This is to certify that the

dissertation entitled

COMPETENCE AND ACCEPTANCE:
PERCEPTIONS BY FOREIGN CHILDREN AND PARENTS

presented by

ISOLDA DE ARAÚJO GÜNTHER

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in PSYCHOLOGY

Ellen A. Strommen
Major professor

Date Nov. 23, 1983

COMPETENCE AND ACCEPTANCE: PERCEPTIONS BY FOREIGN CHILDREN AND PARENTS

by

Isolda de Araújo Günther

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of
DOCTOR OF PHILOSOPHY

Department of Psychology

1983

ABSTRACT

COMPETENCE AND ACCEPTANCE: PERCEPTIONS BY FOREIGN CHILDREN AND PARENTS

by

Isolda de Araújo Günther

This study investigated how six to twelve year old children, who have moved across cultural boundaries, view their new environment, and perceive their competence and feelings of efficacy in dealing with it. Further, the study tried to determine how the children's competence is being perceived by their parents, and how it is influenced by culture shock experienced by the children and their parents. Specifically, the study investigated any variation due to age, sex, cultural background, time since arrival, and time until departure.

Five groups of children from Saudi Arabia, Japan, Korea, United States, who had recently moved to Michigan, and sole representatives from ten countries (or cultures): Chile, Egypt, Hungary, India (Moslem), Nepal, Poland, South Africa (Black), South Africa (Indian), Sudan, Uruguay, as well as their parents served as subjects. Both children and parent were interviewed about their experiences related to the move and the new environment, including culture shock. Children were asked to respond to Harter & Pike's (1981) *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC), parents' responses to an adaptation of this scale were also considered.

To the extent that moves across cultural boundaries signify changes in the relationship between children and various dimensions of their socializing environment, it was asked how such children view themselves and their competence in relation to this ecological transition.

The results of the study suggest: (a) differences between children of various backgrounds and sex in the peer acceptance domain of the PSPCAYC; (b) generally negative correlations between perceived

competence (PSPCAYC) and age and time variables; (c) few significant relationships between perceived competence (PSPCAYC) and parents' perception and culture shock variables - the significant ones suggesting (1) positive relationships between parental perception of children's competence and perceived competence (PSPCAYC), and (2) negative relationships between maternal acceptance (PSPCAYC) and child culture shock (acceptance of the new environment). One possible explanation which might be pursued in future research, is that the various groups studied showed differential competencies in the various domains - not only are they sensitive to the domains salient in their own culture, but they are also sensitive to the demands in other domains that are particular to the new environment.

ACKNOWLEDGEMENTS

I would like to acknowledge the support of the many people and agencies who made my Phd program and this dissertation possible.

I am grateful to Dr. Ellen Strommen, the chairperson of my dissertation committee for her supervision and encouragement; as well as to the members, Dr. Ruth Hill Useem, Dr. Esther O. Fergus, Dr. Hiram Fitzgerald, and Dr. John P. McKinney, for their guidance and professional time dedicated to this research.

I thank Ms. Peggy Arbanas and Ms. Pat Heenan of the Office of Foreign Students and Scholars for their cooperation in obtaining information about the foreign student population at MSU.

I wish to express my appreciation to Dr. Saleh Assaf, Mr.Thalal Dhafar, Dr. Vincent Hoffman, Ms. Mary Rhodes, Ms. Kikuyi Saito, and Ms. Simone Carneiro Maldonado for introducing me to the foreign families.

Special thanks go to Ms. Judy Callender, who conducted the interviews with the US families.

To Drs. Kazuko Thornton, Velma Hildebrand, Maria Alice d'Amorim, and Hartmut Günther, for their thoughtful comments and discussions.

To Paulette Valliere for her support and advice.

To the Michigan Early Childhood Center for their excellent care of my daughter, Luisa, throughout my studies at MSU.

To Aurélio José de Freitas, friend and proxy, without whose intercession with the Brazilian bureaucray, I could not have stayed abroad as long as I did.

To the Federal University of Paraíba and its Department of Psychology, who granted me the leave of absence for my studies abroad, as well

as to the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), which made my studies possible.

Last not least, my special gratitude to the children and parents, who allowed me into their homes and thus made this study possible, for their patience and cooperation.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

The objective of the present study is to investigate how young persons, between the age of six and twelve years, who have moved across cultural boundaries, view their new environment, and how their competence in dealing with it is perceived by both children and their parents. Although one of the conditions of human life is the need to adjust to change, *uprooting* is often a drastic way by which this need may be met: a geographical and cultural move implies distress due to the separation from one's accustomed social, cultural and environmental support systems. According to Coelho & Stein (1980, p. 24),

> in any society, people are likely to experience psychological stress, if an unexpected or unusual change occurs in the immediate social or physical environment, such as uprooting because of war or natural disaster or forced relocation.

The fact that the effects of relocation *may* (e.g., Dien & Vanake, 1964; Huhr, 1972) or *may not* (Cottrell, 1978) necessarily cause psychological problems for children will not be the primary focus of the present study. Rather, the focus will be on *how* such children view themselves in relation to the ecological transition they go through. Bronfenbrenner (1979, p. 27) defines ecological transition as both "consequence and instigation of developmental processes", and adds that an ecological transition happens when the person's position in the ecological environment is altered as a consequence of a change in role, setting or both. More specifically, the objective of the study is to consider how six to twelve year old children perceive their cognitive,

physical and social (peer and maternal) competence vis-à-vis the new environment. Further, the study will determine whether there is any variation depending upon age at and length of time since arrival, as well as length of time until returning home. An attempt will also be made to determine if the perception of competence varies in children from different cultural backgrounds. At this point, several important issues can be identified, but only the first three will be addressed directly:

1. Is the ability to cope with a new environment influenced by cultural background and sex?
2. Is the age at the time of the move; the age at the time of the interview; the length of time since arrival; as well as length of time left until departure, related to the present ability to cope with the different environment?
3. Are the children's perceptions of their own competence related to the parents' perceptions of their children's competence, as well as to the culture shock reported by the children and the parents?
4. Does the ability to assimilate new experience depend upon the relative similarity between the home culture and the new surrounding?
5. Is there an optimal degree of difference between the two cultures and an optimal age at arrival to facilitate the development of competence to deal with the new culture?

1.1 Review of the Literature

Moving from one culture to another has been studied in a variety of populations, who have moved under a variety of conditions, considering a variety of circumstances for and effects on the individual, group of individuals, and social context into which the move occurred. Examples of the populations studied are immigrants, refugees, students, expatriate workers, missionaries, military dependents, to name but a few. Conditions of moving from one culture to another include war, trade, fleeing natural disasters, and social upheavals. Circumstances for and effects on the individuals or groups include psychological variables, such as adaptation, adjustment, coping, competence, self-actualization, mental health, cognitive development, socialization,

psycholinguistics, psycho-social transitions and children's perceptions. Sociological perspective deal with such aspects as mobility (social or geographical), migration, acculturation, race and ethnic relations, while anthropological studies deal with acculturation, adoption of cultural practices and changes in populations as a result of migration. Coelho & Stein (1980, p. 26) summarize the situation of the uprooted, identifying what they called "sources of stress", as follows:

1. the need to change behavior patterns and learn new ones;
2. the difficulty in communicating both verbally as well as non-verbally;
3. the loss of sensory contact with a familiar physical environment;
4. the rate demanded in the adaptation, to the extent that the process of adaptation has been compared to the process of primary socialization from birth to adolescence.

Although we agree with David (1980) when he points out that

> adaptation and coping with diverse forms of sociocultural, environmental, economic, and physical stress are not the province of any one discipline, research orientation, or ideology (p. 281),

the following review of the literature will emphasize a psychological perspective. Futhermore, as the objective of the present study is to examine children's perceived competence to deal with a new culture, the review will refer to studies that consider (a) children's contacts with other and their own culture, (b) mobility, (c) psycho-social transitions and (d) competence.

1.1.1 Children's Contacts with Other Cultures

Piaget & Weil (1951) suggest that only at age 8 to 10 did Swiss children fully comprehend what national group they belonged to, and only then could they express their ideas about foreign peoples. According to these authors

> The feeling and the very idea of the homeland are by no means the first or even the early elements in the child's makeup, but are a relatively late development in the normal child, who does not appear to be drawn inevitably toward patriotic sociocentricity. On the contrary, before he attains to a cognitive and affective awareness of his own country, the child must make a considerable effort

> toward 'decentration' or broadening of his centres of interest (town, canton, etc.) and toward integration of his impressions (with surroundings other than his own) in the course of which he acquires an understanding of countries and points of view different from his own... The child begins with the assumption that the immediate attitudes arising out of his own special surroundings and activities are the only ones possible: This state of mind ... is at first a stumbling-block both to the understanding of his own country and to the development of objective relationships with other countries. Furthermore, to overcome this egocentric attitude, it is necessary to train the faculty for cognitive and affective integration ... a slow and laborious process, consisting mainly in efforts at 'reciprocity' (p. 562)

Although Piaget's general theory of cognitive development contends that the genesis of the mechanism of knowledge is due to (a) maturation, (b) learning on the basis of experience, (c) social transmission, and (d) equilibration; Piaget & Weil, in the article mentioned, make more explicit mention of a possible influence of cultural determinants such as socialization, and geographical mobility, while schooling is not explicitly mentioned. The fact that the subjects of this 1951 study were all Swiss children, presumingly submitted to the same socializing environment consisting of people of the same race and class, may account for what Piaget and Weil called "late development in the normal child", i.e., late comprehension about what national group they belong to. Later, Piaget wrote an article entitled ***Need and significance of cross-cultural studies in genetic psychology*** in which he points out:

> Psychology elaborated in our environment, which is characterized by a certain culture and a certain language, remains essentially conjectured as long as the necessary cross cultural materials have not been gathered as control (1974, p. 12).

This latter aspect is presented by Lambert & Klineberg (1967) who studied children's views of foreign peoples in various countries. They state that while the preschool child learns to interact with the social world, he also learns

> often painfully that the private feelings of attachment he has for his own familiar and comfortable settings are not necessarily shared by those who belong to various social subgroups within his own nation, and even less so by strangers or by people who live in foreign countries (p. 222)

1.1.2 Mobility

Turner & McClatchy (1978) state that many researchers agree with the fact that change of home can be a traumatic experience for the young child [though without specifying what 'change of home' refers to], and that the mobile school child faces difficulties and may be distinctly disadvantaged when compared with more stable children. However, the same authors point out that there is less agreement with respect to the long term effects of mobility. For some researchers, most children seem to settle down, after facing the initial problems related to a move. Other studies appear to point to the harmful effects of mobility on the future academic success of the child, due to persisting psychological effects such as feelings of insecurity. Because geographic mobility is one of the characteristics of contemporary society (Cottrell, 1978; Triandis, 1980; Werkman, 1979), and since studies dealing with the effects of moving on children and adolescents appear to be inconclusive, more work in this area seems to be of relevance.

The first problem that one sees in an attempt to search the literature, is the lack of a generally accepted definition for mobility. The studies range from those presenting no definition of mobility, to others that define mobility as changes in aspects in the life of the child (Ritchie, 1965), to those considering the number of schools attended (varying from attendance in one, two, three and more schools). Other studies use as the criterion the number of districts, cities, states. Some aspects of moving have been found to be influential on the child. Pretzlaff (1969) states that long distance moves appear to be more likely to bring about difficulties. What does this mean? Is there a correlation between distance in terms of miles and feelings of difficulties? Our assumption here is that the issue in question is probably linked to the degree of similarity or dissimilarity between the two environments, the demographic composition of the new area, whether

or not the child remains within his family circle (Coleman, 1968; Ouster, 1974), or the presence and age of siblings (Long, 1975; Whalen & Fried, 1973). According to these studies, what are the aspects that facilitate and/or interfere with the well being of the child? What is the importance of parent's attitude? It appears that there are families that are aware of possible difficulties for their children, and these make an effort to prepare their children for them. Several authors (Becker, 1973; Falik, 1966; Whalen & Fried, 1973) consider the effect of such preparation to be crucial for subsequent adjustment. Turner & McClatchey (1978) state that this need for preparation is probably related to parental attitudes to the move. In some studies (Ouster, 1974; US Govt, Dept of the Army, 1975) it is claimed that the effects of mobility on the child are by-products of the effects on the mother. Wooster & Harris (1972) controlled socioeconomic status and found that mobile children had less social orientation and adjustment than non-mobiles. Long (1975) did not control SES and found that academic achievement of mobile pupils was higher than that of non-mobiles.

Although it was pointed out that psychological problems will not be the primary focus of this study, and, considering that assessment of the children's adjustment before and after the move is not realistic for this study, it appears, however, that the pre-existing level of emotional adjustment may be the more reliable predictor of the effect of the move on the child. Dawson (1969) reports that children with a history of higher or lower level of mobility score lower on tests of self-actualization and achievement than children with a moderate history of mobility. A positive correlation between self-esteem and maladaptive behavior is reported by Becker (1973). Several authors (Falik, 1966; Owen, 1971; Ritchie, 1965; Strickland, 1970) call attention to the previous level of emotional adjustment as a factor for successful adjustment of moving; and other researchers (Coleman, 1968; Ouster, 1974) point out that, given a positive adjustment of the child prior to the move, and that the child remains within his family, few ill effects will occur. Gibson (1973) studied the effect of mobility on the reading

performance of children from military families and found that it becomes worse with age and in turn affects other aspects. Gibson makes a distinction between literacy and oracy, and suggests that such children develop oral skills and confidence as defense, but are not able to translate spoken words into written symbols.

Another part of the mobility research considers *third culture kids* (Useem & Downie, 1976), an international population which has "loosened its ties to a home country, yet has not totally become integrated into the host country" (Werkman, 1979, p. 178). Missionary and military families who have lived overseas for considerable periods of time were also the focus of many of the studies in the area of mobility. Large numbers of reports (Dayton, 1940; Gordon & Gordon, 1958; Malzberg & Lee, 1956; Tietze, *et al.*, 1942; to cite a few) suggest that mobility is linked with psychiatric problems among adults and children. The children of military families, or, as they are sometimes called, children of 'service' families (Turner & McClatchey, 1978, p. 46), are a case in point. However, Pedersen & Sullivan (1964) caution against the tendency to consider repeated family relocation as "an etiologically significant factor in and of itself in the development of emotionally disturbed military children" (p. 578). David (1980) states that there is a growing recognition that cultural, social, economic and technical changes are inflicting stress upon the structure of families, and their ability to adapt to new environments (Coelho *et al.*, 1974). However, much less is known about conditions facilitating normal development and competence in children who live in environments where the language and culture of the majority are not their own.

In sum, how are those children that move able to cope with the challenges that they confront? For Turner & McClatchey (1978), "the effects of mobility may not be a matter of degree: it may be advantageous to some, disadvantageous to others at different times" (p. 49). If so, what makes this advantageous or disadvantageous? Some authors (Janis, 1479; Lazarus, 1975) consider that the effectiveness of

their coping mechanisms depends on the perception of the threatening or promising elements in the situation. It appears that emotional and social support which is available and used (Adams & Lindemann, 1974), motivation and readiness to respond to the environmental challenge (Mechanic, 1974) are two aspects of great importance, and will, therefore, be considered in this study.

1.1.3 Psycho-Social Transitions

In a paper directed to the conceptual issue of the so called crises or loss research, Parkes (1971) advocated a new field of study, Psycho-Social Transitions. Parkes pointed out that such "situations [psycho-social transitions] are seen as turning points for better or worse psycho-social adjustment" (p. 101). The author points out that changes usually take place in what Lewin (1935) has called the *life space*, which encompasses our interpretation of our past experiences, the expectations of the future, "everything we know or think we know" (Parkes, 1971, p. 103). Parkes' proposition seems to be a departure from the traditional disease-oriented research made by clinical psychoanalysts, social psychiatrists and psychologists, and appears to have gained acceptance recently (Bogat, Jones & Jason, 1980; Ginter & Felner, 1979; Primavera, Ginter, Felner & Cauce, 1979). Parkes considers that in dealing with crises, the most important aspect may be the individual's ability to cope with the process of change, which occurs in one's life space. Bogat *et al.* (1980) stress that when encountering transitions, the individual who conquered initial anxiety usually gains information about the situation and develops new patterns of behavior. This need to modify old patterns of life and adopt new coping styles in order to solve transitions is also considered by Hirschowitz (1976). Because individuals are active receptors of sensations from their life space, they are impelled to give up, or keep old views of themselves and/or acquire another view. They do this by reaching out to their environment and "sampling it" (Parkes, 1971, p. 105). Thus, life transitions, such as the loss of a mother or mother

substitute by young children (Bowlby, 1960, 1961a, 1961b); temporary separation from the parents (Robertson & Robertson, 1969); moving to a new environment (Bardo & Bardo, 1980); entering school for the first time (Coddington, 1972; Klein & Ross, 1965); moving from one school setting to another (Bower, 1964; Ginter & Felner, 1979); entering a new school (Bogat *et al.*, 1980); or pregnancy (Leifer, 1977) may affect personal relationships, familiar environments, possessions, physical and mental capacities, roles and status (Parkes, 1971). Wolfenstein (1957) reports that changes related to loved possessions such as home, backyard, favored pets, toys or any other collections may perpetuate fears of further losses. Parkes stresses that the lack of ability to perform according to social or personal expectations makes individuals give up the old view of themselves and acquire another view. He refers to reactions to the present life space "by moving within it, to keep it the same or to change it" (Parkes, 1971, p. 105).

