeconomic status and family functioning. Sun (1983) and Huang (1976) indicated that parents' education levels and occupations affect adjustment of parent-child relationships. Michaels and Lewandowski (1990) pointed out the effects of child's disabilities on family functioning, and speculated that gender of the disabled child may also affect family functioning. However, research is not available to provide enough information to determine the interactional effects of a child's characteristics of disabilities and gender, and parents' socio-economic status, on family functioning types.

Alwin and Thornton (1984) and Smets and Hartup (1988) indicated that the relationships of parents and children could be most manifested during middle childhood, ages 6 to 11, when the influence of peer groups is limited and children have not developed a strong sense of self-regulation. During these ages, the family is most concerned about children's successful functioning in school and plays the most important role of cultivating children's abilities. However, Sameroff and Chandler (1975) indicated that the influence between children and parents is reciprocal. Failed transactions indicate the inability of parents and children to work out an interactional style which could help advance children's ability to organizing their world adaptively (Sameroff & Chandler, 1975).

In spite of the fact that the term learning disabilities is not familiar to Chinese parents, the effects of learning disabilities are manifested in the unique Chinese socio-cultural context. It is very difficult for Chinese parents to accept their children's invisible handicaps which result in academic failures. The rejection causes more pain and

uncertainty. Consequently, the child's continuing academic failures threaten the parent-child relationships and cause crisis and stress in the family (Chang, 1982).

Although learning disabilities do exist among Chinese children and their prevalence rates are by no means lower than American counterparts, many educators and parents ignore the existence of such an issue (Stevenson, Stigler, Lucker, & Lee, 1982).

Contrary to abundant research on learning disabilities in the United States, Taiwan has not put much effort in the research of learning disabilities, not to mention the research on families of children with learning disabilities. With increasing numbers of children with learning disabilities, studies concerning learning disabilities cannot be ignored any more. It is important that research provide information that is useful for enhancing the successful functioning of children with learning disabilities in school.

Research reveals that the parents who have children with learning disabilities and face difficulties in coping with problems related to the disabilities usually encounter stressful situations arising within the family (Roth & Weller, 1985). The stress blocks the parents' will to be involved in their children's academic life in which children's learning difficulties keep emerging. Yet Mahoney et al. (1992) found that stress can be much lessened in a cohesive and supportive family. That is, parents and children from cohesive and supportive families are more likely to adjust to the stress associated with learning disabilities. Parental involvement in the education of their children as well as children's adjustment to their disabilities can be affected by the levels of family functioning. Understanding the functioning of families of children with learning disabilities can help educators develop efficient strategies to encourage parents to involve in children's education. This study expects to explore the differences of family functioning between families of children with and without learning disabilities from the perspectives of children and parents. Correlation of perceptions of family functioning

among fathers, mothers, and children can also provide valuable information on assessing family functioning.

Most research on families, family functioning, and learning disabilities has been conducted and is generalized in the western cultural contexts. There is no information indicating if these theories could be applied to Chinese culture. This study also expects to find out whether the concepts of family functioning could be generalized to the families of learning disabled children in Taiwan.

Prevalence of Learning Disabilities in Taiwan

According to the survey conducted by the Committee on Educational Research of Ministry of Education, the Republic of China (1992), learning disabilities is one of the categories that have been dramatically growing in Taiwan during recent years. Around 1,010 elementary students are identified as learning disabled and receiving special education services. More than ten thousand elementary students who are identified as learning disabled are not receiving special education services due to inadequate professionals. Many experts believe that the real figure should be much higher.

Definition of Learning Disabilities

There is still much controversy and ambiguity on the definition and assessment of learning disabilities. According to the Special Education Law of the Republic of China, 15:9 (Ministry of Education, the Republic of China, 1992), learning disabilities are

exhibitions of significant difficulties in listening comprehension, oral expression, reading comprehension, written expression, and mathematics reasoning. Learning disabilities may coexist with other disabilities, but the definition excludes mental retardation, sensory disabilities, and emotional disturbance from being the primary causes of learning disabilities. Environmental disadvantages such as insufficient learning stimulation and poor teaching also are listed as primary conditions that exclude an individual from identification of learning disabled. Learning disabilities include developmental learning disabilities and academic learning disabilities. The developmental learning disabilities contain attention deficit, cognitive deficit, atypical visual-motor development, and

memory disorder. The academic learning disabilities represent the disabilities of reading, writing, and mathematics reasoning in academic fields. (p.224)

The lack of a standardized test for assessing learning disabilities and its ambiguous definition make it difficult to produce research in this field.

Statement of the Problem

The purpose of this study was to investigate family adaptability and cohesion for Chinese families, and to explore the differences of family functioning between families of children with and without learning disabilities.

Research Questions

1. What are the relationships among fathers', mothers' and children's perceptions of family adaptability and family cohesion for Chinese families?
2. What are the relationships between the perceptions of family adaptability and family cohesion for families of children with and without learning disabilities?
3. What is the impact of socioeconomic status (middle and low), gender (male and female), and educational groups (with and without learning disabilities) on children's perception of family adaptability?
4. What is the impact of socioeconomic status (middle and low), gender (male and female), and educational groups (with and without learning disabilities) on children's perception of family cohesion?
5. What is the impact of socio-economic status (middle and low), the child's gender (male and female) and educational group (with and without learning disabilities) on fathers' perception of family adaptability?
6. What is the impact of socio-economic status (middle and low), the child's gender (male and female) and educational group (with and without learning disabilities) on fathers' perception of family cohesion?

7. What is the impact of socio-economic status (middle and low), the child's gender (male and female) and educational group (with and without learning disabilities) on mothers' perceptions of family adaptability?

8. What is the impact of socio-economic status (middle and low), the child's gender (male and female) and educational group (with and without learning disabilities) on mothers' perceptions of family cohesion?

Definition of Terms

The followings are definitions of terms pertinent to this study.

Learning disabled children: This term refers to those children who were identified as learning disabled under the definition of the Law of Special Education of the Republic of China, mainstreamed, and were receiving individualized education in the resource rooms of regular schools.

Family Functioning: This term refers to both family adaptability and family cohesion in the Circumplex Model.

Circumplex Model: The circumplex model integrates three dimensions of cohesion, adaptability, and communication. Communication is a facilitating dimension to facilitate movement of families on cohesion and adaptability. Within the model, there are four levels of family cohesion ranging from low cohesion to high cohesion: disengaged, separated, connected, and very connected. There are also four levels of family adaptability: rigid, structured, flexible, and very flexible. Four types of family systems are identified by combining levels of cohesion and adaptability dimensions. Families are characterized by extreme, mid-range, moderately-balanced, and balanced functioning. Higher cohesion and adaptability reflect better family functioning.

Socio-economic status: This term reflects a proper combination of the occupational role and the formal schooling of the head(s) of the household. It refers to a social position an individual or a family occupies in the status of the current society. It was determined by

the Four Factor Index of Social Status (Hollingshead, 1975). The status scores ranging from 8 to 29 were classified as low socio-economic status, from 30 to 54 were middle socio-economic status, and those above 55 were high socio-economic status.

Family adaptability: Family adaptability refers to the ability of a family system to change its power structure, role relationships, and relationship rules in response to situational stress (Olson, Portner, & Bell., 1982). It was assessed by scoring fourteen items of adaptability in the Family Adaptability and Cohesion Evaluation Scales II (FACES II). Four levels of adaptability ranged from low to high: rigid, structured, flexible, and very flexible.

Family cohesion: Family cohesion refers to the emotional bonding that family members have toward to one another (Olson et al., 1982). It was assessed by scoring sixteen items of cohesion in the FACES II. Four levels of cohesion ranged from low to high: disengaged, separated, connected, and very connected.

CHAPTER II

LITERATURE REVIEW

This chapter contains a review of the related literature pertinent to this study. This chapter reviews the issues of family functioning related to learning disabilities, application of transactional mode, gender differences related to family functioning, and family socio-economic status related to family functioning.

The Issues of Family Functioning Related to Learning Disabilities

Family Functioning and Family Stress

Family stress is defined as pressure and tension in a family system that calls for adjustment or adaptive behavior (Boss, 1988; Olson & McCubbin, 1983). Tseng and Hsu (1991) referred the family stress to any strains, burdens, problems, or frustration for family members. The stress is resulted from the events or situations that have the potential to cause change (Boss, 1988; Tseng & Hsu, 1991). These events may involve some daily problems, demands of family members, and expectations for children. As an event come with disturbance, it brings crisis to a family (Tseng & Hsu, 1991). In order to keep a family unit function, a family needs to take steps to cope with stressful situations to maintain the balance between demands and rescues (Tseng & Hsu, 1991). Many researchers indicate that the type of family system shapes the course of the family's response to coping with stress (Olson & Lavee, 1991). Angell (1936) identified family integration and adaptability as two important factors related to the ability of a family to recover from disruptive effects of stress. He speculated that the amount of family integration and family adaptability influences the vulnerability to stress. Dyson (1993) noticed that family stress could be considerably reduced when the family has cohesive and supportive relationships to allow free expression of personal feelings without personal

conflict. Beavers and Hampson (1990) used family cohesion as a major dimension to define competent families. Minuchin (1974) identified the disengaged (extremely low on family cohesion) and enmeshed (extremely high on family cohesion) families as dysfunctional family structures which are characterized by low stress tolerance. Olson, Sprenkle, & Russell (1979) developed the circumplex model by using family cohesion and adaptability to distinguish family system types and levels of family functioning in response to stress. Cohesion is defined as the emotional bonding among family members (Olson et al., 1979). Adaptability is defined as the ability of a family system to change in response to situational and developmental needs (Olson et al., 1979). Family communication facilitates movement of the two dimensions of adaptability and cohesion (Olson et al., 1979). Higher scores on cohesion and adaptability are related to more functional family relationships (Olson, 1991). But a lack of communication in a family may result in serious disagreement among family members and cause tension in family relationships (Barnes, 1989). In spite of the popularity of using family cohesion and adaptability to distinguish family types and levels of family function, Green, Harris, Forte, and Robinson (1991) questioned the appropriateness of adaptability in family assessment. They found linear relationships between cohesion scales of FACES and other well-being measures, but could not correlate adaptability scales with those well-being measures.

In their research of family therapy, Tseng and Hsu (1991) emphasized the importance of appreciating the cultural aspects of family system and functioning. Cultural variations have great impacts on the family functioning (Wu & Tseng, 1988). Although extreme types of family adaptability and family cohesion are identified as dysfunctional by western family researchers (Beavers & Hampson, 1990; Minuchin, 1974; Olson et al., 1979; Olson et al., 1982), some researchers (Tseng & Hsu, 1991; Olson & Tiesel, 1991) recognize that extreme family adaptability and cohesion may not definitely reflect family dysfunctioning or pathologies due to some differing cultural

values, especially the cultures that emphasize closeness of family members and strict family structures. Thus, the assessment of family functioning needs to identify with cultural contexts. It is important to clarify and distinguish the culturally sanctioned "intrafamily closeness" and dysfunctional "enmeshed" family types (Tseng & Hsu, 1991).

In Chinese society, the family is a fundamental unit. A strong sense of obligation and responsibility to one's family is cherished as a virtue, and knits family members closely together (Wu & Tseng, 1988). Traditional emphasis on interdependence of family members and respect and obedience to the elders has not diminished in modern Chinese society (Yu, 1987). Family members are obligated to support each other and submit to the family authorities which are usually the parents (Yu, 1987). It is natural for Chinese parents to nurture their children, and ask for children's obedience in return. It permits parents to have absolute authorities on their children, and expect unquestioning obedience from them (Chou, 1993). As parental authority is challenged, stress and disturbance can be easily aroused. In spite of the rigid family structure, family members are bounded by affection and responsibilities (Yu, 1987). Thus some inherent family problems, such as inadequate parent-child communication and generation gaps, exist in the highly cohesive family (Wu & Tseng, 1988). Wu and Tseng (1988) and Hsu (1988) attributed the lack of communication and generation gaps to the Chinese style of nonverbal emotional expression and the authoritarianism of family power. Hsu (1988) further indicated that psychological problems and family dysfunctioning may be manifested when there is a lack of parental understanding and empathy for children.

Family Stress, Family Functioning, and Learning Disabilities

The presence of a disabled child in a family is a stressor for the family (Dyson, 1993). Many studies have found that a disabled child generates greater parental stress and less family functioning (Dyson, 1991), and behavior of the child might cause parental attitudes to be more directive and controlling (Mash, 1984). Stress as well as disruptive

family functioning are caused by the child's continuous demanding of caretaking, financial burdens of medical care, and uncertainty about the child's functioning (Dyson, 1993).

Many studies have revealed that psychological maladjustment, low academic self-concept, and conduct and emotional problems that are amplified by the nature of learning disabilities not only create stress for families of children with learning disabilities, but disrupt family functioning (Feagans et al., 1991; Margalit & Almoughy, 1991; Michaels & Lewandowski, 1990; Yura, 1987). The relationships between children with learning disabilities and their family members are always limited by their cognitive deficit and poor communication skills (Hoyle & Serafica, 1988; McLoughlin, Clark, Mauck, Petrosko, 1987; Smith, 1991).

Compared to average families, the families of children with learning disabilities emphasize more organization and control, are more rigid in family adaptability, and less affectionate in family cohesion and support (Margalit & Almoughy, 1991; Thompson, Lampron, Johnson, & Eckstein, 1990). In order to compensate the continuous academic failures of learning disabled children, parents emphasize the personal achievement of family members, thus limiting emotional expression, and opportunities for conflict resolution are decreased (Margalit & Almoughy, 1991). Margalit and Heiman (1986) used the Family Environment Scale to compare 20 families with children with learning disabilities and 20 families of children without learning disabilities. They found that families with learning disabled children placed more emphasis on system maintaining, but no difference was found in the intensity of relationship in families.

Michaels and Lewandowski (1990) examined the behavior profiles and family functioning of 59 learning disabled boy and 65 normally achieving boys. The results found that LD group families were more frequently in the "extreme" range. Morrison and Zetlin (1988) employed FACES III to 30 nonhandicapped and 30 learning disabled adolescents and their parents. Significant differences in perceptions of family functioning

were found between parents of adolescents with and without learning disabilities, but not between adolescents with and without learning disabilities

The traditional values of academic achievement have not decreased in modern Chinese society. Parents usually have high expectations of academic performance for their children, and take every chance to cultivate children's academic abilities. In a survey to 5,595 junior high students and their parents in Taipei, Taiwan, , Yu (1987) found that 80% of parents required children to achieve academically, and 80% to 85% of children were worried about their academic performances. It is obvious that a lot of family stress can be caused by the low academic performance of children. Hsu (1988) indicated that some of the most common psychological problems among children and adolescents in Taiwan are those created by the pressure parents put on their children to achieve high grades on school performance. As Chinese parents believe that academic failure is attributed to a lack of effort and insufficient training at home (Hess, Chang, & McDevitt, 1986), they try to improve children's school performance through harsh disciplining and higher pressure for success. As parents are more controlling and authoritarian, they are more apt to ignore and neglect children' emotions (Hsu, 1988).

Circumplex Model and FACES

The circumplex model was formulated by Olson et al. (1979) to bridge the concepts between family theory and family therapy. There are three primary dimensions integrated in the model: cohesion, adaptability, and communication. Olson et al. (1979) suggested that a combination of cohesion and adaptability levels may explain differences in the family's response to stress. Communication is an effective dimension to facilitate movement of families toward positive cohesion and adaptability (Olson et al., 1979). The evidence of curvilinearity between adaptability and cohesion has been found in clinical families, but there appears to be a linear relationship between adaptability and cohesion in

family functioning with normal families (Olson, 1991). Higher levels of cohesion and adaptability are associated with better family functioning (Olson, 1986).