One may say that children who moved from other countries may experience changes not only in one of the areas cited, but in several, or even in most of them. Hence, what are the ways in which children react to these changes? How do such children view themselves in relation to the transition they go through? This study will examine whether they consider certain aspects of their life to have changed, such as the language they speak, the food they eat, the clothes they wear, the place they live in, and the behaviors that are expected of them at home and at school. Further, considering that they are confronted with such new situations, how and/or from whom did they gain information about the new situation, how did they cope with it?

1.1.4 Social Competence

The next step will be to provide a conceptualization of social competence, placing emphasis on the integration of socio-cultural differences. Dinges & Duffy (1979) claim that there is relatively little research linking competence and culture, and in a broad

characterization they add

> the psychological research tradition had emphasized research on the incompetent or maladjusted person and the anthropological research tradition has focused more on the ideal person who embodies the cultural norm (p. 209).

At this point, two aspects need to be stressed: (a) in the United States, a complex, changing and pluralistic society, there appears to be a lack of agreement on the definition of competence, (b) there seems to exist a lack of emphasis in research on culture and competence in a broader sense, and more research dealing with the culture of the school as such. Although one can agree that there must be scientific reasons for this, it also implies that some difficulties in an attempt to integrate sociocultural differences into conceptualizations of children's development of social competence will appear. Dinges & Duffy discuss whether the concept of competence is used as a new conceptualization or is synonymous with other concepts which provide less difficulties in their operationalization. The same point is made by Heath (1977) who states that terms such as competence, mental health and self-actualization, all of which imply effectiveness of functioning, may be aspects of the concept of maturity. One of the reasons why Harter's conceptualization of competence will be considered below is that her approach does allow for the integration of socio-cultural factors.

Another issue that needs to be addressed is the problem of metapsychology embedded in the concept of competence. Although we agree with Berry's (1975) relativistic position that there are no general criteria of cultural or behavioral excellence, we are trying to study foreign children's adaptation to a given environment. This means that a child is perceived as being socially competent or incompetent in the context of specific roles and value judgements that are not familiar to them. The dominant group which determines social competence (or incompetence) of the child has changed. Thus while foreign children in general, and children of foreign students in particular [1], and are not necessarily part of the minority group of this society (though many feel they are

treated as such), the problem pointed out by Laosa (1979) may apply equally to them:

> for many minority children the sociocultural context of the home and neighborhood is different from that of the 'mainstream' socioculture, and therefore different from many of its institutions, including the school (p. 271).

The author considers that although non-minority children also experience some sort of discontinuity, the discontinuity of minority children is greater and more abrupt. Adaptation is, in this context, a key concept, and functional adaptation to aspects of the environment is what "enables the person to operate effectively" (p. 271). The issue here is that the minority child probably deals with two or more sets of functional adaptations, something that may also be assumed to be the case with foreign children, such as the ones of this study. Our question is to see what happens when young persons are uprooted, i.e., move with their parents to a different environment and have to renegotiate the various demands of the new environment, (given they are not the same.)

Goldfried & D'Zurilla (1969) suggest that from a Western perspective, the notion of competence has a relatively long history. They quote Socrates as the ultimate source, whose definition of competence was

> Those who manage well the circumstances, which is accurate in meeting occasions as they arise and rarely miss the expedient course of action (*apud* Goldfried & D'Zurilla, 1969, p. 155)

The research concerned with competence and competent behavior may be divided into the following three orientations: (a) personality trait orientation, (b) self concept autonomy orientation, and (c) drive instinct motive orientation.

[1] While foreign students are generally part of their respective countries' cultural elite, some of them are still part of their countries' 'minority', as is the case of the South African families of this study.

1.1.4.1 Personality trait orientation

This orientation attempts to isolate certain dimensions of personality upon which individuals may vary regarding the amount of a trait (characteristic) they might have. The major theorists of this orientation, including Cattell, 1965; Eysenck & Eysenck, 1969; Guilford, 1959, produced a good deal of research related to these theories. There appears to be a continuous debate in the psychological literature with respect to the role of traits in understanding and explaining human behavior (Argyle & Little, 1972; Epstein, 1977).

1.1.4.2 Self-concept autonomy orientation

This orientation emphasizes the organism's active striving for mastery over the environment. Argyal (1941) views the human being not as a mere reactive organism but as an active agent striving for mastery over the environment. Kardiner (1947) postulated an effective ego, with an autonomous energy source, which is more positively directed to successful rather than conflicting experiences. Hartmann (1950) conceptualized the autonomous factor in the developed ego that mediated instinctual drives and environmental demands. Erickson (1952), although accepting Freud's ideas, sees his own theory adding to them. Culminating the apparent discontentment with the instinct-drive motive theories, created the concept of ego identity and a "sense of industry". Allport (1937) called attention to the functional autonomy of motives, Goldstein (1940) to the tendency to self-actualization which was later strengthened by Maslow (1954) and Rogers (1961). In sum, each of these theorists represent particular variations of the general theme of this orientation, which views humans as internally determining dominators of their environment, as opposed to purely reactive organisms.

1.1.4.3 The drive instinct motive orientation

This orientation is influenced by Freudian drive theory which gives emphasis to physiological views of human behavior. Groos (1901) postulated that humans have a need for producing effects in his example of the child's 'joy in being a cause'. Hendrick (1942), on the basis of the drive to do and to learn how to do, suggested an instinct of mastery. Fenichel (1945), rather than putting emphasis on an instinctually based component, associated the reduction of anxiety of mastery over the environment. Mowrer (1950) continued with the position that the motivating element in ego development was anxiety reduction. Dollard & Miller (1950) proposed their concept of drive and attendent reinforcement theory. Even though White (1959) stated that the drive theories, as well as Freud's psychoanalytic instinct theory, were inadequate as models of human and animal behavior, he is considered the most prominent representative of this position (Dinges & Duffy, 1979, p. 211). White not only considered the achieved capacity of competence, but also referred to competence as a motivational concept "because it satisfies an intrinsic need to deal with the environment (1959, p. 318). He points out that "the drive formula seemed to me seriously inadequate to account for the ceaseless activity, play and exploration that are so obvious in young animals and in young children" (1979, p. 7). He asks, why are young creatures always busy, instead of sitting back and waiting for the next episode of hunger and/or discomfort? He considers that this activity must have served in evolutionary history, because by making explorations and by playing, young animals increase their knowledge and competence about the environment. For White, being effective, being able to have effects "seemed to be the heart of the problem" (1979, p. 8). Another very important point for White is that the sense of competence is rooted in one's own action, "has to come from within" (p. 9), and the motivational aspects of competence, referred to

as "effectance" [2] is the "organism's capacity to interact effectively with the environment" (1959, p. 297). Probably because he considers his effectance motive to be universal, White seems not to pay attention to cross-cultural aspects, and although on a physiological level one could argue that his theory is verified cross-culturally, the question that remains is whether it encompasses the issues involved in the term competence.

A contemporary version of the self-concept autonomy theory is presented by Harter (1974, 1975, 1977) who seemed to consider White's conceptualization quite useful in her early research. However, as this author stated, "it soon became apparent that effectance motivation, as presented in the broad brush strokes of White, had little explanatory value, little predictive power" (1981a, p. 216). Harter's criticism refers to two problems: (a) White's concept did not concur with operational definitions, (b) it was not clear how to put White's formulation to an empirical test. In spite of this, Harter agrees that the appeal of a "motive that impels the organism toward competence is obvious and compelling" (1981a, p. 216). Thus, she decided to refine and extend White's model. In a 1982 paper, Harter clarifies the meaning of the term intrinsic in her model. Harter considers the term *intrinsic* not as referring to the type of basic biological property postulated by White (1959). Rather, she used this term to refer to

> an experiential process whereby motivational and informational functions once extrinsic to the child are modeled, incorporated, such that they become internal to the child (1982, p. 18).

Harter calls this second source *internalized* motivation, contrasting it with the "more basic effectance like motivation for which the term intrinsic is more appropriate" (p. 18). Harter's statements of the issues that her scheme must address are presented (1978) and summarized (1981a) as follows:

[2] Referring to the neurogenic 'energy' derived from the living cells that constitute the nervous system.

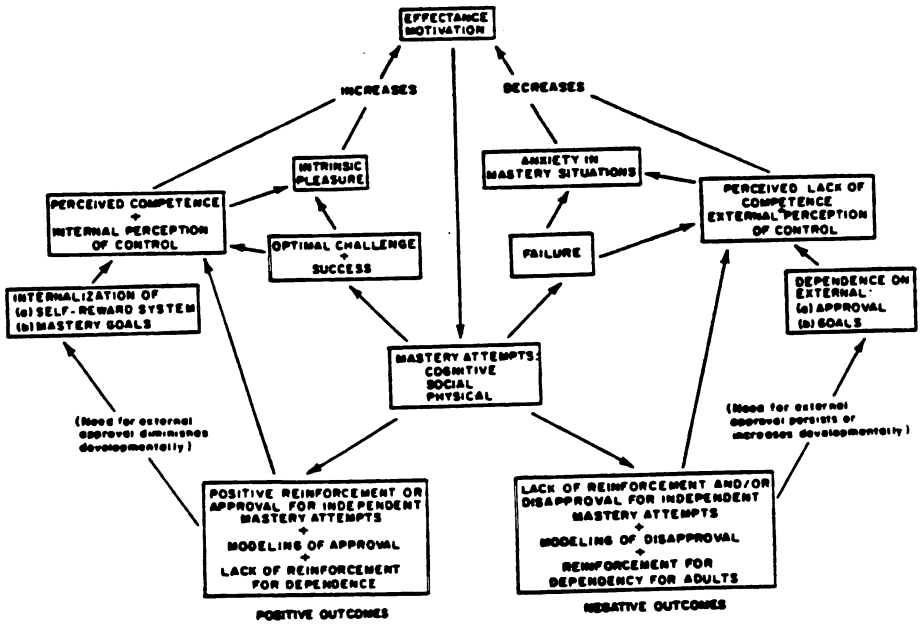
1. The view of effectance motivation as a global or unitary construct is challenged by the consideration of the possible components of this motive system. These possible components must be examined within a developmental framework;
2. The effects of failure experiences on the components of effectance motivation must be examined;
3. The conceptualization of intrinsic pleasure as a result of success is challenged, as success results in feelings of efficacy. An additional component is added, namely the concept of optimal challenge, i.e., successful mastery attempts which provide an optimal degree of challenge produce the greatest sense of satisfaction;
4. The role of the socializing agents must be considered, as well as direct attention paid to the functions of reward and their effect in this system;
5. The effects of reinforcement over time must be considered in order to clarify the internalization process by which self-reward and mastery goals are internalized;
6. Extrinsic motivation and the relative strength of intrinsic versus extrinsic motivation orientations must be examined;
7. Correlates of these motivational constructs such as one's perceived competence or self-esteem, or one's sense of control must be addressed.

Harter's refined model (1981a, p. 218) is reproduced in Figure 1. The left outer circle of Figure 1 presents a diagram of ontogenetic changes with positive outcomes, resulting in a relatively intrinsically motivated individual. The left side of the figure also presents a picture of optimal development as a consequence of the individual's environment jointly with "his or her natural desires toward mastery" (1981a, p. 220). Thus the intrinsic motivation constitutes the major determinant of behavior. Negative outcomes are presented in the right hand side of Figure 1. These outcomes are the ones that will produce an extrinsically oriented individual. Her extended model considers that the reinforcement history has implications for the motivational orientation, for perceived competence, as well as for the sense of control over the outcomes of the individual's life.

The refinement of the model led to another challenge: the search for appropriate measures. Harter apparently faced three alternatives, (a)

Figure 1

Harter's Refinement of White's (1959) Effectance Motivation Formulation



use existing measures, even though they appeared inadequate, (b) to devise new scale(s), or (c) "to remain content to sit in our armchairs flauting our flow diagram and mumbling pedantically" (1981a, p. 224). Harter opted for the second alternative [3] and three years and 4000 children later had arrived at a first scale: the *Perceived Competence Scale for Children* (PCSC) (Harter, 1981a).

The PCSC assesses the child's sense of competence in three domains: cognitive, social and physical. A subscale called general self worth, orthogonal with the other domains is also included. At the theoretical level, Harter (1978) refers to a model of intrinsic motivation in which the central point is one aspect of a child's sense of self, i.e., perceived competence. Perceived competence is viewed as a correlator and mediator of the "child's intrinsic motivation to be effective, to engage in mastery attempts" (Harter & Pike, 1981b, p. 1). According to these authors, at the applied level, this scale has diagnostic utility and can be used for both clinical and educational assessment. The PCSC is a measure for elementary school and junior high school pupils.

Subsequently, and based on the PCSC, two versions of this scale were developed for young children: (a) for pre-schoolers and kindergarteners, (b) for first and second graders. These two versions, named the *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC) determine competence in the same three areas as the PCSC: cognitive, social and physical. However, the social area in these versions includes, besides perceptions of one's peer relationships, the child's perception of maternal support and acceptance. Further reference will be made to the PSPCAYC in the methodology chapter, on page 28 below.

1.2 Research Questions and Hypotheses

In sum, the present study will consider how six to twelve year old children, who have moved across cultural boundaries, view their new

[3] though seemed to have some regrets: "We chose the second strategy, to invent what we could not discover, and embarked on a venture with the appropriate balance of knowledge and ignorance. I say ignorance, because if we had known back then what is required to construct adequate instruments that met the previously raised objections, we might well have opted to pedantically mumble!" (1981a, p. 224)

environment and perceive their social, cognitive and physical competence in dealing with it. Further, this competence, as perceived by the parents, will be considered as well. The following variables will be examined through the use of questionnaires and interviews:

1. The children's perception of culture shock, through a scale adapted for this study;
2. The children's perception of their competence in areas outlined by Harter & Pike (1981a), i.e., cognitive, physical, and social (maternal and peer);
3. The parents' perception of culture shock, as well as its effects on their children, through a scale adapted for this study;
4. The parent's perception of their children's competence, specifically social competence, through a modification of Harter's scale (1981a).

1.2.1 Research Questions

The following specific research question are posed:

1. Is there a relationship between cultural background and perceived competence, as measured by the *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC)?
2. Is there a relationship between sex and perceived competence?
3. Is there a relationship between age at the time of the move across cultural boundaries and perceived competence?
4. Is there a relationship between age at the time of the interview and perceived competence?
5. Is there a relationship between length of time since the move across cultural boundaries and perceived competence?
6. Is there a relationship between length of time until return to home country and perceived competence?
7. Is there a relationship between the children's perception of their own competence, and the parents' perception of their children's competence?
8. Is there a relationship between the children's perception of their own competence, and the parents' culture shock?
9. Is there a relationship between the children's perception of their own competence, and the children's culture shock?

1.2.2 Research Hypotheses

The research hypotheses are, accordingly:

1. H_o

   There is no relationship between cultural background and perceived competence, as measured by the *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC).

2. H_o

   There is no relationship between sex and perceived competence.

3. H_o

   There is no relationship between age at the time of the move across cultural boundaries and perceived competence.

4. H_o

   There is no relationship between the age at the time of the interview and perceived competence.

5. H_o

   There is no relationship between length of time since the move across cultural boundaries and perceived competence.

6. H_o

   There is no relationship between the length of time until return to the home country and perceived competence.

7. H_o

   There is no relationship between the children's perception of their own competence, and the parents' perception of their children's competence.

8. H_o

   There is no relationship between the children's perception of their own competence, and the parents' culture shock.

9. H_o

   There is no relationship between the children's perception of their own competence, and the children's culture shock.

CHAPTER 2

METHODOLOGY

The study was conducted at Michigan State University. At the time of fall registration 1982, there were approximately 1640 foreign students from 70 different countries among the 40,000 students. Most foreign students that are accompanied by their families, as well as many US students and foreign faculty live in university housing in three distinct neighborhoods. Two elementary and one middle school of the East Lansing school district serve these university housing areas. Consequently, most of the children of foreign students and faculty, as well as many children of US students attend these three schools. The percentage of foreign children at the two elementary schools, Spartan Village and Red Cedar, was in excess of 50% and 40% respectively. Hannah Middle School reported approximately 15% foreign students, East Lansing High School 2%. Many foreign students with children report that the support provided by these school is an important reason for choosing MSU.

2.1 Subjects

In order to test the hypotheses stated above, five groups of children and their parents were interviewed in their homes.

2.1.1 Subject Pool

Foreign Children. Information provided by the Office of International Students and Scholars at Michigan State University indicated that there

were 1640 foreign students enrolled in the fall term of 1982. Table 1 presents a summary of the information that was available regarding the *children* of these foreign students.

Given the interest in studying six to twelve year olds, this table presents the number of children born in 1969 and before, in each year for 1970 through 1976, and in 1977 through the present. Further, it indicates the number of families in which the six to twelve year old are divided.

In an effort to corroborate the information provided by the MSU foreign student office, an attempt was made to obtain the number of children of foreign students enrolled in the two elementary and the one middle school of the East Lansing School District which serve the population in question. Table 2 presents data from the one school that made these data readily available.

As is obvious from the data presented in the two tables, there is no consistency as to the number of children from different foreign countries in the community. In part, this is due to the fact that some students live outside the East Lansing school district, in part because information was not available from all three schools. Further, there are some visiting professors with families, whose children are not included in Table 1.

US Children. Information provided by the University Apartments Office at Michigan State University indicated 79 US families that had moved to MSU since the spring of 1982, and were living in two-bedroom units (which implies the presence of children).