The first Family Adaptability and Cohesion Evaluation Scales (FACES) was constructed in the dissertation works of Joyce Portner and Richard Bell to specify the two major dimensions of the model, adaptability and cohesion (Olson & McCubbin, 1983). It included 110 items of self-report scales to measure family adaptability and cohesion. Olson and his colleagues developed FACES II in order to create a shorter instrument with simple sentences. After revising, the initial scale of FACES II was reduced to 30 items which contain 16 cohesion items and 14 adaptability items (Olson et al., 1982). In 1985, Olson, Portner, and Lavee developed FACES III in order to improve the reliability, validity, and clinical utility. Although the FACES III of 20-item scales can be administered more easily and overcome some of the limitations of FACES II, many findings have indicated that FACES II has some advantages over FACES III (Olson, 1991). The alpha reliability in FACES II (0.87 for cohesion, and 0.78 for adaptability) is higher than that in FACES III (0.77 for cohesion, and 0.62 for adaptability). FACES II also shows higher concurrent validity than FACES III. Therefore, Olson (1991) recommends the use of FACES II for research.

In the circumplex model, family cohesion assesses the degree to which family members are separated from or connected to their family. It is defined as the emotional bonding that family members have toward one another (Olson et al., 1982). Specific concepts related to cohesion include emotional bonding, coalitions, time and space, family boundaries, friends, decision-making, and interest and recreation. Four levels of family cohesion range from extremely low cohesion (disengaged) to extremely high cohesion (enmeshed). Family adaptability assesses the extent to which the family system is flexible and able to change. Concepts related to adaptability dimension consist of assertiveness, leadership, discipline, negotiations, roles and rules. Four levels of family adaptability

range from extremely low adaptability (chaotic) to extremely high adaptability (rigid). In updating interpretation of FACES II, Olson and Tiesel (1991) stated that FACES II does not capture the extremely high categories of "enmeshed" and "chaotic" families. High scores on the adaptability and cohesion dimensions are re-interpreted as "very connected" and "very flexible" which are more appropriate for scores in that range (Olson & Tiesel, 1991). Four levels of family cohesion range from disengaged (extremely low cohesion), separated, connected, to very connected (the highest cohesion). Four levels of family adaptability range from rigid (extremely low adaptability), structured, flexible, to very flexible (the highest adaptability).

The circumplex model classifies sixteen distinct types of clinical family systems by combining the four levels of the cohesion and the four levels of the adaptability dimensions. The family types are categorized to three basic groups as balanced types, mid-range types, and extreme types. The model hypothesizes that balanced families will function more adequately than extreme families (Olson, 1989). Based on the linear scoring and interpretation of FACES II for nonclinical families (Olson & Tiesel, 1991), the circumplex model re-classifies four family types as extreme types, mid-range types, moderately-balanced types, and balanced types. The average scores of family cohesion and adaptability determine the location of family type on the circumplex model. A newly developed alternative hypothesis states that examination of functioning for families should be identified with their social-cultural contexts. The other hypothesis indicates that higher scores on cohesion and adaptability represent higher levels of family functioning (Olson & Tiesel, 1991).

Application of Transactional Mode

An ecological approach to the understanding and explanation of learning disabilities has been popular in recent years. Learning disabilities are assessed and explained in a broad environmental context that includes the various settings to which a child relates

(Smith, 1991). A child's most important setting is the family. The members of the child's family, especially the parents, provide the surroundings that have impacts on the child's learning disabilities and adjustments as well as social attitudes and behaviors (Smith, 1991).

Sameroff and Chandler (1975) proposed a transactional mode to emphasize the reciprocal influence and transactions between organism and environment which result in natural alternation throughout development. They believed that transactions are not simply the unidirectional influence of parents on children, but also the reciprocal influence of children on their parents. The reciprocal effects determine the qualities of home environment. Keough (1982) pointed out that the transactional mode could best explain the nature of learning disabilities since it relates to the multivariate nature of the learning disability conditions. Mittelmeier (1987) reviewed the developmental modes such as main effect mode, interactional mode, and transactional mode, and successfully applied the transactional mode to the explanation of the development of social adjustment of learning disabled children.

The main effect mode recognizes that either constitution or environment is considered to be the sole contributor to later developmental outcomes (Sameroff, 1975; Sameroff & Chandler, 1975). Sameroff and Chandler (1975) indicated that this mode fails since solely constitutional and environmental disorders could not be the major contributions to the poor development of children. Keough (1982) also mentioned that the main effect mode could not explain the relationship between neurological impairment and emotional disturbance of children with learning disabilities.

The interactional mode assumes that the child's developmental outcome should be described in the combination of constitution and environment (Sameroff, 1975; Sameroff & Chandler, 1975). But this mode is inadequate, since neither constitution nor

environment is regarded constant over time. That is, progressive interactions between the individual and his/her environment are not incorporated in the mode.

The transactional mode emphasizes that there is a continual and progressive interplay between the organism and its environment. (Sameroff, 1975; Sameroff & Chandler, 1975). It has most been used to illustrate the mutual effects of an infant and his/her caretaking environment. Parental behaviors may be elicited by the child's characteristics, and the elicited behaviors may then alter the behavior of the child (Sameroff, 1975). From this perspective, a child is thought to be actively engaged in attempts to organize and structure his/her world. Keough (1982) speculated that a child with learning disabilities might indeed be neurologically impaired, but the disabilities affect his/her environment and, in turn, the modified environment acts upon the child to produce further changes in the child. Some continuous malfunction in transactions may prevent the child from organizing his/her world adaptively, and from normally integrating with the environment (Sameroff & Chandler, 1975).

Gender Differences

Related to Family Functioning

Gender of the child is of interest because of the differences in how boys and girls are socialized and educated, how adults judge children's behavior and achievements, as well as how boys and girls view themselves and what they achieve (Holloway & Hess, 1985; NICHY, 1990). It affects family functioning through the differences in parents' attitudes toward sons and daughters. It has even been found that females with a disability are less encouraged and demanded to strive for independence and achievements than males are (NICHY, 1990). Higher expectations toward males make it more difficult for both boys with disabilities and their parents to accept and adjust to the stress caused by disabilities (Frey, Greenberg, & Fewell, 1989).

After assessing child-rearing attitudes of 92 mothers and fathers, Bohman, Hazen, Burton, and DeSantis (1991) found parents' attitudes differed according to the gender of child. Fathers had higher expectations for boys, and thus were strict and less warm. Mothers expected more socially appropriate behavior from girls, and therefore showed more strictness to daughters. But Margolin & Patterson (1975) and Su & Ho (1983) found both fathers and mothers gave more time and attention to caring for boys. Stiliadis and Wiener (1989) speculated that parents might be more strict with girls in terms of behavior standards. They found that antisocial behaviors of girls with learning disabilities are more likely to be viewed as deviant and unacceptable than those of boys with learning disabilities, even when the actual behavior of girls may be less negative than the behavior of boys. Yet an early study conducted by Sears, Maccoby, and Levin (1957) revealed that girls were more likely to be deprived of care and love when they presented problems.

Although the male-dominant system has changed in a Chinese society, it is inherent in the culture to view males as the main financial supporters and leaders in a family. The Chinese parents always have higher expectations for boys, and give more encouragement and support for them to strive for achievements (Chu, 1984; Su & Ho, 1983; Yu, 1987). But Chu (1984) related the parental expectations to strict discipline and control which are more frequently experienced by boys. Additionally, as stress is aroused in the family, young males are more sensitive and vulnerable to the disorganization and confusion of family life than young females (Tseng & Hsu, 1991), and have more adjustment difficulties. It may be because problems associated with boys have a more serious influence on the parents and family, while boys are more likely to feel detached and rejected under such conditions (Chang, 1982; Hu, 1986).

Family Socio-economic Status Related to Family Functioning

Since families of handicapped children are with more financial pressure because of children's special needs, Seligman (1991) pointed out the socio-economic status has more impacts on the families of children with disabilities. Economic and social factors have been assumed to be stressors for those families, to exhaust their physical and psychological resources, and to precipitate the uncontrolled expression of assaultive impulses (Sameroff & Chandler, 1975). These could increase conflicts and crises for a family (Hsieh, 1984). Dyson (1991) listed socio-economic status as one of the important variables affecting family functioning and parental adjustment to the stress caused by children's disabilities.

Socio-economic status has impacts on parental stress and family functioning through its possible linkage with social support (Dunst, Trivette, & Cross, 1986; Friedrich & Friedrich, 1981; Gowan et al, 1989; Lee, 1974; Luster, 1986), family integration (Dunst et al., 1986; Lee, 1974), parent-child interaction opportunity (Dunst et al, 1986; Gowan et al, 1989, Lee, 1974), and child-rearing attitudes (Chen, 1986; Lee, 1974; Tsai, 1985).

Comparing mothers of handicapped and nonhandicapped infants, Gowan et al. (1989) found that mothers of handicapped infants who had a higher socio-economic status were likely to have general feelings of self-efficacy and well-being as mothers of nonhandicapped infants. Flynt and Wood (1989) also found that parents of children with disabilities had different coping levels corresponding to their socio-economic status. Parents with lower socio-economic status show more difficulties in coping strategies since they have less access to social support and activities that can help them maintain a feeling of stability and alleviate psychological stress (Flynt & Wood, 1989). Similar results that parents' adjustment and coping abilities correspond to their socio-economic status were

also found in cross-cultural studies of family functioning in Taiwan (Hu, 1986; Su, 1976; Wang, 1979).

Yet, Frey et al. (1989) indicated that fathers with higher socioeconomic status have more stress and difficulty coping with their children's disabilities. Konstantareas and Homatidis (1988) explained that the greater stress experienced by parents of children disabled from middle- and upper- socioeconomic status may be due to their pressure and expectations for children to succeed.

The influences of socio-economic status are not limited to parents. Studies reveal that children from low socio-economic families are more likely to feel unloved and neglected, and experience more conflicts with the environments (Gou, 1984; Ho, 1986; Yu, 1987). It may be due to the reason that parents of low socio-economic status do not have time to spend with their children while they are busy making a living (Hsieh, 1984; Yu, 1987), and tend to be more authoritarian in child-rearing attitudes (Ho, 1986).

Summary

Having children with learning disabilities is considered as a stress for many Chinese families. Failures of children's academic life may deter parent-child dynamics. Under stress, family functioning is the indicator that parents and the child need to work on overcoming the stress caused by the disabilities and maintain a functional family environment.

Cohesion and adaptability have been considered as important factors of family functioning by many family researchers. Olson et al. (1979) developed a circumplex model to integrate family cohesion and family adaptability to illustrate family functioning. Based on this theory, Olson and his colleagues (1982) developed Family Adaptability and Cohesion Evaluation Scales II (FACES II) to assess family cohesion and adaptability. According to the linear scoring and interpretation of FACES II for nonclinical families,

higher scores on cohesion and adaptability represent higher level of family functioning (Olson & Tiesel, 1991).

The transactional theory between children and their care-taking environment (Sameroff and Chandler, 1975) indicates a continuous mutual influence that makes both children and parents take part in determining the functioning of a family.

Literature shows that families of children with learning disabilities are more rigid in family adaptability and less affectionate in family cohesion. Compared to families of children without learning disabilities, families of learning disabled children are more frequently in the extreme range of family functioning. Yet, research is controversial in determining the effect of learning disabilities on families. Although there is no Chinese literature directly relating learning disabilities to family functioning, problems associated with academic failures of children are manifested in the Chinese social cultural context.

Gender has been an issue for parents in determining their attitudes and expectations toward the child. Research has found that males with disabilities and their parents have more difficulties in life adjustment, but females with disabilities are more likely to be neglected by their parents. Literature also indicates that boys gain more attention, love, and support from parents, but, on the other hand, they experience more discipline and control from parents.

Socio-economic status has been considered as an important factor in influencing parents' coping strategies. Parents with low socio-economic status show more difficulties in coping with their children's disabilities, however, there is research indicating parents with high socio-economic status have more stress and problems when they face children's inadequacies. Negative effect of low socio-economic status on children is much more apparent since research has proven that children from low socio-economic status present more adjustment difficulties than children with a higher socio-economic status.

This literature review explored the controversy related to the effects of learning disabilities, gender difference, and socio-economic status on family functioning. The purpose of this study was to investigate the effects of learning disabilities, gender difference, and socio-economic status on the functioning of Chinese families of children with and without learning disabilities.

CHAPTER III

METHODOLOGY

The purpose of this study was to investigate family adaptability and cohesion for Chinese families, and explore differences in family functioning between families of children with and without learning disabilities. This chapter contains descriptions of subjects, instrumentation, procedures, research design, and statistical procedures utilized for this study.

Subjects

The subjects of this research consisted of 86 Chinese children with learning disabilities, and their parents, as well as a comparison group of 104 children without learning disabilities, and their parents. Families involved were limited to two-parent intact families. Children recruited aged from 8 to 9 years, and had the same ethnic background of Chinese.

Children with learning disabilities recruited had been diagnosed by special educators of respective schools based on the eligibility criteria of the Special Education Law of the Republic of China. In Taiwan, children who have experienced learning difficulties and continuous academic failures are referred by regular teachers to the school officials for assessment. Most children with learning disabilities are diagnosed by the end of their first school year, and receive individualized instructions in resource rooms since second grade. For example, a first grader who has continuously failed in tests of language and/or mathematics, would be referred for assessment. A battery of tests including intelligence assessments and curriculum-based achievement tests would be administered to the child. If the child's IQ was greater than 70 on the Chinese version of Wechsler Intelligence Scale for Children-Revised (WISC-R), and a severe lag in the achievement tests was

indicated, he/she would be identified as language learning disabled and/or mathematics learning disabled. Children with learning disabilities are mainstreamed in regular classes, and are pulled out for specialized instructions in resource rooms for one to two hours a day.

The comparison group was composed of normally achieving children without disabilities. They were selected from the same grades and schools as children with learning disabilities, and closely resembled the children with learning disabilities in terms of age and family socio-economic background.

The subjects were selected by using cluster sampling. Thirteen schools were randomly selected from the public elementary schools located in the eastern, western, southern, and northern areas of Taipei, Taiwan. Children with learning disabilities were recruited from resource rooms of schools. The comparison group was selected in the following way: for each child with a learning disability, a child of the same age, sex, and family socio-economic background was randomly chosen from the regular classroom of the same school. Parents were included and divided into the groups having children with and without learning disabilities.

One hundred and fifty families of children with learning disabilities, and the same number of families of children without learning disabilities were invited to participate in the research. One hundred and eleven families with learning disabled children, as well as 112 families without learning disabled children responded to invitations, and returned packages of materials. However, 22 families of learning disabled children, and 11 families without learning disabled children were dropped due to incomplete questionnaires and a lack of family background information sheets. Of the 223 families responding, only three families of learning disabled children, and five families of nonlearning disabled children fell in the category of high socio-economic status. These families were treated as outliers and pulled out from data analysis to avoid confounding

the results. The final pool of families used for data analysis contained 86 families of learning disabled children with middle and low socio-economic status, and 104 families without learning disabled children with middle and low socio-economic status. The two samples represented 57% of the population of families with learning disabled children, and 71% of targeted population of families without learning disabled children.

Demographics for these subjects are presented in Table 1 and Table 2.