2.1.2 Subjects Interviewed

Since representativeness could not be established, it was decided to study families from Japan, Korea and Saudi Arabia, who represent homogeneous groups with a large number of children, as well as a group

Table 1

Children of Foreign Students at MSU by Country of Origin and Age

	Year of Birth									SUM	Families
Country	<1969	70	71	72	73	74	75	76	77+	70-76	70-76
Afghanistan			1	1						2	2
Australia							1	1		2	2
Bangladesh			1						3	1	1
Brazil	2	1	1	2	1	1	1	1	11	8	5
Chile									2	0	0
Columbia	2			1				1	1	2	1
Cyprus								1	1	1	1
Dom Rep	1								1	0	0
Egypt	1	1	2						7	3	2
Gambia									1	0	0
Greece				1				1	0	2	1
Guyana									1	0	0
Honduras								1	3	1	1
India	1								2	0	0
Indonesia			1	1		1			4	3	1
Iran	4					2			15	2	2
Iraque									12	0	0
Israel		1	1		1	1			3	4	3
Japan	1	1	1	2		1		1	1	6	2
Jordan					1		1	1	9	3	2
Kenya						1	1	1	5	3	3
Korea	2		1	2	1	1		3	21	8	5
Kuwait							2	5	7	4	2
Libia								1	9	1	1
Malawi									3	0	0
Malaysia					3	3	2	2	8	10	6
Mali									1	0	0
Mexico									4	0	0
Namibia									1	0	0
Nepal	1			1			1		1	2	1
Nigeria	1				1	2			19	3	3
Philippines						1			3	1	1
Turkey									1	0	0
Saudi Arabia		1	2	2	2	2		5	32	14	8
South Africa							1		1	1	1
Sri Lanka									1	0	0
Sudan		1		1				1	0	3	1
Taiwan	1	1	1		1				12	3	2
Thailand		1				1			1	2	1
Uruguay									3	0	0
Venezuela				1	1	1			4	3	1
Yemen									2	0	0
Zambia	3	1		2					4	3	2
TOTAL	20	9	12	17	12	18	10	23	220	101	64

of families who were the sole representatives of their respective countries. The rationale for the selection of the groups is linked to the source of support available to the children: (a) strong group

Table 2

Children of Foreign Students of MSU in One Elementary School in East Lansing

Country	*Number of Students*
Korea	14
Japan	12
Egypt	9
Brazil	6
Taiwan	6
Israel	4
Malaysia	4
Ethiopia	3
India	3
Philippines	3
9 countries with 2 each	
10 countries with 1 each	

support in the case of the Saudi children who even have their own school; (b) presence of group support due to sufficient numbers of children in the Japanese and Koreans; (c) lack of group support in the case of children who are solitary representatives of their respective countries or cultures; and (d) staying within one's own culture in the case of the US children. Furthermore, it is the researcher's understanding that there are no studies with children of foreign students as subjects. Forty-seven children (21 female, 26 male) and their parents participated in this study, as presented in Table 3 (cf. page 37). The selection criteria were the following: (a) both parents from the same country, (b) at least one child between the ages of six and twelve born in the same country as the parents, (c) in the case of more than one child in this age group, only the eldest was interviewed, (d) in the case of foreign families, the intention to return, and (e) in the case of US families, having moved to Michigan since the spring of 1982.

2.2 Procedure

2.2.1 Contact with the Families

In the proposal for this study, the following was stated regarding the procedure:

> Once families are identified, they will receive a letter (cf. Appendix A, page 107) inviting them to participate. The letter will be followed by a telephone call. In the case of families agreeing to participate, a time will be set, and the researcher will visit the family at the agreed upon time.

While this general procedure was followed, there were some notable variations among the groups of respondents:

2.2.1.1 Saudi Group

From the end of October to mid May, contacts were cultivated with a member of the board of Al-Farook Elementary School, which is maintained by the Saudi Arabian Education Mission. Saudi children attend this school [4] in addition to attending public school. During this period of time, clarifications about the purpose and procedure of the study were made, and finally, names and addresses of Saudi families were obtained. Once this contact with the Saudi families was established, there were no difficulties in receiving collaboration from them.

[4] The school apparently is open to children from other Arab speaking countries; in addition, there is said to be another Arab school maintained by Libya.

2.2.1.2 Japanese Group

Access to the Japanese population was initially gained through the Japanese Club. An explanation of the study similar to the one provided in the letter to parents (cf. Appendix A) was translated and published in the quarterly newletter of the Club. Furthermore, a list of the club members as of Winter quarter 1983 was provided. The investigator was not aware, however, that the Japanese school year begins during the Spring, and that families with school age children return to Japan at that time. Thus, only three families with six to twelve year old children were located from the club list, all of whom agreed to participate. These three families, in turn, provided names and introductions to other families. All but one Japanese family, with children appropriate for the study, present at MSU during the Spring and Summer terms 1983, were included in this study.

2.2.1.3 Korean Group

A list of Korean families was obtained from the MSU foreign student office and the Korean club. Letters were sent to those 21 families, who, on the basis of their address and other information, could be presumed to have children, though not necessarily of the appropriate age, place of birth or intention to return home. Yet, it was surprising that upon telephone contact, only one family admitted to having children here and agreed to participate in the study. This one family opened the door to two other families, one of which, in turn, indicated two other families. The remaining two families were found after the researcher had been legitimized through a Brazilian colleague of Korean descent, as well as with the help of a US professor with contacts in the Korean community. All Korean families who met the criteria established above are included in the study.

2.2.1.4 Sole Representatives of Countries

Thirteen families, being the sole representatives of their respective countries (or cultural groups within the country) were identified through the help of the foreign student office, the English language program of the United Ministries in Higher Education, neighbors, friends, and colleagues. Ten families, from the following countries, agreed to participate: Chile, Egypt, Hungary, India (Muslim), Nepal, Poland, South Africa (Black, Indian), Sudan, Uruguay. Three families refused to participate.

2.2.1.5 US Group

While the University Apartment Office provided 79 names and addresses, only 12 families were found to meet the criteria listed above, and testing was completed with only 10 families. One family declined participation. In the case of another family, the research assistant decided not to complete the child's interview, after the parents explained that the child is two years behind in school due to attention span problems.

2.2.2 Place of Interview

On the basis of contacts with teachers of foreign students in elementary and middle schools, as well as with foreign parents and children themselves, it appears that children are taught at school that they 'are all the same' regardless of race, religion, or cultural background. This seems to suggest that the school is a 'neutral' place, where the children learn how to behave according to the norms and expectations of the East Lansing environment. In contrast, the home may be considered a place where the child explicitly retains his/her singular cultural characteritics, neither being from here, nor (necessarily) staying here.

This consideration is part of the reason for interviewing children in their homes. A second, practical consideration regarding the place of the interview relates to the difficulty in interviewing the children at school, namely those of a bureaucratic nature. Thirdly, since a parent was interviewed as well, the researcher had to go to the home anyway.

2.2.3 Interview Situation

The interview proceeded through the following steps:

1. Introduction and meeting the family; explanation of the purpose of the study; explanation of the voluntary consent form and signing of the same. (cf. Appendix B, page 108)
2. Interview of the Child.
    1. Questionnaire, as presented in Appendix C (page 109) or Appendix D (page 121), for foreign and US children respectively.
    2. Presentation of the *Pictorial Scale for Perceived Competence and Acceptance for Young Children*.
3. Interview of the Parent. In the case of intact families, the preference expressed by the couple determined which parent was interviewed. The reasons for the choice were noted in the Post-Interview Observations (Appendix G, page 149).

    Questionnaire, as presented in Appendix E (page 133) or Appendix F (page 141), for foreign and US parents respectively.
4. Closing remarks, thanking the family for their participation, making arrangements to communicate a summary of the results to them.
5. After leaving the family, completion of the post interview observations (Appendix G, page 149).

In order to assure *authenticity* of the interviews, two interviewers were used. Pareek & Rao refer to authenticity or accuracy in interviews as the "capacity of the interviewer to get unbiased and genuine responses from the respondent" (1980, p. 128). According to these authors, four major dimensions affect authenticity of interviews: (a) interviewer background (the relevant dimension to present concern), (b) interview and its setting, (c) respondent background, and (d) cultural background. The investigator who is a citizen of a country other than the US, conducted the interviews with foreign children and their parents. A North American, senior student in Psychology at MSU conducted the

interviews with US children and parents.

2.3 Instruments

Two interview schedules were developed by the investigator, one to be used with the children, one with the parents. Exploratory questionnaires for children were developed initially on the basis of a review of the literature. This instrument was tried out with a group of seven children of foreign students, none of whom participated in the final study. In light of the outcomes of the pilot interviews, as well as upon consultation with experts in the field of foreign student study, the instrument was modified and retested with another group of ten children and ten parents, who also did not participate in the final study. In addition, Harter's PSPCAYC was used with the children, and an adaptation of Harter's *Self-Report Scale of Intrinsic versus Extrinsic Orientation in the Classroom* was used with the parents. Furthermore, an adaptation of a series of structured questions developed by Thornton (1979) was used with both children and parents, and, finally, a post interview observation scale was prepared.

2.3.1 Children's Questionnaire

A copy of the questionnaire for the children is presented in Appendix C (page 109) and D (page 121) for foreign and US children respectively. The questionnaires cover the following topics:

1. INTRODUCTION - Initially, an attempt was made to explain the scope of the study at a level adequate to the children's comprehension. The importance of the subject under study was emphasized, and consent to *record* the interview was solicited.
2. PRELIMINARY QUESTIONS - Developed with the purpose to establish rapport with the respondent. The questions cover personal information.
3. SECTIONS dealing with (a) coming to the USA or to Michigan, (b) food, (c) language, (d) clothes, (e) playing, (f) home, (g) friends, and (h) school.
4. a SECTION with a series of structured questions which are adapted from Thornton (1979). Thornton selected ten component variables, considered typical as symptoms of culture shock "on

the basis of the researcher's interviews with, and observations of foreign children and adults in this country [USA]" (p. 50). To the extent that the purpose of the present study was to investigate the children's perception of competence in the new environment, questions related with feelings of pleasure, enjoyment and happiness were included as well.

5. a SECTION asking the childrn to indicate three things liked and disliked in their new environment. These responses were matched to the information provided by the parents.

6. a last SECTION soliciting suggestions for a friend from home coming to East Lansing. Implicitly, children's perceptions of advantages and disadvantages of living in the new environment should be revealed.

2.3.2 Parents' Questionnaire

A copy of the questionnaire for the parents is presented in Appendix E (page 133) and F (page 141) for foreign and US families respectively. The questionnaire covers the following topics:

1. INTRODUCTION - explaines the scope of the study once more to the parents.

2. PRELIMINARY QUESTIONS - to establish rapport. The topics covered deal with personal background of the family.

3. a SECTION of more systematic information about the family, and the family members' moving experience.

4. a SECTION with a series of structured questions, similar to those asked of the children. Questions related to the parents' concern with their children's ability to speak their native language, as well as future re-entry difficulties were added.

5. a SECTION soliciting suggestions for a friend from home - similar to the one asked of the children.

6. a SECTION asking about things the child does and does not like.

7. the modified Harter scale, examining parents' perceptions of their child's competence.

2.3.3 PSPCAYC

After a search of the literature for possible scales, *The Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC), as developed by Harter and Pick (1981a,b) was selected. This scale was developed for first and second graders. The decision to use

this scale was made for three characteristics of it: (a) an implicit assumption in the scale's construction that perceived competence is not a global or unitary construct, (b) because the emphasis is on the child's perception of his/her own competence, and (c) given the potential problem with fluency in English, as well as the inherently greater interest value of pictures (at the end of an already lengthy interview). Thus, this version was used with all children through the age of twelve. The PSPCAYC assesses the child's feeling of competence in four different domains: *cognitive* competence, with an emphasis on academic performance (doing well at school work, feeling good about one's classroom performance); *physical* competence, with a focus on sports and outdoor games (doing well at sports, preferring to play sports rather than merely watch others play); and, *social* competence, with regard to (a) *peer* relationships (having a lot of friends, being easy to be liked), and (b) *maternal* emotional support and acceptance (mother cooks the food child likes, mother likes to talk with the child). A sample page of the PSPCAYC is presented in Appendix H (page 152), a complete list of the items is presented in Table 5, page 42.

2.3.3.1 Reliability of the Scale

Subscale reliability was reported by Harter (1981a, p. 91) for the *Perceived Competence Scale for Children*. Working with groups of children in various parts of the US, both a coefficient *alpha*, testing internal consistency, as well as test-retest reliability were determined. "Across all samples, reliabilities [alpha] range from .75 to .83, .75 to .84, .77 to .86, and .73 to .82 for the four subscales [cognitive, social, physical and general self-worth], respectively". The test-retest reliability coefficients were .78 for the cognitive subscale, and ranged from .75 to .80, .80 to .87, and .69 to .70 for the social, physical and general self-worth subscales respectively. For the PSPCAYC Harter & Pike (1981b) report that coefficent *alpha* was determined, ranging between .46 and .79 for the four subscales. They suggest further that by combining the cognitive and physical subscales

into one competence subscale, and the peer and maternal subscales into one acceptance subscale, the reliability increases to .61 and .85 respectively. Considering that in the present study, the PSPCAYC was used with a group of foreign children, between the ages of six and twelve, the reliability tests were repeated. Cronbach's alpha and standardized alpha were computed for each of the four subscales: cognitive and physical competence, and peer and maternal acceptance. Details are presented in Appendix I (page 154). The reliability coefficients *alpha* were .80, .60, .81, and .44 for the cognitive competence, physical competence, peer acceptance and maternal acceptance scales respectively.

2.3.4 Parents' Perception of Children's Competence

Besides the PSPCAYC, there were other developments based on the original PCSC. One of these is the *Self-Report Scale of Intrinsic versus Extrinsic Orientation in the Classroom*. This scale was used as a basis for a *Parents' Perception of Children's Competence* (PPCC) scale, developed for the present study. An effort was made not to use a two-choice format (true - false) in order to avoid socially desirable responses. The scale ranges from 1 - not very much to 5 - very much. This version is composed of 14 items, as presented on page 139 (Foreign Parent Interview Schedule), and on page 147 (US Parent Interview Schedule). As may be seen, there is a large number of questions dealing with peer relationships. This was proposed as an attempt to restrict the parents' perception to the domains of their home and neighborhood. During the adaptation of this scale, ten couples responded to it in trial form. Peer relationships were considered to be the most reliable parent perception, since parents may or may not be well informed about school activities. As Harter (1982) pointed out, peer popularity seems to be "directly related to the pupil's skill in sports" (p. 95). With respect to the one item in the general self-worth domain, it was introduced as an attempt to contrast with one question in the interview, which states, "Do you ever need the help of your child(ren) in social

situations?" Considering that many times, the children's proficiency in the second language appears to precede and be superior to their parents' proficiency, this item was intended to determine if a negotiation in relation to independence occurs. Another aspect that needs to be mentioned refers to the degree of convergence/discrepancy between a child's perceived competence and an index of "actual" competence. According to Harter (1982, p. 96) this is "an interesting empirical question in and of itself". However, in neither Harter's original work nor in the present study is the issue directly addressed.

2.3.5 Structured Questions Regarding Culture Shock

Two sets of questions, one for children, the other for parents, were adapted from a Culture Shock Scale developed by Thornton (1979). Thornton defines cultural shock as "incapacitating reactions experienced upon encountering unfamiliar culture-bound situations" (p. 50). The Culture Shock scale was part of a broader questionnaire whose primary objective was "to gather information which describes the overall conditions of education of foreign children in the selected East Lansing public elementary and middle schools" (p. 6). Thornton reports that satisfactory face validity for the instrument was achieved through comments and reactions of various experts and professionals, and that the questionnaires were pilot tested. The children's version was tested with seven 9th grade and six 3rd grade foreign students of the East Lansing schools; the parents' version was tested with nine foreign students attending advanced reading classes of the English Language Center at Michigan State University. The children's version originally contained ten components focusing on feelings of loneliness, isolation, anxiety, and longing for the home country. The items were selected and accepted as referring to typical symptoms of culture shock "on the basis of the researcher's interviews with and observations of foreign children in this country" (p. 50). The reliability of this ten item scale, using Cronbach's *alpha*, was .71.

2.3.5.1 Children's Version

The adaptation of the children's version for the present study maintained the components focusing on feelings of loneliness, isolation, anxiety and longing for the home country. Because not only incapacitating reactions, but also feelings of competence were considered in the present study, the present version resulted in 18 items. For example, besides the item "Do you ever feel that you do not have any friends", the following item was added, "Do you ever feel that you have a lot of friends". Items relating to feelings during class discussions or strict classroom interactions were substituted by items related to feelings of loneliness or happiness at home, English proficiency, preference for native language versus English, and the desire to play with children from the home country. The style of the items was modified so as to fit the interview format of this study. Again, face validity of the scale was obtained through comments and reactions of experts and professionals, including the creator of the original scale, as well as through pilot testing the scale with ten foreign children. A list of the items is presented on page 117 (Foreign Child Interview Schedule), and on page 128 (US Child Interview Schedule).

2.3.5.2 Parents' Version

The original parents' version of the culture shock scale contains 12 items. The instructions differ from those of the children's version, in that adult respondents were asked if they perceive their school aged child(ren), their spouse, and themselves to experience any of the reactions for a prolonged period of time. The selection criteria and face validity were the same as in the children's version. Reliability coefficients were .788, .795. and .750 for the respondents' children, the respondents' spouse and the respondents themselves respectively. A

list of the items of the adapted version, which contains 24 items, is presented in Table 136 (Foreign Parent Interview Schedule), and on page 144 (US Parent Interview Schedule) with correspondingly less items. As in the children's version, negative and positive items were used, their style modified to fit with the interview format. Face validity was established as in the children's version; again, this scale was pilot tested with ten foreign couples.