Table 1

Numbers (and Percentages) of Students by Educational Groups, Gender, and Socio-economic Status

	Children With LD		Children Without LD		Total
	Male	Female	Male	Female	
	n	n	n	n	n
	(%)	(%)	(%)	(%)	(%)
Middle SES	15	17	22	25	79
	(7.9%)	(9%)	(11.6%)	(13.1%)	(41.6%)
Low SES	30	24	31	26	111
	(15.8%)	(12.6%)	(16.3%)	(13.7%)	(58.4%)
Total	45	41	53	51	190
	(23.7%)	(21.6%)	(27.8%)	(26.8%)	(100%)

Table 2

Numbers (and Percentages) of Parents by Children's Educational Group, Gender, and Socio-economic Status

	Parents of Children With LD		Parents of Children Without LD		Total
	Mother	Father	Mother	Father	
	n	n	n	n	n
	(%)	(%)	(%)	(%)	(%)
Middle SES	32 (8.4%)	32 (8.4%)	47 (12.4%)	47 (12.4%)	158 (41.6%)
Low SES	54 (14.2%)	54 (14.2%)	57 (15%)	57 (15%)	222 (58.4%)
Total	86 (22.65%)	86 (22.6%)	104 (27.4%)	104 (27.4%)	380 (100%)

Instrumentation

Family Adaptability and Cohesion Evaluation Scales II (FACES II)

Family Adaptability and Cohesion Evaluation Scales II (FACES II), see Appendix A) was developed by Olson et al. (1982) to evaluate family cohesion and adaptability, and locate individual families within the Circumplex Model.

FACES II is a 30-item self-report instrument using a Likert-type scoring system (1 = Almost Never, 2 = Once in a while, 3 = Sometime, 4 = Frequently, 5 = Almost Always).

It consists of 16 items for the Cohesion subscales and 14 items for the Adaptability subscales. The respondent is asked to read each statement and decide how frequently the described behavior occurs in his/her family. FACES II enables the family members to complete the questions individually in terms of his or her perceptions of the present family functioning, and is easy to administer and simple to score.

Answers are scored on a continuous scale from low cohesion (disengaged) and low adaptability (rigid) to high cohesion (very connected) and high adaptability (very flexible). An overall family functioning score is obtained by calculating the mean across the two subscales. Four categories of family type are described as extreme, mid-range, moderately-balanced, and balanced. Higher scores of cohesion and adaptability represent more functional family types.

Reliability. Olson et al., (1982) established reliability by determining Cronbach Alpha for cohesion and adaptability using a sample of 2,412 respondents to the 30-item FACES II. The sample was divided into two equal sub-groups of "non-problem" families. Internal consistency was measured and found adequate in two subscales with cohesion $r=.87$ and adaptability $r=.78$. The test-retest reliability coefficients were high for the entire scale ($r=.84$), for cohesion ($r=.83$), and for adaptability ($r=.80$).

Validity. Construct validity for FACES II was obtained through factor analysis separately for the Cohesion and Adaptability items. The coefficients of concurrent validity for adaptability ($r=.79$) and cohesion ($r=.93$) were significant while correlating to Dallas Self-Report Family Inventory

Chinese Versions of FACES II. In order to meet the different reading and comprehension abilities of adults and children, FACES II was translated into two versions of Chinese by the researcher. One was for adults (see Appendix A), and the other one for children (see Appendix A). The researcher consulted elementary school teachers and professionals to assure that the translations could be used with respondents of different

ability levels. To enhance accuracy, translations were reviewed and revised through cooperation between the researcher and professionals of education and English. After the translations were done, a pilot study was conducted to test the reliability of the instruments. The researcher administered the child-version of translated FACES II to 104 second and third graders of a public elementary school located in Taipei Hsien which is a county nearby Taipei city, Taiwan. The researcher read out sentences from the questionnaire, and asked children to check the most appropriate answer for each sentence. The administration time was about 40 minutes. In the mean time, the adult-version of translated FACES II was sent to 100 parents. Ninety parents returned questionnaires. Three weeks later, the researcher administered FACES II to the 104 children, and sent questionnaires to the parents. Eighty nine parents returned the questionnaires. Two sets of scores of family adaptability and family cohesion of 104 children, and 89 parents were analyzed for test-retest reliability. The test-retest correlations are presented in Table 3. As noted in the table, all values were relatively high, providing evidence of the stability of both cohesion and adaptability across the testing administration.

Table 3.

Test-retest Correlations of Adult-version and Child-version of FACES II

	Adult-version	Child-version
Cohesion	.77	.83
Adaptability	.62	.78

Family Background Information Sheet

The Family Background Information Sheet (see Appendix B) was designed to obtain information on parents' educational levels and occupations. Parents' educational levels

and occupations were used to assess family socio-economic status. The score of socio-economic status was assessed by the Four factor of social status (Hollingshead, 1975). In computing this index, it is assumed that education is a prerequisite for entry into occupations that carry higher prestige in the social system (Hollingshead, 1975). The status score of an individual was calculated by multiplying the scale value for occupation by a weight of five (5) and the scale value for education by a weight of three (3). To assess a family's socio-economic status, the individual scores for the father and mother were summed and divided by two if both father and mother were gainfully employed, . If only father or mother was gainfully employed, the estimated socioeconomic status was calculated on the basis of the employed member's education and occupation. The status scores ranging from 8 to 29 (social strata as machine operators, semiskilled workers, unskilled laborers, and menial service workers) were classified as low socio-economic status. The status score ranging from 30 to 54 (social strata as medium business, minor professional, technical, skilled craftsman, clerical, and sales workers) were classified as medium socio-economic status. The status score above 55 (social strata as major business and professional) were classified as high socio-economic status.

Procedure

Thirteen schools were randomly selected from the public elementary schools located in the eastern, western, southern, and northern areas of Taipei, Taiwan. The researcher contacted school officials, explained the nature of the research, and asked for assistance and cooperation. As school officials consented to provide assistance, the researcher made appointments to visit the schools. During visits, the researcher, with the help of special teachers, checked the family background information of children with learning disabilities. The researcher deleted those children from single-parent families from lists to make sure that families involved were intact and children were from different households. As children with learning disabilities were identified, the comparison group of normally

achieving children without disabilities were selected in the following way: for each child with a learning disability, a child of the same age, sex, and family socio-economic background was chosen from the same regular classroom of the same school. The identification procedures were done with the help of special and regular teachers.

After identifying the children targeted to participate in the research, the researcher passed packets of materials to those children, and asked them to forward the packets to their parents. Each packet included an invitation letter (see Appendix C), a cover letter (see Appendix D), a consent form (see Appendix E), Family Background Information Sheet (see Appendix B), and two copies of the adult-version of translated FACES II (see Appendix A). The researcher asked all children to return the packets to the special and regular teachers. Two weeks later, reminders were sent to parents through teachers.

In order to ensure confidentiality, each child and the packet sent to the parents were coded with a specific number. The number was composed of two characters representing the school, two characters of the class, one letter representing the child's gender, and two digits of the child's seat number. The code number was also shown on the child's questionnaire. The researcher used the code number to match children's questionnaires with the information obtained from their parents. For example, a male second grader, with a seat number of 36, of Ho-Ti Public Elementary School, would be coded as 河堤二愛 M 36.

After packets were collected and parental consent was determined, teachers arranged time for the researcher to help children to complete the child-version of translated FACES II (see Appendix A). Since children with learning disabilities need more time than children without learning disabilities to complete questionnaires, children were divided into groups of students with and without learning disabilities before they were helped to complete the questionnaires. Each subgroup contained 7 to 10 children each time. The group with learning disabilities was followed by the other group. The

researcher provided children an oral assent to participate (see Appendix F), and explained how to answer questionnaires. The researcher read out each sentence, and waited until every child in the group was ready for the next one. In order to reduce the variance caused by administration process, the researcher also tried to remain consistent in speed and tone of reading for both groups. The time of administration for the group of children with learning disabilities was about 50 minutes, while about 30 minutes were used for children without learning disabilities.

Research Design

This study explored family adaptability and family cohesion among Chinese families, and compared the functioning of families of children with and without learning disabilities. Parental and children's perceptions of family functioning were described. Fathers', mothers', and children's family adaptability and family cohesion scores were related. Additionally, these family functioning scores were correlated for families of children with and without learning disabilities.

Differences between children with and without learning disabilities, as well as parents of children with and without learning disabilities were also investigated. The children were grouped according to socio-economic status (medium or low), gender (male or female), and educational groups (with learning disabilities or without learning disabilities). The parents were grouped according to socio-economic status (medium or low), the child's gender (male or female), and the child's educational group (with learning disabilities or without learning disabilities). Parents' and children's perceptions of both family adaptability and family cohesion, as influenced by group, were determined.

Statistical Procedures

The responses of fathers, mothers, and children on the FACES II were described using measures of central tendency and variability. Types of family functioning were

delineated for families of children with and without learning disabilities from the perspectives of both children and parents.

Bivariate Pearson correlations were computed to determine the relationship between the family adaptability and family cohesion scores of (1) fathers, mothers, and children, and (2) families of children with and without learning disabilities. Thus, the interrelationships among the subgroups on family functioning were determined, and the following hypotheses were tested at the significance level of .05:

1. There is no relationship among fathers', mothers', and children's perceptions of family adaptability and family cohesion for Chinese families.
2. There is no relationship between the perceptions of family adaptability and family cohesion among fathers, mothers, and children for families of children with learning disabilities and children without learning disabilities.

Differences between the children with learning disabilities and children without learning disabilities, as well as parents of children with and without learning disabilities, were explored by using analyses of variance (ANOVA). Six three-factor between-subject ANOVAs were conducted to explore differences between children with and without learning disabilities, between fathers of children with and without learning disabilities, and between mothers of children with and without learning disabilities. In each analysis, subjects were nested in three independent variables socio-economic status (medium or low), gender (male or female), and educational group (with or without learning disabilities)]. The dependent variables used across the six separate ANOVAs were: (1) children's perception of family adaptability, (2) children's perception of family, (3) fathers' perception of family adaptability, (4) fathers' perception of family cohesion, (5) mothers' perception of family adaptability, and (6) mothers' perception of family cohesion. Due to the the numbers of subjects per cell, the significance level was shifted from .05 to .025.

Based upon this structure, the following six hypotheses were tested at the significance level of .025:

3. Socio-economic status, gender, and educational group would not combine to differentially affect children's perception of family adaptability scores.
4. Socio-economic status, gender, and educational group would not combine to differentially affect children's perception of family cohesion scores.
5. Socio-economic status, the child's gender and educational group would not combine to differentially affect fathers' perception of family adaptability .
6. Socio-economic status, the child's gender and educational group would not combine to differentially affect fathers' perception of family cohesion .
7. Socio-economic status, the child's gender and educational group would not combine to differentially affect mothers' perception of family adaptability.
8. Socio-economic status, the child's gender and educational group would not combine to differentially affect mothers' perception of family cohesion.

Summary

Subjects in this study were 86 Chinese children with learning disabilities, and their parents, and 104 Chinese children without learning disabilities, and their parents. Subjects were recruited from 13 public elementary schools located in different areas of Taipei, Taiwan. Children with and without learning disabilities were selected from the same schools and closely resembled the children with learning disabilities in age and family socio-economic background. The average age of children was 8 to 9 years. Procedures for the administration of instruments and collection of data were described. Instruments used in this study included Chinese versions of FACES II (Olson et al., 1982), and Family Background Information Sheet. Socio-economic status was assessed by Four Factors of Social Status (Hollingshead, 1975). Descriptive statistics were used to describe perceptions of family adaptability and cohesion of the three major subgroups as

children, fathers, and mothers. Pearson correlations were calculated to determine the relationships of family adaptability and cohesion among fathers, mothers, and children for families of children with and without learning disabilities. A series of three-way ANOVAs were utilized to investigate the effects of learning disabilities, gender, and socio-economic status on family adaptability and cohesion of children, fathers, and mothers.

CHAPTER IV

RESULTS

Descriptive statistics and the results of the statistical analyses utilized to test the hypotheses are presented in this chapter.

Descriptive Statistics

Means, standard deviations, and score ranges of family adaptability and family cohesion of children, fathers, and mothers are presented in Table 4. As noted in the table, groups were divided according to educational group (with learning disabilities, without learning disabilities), gender (male, female), and socio-economic status (middle, low) for examining the summary statistics. Additional descriptive statistics on family adaptability and family cohesion based upon the groups outlined above are presented in Tables 5 through 10..

For total families (see Table 4), fathers' perceptions of family adaptability ($M=49.116$, $SD=6.798$) were slightly higher than those of mothers ($M=48.221$, $SD=6.590$) and much higher than those of children ($M=39.779$, $SD=7.305$). Significant mean differences existed between fathers and children [paired $t(189)=-13.333$, $p=.000$], mothers and children [paired $t(189)=-12.339$, $p=.0000$], as well as mothers and fathers [paired $t(189)=2.427$, $p=.016$]. Mothers' perceptions of family cohesion ($M=61.237$, $SD=8.339$) were not very different from those of fathers ($M=61.163$, $SD=7.881$), but again were much higher than those of children ($M=55.368$, $SD=8.408$). Significant differences in family cohesion were found between fathers and children [paired $t(189)=-7.978$, $p=.000$], and mothers and children [paired $t(189)=-8.534$, $p=.000$]. Based on the educational group (see Tables 5 and 6), family adaptability and family cohesion from the perspectives of fathers, mothers and children in families of children without learning

disabilities appeared higher than those perspectives of families of children with learning disabilities. Perceptions of family adaptability ($M=36.826$, $SD=5.777$) and cohesion ($M=50.640$, $SD=6.806$) of children with learning disabilities presented the lowest scores on both dimensions. Based on the child's gender (see Tables 7 & 8), family adaptability ($M=40.859$, $SD=7.552$) and family cohesion ($M=56.641$, $SD=8.043$) perceived by female children were significantly higher than those by male children [independent $t(188)=-1.990$, $p=.048$; independent $t(188)=-2.039$, $p=.043$]. But there was non-significant difference in the means of both dimensions for mothers and fathers. Based upon the socio-economic status (see Tables 9 & 10), family adaptability and family cohesion of families with low socio-economic status were significantly lower than those of families with middle socio-economic status. Family adaptability ($M=38.901$, $SD=7.028$) and family cohesion ($M=53.694$, $SD=8.081$) of children with low socio-economic status presented the lowest scores in the groups.

Table 4

Means, Standard Deviations, and Ranges of Family Adaptability and Family Cohesion of Children, Fathers, and Mothers for Total Families (N=190)

Group	Adaptability			Cohesion		
	Mean	SD	Range	Mean	SD	Range
Children	39.779	7.305	22-60	55.368	8.408	35-80
Fathers	49.116	6.798	30-61	61.163	7.881	41-76
Mothers	48.221	6.590	31-60	61.237	8.339	36-78

Table 5

Adaptability Means, Standard Deviations, and t-tests by Educational Group (With Learning Disabilities, Without Learning Disabilities)

	With LD (N=86)		Without LD (N=104)		t (p-value)
	Mean	SD	Mean	SD	
Children	36.826	5.777	42.221	7.554	-5.575 (p=.000)
Fathers	47.895	7.415	50.125	6.096	-2.233 (p=.027)
Mothers	47.105	7.028	49.144	6.086	-2.114 (p=.036)

Table 6

Cohesion Means, Standard Deviations, and t-tests by Educational Group (With Learning Disabilities, Without Learning Disabilities)

	With LD (N=86)		Without LD (N=104)		t (p-value)
	Mean	SD	Mean	SD	
Children	50.640	6.806	59.276	7.574	-8.274 (p=.000)
Fathers	60.186	8.133	61.971	7.611	-1.550 (p=.123)
Mothers	59.651	8.431	60.548	8.070	-2.404 (p=.017)

Table 7

Adaptability Means, Standard Deviations, and t-tests by the Child's Gender

	Male (N=98)		Female (N=92)		t (p-value)
	Mean	SD	Mean	SD	
Children	38.765	6.981	40.859	7.522	-1.990 (p=.048)
Fathers	49.694	6.260	48.500	7.313	1.205 (p=.230)
Mothers	48.051	6.266	48.402	6.949	-0.365 (p=.716)

Table 8

Cohesion Means, Standard Deviations, and t-tests by the Child's Gender

	Male (N=98)		Female (N=92)		t (p-value)
	Mean	SD	Mean	SD	
Children	54.173	8.606	56.641	8.043	-2.039 (p=.043)
Fathers	61.439	7.647	60.870	8.155	.496 (p=.621)
Mothers	61.000	7.761	61.489	8.951	-.401 (p=.689)

Table 9

Adaptability Means, Standard Deviations, and t-tests by Socio-economic Status

	Middle SES (N=79)		Low SES (N=111)		t (p-value)
	Mean	SD	Mean	SD	
Children	41.013	7.549	38.901	7.028	1.979 (p=.049)
Fathers	51.785	5.327	47.216	7.109	4.827 (p=.000)
Mothers	49.835	5.633	47.072	6.994	2.904 (p=.004)

Table 10

Cohesion Means, Standard Deviations, and t-tests by Socio-economic Status

	Middle SES (N=79)		Low SES (N=111)		t (p-value)
	Mean	SD	Mean	SD	
Children	57.722	8.342	53.694	8.081	3.323 (p=.001)
Fathers	63.709	7.019	59.351	7.989	3.980 (p=.000)
Mothers	64.228	7.084	59.108	8.539	4.504 (p=.000)

Examination of Family Functioning

Because of nonsignificant difference in perceptions of family functioning between fathers and mothers [paired $t(189)=1.172$, $p=.243$], mothers' and fathers' perceptions of family functioning were collapsed as parents' perceptions of family functioning in examining family functioning. Means, standard deviations, and ranges of family functioning from the perspectives of children and parents for total families are presented in Table 11. The mean of family functioning for children was 3 (mid-ranged), and that for parents was 5 (moderately-balanced). It was found that children's perception of family functioning was significantly lower than that of parents [paired $t(189)=-13.12$, $p=.000$].