2.3.6 Post Interview Observations

Lastly, in Appendix G (page 149) a post interview observation schedule is presented, used as soon as possible after having left the home of the family being interviewed. The last part of the post interview observation schedule lists a series of questions adapted from the *Preschool Observational Scale of Anxiety* (Glennon & Weisz, 1978), as presented on page 150. It was used to register children's expression of anxiety. Although this scale is developed as a "way of assessing situationally induced anxiety in children who are too young to accurately report their internal states" (p. 1246), it was used here because some of the foreign children may not be sufficiently fluent in English to express themselves when interviewed.

2.4 Analysis of the Data

Major independent variables considered were the five groups being compared, length of time since arrival and length of time until departure, as well as sex and age. Major dependent variables were the responses to the *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC); *Parents' Perception of Children's Competence* (PPCC), an adaptation of the *Self-Report Scale of Intrinsic versus Extrinsic Orientation* in the Classroom (Harter, 1981b); as well as to culture shock scales for children and for parents, adapted from Thornton (1979).

2.4.1 Reliability of the Scales

For the PSPCAYC, face validity was accepted as reported by Harter & Pike (1981b). Subscale reliabilities were recomputed, because a population with different characteristics was used. Since the other three scales constitued major adaptations of previously published scales, cluster and reliability analyses were undertaken, in order to determine viable subscales. These analyses are reported in the next chapter.

2.4.2 Testing of Hypotheses

Considering the fact that the total number of subjects of the study was relatively small, and, furthermore, that no random or representative sample could be taken, non-parametric statistics were used for the testing of the hypotheses. The first two hypotheses call for group comparisons, which were done with the Kruskal-Wallis one-way analysis of variance. The remaining seven hypotheses call for relationships, which were established with Spearman rank correlations.

CHAPTER 3

RESULTS

The presentation of the results is divided into six major sections. The first presents descriptive data, summarizing the characteristics of the population studied. The next four sections deal with the four scales used in this study (the competence and culture shock scales for children and parents respectively). Since three of the scales, the Parent's Perception of Childrens' Competence, as well as the two culture shock scales, were adaptations of previous versions, additional analyses were done to determine their suitability: Cluster analyses of these scales were conducted to identify meaningful subscales; reliability analyses determined the appropriateness of these subscales. In the last section, the results of the testing of the hypotheses of this study are presented.

3.1 Characteristics of the Population Studied

Table 3 presents an overview of the distribution of the respondents in terms of characteristics of their families, and table 4 presents an overview of the distribution of the respondents in terms of personal charcteristics.

Children from 47 families, and one or both of their parents participated in this study.

Table 3

Summary of Family Characteristics of Respondents

Characteristic	*Saudi*	*Japanese*	*Korean*	*Solitary*	*US*	*Total*
Number of Families	10	10	7	10	10	47
Parent Interviewed						
Father	1	4	3	1	3	12
Mother	3	4	4	7	7	25
Both	6	2	-	2	-	10
Number of Children						
1	-	2	-	3	3	8
2	3	4	3	3	4	17
3	1	4	2	3	3	13
4+	6	-	2	1	-	9
Mean Number	3.6	2.2	2.9	2.2	2.0	2.6
Arrival (# months before interview)						
less than 4	-	3	1	-	-	4
4 - 6	2	1	2	-	-	5
7 - 12	3	4	1	2	7	18
13 - 24	1	1	1	6	3	11
25 - 36	2	1	1	1	-	5
more than 36	2	-	1	-	-	4
mean # months	21.9	9.5	15.7	21.8	12.6	16.4
Planned Departure (# months after interview)						
less than 4	-	6	-	2	1	9
4 - 6	1	-	-	-	-	1
7 - 12	-	-	1	1	-	2
13 - 24	2	2	2	3	-	9
25 - 36	4	1	-	1	1	7
more than 35	3	-	2	1	-	6
mean # months	33.8	7.8	22.4	17.4	-	20.6
don't know	-	1	2	2	8	13
Occupation - Father						
Student	10	-	6	5	8	29
Post-Doc/Fac	-	9	1	4	-	14
Absent	-	1	-	1	2	4
Occupation - Mother						
Student	1	2	-	2	3	8
Post-Doc/Fac	-	1	-	1	1	3
Non Univ Work	2	-	-	1	3	6
At Home	7	7	7	6	3	30

3.1.1 Family Characteristics

Of these families, ten were from Saudi Arabia, ten from Japan, seven from Korea, ten were the sole representatives of their respective

countries (or cultural groups within the country) *with* children, and ten were US families who had recently moved to Michigan.

Discounting the four single parent families, half of the parent interviews were conducted with the mother, twelve with the father, and ten with both parents. The Saudi group constituted an exception in that more than half of the interviews were conducted with both parents.

Considering the parents' occupation, it may be noted that all fathers were either studying or working as post-doctoral fellows or faculty, while nearly two thirds (31/47) of the mothers indicated that they were staying at home. Six others indicated non-university related work. Four of the families (two from the US, one each from Japan and the solitary group) were single parent families.

Considering the length of stay in Michigan prior to the interview, it may be noted that about 20% of the respondents had arrived within the past six months, and more than half within the past year. The mean time in Michigan prior to the interview is longest for the Saudi and solitary groups (nearly two years), least for the Japanese group (less than one year).

Considering the time length of stay in Michigan after the interview, it may be noted that of those who had an idea about when they would leave, about one fourth were leaving within the next three months (one Japanese, one Korean, and one solitary family left within the week after the interview). The mean number of expected months remaining in Michigan was highest for the Saudi group (nearly another three years), the lowest for the Japanese (less than one year).

Twenty-one of the children interviewed were female, 26 were male. Among the Saudi, Japanese and US groups, more boys were interviewed; among the Korean and solitary families, more girls.

Table 4

Summary of Personal Characteristics of Respondents

Characteristic	*Saudi*	*Japanese*	*Korean*	*Solitary*	*US*	*Total*
Number of Families	10	10	7	10	10	47
Sex of Child Interviewed						
Female	3	4	5	6	3	21
Male	7	6	2	4	7	26
Age (when interviewed)						
6 years	-	3	1	1	4	9
7	2	2	1	2	2	9
8	-	1	1	2	1	5
9	2	1	3	2	1	9
10	2	1	1	-	1	5
11	3	1	-	-	-	4
12	1	1	-	3	1	6
Mean Age	9.7	8.2	8.3	9.0	7.7	8.6
Birth Order						
Oldest	6	5	6	4	6	27
Middle	3	-	-	1	-	4
Youngest	1	3	1	2	1	8
No Sibling	-	2	-	3	3	8
Age (at arrival)						
<= 4 years	-	1	-	1	-	2
5	1	-	-	-	2	3
6	2	3	4	2	2	13
7	2	1	-	1	2	6
8	-	1	-	3	1	5
9	1	1	2	1	1	6
10	1	1	1	-	1	4
11	3	1	-	2	1	7
12	-	1	-	-	-	1
Mean	7.9	7.4	7.0	7.2	6.7	7.2

3.1.2 Respondent Characteristics

As indicated in the selection criteria (cf. page 23) at the time of the interview, the children were between six and twelve years old. As shown in Table 4, the mean age is highest for the Saudi children with 9.4 years, followed by the children of the solitary families (9.0), the Koreans (8.3), Japanese (8.2) and lastly the US families, with 7.7 years. Families with between one and five children were encountered. None of the Saudi and Korean families had less than two children, none

of the the Japanese or US families had more than three. The mean number of children is 3.5 among the Saudi families interviewed, 2.9 for the Korean, 2.2 for Japanese and solitary families, and two children among the US families. Considering the birth order of the children, 27 were the oldest, four were neither the oldest nor the youngest, eight were the youngest, and eight had no siblings.

Considering the age of the children at the time of arrival in Michigan, all of the children interviewed were four years of age or older at the time of arrival. More than half were between the ages of four and seven, the mean age for the total group being 7.2 years. The Saudi children showed the highest mean age, with 7.9 years, the US children the lowest with 6.7 years.

3.2 Children's Perception of Own Competence

In the following, results of the application of the *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC) will be presented. This scale is comprised of two dimensions: general competence and social acceptance; the former includes cognitive and physical competence, the latter peer and maternal acceptance. A sample page of this scale may be found in Appendix H (page 152). As may be noted, the scale ranges from "1" - not very competent to "4" - very competent. Following the indications of the authors of the scale (Harter & Pike, 1981b), the results will be presented in two steps: (a) means are presented for each of the 24 items in Table 5, (b) items are grouped and scores for the four subscales are presented in Table 14. In each case, means are presented for all subjects, as well as broken down by cultural background.

3.2.1 Mean Item Responses by Cultural Background

A comment needs to be made regarding the cognitive competence subscale. Table 5 presents means for each of the 24 items of the PSPCAYC. Items

number two to five, involving school, reading, writing and spelling, elicited spontaneous responses on the part of some of the foreign children in the sense that they differentiated between the US school and their home school.

While some of the children who so responded did not go to school at home prior to coming to Michigan, the children of the Saudi group attend their own school besides the US public school, while in the case of the Japanese group, parents follow the Japanese curriculum at home while in the US.

As may be noted from Table 5, item means for all subjects range between 1.87 and 3.75. The means are generally higher (3.02 to 3.75) for the cognitive and physical competence, as well as the peer acceptance, than for maternal acceptance (1.87 to 3.30). The means for the cognitive competence items referring to the native environment range from 3.38 to 3.77.

3.3 Parents' Perception of Children's Competence

In the following, results of the application of the scale of ***Parental Perception of Children's Competence*** (PPCC) will be presented. As was indicated on page 31, this scale was adapted by the author from the ***Self-Report Scale of Intrinsic Versus Extrinsic Orientation in the Classroom*** (Harter, 1981b). Considering that this new parents' scale lacks any indication as to structure and reliability, a cluster analysis as well as a reliability analysis were conducted.

3.3.1 Mean Item Responses by Cultural Background

Item means are presented in Table 6 for all subjects, as well as broken down by cultural background. Furthermore, the Kruskal-Wallis [5] one-way analysis of variance was used to compare the groups. The items are presented in the order suggested by the cluster analysis below. The

Table 5

The PSPCAYC: *Mean Item Responses by Cultural Group*

	Saudi	*Japanese*	*Korean*	*Solitary*	*USA*	*Total*
Cognitive Competence						
Good with Numbers	3.80	3.10	3.29	3.40	3.40	3.40
Knows things at school	3.60	3.10	3.00	3.30	3.50	3.32
Knows things at school (FR)	3.75 (8)	3.67 (6)	4.00 (3)	--	--	3.77
Reading by her/himself	3.50	2.80	3.43	3.10	3.50	3.21
Reading by her/himself (FR)	3.60 (10)	3.78 (9)	4.00 (3)	3.75 (4)	--	3.73
Writing words	3.80	2.80	3.14	3.30	3.40	3.30
Writing words (FR)	3.40 (10)	3.44 (9)	4.00 (3)	3.25 (4)	--	3.46
Spelling words	3.70	2.60	3.43	3.20	3.30	3.23
Spelling words (FR)	3.38 (8)	3.29 (7)	4.00 (3)	3.00 (3)	--	3.38
Adding Numbers	4.00	3.80	3.60	3.50	3.40	3.67
Physical Competence						
Swinging by her/himself	3.70	3.70	3.71	3.70	3.90	3.75
Climbing	4.00	3.70	3.86	3.60	3.60	3.75
Bouncing the ball	3.70	3.50	3.43	3.60	3.40	3.53
Skipping	3.60	3.70	3.43	3.90	3.70	3.68
Run fast	3.70	3.10	3.29	3.50	3.10	3.34
Jump rope	3.30	3.50	3.42	3.20	3.10	3.30
Social Competence - Peer Relations						
Friends to play	3.90	3.60	3.14	4.00	3.30	3.40
Kids share toys with respondent	3.60	3.80	3.29	3.10	3.40	3.45
Friends to play games with	3.90	3.60	3.43	3.20	3.40	3.50
Friends on the playground	4.00	3.60	3.14	3.10	3.40	3.47
Gets asked to play with other kids	3.50	2.30	2.86	2.50	2.90	3.02
Kids want to sit next to respondent	3.60	3.00	3.29	2.80	2.60	3.04
Social Competence - Maternal Acceptance						
M. allows respondent to eat dinner at friends house	2.30	2.30	2.29	2.40	2.00	2.26
M. takes respondent to places liked	3.50	2.50	3.00	3.20	3.10	3.06
M. cooks preferred food	3.40	2.80	3.14	2.90	2.90	3.02
M. reads to respondent	2.50	1.70	1.71	2.33	2.10	2.09
M. allows respondent to stay overnight at friends house	1.67	2.30	1.43	1.60	2.20	1.87
M. talks with respondent	3.80	3.00	3.29	2.90	3.50	3.30

item response scale ranged from "1 - not very much" to "5 - very much".

[5] The Kruskal-Wallis one way analysis of variance is a non-parametric test, based on the rank order of the individual subject scores. Unless otherwise noted, all group comparisons are computed with this statistic.

In general, no significant differences were found between the groups on the items of the scale. However, with respect to item PH13 a significant difference was found in the sense that parents of Korean and solitary children agreed less often that "my child's friends are mostly from our own country".

3.3.2 Cluster Analysis of the Scale

Considering the limited number of subjects (n = 47), as well as the theoretical assumptions underlying a factor analysis, it was decided to use the cluster analysis to determine the internal structure of the

Table 6

PPCC: *Mean Item Responses by Cultural Group*

		Saudi	*Japanese*	*Korean*	*Solitary*	*USA*	*Total*
My child seems to like living in East Lansing	PH01	4.22	4.80	4.71	4.80	4.30	4.57
My child seems to like school	PH02	4.60	4.50	4.43	5.00	4.20	4.55
My child likes to do school work	PH03	4.10	3.60	4.43	4.00	3.60	3.92
My child likes new activities	PH12	4.80	4.20	4.57	4.10	4.60	4.45
My child's friends have mostly a different natinality	PH05	4.20	3.11	3.43	4.60	3.30	3.76
My child likes sports	PH10	4.30	4.50	4.71	4.60	4.30	4.47
My child prefers to figure out problems on herhis own	PH04	4.20	3.90	3.43	3.90	3.40	3.79
My child enjoys being with friends	PH08	4.90	4.10	4.57	4.80	4.60	4.60
My child prefers to play in sports, rather than watch	PH14	4.00	4.20	4.29	4.50	4.60	4.32
My child relies on others for help and guidance	PH06	2.80	2.80	3.57	3.00	3.00	3.00
My child has difficulties in making friends	PH07	1.10	2.60	1.71	2.00	2.10	1.92
My child prefers to play alone	PH11	1.20	1.70	1.43	1.40	1.90	1.53
My child prefers to watch, rather than play in sports	PH09	2.50	2.10	2.00	1.90	1.60	2.02
My child's friends are mostly from our own country	PH13	2.70	3.60	2.43	1.30	2.90	2.60

1 = not very much --- 5 = very much

scale. The BMDP1M cluster analysis of variables program (Dixon & Brown, 1979) was used to analyze the data. This analysis is based on a measure of similarity or association between the variables. In the present analysis, the actual value of the correlation is used to this end, while the maximum distance method was used to form the clusters. The results of the analysis of the *Parents' Perceptions of Children's Competence* scale are presented in Figure 2 .

The numbers in the cluster diagram represent the recoded measures of similarity, i.e. values of the correlation [6]. "The first number in each line is the measure of similarity of the variable to the left of the line with the one immediately below it, the second is with the second variable below it, etc." (Dixon & Brown, 1979, p. 627). A formal cluster is determined on the basis of the similarity of any two clusters of variables. "Initially, each variable is considered a cluster comprised of one variable. At each [subsequent] step, the two most similar clusters are joined to form a new cluster, until a single cluster is obtained that contains all the variables" (Dixon & Brown, 1979, p. 623). The clusters are demarkated by horizontal and diagonal lines.

The following clusters are suggested by the results of the analysis:

Cluster 1 is comprised of items PH01 (child seems to like living in East Lansing) and PH02 (seems to like school).

Cluster 2 is formed by items PH03 (likes to do school work) and PH12 (likes new activities).

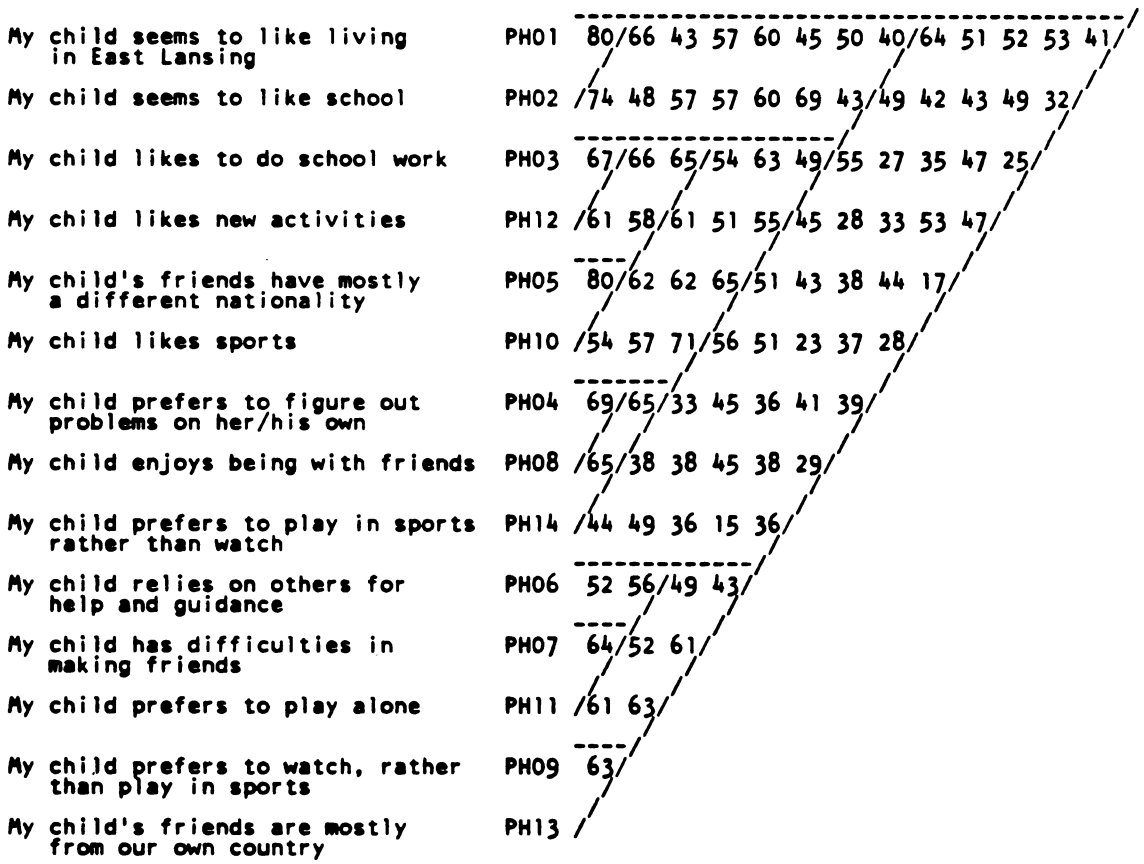
Cluster 3 includes items PH05 (friends have mostly a different nationality) and PH10 (likes sports).