Children and parents were respectively divided by children's educational group (with learning disabilities, without learning disabilities) to further examine perceptual differences in family functioning. Means, standard deviations, and t-tests for these groups are presented in Table 12. Perceptions of family functioning of children with learning disabilities was significantly lower than those of children without learning disabilities [independent $t(185.6)=7.933$, $p=.000$]. Significant mean differences also existed between children with learning disabilities and their parents [paired $t(85)=-11.557$, $p=.000$], and children without learning disabilities and their parents [paired $t(103)=-7.712$, $p=.000$]. Perceptual family functioning of parents from both groups of having children with and without learning disabilities also appeared significantly different [independent $t(188)=-2.227$, $p=.027$].

Percentages of subjects falling into the four categories of family functioning are presented in Tables 13 and 14. About 47% of children with learning disabilities perceived their families as "extreme" family functioning with extremely low adaptability and low cohesion, while only 12% of children without learning disabilities perceived their family functioning the same way (see Table 13). This revealed that children with learning

disabilities more frequently perceived their families as extreme than children without learning disabilities. "Balanced" family functioning that was characterized as high adaptability and high cohesion was not reported by children with learning disabilities, but five children without learning disabilities indicated balanced. Approximately 54% of children with learning disabilities and 84% of children without learning disabilities perceived their families as mid-range to moderately-balanced.

Parents (see Table 14) tended to perceive their families in a different way from their children. Only 8% of parents of children with learning disabilities and 3% of parents of children without learning disabilities perceived their families as extreme. Eight families (9%) of children with learning disabilities and 20 families (19%) of children without learning disabilities were in the balanced range. Most parents fell in the ranges of mid-range and moderately-balanced for both families with and without learning disabilities.

Table 11

Means, Standard Deviations, and Ranges of Family Functioning of Children and Parents (N=190)

Function	Mean	SD	Range
Children	3.405	1.370	1 - 7.5
Parents	5.026	1.340	2 - 7.5

Table 12

Means, Standard Deviations, and t-tests of Children's and Parents' Perceptions of Family Functioning for Families of Children With Learning Disabilities (With LD) and Without Learning Disabilities (Without LD)

Function	With LD (N=86)		Without LD (N=104)		t (p-value)
	Mean	SD	Mean	SD	
Children	2.669	0.990	4.014	1.345	-7.933 (p=.000)
Parents	4.791	1.354	5.221	1.303	-2.227 (p=.027)

Table 13

Perceptions of Family Functioning for Children With Learning Disabilities (With LD) and Without Learning Disabilities (Without LD)

Functioning Type	With LD	Without LD
	n (%)	n (%)
Extreme	40 (46.5%)	12 (11.5%)
Mid-Range	38 (44.2%)	50 (48.1%)
Moderately-Balanced	8 (9.3%)	37 (35.6%)
Balanced	0	5 (4.8%)
Total	86 (100%)	104 (100%)

Table 14

Perceptions of Family Functioning for Parents of Children With Learning Disabilities
(With LD) and Without Learning Disabilities (Without LD)

Functioning Type	With LD	Without LD
	<u>n</u> (%)	<u>n</u> (%)
Extreme	7 (8.1%)	3 (2.9%)
Mid-Range	18 (20.9%)	20 (19.2%)
Moderately-Balanced	53 (61.6%)	61 (58.7%)
Balanced	8 (9.3%)	20 (19.2%)
Total	86 (100%)	104 (100%)

Tests of Research Hypotheses

Hypotheses Exploring Relationships

Hypothesis 1. There is no relationship among fathers', mothers', and children's perceptions of family adaptability and family cohesion for Chinese families.

Bivariate Pearson correlations were utilized to investigate the relationships of family adaptability and family cohesion among fathers, mothers, and children for Chinese families. Table 15 presents the results of correlational analysis used to test the hypothesis stated above.

The intercorrelation between children's perceptions of family adaptability and family cohesion ($r=.61$, $p=.00$) was significant. The common variance shared between both dimensions for children was 37%. Children's perception of family adaptability was neither significantly correlated to fathers' perceptions of family adaptability and family

cohesion nor to mothers' perception of family adaptability, but was significantly correlated to mothers' family cohesion ($r=.143$, $p=.05$) with the common variance of 2%.

Children's perception of family cohesion was significantly related to fathers' family adaptability and family cohesion, as well as to mothers' family adaptability and family cohesion. The common variance shared between children and parents varied between 5% and 13%. Perceptions of family adaptability and family cohesion between fathers and mothers were significantly correlated at the level of .01. These intercorrelations ranged from .51 to .71. The common variance of perceptions of family adaptability and cohesion shared between fathers and mothers varied between 26% to 51%.

Table 15

Matrix of Correlations and Probabilities of Family Adaptability And Family Cohesion
Among Fathers, Mothers, and Children (N=190)

	ChAdap	ChCo	FaAdap	FaCo	MoAdap	MoCo
ChAdap	1.000					
ChCo	.611 (p=.000)	1.000				
FaAdap	.064 (p=.377)	.222 (p=.002)	1.000			
FaCo	.115 (p=.114)	.246 (p=.001)	.671 (p=.000)	1.000		
MoAdap	.081 (p=.264)	.296 (p=.000)	.712 (p=.000)	.509 (p=.000)	1.000	
MoCo	.143 (p=.050)	.359 (p=.000)	.578 (p=.000)	.689 (p=.000)	.673 (p=.000)	1.000

Note. ChAdap = Children's family adaptability. ChCo = Children's family cohesion.
FaAdap = Fathers' family adaptability. FaCo= Fathers' family cohesion. MoAdap=
Mothers' family adaptability. MoCo = Mothers' family cohesion.

Hypothesis 2. There is no relationship between the perceptions of family adaptability and family cohesion among fathers, mothers, and children for families of children with learning disabilities and families of children without learning disabilities.

Separate bivariate correlation matrices were constructed to investigate the relationships of family adaptability and family cohesion among fathers, mothers, and children for families of children with and without learning disabilities (see Tables 16 and 17).

A similar intercorrelation pattern between adaptability and cohesion was found among fathers and mothers of children with and without learning disabilities. Family adaptability and cohesion between fathers and mothers of children with learning disabilities were significantly correlated, and the common variance varied between .24% to 31%. Significant relationships also existed between family adaptability and cohesion for fathers and mothers of children without learning disabilities. The common variance shared between them varied between 26% to 58%.

Yet the correlation between children and parents were quite different. The perception of family adaptability for children with learning disabilities was negatively and significantly correlated to their mother's perception of family adaptability ($r=-.280$, $p=.009$), with the common variance of 8%. But among those children without learning disabilities, a positive and significant correlation existed between children's and mother's perceptions of family adaptability. The common variance shared between them was 6%. In terms of family cohesion, children with learning disabilities was only significantly correlated to mother's cohesion ($r=.21$, $p=.048$), and the common variance between them was 4%. However, the perception of cohesion for children without learning disabilities was significantly correlated to both father's and mothers' perceptions of family adaptability and cohesion. The common variance shared between children and their parents ranged from 4% to 16%.

A significant correlation between perceptions of family adaptability and cohesion existed for both groups of children with and without learning disabilities. The common variance of adaptability and cohesion for children with learning disabilities was 9%, while that for children without learning disabilities was 44%.

Table 16

Matrix of Correlations and Probabilities for Families of Children With Learning Disabilities (N=86)

	ChAdap	ChCo	FaAdap	FaCo	MoAdap	MoCo
ChAdap	1.000					
ChCo	.302 (p=.005)	1.000				
FaAdap	-.157 (p=.148)	.128 (p=.239)	1.000			
FaCo	-.082 (p=.451)	.102 (p=.348)	.648 (p=.000)	1.000		
MOAdap	-.280 (p=.009)	.106 (p=.332)	.764 (p=.000)	.489 (p=.000)	1.000	
MoCo	-.028 (p=.511)	.213 (p=.048)	.555 (p=.000)	.699 (p=.000)	.566 (p=.000)	1.000

Table 17

Matrix of Correlations and Probabilities for Families of Children Without Learning Disabilities (N=104)

	ChAdap	ChCo	FaAdap	FaCo	MoAdap	MoCo
ChAdap	1.000					
ChCo	.660 (p=.000)	1.000				
FaAdap	.129 (p=.192)	.199 (p=.043)	1.000			
FaCo	.190 (p=.053)	.315 (p=.001)	.687 (p=.000)	1.000		
MoAdap	.251 (p=.010)	.387 (p=.000)	.637 (p=.000)	.513 (p=.000)	1.000	
MoCo	.191 (p=.052)	.404 (p=.000)	.580 (p=.000)	.671 (p=.000)	.763 (p=.000)	1.000

Hypotheses Exploring Differences

Hypothesis 3. Socio-economic status, gender, and educational group would not combine to differentially affect children's perception of family adaptability.

A three-way analysis of variance was conducted in which children's family adaptability was the dependent variable and socio-economic status (middle, low), gender (male, female), and educational group (with learning disabilities, without learning disabilities) were independent variables. The summary table for this analysis is presented in Table 18.

Because the interaction effect of educational group, gender, and socio-economic status on children's perceptions of family adaptability was nonsignificant, the hypothesis was not rejected. As evidenced in the Table, only the main effect of educational group reached statistical significance. Family adaptability of children with learning disabilities ($M=38.826$, $SD=5.77$) was consistently lower than that of children without learning disabilities ($M=42.221$, $SD=7.554$). The strength of association as indexed by omega squared indicated that 13% of the variance in children's perceptions of family adaptability was accounted for by educational group.

Table 18

Summary Table of Analysis of Variance of Children's Perception of Family Adaptability
(N=190)

SOURCE	SS	DF	MS	F	P
EDU	1293.099	1	1293.099	28.610	.000
GEND	142.679	1	142.679	3.157	.077
SES	83.440	1	83.440	1.846	.176
EDU*GEND	27.042	1	27.042	.598	.440
EDU*SES	76.283	1	76.283	1.688	.196
GEND*SES	28.926	1	28.926	.640	.425
EDU*GEND* SES	51.412	1	51.412	1.137	.288
ERROR	8226.061	182	45.198		
TOTAL	9928.942	189			

Note. EDU = Educational group. GEND = Gender. SES = Socio-economic status

Hypothesis 4. Socio-economic status, gender, and educational group would not combine to differentially affect children's perception of family cohesion.

A three-way analysis of variance was conducted (See Table 19) in which children's family cohesion was the dependent variable and socio-economic status (middle, low), gender (male, female), and educational group (with learning disabilities, without learning disabilities) were independent variables.

The three-way interaction effect (educational group, gender, and socio-economic status) on children's perception of family cohesion was, again, nonsignificant. Therefore, the hypothesis stated above was not rejected. The main effects of socio-economic status [$F(1,182)=8.299, p=.004$], gender [$F(1,182)=5.494, p=.020$], and educational group [$F(1,182)=68.247, p=.000$] were the only variables to reach a level of significance. Family cohesion of children with learning disabilities ($M=50.640, SD=6.806$) was consistently lower than that of children without learning disabilities ($M=59.279, SD=7.574$). Family cohesion of male children ($M=54.173, SD=8.606$) was consistently lower than that of female children ($M=56.641, SD=8.401$). Family cohesion of children with low socio-economic status ($M=53.694, SD=8.081$) was consistently lower than that of children with middle socio-economic status ($M=57.722, SD=8.342$). The strengths of association as indexed by omega squared indicated that whereas 25% of the variance in children's perceptions of family cohesion was accounted for by educational group, only 2% was accounted for by gender, and only 3% was accounted for by socio-economic status.

Table 19

Summary Table of Analysis of Variance of Children's Perception of Family Cohesion(N=190)

SOURCE	SS	DF	MS	F	P
EDU	3352.936	1	3352.936	68.247	.000
GEND	269.901	1	269.901	5.494	.020
SES	407.735	1	407.735	8.299	.004
EDU*GEND	51.755	1	51.755	1.053	.306
EDU*SES	76.340	1	76.340	1.554	.214
GEND*SES	54.672	1	54.672	1.113	.293
EDU*GEND* SES	36.851	1	36.851	.750	.388
ERROR	8941.568	182	49.129		
TOTAL	13191.758	189			

Hypothesis 5. Socio-economic status, the child's gender and educational group would not combine to differentially affect fathers' perception of family adaptability.

A three-way analysis of variance was utilized in which fathers' family adaptability was the dependent variable and socio-economic status (middle, low), and child's gender (male, female) and educational group (with learning disabilities, without learning disabilities) were independent variables. The summary table for this analysis is presented in Table 20.

Since the three-way interaction effect (education group, gender, and socio-economic status) was nonsignificant, the hypothesis stated above was not rejected. Only a main effect for socio-economic status reached significance, $F(1,182)=23.367$, $p=.000$. Family adaptability of fathers with low socio-economic status ($M=47.216$, $SD=7.109$) was consistently lower than that of fathers with middle socio-economic status ($M=51.785$, $SD=5.327$). The strength of association as indexed by omega squared indicated that 10% of the variance in fathers' perceptions of family adaptability was accounted for by socio-economic status.

Table 20

Summary Table of Analysis of Variance of Fathers' Perception of Family Adaptability
(N=190)

SOURCE	SS	DF	MS	F	P
EDU	144.702	1	144.702	3.540	.062
GEND	88.455	1	88.455	2.164	.143
SES	955.246	1	955.246	23.367	.000
EDU*GEND	2.443	1	2.443	.060	.807
EDU*SES	13.883	1	13.833	.340	.561
GEND*SES	34.046	1	34.046	.833	.363
EDU*GEND* SES	1.241	1	1.241	.030	.862
ERROR	7440.310	182	40.881		
TOTAL	8680.326	189			

Hypothesis 6. Socio-economic status, the child's gender and educational group would not combine to differentially affect fathers' perception of family cohesion.

A three-way analysis of variance was conducted in which fathers' family cohesion was dependent variable and socio-economic status (middle, low), the child's gender (male, female) and educational group (with learning disabilities, without learning disabilities) were independent variables. The summary table for this analysis is present in Table 21.

The three-way interaction effect (socio-economic status, gender, and educational group) was nonsignificant. Therefore, the hypothesis stated above was not rejected.. Only the main effect of socio-economic status was significant, $F(1,182)=13.643$, $p=.000$. Family cohesion of fathers with low socio-economic status ($M=59.351$, $SD=7.989$) was consistently lower than that of fathers with middle socio-economic status ($M=63.709$, $SD=5.3327$). The strength of association as indexed by omega squared indicated that 6% of variance in fathers' perceptions of family cohesion was accounted for by socio-economic status.

Table 21

Summary Table of Analysis of Variance of Fathers' Perception of Family Cohesion(N=190)

SOURCE	SS	DF	MS	F	P
EDU	114.650	1	114.650	1.952	.164
GEND	34.351	1	34.351	.585	.445
SES	801.174	1	801.174	13.643	.000
EDU*GEND	2.105	1	2.105	.036	.850
EDU*SES	24.193	1	24.193	.412	.522
GEND*SES	8.503	1	8.503	.145	.704
EDU*GEND* SES	.005	1	.005	.000	.993
ERROR	10687.710	182	58.724		
TOTAL	11672.691	189			

Hypothesis 7. Socio-economic status, the child's gender and educational group would not combine to differentially affect mothers' perception of family adaptability.

A three-way analysis of variance was conducted in which mothers' family adaptability was the dependent variable and socio-economic status, the child's gender (male, female) and educational group (with learning disabilities, without learning disabilities) were independent variables. The summary table for this analysis is presented in Table 22.

Since the three-way interaction effect (socio-economic status, gender, and educational group) was nonsignificant, the hypothesis stated above was not rejected. Only the main effect of socio-economic status was statistically significant, $F(1,182)=7.07$, $p=.009$. Family adaptability of mothers with low socio-economic status ($M=47.072$, $SD=6.994$) was consistently lower than that of mothers with middle socio-economic status ($M=49.835$, $SD=5.663$). The strength of association as indexed by omega squared indicated that only 3% of the variance in mothers' perceptions of family adaptability was accounted for by socio-economic status.

Table 22

Summary Table of Analysis of Variance of Mothers' Perception of Family Adaptability(N=190)

SOURCE	SS	DF	MS	F	P
EDU	186.033	1	186.033	4.474	.036
GEND	3.264	1	3.264	.078	.780
SES	293.985	1	293.985	7.070	.009
EDU*GEND	.206	1	.206	.005	.944
EDU*SES	5.749	1	5.749	.138	.710
GEND*SES	4.666	1	4.666	.112	.738
EDU*GEND* SES	116.683		116.683	2.806	.096
ERROR	7567.982	182	41.582		
TOTAL	8178.568	189	8178.568		

Hypothesis 8. Socio-economic status, the child's gender and educational group would not combine to differentially affect mothers' perception of family cohesion.

A three-way analysis of variance was utilized in which mothers' family cohesion was the dependent variable and socio-economic status (middle, low), the child's gender (male, female) and educational group (with learning disabilities, without learning disabilities) were independent variables. The summary table for this analysis is presented in Table 23.

As the three-way interaction effect (socio-economic status, gender, and educational group) was nonsignificant, the hypothesis stated above was not rejected.. The main effects of educational group [$F(1,182)=5.269, p=.023$] and socio-economic status [$F(1,182)=16.668, p=.000$] were the only effects reaching significance level. Family cohesion of mothers with learning disabled children ($M=59.651, SD=8.431$) was consistently lower than that of mothers without learning disabled children ($M=60.548, SD=8.070$). Family cohesion of mothers with low socio-economic status ($M=59.108, SD=8.539$) was consistently lower than that of mothers with middle socio-economic status ($M=64.228, SD=7.084$). The strengths of association as indexed by omega squared indicated that only 2% of the variance in mothers' perceptions of family cohesion was accounted for by educational group, and 8% was accounted for by socio-economic status.

Table 23

Summary Table of Analysis of Variance of Mothers' Perception of Family Cohesion

(N=190)

SOURCE	SS	DF	MS	F	P
EDU	333.305	1	333.305	5.269	.023
GEND	3.650	1	3.650	.058	.810
SES	1054.355	1	1054.355	16.668	.000
EDU*GEND	.526	1	.526	.008	.927
EDU*SES	12.179	1	12.179	.193	.661
GEND*SES	31.748	1	31.748	.502	.480
EDU*GEND* SES	86.139	1	86.139	1.362	.245
ERROR	11512.375	182			
TOTAL	13034.277	189			

Summary

Means, standard deviations, and score ranges of family adaptability and cohesion of children, fathers, and mothers were described. Significant differences in perceptions of family adaptability and cohesion were found among children, fathers, and mothers. Based on educational group, families of children with learning disabilities had lower perceptions on both dimensions than families of children without learning disabilities. Based on children's gender difference, female children had higher perceptions on both dimensions than male children. Based on socio-economic status, families with low socio-economic status had lower perceptions on family adaptability and cohesion than families with middle socio-economic status.

Examination of family functioning was provided. Families of children with learning disabilities were more frequently in the extreme range of family functioning than families of children without learning disabilities.

In the hypotheses exploring relationship, significant correlations of family adaptability and cohesion were found between fathers and mothers in both groups of having children with and without learning disabilities. Significant relationships of family adaptability and cohesion were found in children, fathers, and mothers. Perception of family adaptability in children with and without learning disabilities significantly correlated with mothers' family adaptability. Yet learning disabled children's perception of cohesion only significantly correlated with mothers' cohesion, while that of children without learning disabilities were significantly related to both fathers' and mothers' family adaptability and cohesion.

In hypotheses exploring differences, the three-way interaction effect (educational group, gender, and socio-economic status) was nonsignificant in affecting children's, fathers' and mothers' family adaptability and cohesion. The effect of educational group was found on children's perception of family adaptability, and educational group, gender,

and socio-economic status on children's perception of family cohesion. Fathers' perceptions of family adaptability and cohesion were only differently affected by the effect of socio-economic status. Socio-economic status also differently affected mothers' family adaptability, yet educational group and socio-economic status were the significant effects on their family cohesion.

CHAPTER V
SUMMARY, DISCUSSION, LIMITATIONS,
AND RECOMMENDATIONS

Summary

The purpose of this study was to investigate family adaptability and family cohesion for Chinese families, and to explore differences in family functioning between families of children with and without learning disabilities.

Subjects in this study consisted of 190 intact Chinese families in which 86 families were identified as families of children with learning disabilities, and 104 families were families of children without learning disabilities. Children with learning disabilities were recruited from resource rooms of 13 public elementary schools located in different areas of Taipei, Taiwan. The comparison group of children without learning disabilities were selected in the following way: For each child with a learning disability, a child of the same age, sex and family socio-economic background was chosen from the regular classroom of the same school. After children subjects were identified, parents of those children were invited to participate in the research.

Family Adaptability and Cohesion Evaluation Scales II (FACES II), Olson et al., 1982) and Family Background Information Sheet were the instruments used to assess family adaptability and cohesion, as well as socio-economic status. FACES II was translated into Chinese versions for children and adults respectively. Validity of both versions of translated FACES II was established through cooperation of the researcher and professionals during the process of translation. Reliability was determined by computing significant test-retest coefficients. Socio-economic status was assessed by Four Factors of Social Status (Hollingshead, 1975). But the data collected failed to

provide enough information on families with high socio-economic status for data analyses.

The data consisted of children's gender, and children's, mothers', and fathers' scores of family adaptability and family cohesion, and parents' socio-economic status.

Descriptive statistics were used to delineate children's, mothers', and fathers' perceptions of family adaptability and cohesion. Bivariate Pearson correlations were used to investigate the relationships of perceptual family adaptability and cohesion among children, fathers, and mothers. A series of three-way ANOVAs were utilized to explore differences of family functioning between children with and without learning disabilities, between fathers of children with and without learning disabilities, and between mothers of children with and without learning disabilities.

Descriptive statistics revealed that significant differences in perceptual family adaptability and cohesion existed among children, mothers, and fathers. Families of children with learning disabilities presented lower scores on both dimensions than families of children without learning disabilities. Families with low socio-economic status had lower scores on both dimensions than families with middle socio-economic status. There was a gender difference on children's perceptions of family adaptability and cohesion, but not on parents' perceptions. Perceptions of family adaptability and cohesion between fathers and mothers significantly correlated with each other in both groups of having children with and without learning disabilities. Compared to children with learning disabilities related to their parents, children without learning disabilities had more significant correlations with their parents on both dimensions of adaptability and cohesion.

Since all of the three-way interaction effects (socio-economic status, the child's gender and educational group) tested in ANOVAs were nonsignificant, the hypotheses stated were not rejected. Only the main effect of educational group significantly affected

children's perception of family adaptability. Educational group, gender, and socio-economic status differentially affected children's perception of family cohesion. Socio-economic status was the only variable that significantly influenced fathers' perceptions of family adaptability and cohesion, and mother's perception of family adaptability.

Mothers' perception of family cohesion was significantly affected by educational group and socio-economic status. In short, perceptions of family adaptability and cohesion for children with learning disabilities were lower than those of children without learning disabilities. Family cohesion of male children was lower than that of female children, and family cohesion of children with low socio-economic status was lower than that of children with middle socio-economic status. Perceptions of family adaptability and cohesion for fathers with low socio-economic status were lower than those of fathers with middle socio-economic status. Family adaptability and cohesion of mothers with low socio-economic status were lower than those of mothers with middle socio-economic status, and family cohesion of mothers with learning disabled children was lower than that of mothers without learning disabled children.

Discussion

Based on the literature review and findings in this study, discussions on perceptions of family functioning, relationships of family adaptability and cohesion, differences between families of children with and without learning disabilities, and transactions between parents' and children's characteristics were provided.

Perceptions of Family Functioning

The finding of significant differences in perceptual family functioning between parents and children supports the western literature which found disagreements between parents and children on perceptions of family functioning (Beavers & Hampson, 1990; Morrison & Zetlin, 1988; Olson, 1989). As stated by Olson (1989), children viewed their families as more disengaged on cohesion and more rigid on adaptability than their

parents. Barnes (1989) attributed the significant disagreement to a lack of communication and relationship satisfaction between two generations. Hsu (1988) stated that a lack of communication between Chinese parents and their children is a major contributor to tension in parent-child dyads. It is not unusual to find that children viewed their families as rigid on adaptability and separated on cohesion, while parents viewed their families as flexible and connected. As the power structure in Chinese families is very strict, the power is wielded in an authoritarian way (Hsu, 1988). If there is any "discussion " or "communication" between parents and children, it generally follows that parents make the decision, and give a lecture to children. Relatively, the strict authoritarianism expressed by parents may keep children emotionally separated from their families (Hsu, 1988).

The finding that families of children with learning disabilities perceived lower family functioning than families of children without learning disabilities supports Morrison and Zetlin (1988) and Michaels and Lewandowski (1990), who found the former families were more likely to view their families as extreme. However, Morrison and Zetlin (1988) found adolescents with and without learning disabilities perceived their families similarly. It contrasts to the finding of this study that children with and without learning disabilities perceived their families in a significantly different way. This might happen since children are more influenced by their peers as they reach adolescence than those children in childhood. The low perceptions of family adaptability and cohesion of children with learning disabilities can be partly explained by the nature of learning disabilities, and partly by parental attitudes. Communication and relationships between children with learning disabilities and their families may be limited by verbal skill deficits and perceptual social difficulties which are accompanied with learning disabilities. Sensing that their children are different from other children, parents of children with learning disabilities tend to be more controlling and directive.

The finding of a higher percentage of extreme families in the group of children with learning disabilities proposes a relationship between the extreme families and the development of learning disabilities. Extreme families were characterized by extreme rigidity and disengagement (Olson et al., 1982). Yet, it is hard to determine if extreme families contribute to the development of learning disabilities, or if children with learning disabilities alter the families toward being more extreme on both adaptability and cohesion. It is a warning that most (47%) of children with learning disabilities perceived their families as disengaged and rigid. Obviously, they were more at risk of serious delinquent and emotional problems. Although parents of children with learning disabilities perceived families as lower in family functioning than parents of children without learning disabilities, it is encouraging to find nonsignificant difference in perception of family functioning between fathers and mothers. Barnes (1989) speculated that perceptual disparity between parents have more harmful effects on families than intergenerational discrepancy. Spousal coalition provides the foundation for both effective parenting and improving family environment (Barnes, 1989).

Relationships of Family Adaptability and Cohesion

As predicted by Olson (1989), this study also found a high correlation between perceptions of family adaptability and cohesion. A positive relationship between family adaptability and cohesion indicated that the level of emotional bonding within a family are associated with the ability of a family to be stable and flexible.

Children's perception of family adaptability presented a positive relationship with mothers' perception of family cohesion. However, as data were split based on children's education group (with and without learning disabilities), the significant relationship disappeared. Instead, a significant correlation of family adaptability surfaced between children with/without learning disabilities and mothers. The occurrence may be explained by the high correlation of family adaptability and cohesion in mothers. The evidence that

the perception of family adaptability for children with learning disabilities was negatively correlated with mothers' family adaptability may be explained by Mash (1984) who found mothers of problem children are more controlling and directive. As mothers of children with learning disabilities view their children as difficult or atypical, and try to maintain family stability through controlling and disciplining the difficult children, strong negative correlation on adaptability is aroused. Olson (1989) and Barnes (198) speculated that perceptual disparities may cause more stress which makes families more rigid and inflexible.

Contrast to significant relationships of family cohesion between children without learning disabilities and their parents, the perception of family cohesion for children with learning disabilities only significantly correlated with mothers' perception of family cohesion. No significant correlation of family adaptability and cohesion was found between fathers and children with learning disabilities. The evidence may hint a remote relationship between the children and their fathers. Hsu (1988) attributed the emotional apartness between Chinese parents and children to inadequate communication which results in a lack of understanding and parental empathy for children. Since fathers usually play the authoritarian role and carry out disciplinary training to children, communication and emotional sharing are limited between fathers and children. The condition is even worse in extreme families which are more frequently reported by families of children with learning disabilities. Hsu (1988) illustrated that parents' punitive responses to children's behavior is the major block to keep children close to parents.

Differences Between Families of Children With and Without Learning Disabilities

On perception of family adaptability. The three-way interaction effect of educational group, socio-economic status, and gender was not significant with respect to the perception of family adaptability in children, fathers, and mothers. It may be because

these independent variables were not optimistic enough to present an interaction effect on each of the dependent variables. Educational group only significantly influenced how children perceived the adaptability of their families, but did not affect fathers and mothers. Instead, socio-economic status was the only significant effect in affecting both fathers' and mothers' perception of family adaptability. The effect size of educational group on children's family adaptability ($=.13$) was medium. Yet the effect size of socio-economic status on mothers' ($=.03$) was small, while it was considered medium on fathers' ($=.10$). That is, 13% of the variance in children's perceptions of family adaptability was accounted for by educational group. Only 3% of the variance in mother's perception of family adaptability was accounted for by socio-economic status, while 10% of the variance in father's perception of family adaptability could be explained by socio-economic status.

Children with learning disabilities perceived their families as more rigid than children without learning disabilities. The evidence could be explained by the parental attitudes toward children with disabilities which are found to be controlling and directive (Mash, 1984). Margalit and Heiman (1986), and Margalit and Almoughy (1990) also reported that parents of children with learning disabilities emphasize personal achievement and system maintaining rather than emotional expression and conflict resolution within the family. Since Chinese parents contribute academic failure to inappropriate learning attitudes, they are more likely to discipline children for their insufficient effort.

The finding of socio-economic status differentially affecting both father's and mothers' perception of family adaptability supports a body of research that has suggested that parents' coping strategies and child-rearing attitudes differ according to their socio-economic status (Chen, 1986; Gowan et al., 1989; Flynt & Wood, 1989). Coping strategies and child-rearing attitudes directly influence family environment on both adaptability and cohesion.