Cluster 4 involves items PH04 (prefers to figure out problems on her/his

[6] For reasons of space, see Figure 4, page 62 , for the scaling of the correlation values.

Figure 2

PPCC: *Variable Cluster Analysis*



Note: Tree printed over correlation matrix (scaled 0 - 100). Clustering is by maximum distance method.

own) and PH08 (enjoys being with friends).

Cluster 5 adds item PH14 (prefers to play in sports rather than watch) to cluster 4 above.

Cluster 6 consists of items PH07 (has difficulties making friends) and PH11 (prefers to play alone).

Cluster 7 adds item PH06 (relies on others for help and guidance) to cluster 6 above.

Cluster 8 is formed by items PH09 (prefers to watch sports, rather than play) and PH13 (friends are mostly from own country).

Besides these eight "elementary" clusters, the results of the cluster analysis suggest additional, larger clusters, formed by the elementary ones:

Cluster 9 formed by cluster 2 and 3.

Cluster 10 formed by cluster 9 and cluster 5.

Cluster 11 based on clusters 7 and 8.

3.3.3 Reliability of the Sub-Scales

The results of the cluster analysis of the scale *Parents' Perception of Children's Competence* present a division into some eight 'elementary' clusters, which may be combined such that the division may be reduced to three distinct, major clusters. Each of these major clusters defined a subscale of the *Parents' Perception of Children's Competence*.

The strategy for testing the reliability of the subscales suggested by the cluster analysis is as follows: Initially, all the items in the major clusters are considered to be a subscale, whose reliability is tested. Next, the items of the minor clusters that compose a major cluster are considered to be a subscale and are tested for reliability. The objective is to find the largest number of items, i.e. the largest cluster, that makes up reliable subscale. A summary of the results is presented in table 7, complete results are in Appendix K (page 163).

3.3.3.1 Perception of General Adaptation

The first of the three clusters, number 1, consists of two items: PH01 - child seems to like living in East Lansing and PH02 - child seems to like school. Therefore, only the correlation coefficient between these two items is considered. As may be noted from Appendix J-1 (page 160), the coefficient is $r = .61$ ($n = 37$, $p < .01$). On the basis of these cluster and reliability analyses of the *Parent's Perception of Children's Competence*, scale, the following subscale, *General Adaptation*, is accepted:

1. PH01 - seems to like living in East Lansing
2. PH02 - seems to like school

3.3.3.2 Perception of Social Competence

The second of the three clusters, number 10, consists of seven items; the reliability coefficient alpha is .69. As the item-total statistics suggest, six of the items contribute positively to a scale suggested by cluster 10, while one of the items (PH12 - child enjoys new activities) does not add to the overall scale (i.e., the reliability coefficient would *increase* slightly to .69 if the item were deleted). As the cluster analysis indicated, cluster 10 is composed of two clusters, 5 (consisting of three items) and 9 (consisting of four items). Separate reliability analyses indicate a reliability coefficient alpha = .62 and .65 respectively. All three items contribute positively to cluster 5, while item PH12 distracts from cluster 9 (deleting the item would increase the reliability coefficient to .67). On the basis of these reliability analyses, this second subscale, *Social Competence*, is formed by the following items:

1. PH03 - likes to do school work
2. PH05 - friends have mostly a different nationality

3. PH10 - likes sports
4. PH04 - likes to figure out problems on her/his own
5. PH08 - enjoys being with friends
6. PH14 - prefers to play in sports rather than watch

As suggested by the reliability analysis, item PH12 (child likes new activities) was excluded from this subscale, as it does not contribute to its reliability, nor does it add to it conceptually. Furthermore, rather than dividing these six items into two subscales, they are kept together, because, on the one hand, the overall reliability for the six items is better than the reliabilities for the two scales, and, on the other hand, there appears no conceptual justification to separate the items. As may be noted, the six items in this second subscale relate to three domains pointed out by Harter: cognitive, physical and social. As they do not form different subscales, it leads to the same problem pointed out by Harter (1981a, p. 4) with respect to the PSPCAYC, where Harter's own conceptualization of domains was not confirmed.

3.3.3.3 Perception of Peer Acceptance

The third cluster, number 11, consists of five items; the reliability coefficient is .44. While four of the five items in the scale contribute positively to the reliability, deleting item PH06 (relies on others for help and guidance) would increase the reliability to .50. Considering only cluster 7, which contains a subset of three items of cluster 11, a reliability of .362 may be observed; again, deleting item PH06 would increase the reliability of the scale with the remaining items. Based on these reliability analyses, the third subscale, *Peer Acceptance*, is formed as follows:

1. PH07 - has difficulty making friends
2. PH11 - prefers to play alone
3. PH09 - prefers to watch, rather than play in sports
4. PH13 - friends are mostly from our own country

Table 7

PPCC: *Summary of Reliability Analyses*

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
Reliability Analysis for Scale (CLUSTER 10)					
PH03	25.639	15.837	.321	.253	.676
PH12	25.250	16.936	.260	.192	.688
PH05	25.806	12.047	.565	.431	.601
PH10	25.167	14.657	.529	.473	.622
PH04	25.806	16.161	.386	.288	.660
PH08	25.056	16.397	.343	.295	.670
PH14	25.444	14.540	.404	.338	.655
ALPHA = .68975	STANDARDIZED ITEM ALPHA = .68546				
Reliability Analysis for Scale (CLUSTER 09)					
PH03	12.861	6.409	.405	.173	.594
PH12	12.472	7.513	.280	.105	.665
PH05	13.028	4.428	.542	.394	.496
PH10	12.389	6.130	.527	.373	.519
ALPHA = .64737	STANDARDIZED ITEM ALPHA = .64490				
Reliability Analysis for Scale (CLUSTER 05)					
PH04	8.889	2.959	.441	.210	.473
PH08	8.139	2.923	.442	.212	.469
PH14	8.528	2.256	.383	.147	.585
ALPHA = .60271	STANDARDIZED ITEM ALPHA = .62036				
Reliability Analysis for Scale (CLUSTER 11)					
PH06	7.946	10.219	-.013	.050	.496
PH07	9.081	8.465	.236	.114	.307
PH11	9.514	9.312	.414	.176	.252
PH09	8.811	8.102	.213	.103	.325
PH13	8.432	7.530	.258	.168	.282
ALPHA = .39012	STANDARDIZED ITEM ALPHA = .44145				
Reliability Analysis for Scale (CLUSTER 07)					
PH06	3.297	2.770	.102	.019	.408
PH07	4.432	2.586	.179	.084	.215
PH11	4.865	3.509	.294	.099	.095
ALPHA = .30657	STANDARDIZED ITEM ALPHA = .36249				

As suggested by the reliability analysis, item PH06 was not included, since it detracts from the reliability of the subscale, as well as from the conceptualization of the scale. This subscale may be seen as a

complement to the *Peer* Acceptance subscale of the PSPCAYC.

3.4 Culture Shock in Children

In the following, results of the application of the structured questions regarding culture shock in children will be presented. As was indicated on page 33, this scale was adapted by the author from Thornton's Culture Shock Scale (1979). Again, since this new version lacks any indication as to structure and reliability, both cluster and reliability analyses were performed.

3.4.1 Mean Item Responses by Cultural Group

Item means are presented in Table 8 for all subjects, as well as broken down by cultural background. Furthermore, the Kruskal-Wallis one-way analysis of variance was used to compare the groups. The items are presented in the order suggested by the cluster analysis below. The scale ranges from "1 - all the time" to "3 - never". In general, there are no significant differences between the groups with respect to the structured questions regarding culture shock in children. However, with respect to three items, significant differences were observed: C69 - Saudi and solitary children indicated significantly less that they disliked being spoken to in English than Japanese or Korean children. C72 - Likewise, Saudi and solitary children indicated significantly more often that they liked to speak English. And, C84 - solitary and US children indicated significantly more often that they felt lonely while in school.

3.4.2 Cluster Analysis of the Scale

In order to analyze the children's culture shock scale, the same BMDP1M procedure as described in the previous section, was used. The results

Table 8

Culture Shock in Children: *Mean Item Responses by Cultural Group*

		Saudi	*Japanese*	*Korean*	*Solitary*	*USA*	*Total*
Do you (ever) ...							
..feel that you have a lot of friends	C67	1.30	1.50	1.71	1.80	1.50	1.55
..like to speak -- rather than English	C80	2.00	1.90	1.86	2.40	--	2.05
..dislike going out without your family	C74	1.60	2.10	1.86	2.40	2.10	2.02
..feel happy at home	C70	1.70	1.60	1.29	1.40	1.20	1.45
..want to play only with children from --	C73	2.50	2.60	2.14	2.50	2.33	2.43
..miss your friends from --	C77	1.33	2.00	1.86	1.70	1.50	1.67
..want to go back to --	C79	1.60	2.00	2.00	1.70	2.10	1.87
..enjoy going out without your family	C68	2.70	2.30	2.14	2.30	2.20	2.34
..think will miss American friends when home	C71	1.90	1.56	1.71	1.80	--	1.75
..enjoy to speak English	C72	1.20	1.80	1.57	1.10	--	1.41
..enjoy people speaking to you in English	C76	1.30	1.50	1.71	1.20	--	1.41
..feel happy in school	C75	1.10	1.30	1.43	1.20	1.30	1.26
..dislike people speaking to you in English	C69	2.80	2.30	2.14	2.90	--	2.56
..feel lonely while at home here in USA	C81	2.70	2.50	2.86	2.70	2.22	2.59
..want to play only with American children	C78	2.40	1.75	2.43	2.20	--	2.20
..miss food from ---	C82	2.70	2.00	2.14	2.20	2.30	2.28
..feel have no friends	C83	2.70	2.60	3.00	2.50	2.70	2.68
..feel lonely while in school	C84	3.00	2.90	2.71	2.40	2.40	2.68

1 = all the time --- 2 = some of the time --- 3 = never

are presented in Figure 3 . The following clusters were generated from the items of this questionnaire:

Cluster 1 is formed by items C67 (feels to have a lot of friends) and C80 (prefers to speak native language).

Cluster 2 adds item C74 (dislikes going out without the family) to cluster 1.

Cluster 3 consists of items C70 (feels happy at home) and C73 (want to play only with children from home country)

Cluster 4 composed of items C77 (misses friends from home country) and C79 (wants to go back home).

Cluster 5 comprised of items C68 (enjoys going out without the family) and C71 (thinks will miss American friends after return).

Cluster 6 is formed by items C72 (enjoys speaking English) and C76 (enjoys being spoken to in English).

Cluster 7 adds item C75 (feels happy in school) to cluster 6.

Cluster 8 consists of items C69 (dislikes being spoken to in English) and C81 (feels lonely while at home here in the USA).

Cluster 9 consists of items C78 (wants to play only with American children) and C82 (misses food from home).

Cluster 10 is formed by items C83 (feels to have no friends) and C84 (feels lonely while in school).

Besides these elementary clusters, the following expansions are suggested by the results presented in Figure 3 :

Cluster 11 joins clusters 2 and 3.

Cluster 12 adds cluster 4 to cluster 11.

Cluster 13 is formed by clusters 5 and 7.

Cluster 14 consists of clusters 8 and 9.

Cluster 15 adds cluster 10 to cluster 14.

3.4.3 Reliability of the Sub-Scales

The results of the cluster analysis of the structured questions regarding culture shock in children suggest a division into some ten 'elementary' clusters, which may be combined such that the division may be reduced to three distinct, major clusters (numbers 12,13, and 15 above). Using the same strategy as presented above (page 46), reliability analyses were undertaken with the items in the clusters, in order to determine their significance. A summary of the results are presented in tables 9 and 10; complete results are reported in Appendix L (page 167).

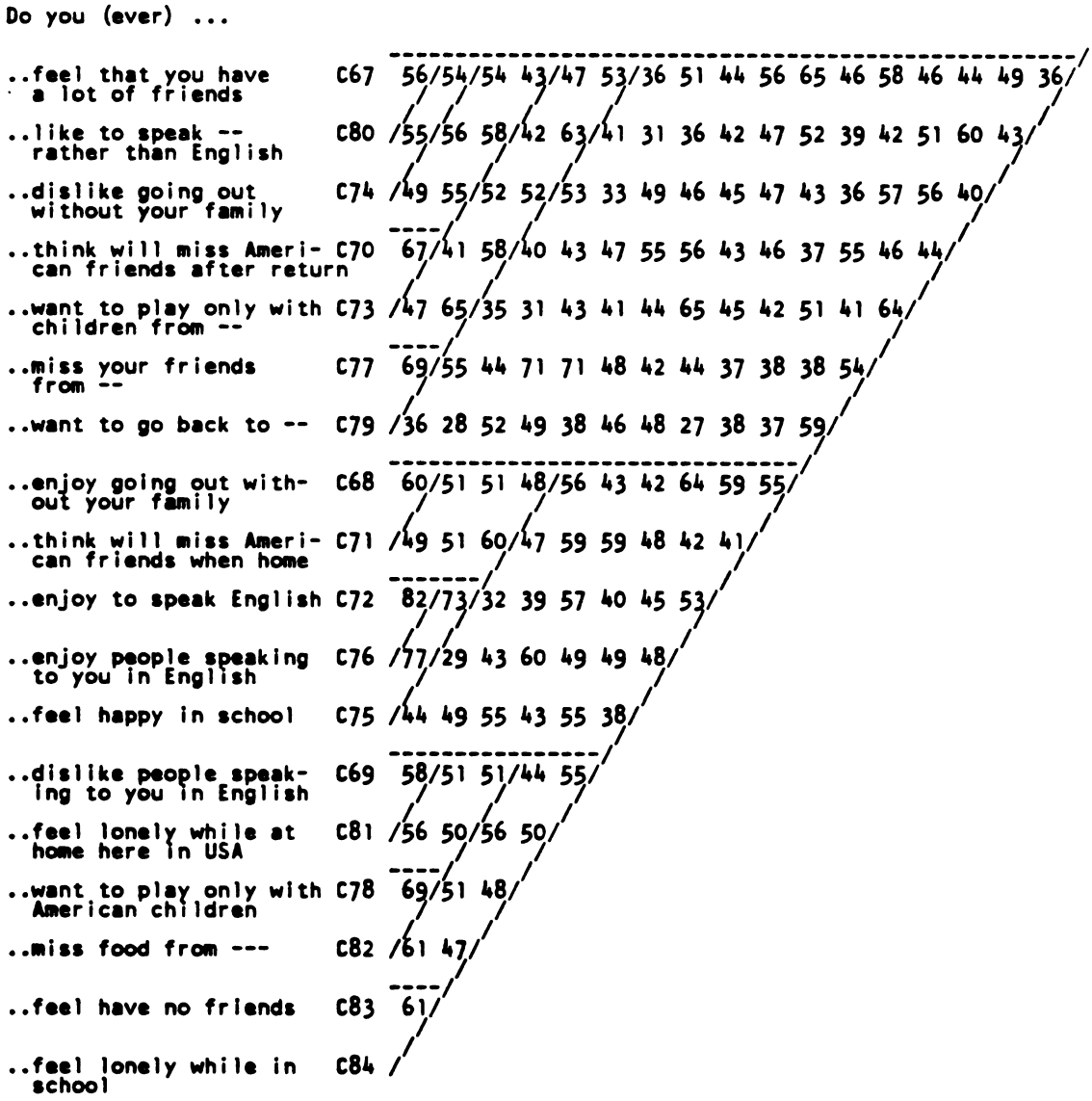
3.4.3.1 Linkage to Own Cultural Group

The first of the three clusters, number 12 above, consists of seven items; the reliability coefficient alpha is .46. While five of the items contribute positively to the scale suggested by the cluster, the deletion of two items would increase the reliability of the scale: (a) deleting item C67 (feels to have a lot of friends) would increase the reliability to .49; (b) deleting item C77 (misses friends from home) would increase the index to .50. Considering only cluster 11, a subset of 5 items of cluster 12, indicates a reliability of .44; deleting item C67 would increase the reliability to .49. Considering only cluster 02, a subset of three items of cluster 11, indicates a reliability of .31, with all three items contributing positively to the scale. On the basis of the cluster and reliability analyses, the first subscale of the Child Culture Shock scale, *Linkage to Own Cultural Group*, is formed as follows:

1. C80 - prefer to speak native language

Figure 3

Culture Shock in Children: *Variable Cluster Analysis*



Note: Tree printed over correlation matrix (scaled 0 - 100). Clustering is by maximum distance method.