It is surprising to find gender didn't differentially affect children's, mothers', and fathers' perceptions of family adaptability. It is contrast to some of Chinese literature which illustrate that boys have experienced more discipline and control than girls due to parents' higher expectations of boys (Chu, 1986; Su, 1976; Yu, 1987), and thus boys are more likely to perceive their families as more rigid. The absence of gender effect in this study may be because FACES II was not able to reveal the differences in parental attitudes toward daughters and sons.

A lot of western literature has consistently found that children's learning disabilities play an important part in changing family functioning (Margalit & Almoughy, 1991; Margalit & Heiman, 1986; Michaels & Lewandowski, 1990; Morrison & Zetlin, 1988; Thompson et al., 1990). Similar results of children's academic failures on families have been noted in the Chinese literature (Hsu, 1988; Yu, 1987). It is unusual in this study that the effect of children's educational group was nonsignificant in affecting fathers' and mothers' perceptions of family adaptability. This may be explained by Stevenson et al. (1982) who found learning difficulties in Taiwan would be only attributed to lack of proper experience and poor motivation rather than possessing an actual disabilities. During the course of data collection in Taiwan, the researcher was informed by many special teachers that parents who have children with learning disabilities insisted that inadequate performance was the result of insufficient effort by the child and ineffective teaching instead of disabilities. Parents did not recognize that their children had disabilities. The situation may decrease the negative effects of labeling on families. However, the parents' effort in forcing their children to survive through school were amplified in how their children perceived their families as extreme.

On perception of family cohesion. The three-way interaction effect of educational group, socio-economic status, and gender was found nonsignificant in children's, fathers', and mothers' perceptions of family cohesion. Only the main effects of educational group,

socio-economic status, and gender reached statistical significance in affecting children's perception of family cohesion. Socio-economic status significantly influenced fathers' perception of family cohesion. Educational group and socio-economic status significantly affected mother's perception of family cohesion. The effect size of educational group on children ($=.25$) was large, but small on mothers ($=.02$). The effect size of socio-economic status on children ($=.03$) was small, but medium on both fathers ($=.06$) and mothers ($=.08$). The effect size of gender on children ($=.02$) was considered small too. That is, educational group could explain 25% of the variance in children's perception of family cohesion, but only 2% of the variance in mother's. Socio-economic status could account for only 3% of the variance in children's perception of family cohesion, but 6% of the variance in father's. And only 2% of the variance in children's perception of family cohesion was accounted for by the gender.

Studies provided different explanations of why children with learning disabilities perceived their families as more disengaged than children without learning disabilities. Stone (McLoughlin et al., 1987) attributed it to low self-concepts of learning disabled children. Smith (1991) attributed it to language difficulties and social imperception which deter the relationships with families. Mash (1984) and Hsu (1988) attributed it to parents controlling and punitive attitudes.

The finding that families with low socio-economic status reported lower family cohesion than did families with middle socio-economic status may be explained by the studies that have assessed relationships between family integration and parents' socio-economic status (Chen, 1986; Dunst et al., 1986; Gou, 1984; Lee, 1974; Tsai, 1985). Gou (1984) indicated that parents with middle socio-economic status could best provide a caring and stable family environment for their children, while parents with low socio-economic status were limited by time and capacities. Ho (1986) speculated that children from low socio-economic status families could experience less love and caring than those

children from high socio-economic families since the parents with low socio-economic status were more likely to ignore the needs of their children..

This study also found that gender was a significant factor in affecting children's perception of family cohesion. Female children viewed their families as more cohesive than male children did. The finding is against a body of western and Chinese literature that found boys have gained more time, attention, and support from their parents (Chu, 1984, Margolin & Patterson, 1975; Su & Ho, 1983, Yu, 1987), and thus boys should perceived their families as more cohesive than girls. But it confirms Hu (1986) and Chu (1984) who noticed that boys feel more rejected and detached from their parents. Hu (1986) attributed it to the fact that boys are expected to be independent and unemotional by parents.

Transactions Between Parents' and Children's Characteristics

The lack of three-way interaction in the series of ANOVAs suggests that children's characteristics (with or without learning disabilities, and gender difference), and parents' socio-economic status did not combine to affect perceptions of family adaptability and cohesion in children, and both parents. However, children might be influenced by parents' different child-rearing attitudes, and the influences were indirectly reflected on their perception of family functioning. Especially, children with learning disabilities might experience more discipline and rejection from their parents, and thus perceive their families as rigid and disengaged. Yet children's characteristics, such as educational group and gender, didn't affect how fathers perceived their family functioning. Instead, their socio-economic background provided the influences. Neither did the children's characteristics influence mothers' perception of family adaptability. As stated earlier, the evidence could be explained by the strict power structure inherited in Chinese families. Children are usually passive and not allowed to challenge the power structure. However, children's academic failure might affect parents' attitudes to be more authoritarian and

strict. Mothers' perception of family cohesion was affected by the children's characteristic of with or without learning disabilities. This influence from children may be because that mothers spend more time with children and still take the major responsibilities of caretaking.

Limitations of the Research

Although the subjects of children with learning disabilities were recruited from resource rooms of public elementary schools, present knowledge and assessments utilized in Taiwan could not accurately identify the learning disabled population. There is much controversy surrounding the independence of learning disabilities and environmental influences. Some children were misdiagnosed because of the learning difficulties caused by disadvantaged environments and inappropriate teachings. However, the researcher needed to assume that there was no misdiagnosis for those students recruited. Cooperation with special teachers in the process of subject identification might help solve this problem. For example, several students were deleted from participation since they were suspected by special teachers as emotional disturbed instead of learning disabled.

One of the limitations of this research is the lack of information on families with high socio-economic status. Most of children recruited were from middle and low socio-economic families. Only a few fell in the category of high socio-economic status. To avoid confounding the results, those families with high socio-economics status were treated as outliers and dropped out from analysis. Yet, according to the literature review, families with high socio-economic status might provide a greater diversity and insight into the learning disabilities and family functioning.

This study was correlational in exploring relationships of family adaptability and cohesion among family members, and thus any speculations about direction of influence or casualty are unavailable.

It should be noted that the main effects of gender and socio-economic status on children's perception of family cohesion, socio-economic status on mothers' perception of family adaptability, and educational group on mothers perception of family cohesion were small in their strengths of effect. Therefore, additional variables need to be assessed in explaining family functioning.

Although the researcher tried to maintain the accuracy and validity of the translation versions of FACES II through cooperating with many professionals, it was unavoidable to have paraphrase differences between the translations and the original because of different language systems.

Recommendations

Recommendations for the Schools

Based on the literature review and results of this research, several recommendations are provided to the schools.

1. Regular/special teachers should be equipped with competent counseling techniques. When parents sense that their children have specific learning difficulties, and they experience difficulties coping with their children's problems, they would not turn to counselors or therapists for help. Instead, they prefer to counsel with teachers in the schools. As parent counseling becomes a more integral part of total programming for children with learning disabilities, the distinction between the teacher and counselor will become less pronounced.

2. Parents' punitive attitudes toward children's academic failure may be caused by the fact that those parents do not understand the nature of learning disabilities possessed by their children. The schools need to help parents understand and recognize the existence of learning disabilities. The avenues include printed materials, lectures on learning disabilities, and teacher counseling. The better the parents understand the difficulties their children can not overcome, the more empathetic and supportive they may

be with their children. Parental understanding and empathy could help improve family integration and stability.

3. The schools need to arrange parental education programs which meet families' needs. Stress managing techniques are crucial for those families of the extreme function type. Parent-child interaction skills may be needed by those disengaged families.

4. The schools should establish support groups for children with learning disabilities, and for their parents. As those children with disabilities and their parents are likely to feel unsupported and stressed in dealing with children's school performance, the support groups are important in providing tips and support to manage the external and internal pressures related to the disabilities.

5. In order to enhance teachers' sensitivity to the family influence on children with disabilities, the schools need to provide teachers with in-service training on the characteristics of families having children with disabilities. Many behavioral and emotional problems may be resulted by family dysfunctioning. Those children who are from extreme families usually feel rejected by and detached from their families. Thus they may need extra positive attention and emotional support from teachers and peers.

6. Although socio-economic status may not add to learning disabilities on family functioning, it is very possible that parents with learning disabled children and with low socio-economic status need more professional assistance. If possible, the schools could work with social workers to arrange therapies and counseling for both parents and children in the time of crisis.

Recommendations for Future Research

FACES II was able to discriminate different family functioning between families of children with and without learning disabilities. This suggests that the theory of family functioning can work on Chinese families too. Yet, the assessment of family functioning could not be informative without investigating the variables influencing the levels of

family functioning. The potential variables, such as parental attitudes toward children with learning disabilities, children's behavior problems, and levels of open communication among family members, should be investigated along with family functioning assessment.

Each family is unique in addressing its needs and coping with stress. Qualitative research, such as case study, of families with learning disabled children could provide in-depth information on the children and their families.

REFERENCES

- Abrams, J. C., & Kaslow, F. (1977). Family systems and the learning disabled child: Intervention and treatment. Journal of Learning disabilities, 10(2), 27-31.
- Alwin, D. F., & Thornton, A. (1984). Family origins and the schooling process: Early ersus late influence of parental characteristics. American Sociological Review, 49, 784-801.
- Angell, R. C. (1936). The family encounters the depression. New York: Charles Scribner and Sons.
- Barnes, H. L. (1989). Cross-generational coalitions, discrepant perceptions and family functioning. In D. H. Olson, C. S. Russell, & D. H. Sprenkle (Eds.), Circumplex model: Systematic assessment and treatment of families (pp. 175-198). New York: The Haworth Press, Inc.
- Beavers, W. R., & Hampson, R. B. (1990). Successful families: Assessment and intervention. New York: W. W. Norton & Company, Inc.
- Bohman, T. M., Hazen, N. C., Burton, H., & DeSantis, R. (1991). Change in parental attitudes toward child-rearing over time. Paper presented at the Biennial Meeting of the Society for Research in Child Development in Seattle, WA.
- Boss, P. (1988). Family stress management. Newbury, CA: Sage Publications, Inc.
- Chang, J. (1982). Hsiao hsueh e nien chi hsueh t'ong chih cheng cheu dong chi yien chieu [A study of achievement motivation of first graders]. Chiao Yu Hsueh Kan, 4, 47-88.

- Chen, S. (1986). Fu mu ching kuan chiao jee nu de sin we: Jen chi hu dong mo shih chih tan tao [Parental disciplinary attitudes: The study of cognitive transactional modes]. Unpublished master thesis, National Taiwan University, Taiwan.
- Chou, Y. (1993). The impact of having a child with developmental disabilities on family in Taiwan. Paper presented at the meeting of the 4th Sino-American Symposium on Special Education Technology, Taipei, Taiwan.
- Chu, R. (1984). Fu mu chiao yu fan shih chih kai pien [The change of parental child-rearing attitudes]. Chia Yu Tsu Liao, 14(5), 115-134.
- Clark, R. M. (1983). Family life and school achievement. Chicago: The University of Chicago.
- Committee on Educational Research of Ministry of Education. (1992). Taiwan di chiu we lai liao lien kuo chung teh shu chia yu shy tzy hsu chio tuea ku yan jiw [Needs assessment of special teachers of junior high schools in Taiwan from 1991 to 1996]. Taipei: Ministry of Education, the Republic of China.
- Crownwell, R. E., & Olson, D. H. (1975). Multidisciplinary perspective of power. In R. E. Crownwell & D. H. Olson (Eds.), Power in families (pp. 15-37). NY: Halted Press.
- Dunst, C. J., Trivette, C. M., & Cross, A. H. (1986). Mediating influences of social support: Personal, family, and child outcomes. American Journal on Mental Deficiency, 90(4), 403-417.
- Dyson, L. L. (1991). Families of young children with handicaps: Parental stress and family functioning. American Journal on Mental Retardation, 95(6), 623-629.
- Dyson, L. L. (1993). Response to the presence of a child with disabilities: Parental stress and family functioning over time. American Journal on Mental Retardation, 98(2), 207-218.

- Feagans, L. V., Merriweather, A. M., & Haldane, D. (1991). Goodness of fit in the home: Its relationship to school behavior and achievement in children with learning disabilities. Journal of Learning Disabilities, 24(7), 413-420.
- Fewell, R. R. (1991). Parenting moderately handicapped persons. In M. Seligman (Ed.), The family with a handicapped child. (pp. 203-236) MA: Allyn and Bacon.
- Flynt, S. W., & Wood, A. E. (1989). Stress and coping of mothers of children with moderate retardation. American Journal on Mental Retardation, 94(3), 278-283.
- Frey, K.S., Greenberg, M. T., & Fewell, R. R. (1989). Stress and coping among parents of handicapped children: A multidimensional approach. American Journal on Mental Retardation, 94(3), 240-249.
- Friedrich, W. N., & Friedrich, W. L. (1981). Psychosocial assets of parents of handicapped and nonhandicapped children. American Journal on Mental Deficiency, 85(5), 551-553.
- Gou, H. (1984). Ying hsian kuo chung sheng tzyh who kuan lian de chia tien ying su [The family factors influencing self-concepts of junior high students]. Tseh Yann Yu Fu Dao, 63, 1121-1124.
- Gowan, J. W., Johnson-Martin, N., Goldman, B. D., & Appelbaum, M. (1989). Feelings of depression and parenting competence of mothers of handicapped and nonhandicapped infants: A longitudinal study. American Journal on Mental Retardation, 94(3), 259-271.
- Green, R. G., Harris, R. N., Forte, J. A., & Robinson, M. (1991). Evaluating FACES III and the Circumplex Model: 2,440 families. Family Process, 30(1), 55-73.
- Hallahan, D. P., & Kauffman, J. M. (1991). Exceptional Children. NJ: Prentice Hall.

- Harris, V. S., & McHale, S. M. (1989). Family life problems, daily caretaking activities, and the psychological well-being of mothers of mentally retarded children. American Journal on Mental Retardation, 94(3), 232-239.
- Hess, R. D., Chang, C., & McDevitt, T. (1986). Cultural variations in family beliefs about children's performance in mathematics: Comparisons among the People's Republic of China, Chinese-American, and Caucasian-American families. (Report No. NSF-BNS--07542). Washington, D. C.: National Science Foundation. (ERIC Document Reproduction Service No. ED 265 962)
- Hess, R. D., Holloway, S., Price, G. G., & Dickson, W. P. (1982). Family environments and the acquisition of reading skills: Toward a more precise analysis. In L. M. Laosa & I. E. Sigel (Eds.), Families as learning environments for children (pp. 87-113). Princeton, NJ: Plenum Press.
- Ho, C. (1986). Kuo chung sheng hsing pieh chiao se yu sheng huo shih yin, hsueh si cheng chiao chih kuan si [The relationships of sexual roles, life adjustment, and academic achievement for junior high students]. Unpublished master thesis, Taiwan National University, Taiwan.
- Hollingshead, A. B. (1975). Four factor index of social status. Unpublished working paper. New Haven, CN: Yale University.
- Holloway, S. D., & Hess, R. D. (1985). Mothers' and fathers' attributions about children's mathematics performance. In I.E. Sigel (Ed.), Parental belief systems: The psychological consequences for children (pp. 177-200). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Hoyle, S. G., & Serafica, F. C. (1988). Peer status of children with and without learning disabilities: A multimethod study. Learning Disability Quarterly, 11(4), 322-332.