2. C74 - dislike going out without own family

3. C70 - feel happy at home
4. C73 - want to play only with children from same country
5. C77 - miss friends from home
6. C79 - want to go back to home country

As suggested by the reliability analysis, item C67 (feel to have a lot of friends) was excluded from this subscale, as it distracts form the reliability, and since it does not add conceptually.

Table 9

Culture Shock in Children: *Summary of Reliability Analyses: Cluster 12*

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
Reliability Analysis for Scale (CLUSTER 12)					
C67	11.645	5.370	.017	.056	.487
C80	11.194	4.828	.208	.126	.411
C74	11.226	4.247	.218	.079	.408
C70	11.742	4.798	.222	.232	.405
C73	10.839	4.340	.359	.308	.338
C77	11.484	4.925	.042	.312	.504
C79	11.419	4.052	.460	.382	.283
ALPHA = .44832		STANDARDIZED ITEM ALPHA = .46211			
Reliability Analysis for Scale (CLUSTER 11)					
C67	8.032	3.166	.073	.038	.489
C80	7.581	2.785	.249	.088	.382
C74	7.613	2.245	.264	.073	.373
C70	8.129	2.716	.289	.187	.356
C73	7.226	2.581	.311	.236	.336
ALPHA = .44570		STANDARDIZED ITEM ALPHA = .44443			
Reliability Analysis for Scale (CLUSTER 02)					
C67	4.097	1.357	.147	.024	.288
C80	3.645	1.303	.172	.033	.244
C74	3.677	.826	.223	.050	.125
ALPHA = .31326		STANDARDIZED ITEM ALPHA = .31096			

3.4.3.2 Linkage to New Environment

The second cluster, number 13, includes five items, and presents a reliability of .60. All items contribute positively to the overall reliability. Considering only cluster 7, a subset of three items of cluster 13, presents a reliability of .82, again, all items contribute positively to the overall reliability. Accordingly, this subset was accepted as the second subscale, ***Linkage to New Environment***, as follows:

1. C72 - enjoy to speak English
2. C76 - enjoy being spoken to in English
3. C75 - feel happy in school

3.4.3.3 Need for Companionship

The third major cluster, number 15, consists of six items, presenting a reliability of .37. Five of the items of this cluster contribute positively to the overall reliability, while the deletion of one item (C69: dislikes being spoken to in English) would increase the reliability to .405. Considering only cluster 14, a subset of three items of cluster 15, reveals a reliability of .31; again, deleting item C69 would increase the reliability of this subset to .42. This third subscale, ***Need for Companionship***, consists of the following five items:

1. C81 - feel lonely while at home in USA
2. C78 - want to play only with US children
3. C82 - miss food from native country
4. C83 - feel to have no friends
5. C84 - feel lonely while in school

As suggested by the reliability analysis, item C69 was excluded, since it contributes neither statistically, nor conceptually.

Table 10

Culture Shock in Children:
Summary of Reliability Analyses: Clusters 13 and 15

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
Reliability Analysis for Scale (CLUSTER 13)					
C68	5.750	2.307	.123	.072	.601
C71	6.389	2.130	.174	.108	.579
C72	6.778	2.063	.436	.470	.399
C76	6.750	2.136	.455	.483	.399
C75	6.889	2.216	.481	.462	.402
ALPHA = .53371		STANDARDIZED ITEM ALPHA = .60200			
Reliability Analysis of Scale (CLUSTER 07)					
C72	2.639	.694	.676	.459	.741
C76	2.611	.759	.693	.480	.715
C75	2.750	.879	.642	.414	.773
ALPHA = .81399		STANDARDIZED ITEM ALPHA = .81709			
Reliability Analysis of Scale (CLUSTER 15)					
C69	12.629	2.476	.061	.038	.405
C81	12.543	2.432	.159	.056	.346
C78	13.029	2.087	.219	.159	.304
C82	12.914	1.845	.270	.182	.258
C83	12.543	2.255	.221	.138	.308
C84	12.486	2.434	.126	.087	.364
ALPHA = .37718		STANDARDIZED ITEM ALPHA = .37015			
Reliability Analysis of Scale (CLUSTER 14)					
C69	7.200	1.576	.034	.007	.417
C81	7.114	1.575	.112	.019	.336
C78	7.600	1.129	.298	.153	.114
C82	7.486	1.022	.270	.142	.138
ALPHA = .33566		STANDARDIZED ITEM ALPHA = .31329			

3.5 Culture Shock in Parents

In the following, results of the application of the structured questions regarding culture shock in parents will be presented. As was the case for the structured questions regarding culture shock for children, the

parents' scale was also adapted from Thornton's (1979) Culture Shock Scale, as mentioned on page 33.

3.5.1 Mean Item Responses by Cultural Background

Item means are presented in Table 11 for all subjects, as well as broken down by cultural background. The scale ranged from "1 - all the time" to "5 - never". As may be noted, in general there are no significant difference between the groups, with the exception of the following five items: P20 - Saudi and Japanese parents indicate significantly more often to feel that they have a lot of friends. P28 - Saudi and Japanese parents indicate significantly more often to feel happy at home. P27 - Saudi and Japanese parents indicate significantly more often to want more American friends. P22 - Japanese and American parents indicate signficantly more often not to miss family and friends from home. P35 - Japanese and American parents indicate significantly more often not to wish to return.

3.5.2 Cluster Analysis of the Scale

In order to analyze the parents' culture shock scale, the same BMDP1M procedure, as described above, was used. The results are presented in Figure 4. The results of the cluster analysis suggest the following internal structure of the scale:

Cluster 1 is comprised of items P28 (feels happy at home) and P40 (feels uncomfortable while attending class).

Cluster 2 adds item P20 (feels to have a lot of friends) to cluster 1.

Cluster 3 is formed of items P33 (likes to speak English) and P38 (likes being spoken to in English)

Cluster 4 consists of items P25 (prefers to speak native language) and

Table 11

Culture Shock in Parents: *Mean Item Responses by Cultural Group*

Do you (ever) ...		*Saudi*	*Japanese*	*Korean*	*Solitary*	*USA*	*Total*
..feel that you have a lot of friends	P20	1.50	1.50	2.43	3.30	2.90	2.32
..feel happy at home	P28	1.50	1.20	2.29	1.80	2.20	1.77
..feel uncomfortable while attending class	P40	3.67	3.20	4.00	4.00	4.30	3.81
..like to speak English	P33	1.60	1.90	1.86	1.80	--	1.78
..like for people to speak to you in English	P38	2.10	1.90	1.57	1.80	--	1.87
..like to speak --- rather than English at home	P25	2.00	2.30	1.29	1.60	--	1.84
..concerned about your child(ren)'s ability to speak ---	P26	2.40	3.30	2.29	3.00	--	2.78
..think about missing US food after your return home	P37	4.50	3.60	3.57	4.10	--	3.97
..enjoy going shopping without your family	P21	3.33	2.40	3.44	3.70	3.10	3.17
Are you ever unable to relax in the company of Americans/Michiganders	P30	4.00	3.20	3.71	3.30	3.90	3.62
..dislike people speaking to you in English	P23	4.20	3.80	4.43	4.50	--	4.22
..want to have more American/ Michigan friends	P27	1.70	2.10	3.14	3.10	3.11	2.59
..miss the food from ---	P29	4.00	2.80	4.29	3.70	4.30	3.79
..miss your family and friends in ---	P22	1.60	3.50	2.00	2.10	2.80	2.43
..dislike going shopping without your family	P32	3.38	3.90	4.00	2.80	4.30	3.67
..proud of your child(ren)'s progress in English	P31	1.60	2.10	1.43	1.20	--	1.60
..wish to go back to ---	P35	2.10	3.40	1.29	1.30	3.50	2.38
..feel confined in your home here in the USA	P24	3.00	3.80	2.14	2.70	3.50	3.09
Are you ever unable to relax in company of compatriots	P39	4.10	4.00	3.00	3.90	--	3.83
..embarrassed when asking your child(ren)'s help in social situations	P42	4.56	3.86	2.60	4.43	--	4.00
..concerned that child(ren) will have difficulty after returning to ---	P43	3.44	2.56	1.57	2.80	--	2.66
..feel that you do not have any friends	P34	4.10	4.40	3.29	3.60	4.40	4.00
..need the help of child(ren) in social situations	P36	2.50	3.78	3.14	3.20	--	3.14
..feel uncomfortable speaking --- in front of Americans	P41	3.89	3.56	2.71	3.11	--	3.35

1 = all the time --- 5 = never

P26 (concerned about child's ability to speak native language).

Cluster 5 adds item P37 (thinks will miss US food after return)

Cluster 6 is formed of items P21 (enjoys going shopping without family) and P30 (unable to relax in the company of Americans)

Cluster 7 consists of items P27 (wants to have more American friends) and P29 (misses food from home)

Cluster 8 adds item P23 (dislikes being spoken to in English) to cluster 7.

Cluster 9 is formed of items P22 (misses family and friends from home) and P32 (dislikes going shopping without the family).

Cluster 10 is formed by items P31 (proud of child's progress in English) and P35 (wishes to go back home)

Cluster 11 consists of items P24 (feels confined in home in USA) and P39 (unable to relax in the company of others from home country).

Cluster 12 formed by items P42 (embarrassed when asking child's help) and P43 (concerned that child will have difficulty after return home)

Cluster 13 consists of items P34 (feels not to have friends) and P36 (needs help of child in social situations).

Cluster 14 adds item P41 (feels uncomfortable speaking native language in front of Americans) to cluster 13.

Some of these elementary clusters may be combined as follows:

Cluster 15 is formed of Clusters 2 and 3.

Cluster 16 adds cluster 5 to cluster 15.

Cluster 17 joins clusters 6 and 8.

Cluster 18 is composed of clusters 9 and 10.

Cluster 19 joins clusters 11 and 12.

Cluster 20 adds cluster 14 to cluster 19.

3.5.3 Reliability of the Sub-Scales

The results of the cluster analysis of the structured questions regarding culture shock in parents suggest a division into at least five distinct, major clusters. Four of these clusters are composed of several 'elementary' clusters. Using the same strategy as presented above (page 46), reliability analyses were undertaken with the items in the clusters. A summary of the results is presented in tables 12 and 13; complete results may be found in Appendix M (page 173). The first of the five clusters, number 1, consists of two

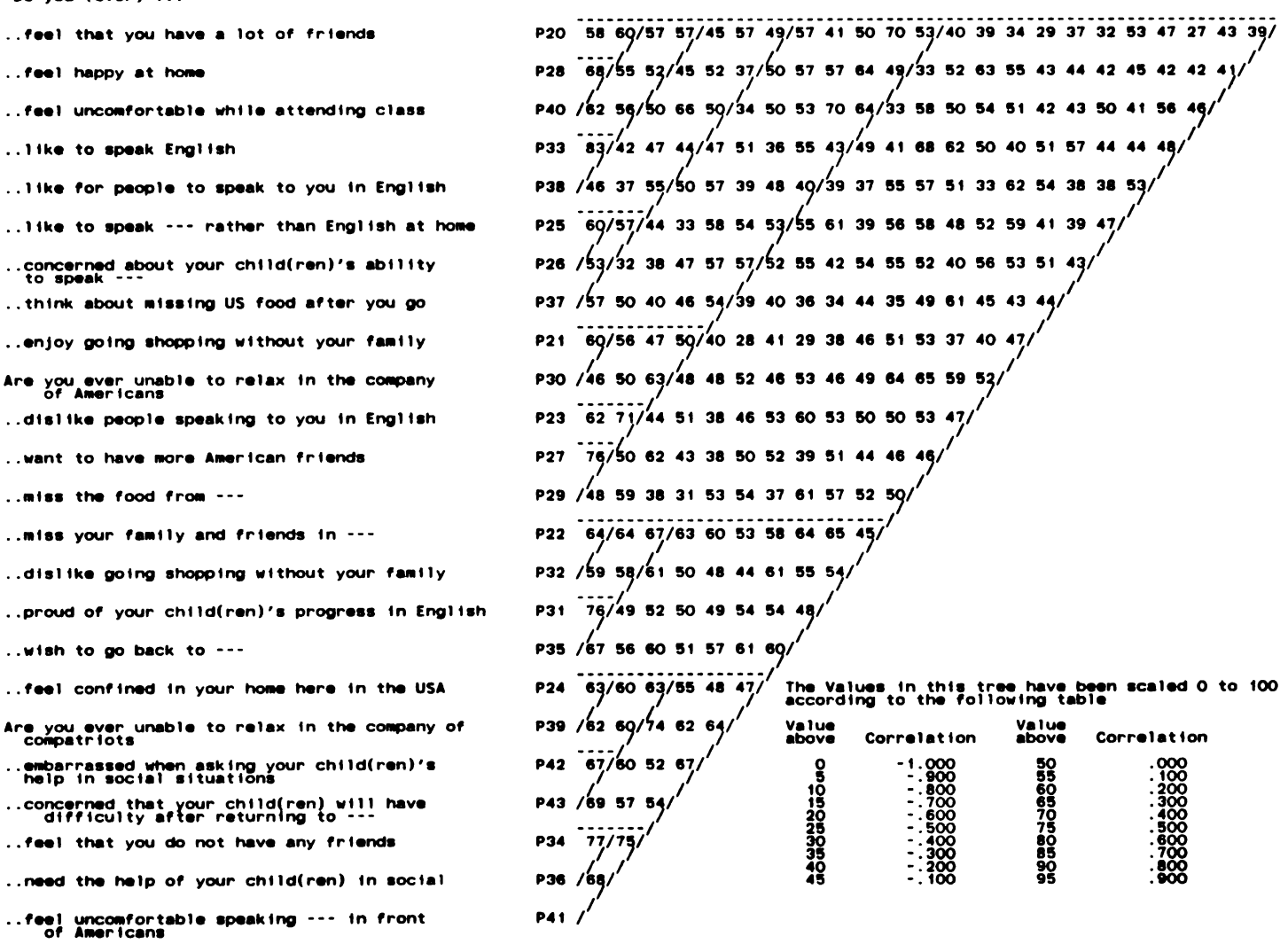
3.5.3.1 Acculturation

items: P28 (feels happy at home) and P40 (feels uncomfortable while attending class), therefore, only the correlation coefficient between these two items is considered. As may be noted from Appendix J-3 (page 162), the coefficient is $r = .36$ ($n = 37$, ns). On the basis of the cluster and reliability analyses, the first subscale, *Acculturation*, of the Parent Culture Shock scale is formed as follows:

1. P28 - feel happy at home
2. P40 - feel uncomfortable while attending class
3. P33 - like to speak English
4. P38 - like to be spoken to in English

As suggested by the reliabilty analysis, item P20 (feel that you have a lot of friends) is excluded, since it contributes neither statistically nor conceptually.

Figure 4: Variable Cluster Analysis of Structured Questions Regarding Culture Shock for Parents



The Values in this tree have been scaled 0 to 100 according to the following table

Value above	Correlation	Value above	Correlation
0	-1.000	50	.000
5	-.900	55	.100
10	-.800	60	.200
15	-.700	65	.300
20	-.600	70	.400
25	-.500	75	.500
30	-.400	80	.600
35	-.300	85	.700
40	-.200	90	.800
45	-.100	95	.900

Note: Tree printed over correlationmatrix (scaled 0 - 100). Clustering is by maximum distance method.

3.5.3.2 Adjustment Level

The second of the five clusters, number 16, consists of eight items, with a reliability coefficient of .43. All but one item, P37 (thinks will miss US food) contribute positively to the scale suggested by this cluster. Deleting item P37 would increase the reliability of the remaining seven item scale to .46. Considering, finally, cluster 5, a three item subset of cluster 16, provides a reliability coefficient of .26; deleting item P37 would increase the reliability to .36. Considering only cluster 15, which is a five item subset of cluster 16, provides a reliability coefficient of .64. Furthermore, deleting item P20 (feels to have many friends) would increase the reliability coefficient to .65. Considering only cluster 2, a three item subset of cluster 15, leads to a reliability of .44; again, deleting item P20 would increase the reliability of the remaining items, to .54. This second subscale, *Adjustment*, is based on cluster 17 and is composed of the following four items:

1. P30 - unable to relax in the company of Americans
2. P23 - dislike to be spoken to in English
3. P27 - want to have more American friends
4. P29 - miss the food from home

As suggested by the reliability analysis, item P21 (enjoy going shopping without your family), is excluded, since it contributes neither statistically nor conceptually.

3.5.3.3 Linkage to Own Cultural Group

The third of the five major clusters, number 17, consists of five items, with a reliability coefficient of .52. Deleting one of the items, P21 (enjoys going out without family), improves the reliability of the

Table 12

Culture Shock in Parents:
Summary of Reliability Analyses: Clusters 16 and 17

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
Reliability Analysis of Scale (CLUSTER 16)					
P20	17.290	14.213	.165	.143	.364
P28	17.742	15.998	.081	.360	.395
P40	15.581	11.985	.472	.392	.206
P33	17.419	13.785	.380	.529	.285
P38	17.387	13.778	.240	.518	.328
P25	17.387	15.712	.039	.116	.416
P26	16.516	12.591	.128	.339	.404
P37	15.258	16.265	-.053	.173	.463
ALPHA = .39497	STANDARDIZED ITEM ALPHA = .42593				
Reliability Analysis for Scale (CLUSTER 15)					
P20	8.774	8.181	.237	.092	.649
P28	9.226	8.981	.337	.198	.591
P40	7.065	7.596	.359	.214	.581
P33	8.903	7.490	.595	.495	.474
P38	8.871	7.249	.432	.449	.539
ALPHA = .62297	STANDARDIZED ITEM ALPHA = .64161				
Reliability Analysis for Scale (CLUSTER 02)					
P20	5.129	2.783	.153	.040	.543
P28	5.581	3.385	.274	.160	.327
P40	3.419	2.185	.378	.191	.059
ALPHA = .42326	STANDARDIZED ITEM ALPHA = .44149				
Reliability Analysis for Scale (CLUSTER 05)					
P25	6.677	4.426	.243	.065	-.009
P26	5.806	2.761	.153	.060	.137
P37	4.548	5.056	.032	.006	.357
ALPHA = .24176	STANDARDIZED ITEM ALPHA = .25903				
Reliability Analysis for Scale (CLUSTER 17)					
P21	14.000	12.457	.120	.081	.567
P30	13.694	11.761	.252	.203	.475
P23	12.917	12.650	.288	.193	.457
P27	14.694	11.990	.276	.265	.459
P29	13.472	9.171	.519	.434	.275
ALPHA = .51171	STANDARDIZED ITEM ALPHA = .51696				
Reliability Analysis for Scale (CLUSTER 08)					
P23	6.222	5.892	.337	.139	.659
P27	8.000	4.743	.445	.248	.525
P29	6.778	3.492	.567	.325	.327
ALPHA = .77349	STANDARDIZED ITEM ALPHA = .78088				

remaining four item scale to .57. Considering only the three items of

cluster 8, a subset of cluster 17, provides a reliability of .62, deleting one of the items, P23 (dislikes being spoken to in English), increases the reliability to .66. This third subscale, ***Linkage to Own Cultural Group***, is based on cluster 18, and is composed of the following three items:

1. P22 - miss family and friends in home country
2. P31 - proud of child's progress in English
3. P35 - wish to go back to home country

As suggested by the reliability analysis, item P32 (dislike going shopping without your family), since it contributes neither statistically nor conceptually. is excluded,

3.5.3.4 Frustration

The fourth of the major clusters, number 18, consists of four items, with a reliability coefficient of .639. Deleting item P32 (dislikes going shopping without family) would improve the reliability to .66. This fourth subscale, ***Frustration***, is based on cluster 19 and is composed of the following four items:

1. P24 - feel confined at home in the USA
2. P39 - unable to relax in the company of compatriots
3. P42 - embarrassed when asking child's help
4. P43 - concerned that children will have difficulties after return

3.5.3.5 Isolation

The last of the five major clusters, number 20, consists of seven items, with a reliability coefficient of .78. All seven items contribute positively to the scale suggested by this cluster. Considering cluster 19, a four item subset of cluster 20, provides a reliability of .69,

Table 13

Culture Shock in Parents:
Summary of Reliability Analyses: Clusters 18 and 20

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
Reliability Analysis for Scale (CLUSTER 18)					
P22	7.257	8.432	.455	.209	.510
P32	6.086	8.081	.279	.101	.659
P31	7.943	9.055	.454	.283	.523
P35	7.429	7.605	.457	.317	.500
ALPHA = .61731		STANDARDIZED ITEM ALPHA = .63913			
Reliability Analysis for Scale (CLUSTER 20)					
P24	20.227	34.946	.351	.267	.779
P39	19.455	31.688	.603	.393	.727
P42	19.364	35.195	.429	.271	.762
P43	20.591	31.777	.511	.493	.747
P34	19.500	29.976	.719	.690	.702
P36	20.773	34.565	.548	.450	.743
P41	20.273	34.303	.382	.466	.773
ALPHA = .77654		STANDARDIZED ITEM ALPHA = .78106			
Reliability Analysis for Scale (CLUSTER 19)					
P24	10.682	11.084	.451	.255	.639
P39	9.909	10.944	.516	.268	.596
P42	9.818	12.823	.366	.171	.685
P43	11.045	9.760	.564	.323	.560
ALPHA = .68916		STANDARDIZED ITEM ALPHA = .68618			
Reliability Analysis for Scale (CLUSTER 14)					
P34	5.682	5.275	.712	.531	.571
P36	6.955	6.998	.603	.436	.715
P41	6.455	5.784	.541	.315	.783
ALPHA = .77349		STANDARDIZED ITEM ALPHA = .78088			

while cluster 14, the other subset of cluster 20, provides a reliability of .78. This fifth subscale, *Isolation*, is based on cluster 14 and is composed of the following three items:

1. P34 - feel not to have friends
2. P36 - need help of children in social situations
3. P41 - feel uncomfortable speaking native language in front of Americans.

3.6 Testing of Hypotheses

3.6.1 Comparisons by Cultural Background and Sex

The first hypothesis of this study states that

> There is no relationship between cultural background and perceived competence, as measured by the PSPCAYC

The second hypothesis of the study states

> There is no relationship between sex and perceived competence, as measured by the PSPCAYC

To test these hypotheses, Kruskal-Wallis one-way analyses of variance were performed. Table 14 presents item mean for the four subscales, broken down by cultural background and sex of the respondent.

The overall item mean for *Cognitive Competence* is 3.35. Using the Kruskal-Wallis one-way analysis of variance, no significant differences were found between the five cultural groups. The item means for male and female respondents are 3.49 and 3.19,no significant difference was found.

The overall item mean for *Physical Competence* is 3.56. Comparing groups, the highest mean is found among the Saudi children (3.67), the lowest among the US children (3.47). The item means for male and female respondents are 3.58 and 3.53. No significant differences were observed between either cultural groups or sex.

The overall item mean for *Peer* Acceptance is 3.32. Comparing groups, a highly significant difference was found, in the sense that the Saudi children perceived themselves as most accepted (3.75), followed by the Japanese (3.48), Korean (3.19), US (3.17), and lastly the children of

Table 14

Mean Item Responses of the Four Major Scales of the PSPCAYC by Cultural Group and Sex

	Saudi	Japanese	Korean	Solitary	USA	Total
Cognitive Competence						
Female	3.44 (n = 3)	2.83 (4)	3.10 (5)	3.22 (6)	3.50 (3)	3.19 (21)
Male	3.81 (7)	3.17 (6)	3.83 (2)	3.42 (4)	3.38 (7)	3.49 (26)
Total	3.70 (10)	3.03 (10)	3.31 (7)	3.30 (10)	3.42 (10)	3.35 (47)
Physical Competence						
Female	3.61	3.63	3.43	3.53	3.50	3.53
Male	3.69	3.47	3.75	3.67	3.45	3.58
Total	3.67	3.53	3.52	3.58	3.47	3.56
Peer Acceptance						
Female	3.67	3.42	2.97	2.72	3.11	3.10
Male	3.79	3.53	3.75	3.29	3.19	3.49
Total	3.75	3.48	3.19	2.95	3.17	3.32*
Maternal Acceptance						
Female	2.61	2.54	2.37	2.47	2.78	2.52
Male	2.92	2.36	2.75	2.58	2.57	2.63
Total	2.83	2.43	2.48	2.52	2.63	2.59

* significant differences at the .01 level

solitary families (2.95). Highly significant differences were also found between boys and girls, in that the former perceived themselves as more accepted (3.49 versus 3.10).

The overall item mean for ***Maternal Acceptance*** is 2.59. Comparing cultural groups, the highest mean is found among the Saudi children (2.83), the lowest among the Japanese (2.43). The item means for male and female respondents are 2.63 and 2.52. No significant differences were observed between either cultural groups or sex.

3.6.1.1 Summary of Finding for Hypotheses 1 and 2

In general, no significant differences were found between children of various cultural backgrounds or sex with respect to perceived competence, as determined by the PSPCAYC in the domains of cognitive competence, physical competence, and maternal acceptance. Highly significant differences were found with respect to perception of peer acceptance.

3.6.2 Correlations with Age and Time Abroad

The third hypothesis of this study states

> There is no relationship between age at the time of the move across cultural boundaries and perceived competence.

The fourth hypothesis of this study states

> There is no relationship between the age at the time of the interview and perceived competence.

The fifth hypothesis of this study states

> There is no relationship between length of time since the move across cultural boundaries and perceived competence.

The sixth hypothesis of this study states

> There is no relationship between the length of time until return to the home country and perceived competence.

These hypotheses were tested by using Spearman rank correlations. Table 15 presents correlations between the four major scales of the PSPCAYC, and age at arrival, age when interviewed, time since arrival and time until departure. Correlations are presented for all subjects together, as well as individually by cultural background. Considering all subjects, no significant correlations ($p < .05$) are observed. However, looking at the various cultural groups, the following relationships may be noted.

Among the *Saudi* children, there are significant correlations with respect to cognitive competence and age when interviewed, as well as

with respect to peer acceptance and time since arrival. Both correlations are negative, indicating that the older the children are at the time of the interview, the less cognitive competence they perceived; and the longer they have been away from home, the less peer acceptance do they perceive.

Among the *Japanese* children, cognitive competence was found to correlate negatively and significantly with age, both at arrival and when interviewed. In other words, the older the children are at these two points, the less competent they perceive themselves. With respect to physical competence, a significant and negative correlation was observed with age when interviewed: the older the child, the less physically competent he/she felt. With respect to peer acceptance, signficant negative correlations are observed with respect to age, both at arrival and when interviewed: The older at these two points in time, the less acceptance is perceived.

Among the *Korean* children a significant and positive relationship was found between cognitve competence and time left until departure: the more time was left abroad, the more competence they perceived. With respect to physical competence, negative and significant correlations were observed with age when interviewed and time left until departure, i.e., the older the children, and the more time left until departure, the less competent the children felt. On the other hand, a positive and significant correlation was observed with respect to peer acceptance and time until departure: The more time was left until departure, the more peer acceptance they perceived.

Among the children from families which are *solitary* representatives of their respective countries, significant correlations were only observed with respect to maternal acceptance: the older at the time of arrival, the less acceptance is perceived, and the longer the time since arrival, the more acceptance is noted.

Considering the *US* children, finally, only one significant correlation may be observed: The longer they have been away from their previous state of residence, the less physically competent they perceive themselves.

Table 15

Spearman Rank Correlations between 4 Major Scales of the PSPCAYC and Age at Arrival, Age when Interviewed, Time Since Arrival, and Time until Departure

	Saudi (n = 10)	*Japanese* (n = 10)	*Korean* (n = 7)	*Solitary* (n = 10)	*USA* (n = 10)	*Total* (n = 47)
Cognitive Competence						
Age Arrival	-29	-83**	-40	22	07	-18
Age Interview	-55*	-64*	-43	51	09	-11
Time Arrival	-36	29	-13	28	-33	17
Time Departure	31	18	1.00**	-39	***	24
Physical Competence						
Age Arrival	-13	-53	-56	10	-14	-20
Age Interview	-28	-66*	-77*	17	-19	-21
Time Arrival	10	00	-04	19	-82**	00
Time Departure	31	-29	-87*	06	***	16
Peer Acceptance						
Age Arrival	42	-66*	-09	-12	07	-02
Age Interview	-14	-72**	-47	-20	15	-14
Time Arrival	-56*	13	-47	10	-07	-16
Time Departure	20	-41	97**	-32	***	14
Maternal Acceptance						
Age Arrival	18	32	04	-57*	47	10
Age Interview	-25	41	-11	-22	44	14
Time Arrival	-24	49	-25	77**	-29	08
Time Departure	-03	-09	66	-26	***	17

* $p < .05$
** $p < .01$
*** n = 2

3.6.2.1 Summary of Findings for Hypotheses 3 to 6

Summing over all groups, no significant relationships were found between age and length of stay variables and the domains of perceived competence and acceptance as determined by the PSPCAYC. When groups were examined individually, however, some significant effects were found, which differed by group, providing some support for the hypotheses and suggesting further that effects of interest were measured by combining groups. While specific results differed by group, in general the findings reflect negative relationships between perceived competence and variables of age at arrival, age at interview, time of arrival and time of departure. The pattern of negative correlations in these analyses was quite notable, and possible explanations will be presented in the next chapter.

3.6.3 Correlations between Competence and Culture Shock

The seventh hypothesis of this study states

> There is no relationship between the children's perception of their own competence, and the parents' perception of their children's competence.

The eighth hypothesis of this study states

> There is no relationship between the children's perception of their own competence, and the children's culture shock.

Th ninth hypothesis of this study states

> There is no relationship between the children's perception of their own competence, and the parents' culture shock.

These hypotheses were tested by using Spearman rank correlations, as presented in the following.

3.6.3.1 Correlations with Parents' Perception of Children's Competence

As presented on page 47, the cluster and reliability analyses of the PPCC scale resulted in three subscales:

1. perception of General Adaptation (ranging from 1 - negative to 5 - positive);
2. perception of Social Competence (ranging from 1 - negative to 5 - positive);
3. perception of Peer Acceptance (ranging from 1 - *positive* to 5 - negative).

Table 16 presents Spearman rank correlations between the four subscales of the *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC) and the three subscales of the *Parents' Perception of Children's Competence* (PPCC) scale, broken down by cultural background.

Concerning *General Adaptation*, a positive correlation may be observed for Saudi children: The more positive the parents' perception of their children's general adaptation, the more positive the perception of the children of their own physical competence ($r = .74$, $p < .01$).

Concerning *Social Competence*, several positive correlations may be observed. Among *Japanese* children: The more positive the parents'

Table 16

Spearman Rank Correlations between Subscales of Competence

	PSPCAYC (Range: 1 - low to 4 - high)					
	Cognitive	Physical	Peer	Maternal		
PPCC						
General Adaptation	.0033	.7353 **	.0910	-.0504	Saudi	(n=10)
(1 - neg : 5 - pos)	.2155	.4234	.4564	.0038	Japan	(n=10)
	.4869	.2481	.2111	.2412	Korea	(n= 7)
	.3953	.1773	.4861	.4861	Solitary	(n=10)
General Competence	-.2540	-.2588	-.1346	-.5272		
(1 - neg : 5 - pos)	-.0862	.7169 **	.4768	.2185		
	.6389	.4152	.6698 *	.8899 **		
	.6796 *	.3462	.2333	.5720 *		
Peer Acceptance	.8144 **	.1639	.0493	.1180		
(1 - pos : 5 - neg)	-.1429	-.3509	-.2937	-.5031		
	-.0741	-.5095	-.4587	-.3028		
	-.2619	-.4164	-.7873 **	-.3788		

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

perception of their children's social competence, the more positive the perception of the children of their own physical competence ($r = .72$, $p < .01$). Among *Korean* children: The more positive the parents' perception of their children's social competence, the more positive the perception of the children of their own (a) peer accepetance ($r = .67$, $p < .05$), and (b) maternal acceptance ($r = .89$, $p < .01$). Among *solitary* children: The more positive the parents' perception of their children's social competence, the more positive the perception of the children of their own (a) cognitive competence ($r = .68$, $p < .05$), and (b) maternal acceptance ($r = .57$, $p < .05$).

Concerning *Peer Acceptance*, two significant correlations may be observed. Among *Saudi* children: The more negative the parents' perception of their children's peer acceptance, the more positive the perception of the children of their own cognitive competence ($r = .81$, $p < .01$). Among *solitary* children: The more positive the parents' perception of their children's peer acceptance, the more positive the perception of the children of their own peer acceptance ($r = -.79$, $p < .01$).

In *summary*, few statistically significant relationships were found between the children's perception of their own competence and acceptance, as determined by the PSPCAYC, and the parents' perception of their children's competence, as determined by the PPCC. This raises the question of whether the results observed occurred by chance, especially in the case of general adaptation and peer acceptance. In the case of social competence, 5 of 16 relationships were significant; and all significant results showed a positive relationship between parental perception of child's competence and child's own perception of competence and acceptance.

3.6.3.2 Correlations with Parents' Culture Shock Scale

As presented on page 63, the cluster and reliability analyses of the parents' culture shock scale resulted in five subscales:

1. Acculturation (ranging from 1 - high to 5 - low);
2. Adjustment (ranging from 1 - low to 5 - high), or Alienation (ranging from 1 - high to 5 - low);
3. Linkage to Own Cultural Group (ranging from 1 - high to 5 -low);
4. Frustration (ranging from 1 - high to 5 - low);
5. Isolation (ranging from 1 - high to 5 - low).

Table 17 presents Spearman rank correlations between the four subscales of the *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC) and the five subscales of the parents' culture shock scale, broken down by cultural background.

Concerning *acculturation* and *isolation*, no significant correlations were found between the PSPCAYC and parents' culture shock.

Concerning *alienation*, two significant correlations were found among *Korean* families: The higher the alienation reported by the parents, the more negative the children's own perception of (a) cognitive competence ($r = .79$, $p < .05$), and (b) physical competence ($r = .80$, $p < .05$).

Concerning *Linkage to Own Group*, one significant correlation was found among *solitary* families: The lower the linkage to the own group reported by the parents, the more positive the perception of the children's own cognitive competence ($r = -.61$, $p < .05$).

Concerning *frustration*, one significant correlation was found among *solitary* families: The higher the frustration reported by the parents, the more negative the perception of the children's own physical competence ($r = .62$, $p < .05$).