- Hsieh, M. (1984). Due pin chiung chia tien chih fu wu [Services to poverty families]. Sheh Chu Fa Jan, 25, 78-82.
- Hsu, J. (1988). The Chinese family: Relations, problems and therapy. In W. Tseng & D. Y. H. Wu (Eds.), Chinese culture and mental health (pp. 95-110). Orlando, FL: Academic Press Inc. Ltd.
- Hu, F. (1986). Chia tien wen din Hsing, mu ching chiao yu chen du, yu hai chi hsing hai tsu sheng huo shih yin chih ying hsiang [The influence of family stability, mother's education, and the child's gender on mother's child-rearing attitudes and life adjustment of children]. Unpublished master thesis, Chinese Cultural University, Taiwan.
- Huang, C. (1976) Sheh huai kai pien yu chin-tsu kuan si chih tiao shih [Society changes and adjustment of parent-child relationships]. Teacher Chang, 5(4), 222-227.
- Kazak, A. E. (1987). Families with disabled children: Stress and social networks in three samples. Journal of abnormal child Psychology, 15, 137-155.
- Keough, B. K. (1982). Research in learning disabilities: A review of status and need. In J.P. Das, R. F. Mulcahy, & A. E. Wall (Eds.), Theory and research in learning disabilities (pp. 27-44). New York: Plenum Press.
- Konstantareas, M. M., & Homatidis, S. (1988). Stress and differential parental involvement in families of autistic and learning disabled children. In E. D. Hibbs (Ed.), Children and families: Studies in prevention and intervention (pp. 321-336). Madison: International Universities Press, Inc.
- Lee, M. S. (1974). Yin hsian zai fu iou yi erl tung chi chia ting yin su [A study of family influences on the education of gifted children]. Chia Yu Yan Jiou Shoo Zi Kan, 15, 129-231.

- Luster, T. (1986). Beyond social address: Linking socioeconomic status to family functioning. Paper presented at the Annual Meeting of the American Psychological Association (Washington, D. C.).
- Mahoney, G., O'Sullivan, P., & Robinson, C. (1992). The family environments of children with diversities: Diverse but not so different. Topics in Early Childhood Special Education, 12(3), 386-402.
- Margalit, M., & Almoughy, K. (1991). Classroom behavior and family climate in students with learning disabilities and hyperactive behavior. Journal of Learning Disabilities, 24(7), 406-412.
- Margalit, M., & Heiman, T. (1986). Learning-disabled boys' anxiety, parental anxiety, and family climate. Journal of Clinical Child Psychology, 15(3), 248-253.
- Margolin, G., & Patterson, G. R. (1975). Differential consequence provided by mothers and fathers for their sons and daughters. Developmental Psychology, 11(4), 537-538.
- Mash, J. (1984). Families with problem children. New Directions for Child Development, 24, 65-84.
- McCubbin, M. A., & McCubbin, H. I. (1987). Family stress theory and assessment: The T-double ABCX model of family adjustment and adaptation. In H.I. McCubbin & A. I. Thompson (Eds.), Family assessment inventories for research and practice (pp. 3-32). Madison, WI: The University of Wisconsin - Madison.
- McLoughlin, J. A., Clark, F. L., Mauck, A. R., & Petrosko, J. (1987). A comparison of parent-child perceptions of student learning disabilities. Journal of Learning Disabilities, 20(6), 357-360.

- Michaels, C. R., & Lewandowski, L. J. (1990). Psychological adjustment and family functioning of boys with learning disabilities. Journal of Learning Disabilities, 23(7), 446-450.
- Ministry of Education, the Republic of China. (1992). Teh shu chia yu fa guaa huei bien [Collections of special education laws and regulations]. Kaohsiung, Taiwan: Bureau of Education, Kaohsiung Hsien.
- Minuchin, S. (1974). Families and family therapy. Cambridge, MA: Harvard University Press.
- Mittelmeier, C. M. (1987). Correlations of adjustment among children referred for a learning. Doctoral dissertation, University of Rhode Island, Rhode Island.
- Morrison, G. M., & Zetlin, A. (1988). Perceptions of communication, cohesion, adaptability in families of adolescents with and without learning handicaps. Journal of Abnormal Child Psychology, 16(6), 675-685.
- National Information Center for Children and Youth with Handicaps (NICHY). (October, 1990). News Digest, 4.
- Olson, D. H. (1986). Circumplex Model VII: Validation studies and FACES IV. Family Process, 25(3), 337-352.
- Olson, D. H. (1989). Circumplex Model of family systems VIII: Family assessment and intervention. In D. H. Olson, C. S. Russell, & D. H. Sprenkle (Eds.), Circumplex Model: Systematic assessment and treatment of families (pp. 7-49). New York: The Haworth Press, Inc.
- Olson, D. H. (1991). Commentary: Three-dimensional (3-D) circumplex model and revised scoring FACES III. Family Process, 30(1), 74-79.
- Olson, D. H., & Lavee, Y. (1991). Family types and responses to stress. Journal of Marriage and the Family, 53(2), 786-798.

- Olson, D. H., & McCubbin, H. I. (1983). Families: What makes them work. Beverly Hills, CA: SAGE Publications, Inc.
- Olson, D. H., Portner, J., & Bell, R. Q. (1982). FACES II: Family adaptability and cohesion evaluation scales. St. Paul, MN: Family Social Science, University of Minnesota.
- Olson, D. H., Sprenkle, D., & Russell, C. (1979). Circumplex model of marital and family system I: Cohesion and adaptability dimensions, family types and clinical application. Family Process, 18, 3-28.
- Olson, D. H., & Tiesel, J. W. (1991). FACES II update: Linear scoring and interpretation. St. Paul, MN: Family Social Science, University of Minnesota.
- Pettit, G. S., Dodge, K. A., & Brown, M. M. (1988). Early family experience, social problem solving patterns, and children social competence. Child Development, 59(1), 107-120.
- Roth, L., & Weller, C. (1985). Education/counseling modeling for parents of LD children. Academic Therapy, 20(4), 487-495.
- Sameroff, A. (1975). Transactional models in early social relations. Human Development, 18, 65-79.
- Sameroff, A., & Chandler, M. (1975). Reproductive risk and the continuum of caretaking casualty. In F. D. Horowitz (Ed.), Review of child development research, Vol. 4. Chicago: University of Chicago Press.
- Sears, R. R., Maccoby, E. E., & Levin, H. (1957). Patterns of child rearing. Evanston, Ill: Row, Peterson.
- Seligman, M. (1991). Family systems and beyond. In M. Seligman (Ed.), The family with a handicapped child (pp. 27-54). MA: Allyn and Bacon.

- Smets, A. C., & Hartup, W. W. (1988). Systems and symptoms: Family cohesion/adaptability and childhood behavior problems. Journal of Abnormal Child Psychology, 16(2), 233-246.
- Smith, C. (1991). Learning disabilities: The interactions of learner, task, and setting. Boston: Allyn and Bacon.
- Stevenson, H. W., Stigler, J. W., Lucker, G. W., & Lee, S. (1982). Reading disabilities: The case of Chinese, Japanese, and English. Child Development, 53(5), 1164-1181.
- Stiliadis, K., & Wiener, J. (1989). Relationship between social perception and peer status in children with learning disabilities. Journal of Learning Disabilities, 22(10), 624-629.
- Su, C. (1976). Kuo chung kao di cheng chiao hsueh shen sin mu chung fu mu chiao yang tai du chih fan shi [The study of parental disciplinary attitudes from the perspectives of junior high students with high and low academic achievement]. Chiao yu Sin Li Hsueh Po, 5, 21-32.
- Su, C., & Ho, B. (1983). Ying erh nien lin, chu sheng ch hsu, chao ku fan fa, muching nien lin, yu mu ching-yin erh chih kuan si [Infants' age, sex, birth order, ways of caring baby, maternal age as related to mother-infant intervention]. Chia Cheng Chiao Yu, 9(1), 16-31.
- Sun, Y. (1983). Hsian dai fu mu so mien lin de kuan nan: Chin tsu kuan si chih tiao shih [Difficulties that modern parents are facing: Adjustment of parent-child relations]. Sheh Huai Yin Chiao, 22, 45-52.
- Thompson, R. J., Lampron, L. B., Johnson, D. F., & Eckstein, T. L. (1990). Behavior problems in children with the presenting problem of poor school performance. Journal of Pediatric Psychology, 15(1), 3-20.

- Tsai, J. (1985). Chia tin sheh chin di wei, fu mu kwuan chia tai du yu hsueh hsiao huang chin due chu chung sheng chi tsun sing yu shih yin chih ying hsiang [A study of SES, child-rearing attitudes, school environments, and junior high students' assertiveness and adjustment]. Chiao Yu Sing Li Hsueh Po, 18, 239-264.
- Tseng, W., & Hsu, J. (1991). Culture and family: Problems and therapy. New York: The Haworth Press.
- Walberg, H. J., & Marjoribanks, K. (1976). Family environment and cognitive development: Twelve analytic models. Review of Educational Research, 46(4), 527-551.
- Wang, C. (1979). Chung shan sheh chin chieh chi due mu ching chiao yang fan shih yu chang nu sheng huo shi yin [The study of disciplinary attitudes of motehrs with high and middle socio-economic status and life adjustment of their eldest daughters]. Sheng Li Hu Chuan Hsueh Po, 3, 79-132.
- West, J. D., Hosie, T. W., & Mathews, F. N. (1989). Families of academic gifted children: Adaptability and cohesion. The School Counselor, 37(2), 121-127.
- Wu, D.Y., & Tseng, W. (1988). The introduction: The characteristics of Chinese culture. In W. Tseng & D. Y. Wu (Eds.), Chinese culture and mental health. (pp. 3-11). Orlando,Fl: Academic Press Inc. Ltd.
- Yu, D. (1987). Juei chyow jwo yueh de ching chin [Searching outsatnding parent-child relationships]. In D. Yu (Ed.), Chun gwo ren de fu mu chin (pp. 1-24) [Philosophy of Chinese Parents (pp. 1-24)]. Taipei: Teacher Chang Pub.
- Yura, M. T. (1987). Family subsystem functions and disabled children: Some conceptual issues. Marriage and Family Review, 11(1/2), 135-151.

APPENDICES

APPENDIX A
FACES II:
ENGLISH AND CHINESE VERSIONS

APPENDIX A

FACES II

FACES II: Family Version				
David H. Olson, Joyce Portner & Richard Bell				
1	2	3	4	5
Almost Never	Once in Awhile	Sometimes	Frequently	Almost Always
Describe Your Family:				
<input type="checkbox"/>				1. Family members are supportive of each other during difficult times.
<input type="checkbox"/>				2. In our family, it is easy for everyone to express his/her opinion.
<input type="checkbox"/>				3. It is easier to discuss problems with people outside the family than with other family members.
<input type="checkbox"/>				4. Each family member has input regarding major family decisions.
<input type="checkbox"/>				5. Our family gathers together in the same room.
<input type="checkbox"/>				6. Children have a say in their discipline.
<input type="checkbox"/>				7. Our family does things together.
<input type="checkbox"/>				8. Family members discuss problems and feel good about the solutions.
<input type="checkbox"/>				9. In our family, everyone goes his/her own way.
<input type="checkbox"/>				10. We shift household responsibilities from person to person.
<input type="checkbox"/>				11. Family members know each other's close friends.
<input type="checkbox"/>				12. It is hard to know what the rules are in our family.
<input type="checkbox"/>				13. Family members consult other family members on personal decisions.
<input type="checkbox"/>				14. Family members say what they want.
<input type="checkbox"/>				15. We have difficulty thinking of things to do as a family.
<input type="checkbox"/>				16. In solving problems, the children's suggestions are followed.
<input type="checkbox"/>				17. Family members feel very close to each other.
<input type="checkbox"/>				18. Discipline is fair in our family.
<input type="checkbox"/>				19. Family members feel closer to people outside the family than to other family members.
<input type="checkbox"/>				20. Our family tries new ways of dealing with problems.
<input type="checkbox"/>				21. Family members go along with what the family decides to do.
<input type="checkbox"/>				22. In our family, everyone shares responsibilities.
<input type="checkbox"/>				23. Family members like to spend their free time with each other.
<input type="checkbox"/>				24. It is difficult to get a rule changed in our family.
<input type="checkbox"/>				25. Family members avoid each other at home.
<input type="checkbox"/>				26. When problems arise, we compromise.
<input type="checkbox"/>				27. We approve of each other's friends.
<input type="checkbox"/>				28. Family members are afraid to say what is on their minds.
<input type="checkbox"/>				29. Family members pair up rather than do things as a total family.
<input type="checkbox"/>				30. Family members share interests and hobbies with each other.

CHINESE VERSION FOR ADULTS

Code Number: _____

家庭調適力與親和力評估表

填表者: _____ 父 _____ 母

請想想您的家庭狀況，並在適當的位置打 X。

	1	2	3	4	5
	從未	很少	有時	經常	總是
1. 在困難的時候，我們能互相扶持鼓勵。	-----	-----	-----	-----	-----
2. 在家中，每個人都能隨時隨地地表達意見。	-----	-----	-----	-----	-----
3. 和外人討論問題，比和家人討論問題還容易。	-----	-----	-----	-----	-----
4. 每個家庭成員都能參與重要決定。	-----	-----	-----	-----	-----
5. 我們喜歡聚在家裏。	-----	-----	-----	-----	-----
6. 處罰孩子時，孩子能表示意見，甚至影響決定。	-----	-----	-----	-----	-----
7. 家人會一起做事情。	-----	-----	-----	-----	-----
8. 家人會一起討論問題，並對結果感到滿意。	-----	-----	-----	-----	-----
9. 在我們的家庭中，每個人各行其是。	-----	-----	-----	-----	-----
10. 家中每人輪流分擔家務。	-----	-----	-----	-----	-----
11. 家人都認識彼此的好朋友。	-----	-----	-----	-----	-----
12. 很難知道家規的標準。	-----	-----	-----	-----	-----
13. 家中每一份子做個人的決定時，會徵詢其他家人的意見	-----	-----	-----	-----	-----
14. 家中每個人都能說自己想說的話。	-----	-----	-----	-----	-----

15. 很難找出一些共同的家庭活動。-----
16. 在解決問題時，父母會採取孩子的建議。-----
17. 家人彼此都很親近。-----
18. 家裏賞罰公平。-----
19. 對外面的朋友比對家人還親近。-----
20. 我們會嚐試用新的方法來解決問題。-----
21. 家人會遵守協議好的決定。-----
22. 在我們的家庭中，每個人都能分擔責任。-----
23. 家人喜歡共渡休閒的時光。-----
24. 很難改變家中的成規。-----
25. 在家中的時候，家人彼此逃避對方。-----
26. 面臨衝突時，我們能互相忍讓。-----
27. 我們認同彼此的朋友。-----
28. 家人害怕吐露心事。-----
29. 家人不喜歡一起活動。-----
30. 家人能分享彼此的興趣與嗜好。-----

*** "家人" 在這裏的定義為，同住一戶的家庭成員。

家庭調適力與親和力評估表

小朋友，這份問卷調查是用來了解你們在家裏的情形。當你回答每一個問題的時候，仔細想一想在家裏和父母、兄弟姐妹相處的情形，然後在題目後面，1.從沒有這樣，2.很少這樣，3.有的時候這樣，4.常常這樣，5.每一次都這樣，你覺得是正確的地方，打上一個✓。每一題只能打一個✓。這不是考試，所以，小朋友不需要看別人的答案。如果你有不懂的地方，可以隨時舉手問老師。開始之前，先檢查是不是已經填好了姓名、班級、性別、及年齡。

	1 從沒有 這樣	2 很少 這樣	3 有的時 候這樣	4 常常 這樣	5 每一 次都 這樣
1. 有困難的時候，家人能互相幫忙。—— ————— ① →	-----	-----	-----	-----	-----
2. 在家中，家人都能自由地表達意見。—— ————— ② →	-----	-----	-----	-----	-----
3. 和朋友、同學、或老師討論問題，比和家人討論問題還容易。例如，我比較喜歡和朋友、同學、老師討論問題，因為，我覺得他們比家人還要了解我。—— ————— ③ →	-----	-----	-----	-----	-----
4. 家裏每一個人都能參加重要的決定。例如，父母親要我們去學鋼琴、英文等，我們能提出自己想不想學的原因和意見。—— ————— ④ →	-----	-----	-----	-----	-----
5. 家人喜歡一起待在家裏。—— ————— ⑤ →	-----	-----	-----	-----	-----
6. 父母親處罰孩子時，孩子能表示意見，並且可以影響決定。例如，爸爸媽媽本來要打我，可是，聽了我的想法跟意見之後，就不打我了。—— ————— ⑥ →	-----	-----	-----	-----	-----
7. 家人會一起去做事情，例如，一起打掃房子、一起出去玩等等。—— ————— ⑦ →	-----	-----	-----	-----	-----

8. 家人會一起商量問題，並且對結果感到滿意高興。例如，我們商量星期天要去那裏玩，商量完後，每個人都對結果感到滿意高興。—— (8)
9. 在我們的家庭中，每個人都自己做自己的事，不管其他的家人。例如，我要出去就出去，不會告訴家裏的人；家人要出去時，也不會告訴我。—— (9)
10. 家中每個人都會輪流做家事。—— (10)
11. 父母，和兄弟姐妹都認識我的好朋友，我也認識他們的好朋友。—— (11)
12. 我不知道家裏有什麼規定。例如，我不知道什麼事情能做，什麼事情不能做。—— (12)
13. 家中每一個人做決定時，會問其他家人的意見。例如，我要做一件事之前，我會問家人的意見；家人做事情之前，也會問我的意見。—— (13)
14. 家中每個人都能想說什麼就說什麼。—— (14)
15. 我很难想出一些共同的家庭活動，如郊遊、爬山、看電影等等。—— (15)
16. 在解決問題時，父母會聽取孩子的建議。—— (16)
17. 家人彼此都很親近。—— (17)

18. 父母親處罰我們兄弟姐妹時，都很公平。—— (18) →
19. 我對朋友、同學比對家人還要親近。—— (19) →
20. 有問題時，我們會試著用新的方法解決。—— (20) →
21. 家人會遵守已經決定好的事情。例如，大家決定8點以後不能看電視，家裏每一個人8點以後就不會看電視。—— (21) →
22. 在我們的家庭中，每個人都能分工合作。—— (22) →
23. 家人喜歡一起渡過假日。—— (23) →
24. 很難改變家裏的規定。例如，爸爸媽媽規定我要在10點以前上床睡覺，我就每天一定要在10點以前上床。—— (24) →
25. 在家中的時候，家人互相躲避對方。例如，我不想看到兄弟姐妹，或爸爸、媽媽，一看到他們，我就走開，他們一看到我，也會躲開。—— (25) →
26. 家人意見不一樣的時候，能互相讓著對方。例如，和兄弟姐妹吵架的時候，我會讓他們，他們也會讓我。—— (26) →
27. 家人喜歡我的朋友，我也喜歡他們的朋友。—— (27) →
28. 家人不敢說出心裏面的事。例如，我不敢說出心裏的事，怕說出來後，父母親會處罰我。—— (28) →
29. 家人不喜歡一起活動。例如，我只喜歡和爸爸、或媽媽、或哥哥、姐姐出去，可是不喜歡跟全家人一起出去。—— (29) →
30. 家人能分享彼此的興趣。例如，我喜歡的活動，家人也喜歡。—— (30) →

※ “家人”在這裏的定義為，同住一戶的家庭成員。

APPENDIX B

FAMILY BACKGROUND INFORMATION SHEET:

ENGLISH AND CHINESE VERSIONS

APPENDIX B

Code Number

Family Background Information Sheet

Mothers' highest education level (please check one.)

Graduate schools	College or university graduation	Junior college graduation	Senior high school, or vocational school graduation	Junior high school	Elemen- tary school	Illiterate
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Mother's occupation : _____

Father's highest education level (please check one.)

Graduate schools	College or university graduation	Junior college graduation	Senior high school, or vocational school graduation	Junior high school	Elemen- tary school	Illiterate
---------------------	---	---------------------------------	--	--------------------------	---------------------------	------------

Father's occupation : _____

CHINESE VERSION OF
FAMILY BACKGROUND INFORMATION SHEET

CODE NUMBER: _____

父母親教育、職業調查表

母親最高學歷程度 (請勾一欄)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
研究所 以上	大學(專)	五專	高中(職)	初中	小學	不識字

母親職業：

父親最高學歷程度 (請勾一欄)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
研究所 以上	大學(專)	五專	高中(職)	初中	小學	不識字

父親職業：

APPENDIX C
INVITATION LETTER:
ENGLISH AND CHINESE VERSIONS

APPENDIX C

Dear Parents,

In order to better understand the functioning of families with children from ages 7 to 12, I have initiated a research entitled *The Comparisons of Family Adaptability and Cohesion Between Chinese Families of Children With and Without Learning Disabilities* in which I would like you to be involved. The purpose of this research is to investigate the family adaptability and cohesion among Chinese families, and explore the differences of family functioning between families of children with and without learning disabilities. Results of this study can help educators develop efficient strategies to enhance school-parent collaboration and parental involvement in the education of children with and without learning disabilities.

Your participation involves completing the Family Adaptability and Cohesion Evaluation Scales II (FACES II), the Family Background Information Sheet, and consenting for your child to participate in the study by completing the FACES II in school.

As soon as you return the consent form, a package of materials will be sent to you. It will take you about 20 minutes to complete the surveys.

I would like to emphasize that all information gathered will be kept fully confidential and your participation is fully voluntary.

The success of this research will depend on your generous participation. Therefore, I appreciate your assistance and will be glad to share the results with you.

Sincerely yours,

Su-Pin Hsu
Doctoral Candidate, Applied Behavioral Studies
Oklahoma State University

CHINESE VERSION OF INVITATION LETTER

敬愛的家長們：

根據教育部委託師範大學特殊教育中心所做的研究調查中顯示，學習障礙學童正逐年增加，這份調查結果喚起各界對學習障礙兒童的關懷。由於學習障礙在教育、學術、及法規上的定義混淆不清，使得學習障礙兒童無法得到完善的特殊教育。可是，學習障礙對兒童及其家庭的影響，因為漠視而加劇。因為障礙所引起的學習困難，使兒童在正規的學習環境中受到極大的挫折，直接影響到兒童的人格及行為發展，也給家庭帶來一層陰影。

然而，並非所有的學習障礙兒童都挫敗於這種“智力與學習成就呈顯著差異”的障礙中，許多成功的例子顯示，學習障礙不是一種無法克服的殘障。儘管在學習的過程中，學習障礙兒童必需付出更多的努力和心血，但終是可以掙脫出障礙所帶來的陰影。而家庭正是給予兒童這股動力的來源。兒童與家庭間互動的關係，不僅影響兒童的人格發展，也關係著家庭的和協。

學校是另一個影響兒童身心發展的主要場所。家庭與學校密切合作，相輔相成，不僅能提昇兒童的學習能力，發掘他們的潛力，更能激發他們的學習動機。

為了幫助學校瞭解學童的家庭狀況，及家庭與學童間的互動關係，進而加強學校與家庭的合作，我正在進行一項研究“學障兒童與非學障兒童家庭調適力與親和力之比較研究”，探討家庭成員間的親和力，與家庭組織的調適力，並比較學障兒童與非學障兒童之家庭差異。這項研究不僅有益於瞭解及幫助學障兒童家庭調適障礙所帶來的壓力，並可探討學齡兒童家庭的特性；從而，學校可應家庭所需，提供親職教育與家庭輔導，改善家庭教育的學習環境，進而促使學校教育與家庭教育結合為一，提昇兒童的學習成就。

您們的參與與合作是這項研究成功的關鍵。您們所需要做的是，用二十分鐘的時間填寫一份“父母親教育、職業調查表”與各回答一份“家庭調適力與親和力評估表”；並同意您的孩子在學校回答一份“家庭調適力與親和力評估表”。

如果您們願意參與這項研究，請將函中所附的同意書寄回，我會很快將所有的資料寄上。

許素彬敬上
博士候選人
奧克拉荷馬州立大學

APPENDIX D
COVER LETTER:
ENGLISH AND CHINESE VERSIONS

APPENDIX D
COVER LETTER

Dear Parents,

Thank you for participating in the research entitled *The Comparison of Family Adaptability and Cohesion Between Chinese Families of Children With and Without Learning Disabilities*.

Enclosed please find two copies of *Family Adaptability and Cohesion Evaluation Scales II (FACES II)* and a *Family Background Information Sheet*. It will take you about 20 minutes to complete the surveys.

In order to maintain the accuracy and objectivity of the research, please notice that

- 1) the surveys should be completed based on the truth;
- 2) FACES II needs to be completed by father and mother individually according to personal experience.

If you need any further information, please do not hesitate to call Su-Pin Hsu at (02) 236-3566.

Thank you again for your generous cooperation and assistance.

Sincerely yours,

Su-Pin Hsu

CHINESE VERSION OF COVER LETTER

敬愛的家長們：

為能更瞭解學童的家庭狀況，及其學習成就與家庭之間的關係，我正在進行一項研究，探討學齡兒童家庭的調適力與親和力。這項研究成果將可做為親職教育與家庭輔導之規劃參考，以加強學校與家庭的溝通與合作，激發學童的學習動機，提昇學習成就。

諸位家長們的參與與協助，是這項研究成功的關鍵。您們所需要做的是，利用三十分鐘的時間回答兩份問卷調查。

函中附有兩份”家庭調適力與親和力評估表”及一份”父母親教育、職業調查表”。為維持研究結果的精確與客觀，請（1）依據事實填寫資料，（2）父親與母親需各別回答一份”家庭調適力與親和力評估表”，請依據個人的經驗作答，避免互相討論；並請記得在表上圈選填表者。

如果有任何問題，歡迎打電話至（02）236-3566 詢問。

填妥後，請於 月 日以前，將問卷交由學童擲至學校之資源教室。

再次謹向您們的合作與協助致謝。

許素彬 敬上
奧克拉荷馬州立大學
教育應用行為學系
博士候選人

APPENDIX E
CONSENT FORM:
ENGLISH AND CHINESE VERSIONS

APPENDIX E

Code No.

Parental Consent Form

We, _____, voluntarily agree to have us and our child,
(name of parents or guardians)

_____ participate in the research entitled The Comparisons of Family
(name of child)

Adaptability and Cohesion Between Chinese Families of Children With and Without
Learning Disabilities. We understand that:

1. the purpose of this study is to investigate the correlation of perceptions of family adaptability and cohesion among Chinese families, and explore the differences of family functioning between families of children with and without learning disabilities;
2. my child's participation or failure to participate in this study will not affect his/her school grades in any way;
3. my child will be requested to complete a two-page survey assessing family functioning in school. The survey will take 30 - 50 minutes to complete;
4. we will be requested to complete a one-page survey assessing family functioning, and a Family Background Information Sheet. The surveys will take about 20 minutes to complete;
5. all records are confidential and that our names will not be associated with any reports or data records during or at the end of the study;
6. participation is voluntary and we have the right to withdraw from this study at any time;
7. I may contact Su-Pin Hsu at (02) 236-3566 should I wish further information.

We have read and fully understand the consent form. We sign it freely and voluntarily.

Signature

Date

Signature

Date

CHINESE VERSION OF CONSENT FORM

Code No.

家長同意書

我們同意參與這項研究”學障兒童與非學障兒童家庭調適力與親和力之比較研究”，我們知道：

1. 這項研究的目地在於探討中國家庭的調適力與親和力，及學障兒童與非學障兒童之家庭差異；
2. 不論我的小孩是否參與這項研究，絕不會影響他（她）的課業成績；
3. 我的小孩將在學校裏回答一份”家庭調適力與親和力評估表”；
4. 我們需填寫一份”父母親教育、職業調查表”，並各別回答一份”家庭調適力與親和力評估表”；
5. 我們的個人資料與問卷答案絕對被保持機密，不會對外洩漏；
6. 我們自願參與這項研究，但可以隨時中止我們的合作；
7. 如果有任何問題，我們可打電話至（02）236-3566查詢。

家長簽名

日期

APPENDIX F
ORAL ASSENT TO PARTICIPATE:
ENGLISH AND CHINESE VERSIONS

APPENDIX F
ORAL ASSENT TO PARTICIPATE

Dear Students,

I am doing a study of the functioning of families of elementary students and I am pleased to have you involved. Your participation is to answer a survey of Family Adaptability and Cohesion Evaluation Scales II. This survey is used to know how close your family members are to one another, and how your family is flexible and able to change. The survey will take 30 - 50 minutes to complete. Your teachers, friends, or even your parents will have no way of knowing what you put down on your survey, because I will not let anybody but me look at it. Your participation is completely voluntary, and there is no penalty at all for not participating in this study. That means, if you do not want to fill out the survey, you do not have to. You will not be punished for not filling out the survey.

I will read out each sentence on the survey to you, and you will have enough time to complete it. Put an "V" on the appropriate place. If you have any questions, raise your hands.

CHINESE VERSION OF ORAL ASSENT TO PARTICIPATE

小朋友們，

我正在做一項研究，瞭解小學生的家庭狀況，我需要你們的合作與協助。你所要做的是花二十分鐘的時間，回答一份問卷調查，這份問卷調查可以幫助我們更瞭解你的家庭。除了我之外，沒有人能看你們的問卷答案。你可以決定是否願意填寫這份問卷調查。不論參加與否，絕不會影響你的學校成績。我會唸出問卷中的每個句子，你在題目後面，適當的答案位置處，打上記號。如果有任何問題，請舉手，我會再唸一次，幫助你們瞭解。

VITA²

Su-Pin Hsu

Candidate for the Degree of

Doctor of Philosophy

Thesis: COMPARISONS OF FAMILY ADAPTABILITY AND COHESION
BETWEEN CHINESE FAMILIES OF CHILDREN WITH AND
WITHOUT LEARNING DISABILITIES

Major Field: Applied Behavioral Studies

Biographical:

Personal Data: Born in Tainan Hsien, Taiwan, on February 2, 1963, the daughter of Mr. and Mrs. Yung-Fu Hsu.

Education: Graduated from Taipei First Girls' Senior High School, Taipei, Taiwan, in June 1981; received Bachelor of Arts in English from Soochow University, Taipei, Taiwan, in June 1986; received Master of Education in Instructional Technology from University of Georgia, Athens, Georgia, in December 1987. Completed the requirements for the Doctor of Philosophy with a major in Applied Behavioral Studies in Education at Oklahoma State University in December 1994.

Professional Experience: Part-time instructor at Open University, Taipei, Taiwan, 1991 and Spring 1994; full-time instructor at FuShing Junior College of Technology and Commerce, I-Lan, Taiwan, 1988-1991; researcher at Taipei Municipal Libraries, Taipei, Taiwan, 1988.

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH

Date: 01-12-94

IRB#: ED-94-044

Proposal Title: COMPARISONS OF FAMILY ADAPTABILITY AND COHESION
BETWEEN CHINESE FAMILIES OF CHILDREN WITH AND WITHOUT LEARNING
DISABILITIES

Principal Investigator(s): Diane Montgomery, Su-Pin Hsu

Reviewed and Processed as: Expedited

Approval Status Recommended by Reviewer(s): Approved

APPROVAL STATUS SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT
MEETING.
APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION
OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL. ANY
MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

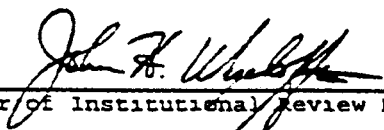
Comments, Modifications/Conditions for Approval or Reasons for
Deferral or Disapproval are as follows:

COMMENT:

When participants are answering questions orally, their
answers should be limited to the answer scale on the
questionnaire. The child/adult should be discouraged from
expanding upon their answers.

Please send copies of the permission letters obtained from
the schools to the IRB office for reference.

Signature:


Chair of Institutional Review Board

Date: January 19, 1994