Table 17

Spearman Rank Correlations between Subscales of Competence and Culture Shock in Parents

	PSPCAYC					
	Cognitive	Physical	Peer	Maternal		
	(Range: 1 - low to 4 - high)					
Culture Shock in Parents (1 - high : 5 - low)						
Acculturation	-.0847	-.2966	.2818	.5144	Saudi	(n=10)
	.0278	-.2315	-.1894	-.3210	Japan	(n=10)
	.1204	-.5095	-.2202	-.1835	Korea	(n= 7)
	-.3323	.1522	-.2043	-.1858	Solitary	(n=10)
Alienation	-.3590	.1472	.0604	.0803		
	.3200	.1046	.1610	.3015		
	.7890 *	.8041 *	.6000	.3091		
	-.1605	-.2928	-.2733	.0807		
Linkage to Own Group	-.1129	-.3182	-.3094	-.0325		
	-.2081	.1211	-.0437	.3199		
	-.1906	-.3107	-.0661	-.2360		
	-.6106 *	.0065	-.0901	.0129		
Frustration	-.3259	.4373	-.2452	.0514		
	.3015	-.2954	-.1920	.3538		
	-.5648	-.1698	-.4496	-.3762		
	.2000	.6212 *	.0279	.0279		
Isolation	-.3731	.3093	-.2818	-.2367		
	-.0957	.0154	-.0683	.1358		
	-.4679	-.0935	.0182	.0273		
	-.0401	-.1495	.5435	.3447		

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

In *summary*, even fewer statistically significant relationships were found between the children's perception of their own competence and acceptance, as determined by the PSPCAYC, and the the parents' culture shock scale.

3.6.3.3 Correlations with Children's Culture Shock Scale

As presented on page 55, the cluster and reliability analyses of the children's culture shock scale resulted in three subscales:

1. Linkage to one's own Cultural Group (ranging from 1 - high to 3 - low);
2. Linkage to the New Environment (ranging from 1 - high to 3 - low);
3. Need for Companionship (ranging from 1 - high to 3 - low).

Table 18 presents Spearman rank correlations between the four subscales of the *Pictorial Scale of Perceived Competence and Acceptance for Young Children* (PSPCAYC) and the three subscales of the children's culture shock scale, broken down by cultural background.

Concerning *Linkage to Own Group*, several significant correlations may be observed. Among the *Japanese* children: The lower the reported need for linkage to the own group, the more positive the perception of the children's own (a) physical competence ($r = .76$, $p < .01$), and (b) peer acceptance ($r = .66$, $p < .01$). Among the *Korean* children: The higher the reported need for linkage to the own group, the more negative the child's own perception of maternal acceptance ($r = -.93$, $P < .01$).

Table 18

Spearman Rank Correlations between Subscales of Competence and Culture Shock in Children

	PSPCAYC					
	Cognitive	Physical	Peer	Maternal		
Culture Shock in Children						
Need for Own Group	-.5048	.3461	-.3950	-.2064		
	-.0528	.7578 **	.6563 **	-.1739		
	-.3028	.0748	-.4545	-.9273 **		
	.2215	.4503	-.0991	-.5635 *		
Acceptance of New Environment	-.2746	-.1651	-.2161	-.1328		
	.2161	-.3536	-.1976	-.6875 *		
	-.3906	.2330	-.2266	-.8119 *		
	-.4234	-.2379	-.4524	-.4699		
Need for Companionship	.7703 **	-.2443	.2680	.1303	Saudi	(n=10)
	-.3357	.1055	.0290	-.3549	Japan	(n=10)
	-.8056 *	-.5661	-.7890 *	-.3945	Korea	(n= 7)
	.3147	.1667	.0188	.4263	Solitary	(n=10)

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

Among the *solitary* children the same significant relationship as among the Korean children was observed ($r = -.56$, $p < .05$).

Concerning *Acceptance of the New Environment*, two significant correlations were observed. Among both *Japanese* and *Korean* children: The higher the reported acceptance of the new environment, the more negative the perception of the children's own maternal acceptance ($r = -.69$, $p < .05$ and $r = -.82$, $p < .05$ respectively).

Concerning *Need for Companionship*, three significant correlations were observed. Among *Saudi* children: The lower the reported need for companionship, the more positive the perception of the children's own cognitive competence ($r = .77$, $p < .01$). Among *Korean* children: The higher the reported need for companionship, the more positive the perception of the children's own (a) cognitive competence ($r = -.81$, $p < .05$), and (b) peer acceptance ($r = .-79$, $p < .05$).

In *summary*, few statistically significant relationships were found between the children's perception of their own comptence and acceptance, as determined by the PSPCAYC, and the children's culture shock scale. However, the few that were significant, appear to point in the same direction: Both peer acceptance and physical competence are positively related to need for own group among the Japanese children. Among the Korean children, need for companionship is negatively correlated will all domains, and signficantly so with cognitive competence and peer acceptance. Need for own group and acceptance of the new environment are negatively correlated with maternal acceptance, especially among the Korean children. Larger samples might have provided more clearcut trends.

3.6.3.4 Summary of Findings for Hypotheses 7 to 9

Few significant relationships were observed between the four subscales of the PSPCAYC on the one hand, and the subscales of the PPCC and the

culture shock scales for children and parents. On the one hand, this raises the question of whether the results observed occurred by chance, especially for the case of correlations with the parents' culture chock scale. On the other hand, some discernable trends were observed, such as (a) consistently positve correlations between parental perception of children's competence and the children's own perception of competence and acceptance, and (b) negative correlations between maternal acceptance and children's need for own group and acceptance of the new environment.

CHAPTER 4

DISCUSSION

The results of the data analyses presented above will be discussed in this chapter. Furthermore, limitations of this study, conclusions and implications of findings will be presented.

This study proposed to deal with three general research questions (cf. page 2):

1. Is the ability to cope with a new environment influenced by cultural background and sex?
2. Is the age at the time of the move; the age at the time of the interview; the length of time since arrival; as well as length of time left until departure, related to the present ability to cope with the different environment?
3. Are the children's perceptions of their own competence related to the parents' perceptions of their children's competence, as well as to the culture shock reported by the children and the parents?

How the results of this study bear on these questions in terms of relevance to past theory and research will be considered in the following discussion.

4.1 Influence of Cultural Background and Sex

Two hypotheses were formulated to answer the first general research question, regarding the relationship between perceived competence on the one hand and cultural background and sex on the other. The first hypothesis stated:

> There is no relationship between cultural background and perceived competence as measured by the PSPCAYC.

The results of the Kruskal-Wallis one-way analysis of variance confirmed the null-hypothesis in the domains of cognitive and physical competence, as well as maternal acceptance. Significant differences were found, however, in the peer acceptance domain, in the sense that Saudi children perceived themselves as most accepted, followed by the Japanese, Korean, US, and lastly the children of solitary families.

The second hypothesis stated:

> There is no relationship between sex and perceived competence, as measured by the PSPCAYC.

Again, highly significant differences were found only in the peer acceptance domain, in the sense that boys found themselves more accepted than girls.

In the following, several reasons for these results will be considered:

4.1.1 Suitability of the Scale

Considering the differences (or lack thereof) between children of differing cultural background, it must be asked first if the PSPCAYC is appropriate to the population in question. It is imperative to mention that the scale was developed by Harter & Pike for a US population of first and second graders. The pictoral version was chosen for the present study, among other reasons (cf. page 29ff), given the potential problem with fluency in English on the part of the foreign children. Consequently, a reliability analysis was repeated for the present population (cf. page 30). Interestingly enough, the highest reliability coefficient was found for the peer acceptance subscale.

4.1.2 Content of the Subscales

Another possible explanation refers to the item content of the subscales. It may be argued that the activities presented in the subscales are not developmentally appropriate across the entire range of six to twelve year olds. Only the peer acceptance subscale seems to present content appropriate to all of the ages encompassed in this study. At the same time, it appears to present the most clear cut items (one either goes or does not go to somebody's house to play). Likewise, more objective items might make the cognitive subscale more sensitive to existing differences between children.

4.1.3 Children's Perceptions as Revealed in Spontaneous Comments

With the exception of one interview with a solitary family, either or both parents were present during the interview of the child. During the administration of the competence domain subscales (cognitive and physical), a constant occurrence was that children would point to alternatives 3 (pretty good) or 4 (really good) and would comment "Now I am better" or "I grow up by myself", as if they were comparing past and present perceived skills. In contrast, no mention of doing well or poorly is being made in the peer acceptance subscale. A child either does or does not have a lot of friends to play with, is usually asked to play or not. Thus, perception of skills is not involved. On the other hand, it might be questioned why such significant differences were not found in the maternal acceptance domain. Two general reactions were observed on the part of the children as they were confronted with the maternal acceptance subscale items: More assertive children looked at their mothers and commented, "Now you will see!", or "It is my time now!" The parents, in turn, made comments such as "Be honest", or "You can tell". These observations suggest the influence of extraneous variables on the children's responses to the maternal acceptance

subscale.

4.1.4 Group Differences

The authors of the scale report that "young children [preschool to 2nd grade] tend to report relatively positive feelings of competence and acceptance" (Harter & Pike, 1981, p. 11) in comparison with children grades three through nine. Among the subjects of the present study, however, the Saudi children were the oldest (mean age 9.4), followed by children of solitary families (9.0), Koreans (8.3), Japanese (8.2) and US (7.7). Assuming age to confound cultural background, one would expect US children to present higher scores than Saudi children; instead, the opposite was found. As indicated above (cf. page 21), cultural groups were selected as representing varying levels of support available to the children after moving to a new environment. Saudi children experience strong group support through their own school, Japanese and Korean children receive support through their numbers, while solitary children are isolated, and so are US children, even though they moved within their own culture. The stronger the group support, the higher the perceived peer acceptance reported by the children.

4.1.5 Sex

No data were reported by Harter or her associates regarding sex differences. The significant differences regarding perception of peer acceptance found in the present case, appeared to apply equally to all groups, i.e., all boys perceive themselves as more accepted. Whether this finding is a reflection of personal attributes, or of the respective cultures, might be a topic for future study.

4.1.6 Summary of First Research Question

In summary, the peer acceptance domain was found to be the most reliable subscale for the age range studied, and was the only one found to vary due to cultural background or sex. These findings are similar to Hartup's (1983) observation that peer contacts vary enornously among cultures in which peer relations contribute informally or formally to socialization. However, "it remains the case that more is known about peer relations among American children than among children in any other culture; few universal assertions can be made with confidence" (p. 173).

4.2 Influence of Age and Time Abroad

Four hypotheses were formulated to answer the second general research question of this study:

> Is the age at the time of the move; the age at the time of the interview; the length of time since arrival; as well as length of time left until departure, related to the present ability to cope with the different environment?

4.2.1 Influence of Age

Two hypotheses were formulated to test the relationship between perceived competence on the one hand and age of the child on the other. The third hypothesis of this study stated:

> There is no relationship between age at the time of the move across cultural bounderies and perceived competence.

The results of the Spearman rank correlations rejected the null hypothesis only in the case of Japanese children with respect to cognitive competence and peer acceptance, as well as in the case of the solitary children in the maternal acceptance domain.

The fourth hypothesis of the study stated:

There is no relationship between the age at the time of the interview and perceived competence.

The results of the Spearman rank correlations rejected the null hypothesis in the following cases: In the cognitive domain among Saudi and Japanese children, in the physical domain among Japanese and Korean children, and in the peer acceptance domain among Japanese children. In the following, possible explanations for these results will be considered.

4.2.1.1 Cognitive Competence Domain

4.2.1.1.1 Age at Arrival

A possible explanation for the results among the Japanese group refers to sociological variables. Given the highly structured nature of Japanese society, children learn, beginning with kindergarten, how to conform to a particular role. Older children have more experience in Japanese school, being consequently more experienced to the demands of working hard and trying to do their job as perfect as possible. Moving to a new society, the older children may feel more disrupted, and perceive their initial lack of competence vis-a-vis the new society more accutely. It should be mentioned in this context that in all but one Japanese family (where the father was absent), the fathers hold faculty positions at MSU as visiting scholars. As one of them advised, "you are talking with the winners". Thus, it is possible that these parents, who themselves are high achievers, have higher expectations for their children; their children, in turn, may perceive that they are not among the best students here in the US (especially in the social sciences), while they are considering mathematics and science as being too easy to be a challenge.

4.2.1.1.2 Age at the Time of the Interview

Both among the Saudi and the Japanese children significantly negative correlations were observed between current age and perceived cognitive competence. As pointed out above, Harter & Pike suggest that younger children have a tendency to report relatively positive feelings of competence and acceptance. However, the Saudi children are the oldest group, and they scored highest in all four domains. Furthermore, if one considers this result together with the Japanese group (the only group younger being the US one), alternative explanations must be considered.

4.2.1.1.2.1 Family Observations

Among the ten Japanese families, nine expressed concern regarding the suitability of their children's US school curriculum for the situation after the return to Japan. All nine families showed books they had brought with them and which they tried to follow while in the US. The one family that did not show Japanese school books, was the one that explicitely expressed discontentment with the Japanese school system and stated that the very reason that they had come to the US was the more relaxed school atmosphere in the US. In other words, the Japanese children may have judged their competence vis-a-vis *two* cultures: besides perceiving that they are not (yet) as cognitively competent in the new culture, as they were back home, they also perceive themselves no longer as competent in the culture they left behind. Conceivably, a similar phenomenon holds true for the Saudi children. They too undergo a process of additional, even formal, schooling to maintain their 'home culture competence'. During the interview it was salient that they were not concerned with academic matters, since they have an Saudi school here, but in how to handle some aspect of their culture that can be called 'everyday' cognition. Thus, one boy commented how since the age of three he would accompany his father wherever he would go, to learn

his future role. While here, these lessons cannot be learned.

4.2.1.2 Physical Competence Domain

Both Japanese and Korean children presented significantly negative correlations between age at the time of interview and perceived competence in the physical domain. As mentioned before, perceptions of popularity, i.e. peer acceptance, may be determined by perceptions of skills in sports, i.e. physical competence. With regard to the Japanese group, both correlations (physical and peer) were significant; with regard to the Koreans, only the physical domain was. It should be mentioned that all the Korean children interviewed have at least one sibling of the same sex with whom they play until they meet new friends. Furthermore, during the first months in the new environment, they usually meet other Korean children, with whom they would play and speak Korean, in a second step in their adaptation to the new environment. This observation appears to be in accordance with Long's (1975) and Whalen & Freed's (1973) assertions that presence and age of siblings are one of the influential factors in a child's adjustment to a new environment.

4.2.1.3 Peer Acceptance Domain

4.2.1.3.1 Age at Arrival

While specific results differed by cultural group, in general the findings reflect negative relationships between perceived competence and variables of age at arrival, age at interview, time of arrival and time of departure. Harter (1982, p. 95) suggested that children's popularity may be dependent to a considerable degree on their skills in sports. The word popularity was used, she added, because she was investigating whether the social scale "actually assesses competence in

the sense of social skills or whether it taps a peer friendship dimension, which may be more highly related to factors such as athletic prowess than social competence per se" (p. 95). This may very well be the explanation for the result obtained in the present study as well as the significantly negative correlations between physical competence and peer acceptance and age at the time of the interview, which will be considered below.

4.2.1.3.2 Age at the Time of the Interview

As was mentioned, perception of less athletic prowess may be related to perception of less acceptance on the part of one's peers, and, that is what this finding suggested. The negative correlation among the Japanese children between peer acceptance and age at the time of the interview is another instance which may reflect dynamics similar to those suggested above.

4.2.1.4 Maternal Acceptance Domain

All the solitary families interviewed belonged to extended families. Grandparents, aunts & uncles, cousins, maids were all part of the household that had been left behind. One may suggest that the mothers of these households received help and support from others in relation to household chores. When the families moved to the new environment, the mothers themselves were confronted with new tasks: language, household, and, in half of the families visited, the care of small children. All this may have provoked a perception of less maternal acceptance on the part of the older children of the families who were the ones interviewed.

4.2.2 Influence of Length of Time

Two hypotheses were formulated to test the correlations between length of time in the new environment and perceived competence. The fifth

hypothesis of the study stated:

> There is no relationship between length of time since the move across cultural boundaries and perceived competence.

4.2.2.1 Cognitive Competence Domain

The positive correlation found among the Korean children between cognitive competence and length of time left until departure may have but a simple explanation: The more time left to stay in the new environment, the more the child expects to learn about this environment, and the more competent the child feels.

4.2.2.2 Physical Competence Domain

The results reported by the US children indicated a significantly negative correlation between length of time since the move and perceived physical competence. In connection with this finding, it must be considered that (a) the perception of having friends may depend on a perception of skills in sports, as discussed above, and (b) results lower than these found in US children in the peer acceptance domain were only found among the solitary children. Hence, rather than being an indication of negative perception of physical competence. These results may be considered an indication of less perception of peer acceptance.

4.2.2.3 Peer Acceptance Domain

The negative correlation found among Saudi children between the length of time since the move and perception of peer acceptance may relate to the finding discussed below (4.3.1), namely that a negative parents' perception of peer acceptance correlates with positive self perception of cognitive competence - which should generally increase with time.

4.2.2.4 Maternal Acceptance Domain

The positive correlation found among solitary children between maternal acceptance and length of time since the move may corroborate the finding discussed above (4.2.1.4), namely that the older the children were at the time of arrival, the less maternal acceptance they felt. The present findings suggest that with time, this perception changes, possibly because with more time abroad, the mother adjusted to her more demanding role abroad.

The sixth hypothesis of the study stated:

> There is no relationship between length of time until return to the home country and perceived competence.

In the following, physical competence and peer acceptance domains will be discussed jointly. Among the Korean children, two significant correlations were found with respect to length of time until return: (a) a negative correlation with physical competence, and (b) positive correlation with peer acceptance. Though previous data suggest that the perception of having friends and being physically competent are related, the relationships observed here were not in the same direction.

4.2.3 Summary of Second Research Question

In summary, while there were relatively few significant results, those results indicated that the pattern of relationships between various dimensions of age and time abroad, and perceived competence varied in the different groups studied. One possible explanation, which might be pursued in future studies, is that the various groups show differential competencies in the various domains. Not only are they sensitive to the domains salient in their own cultures, but they are also sensitive to the demands in other domains that are particular to the new environment.

4.3 Influence of Parents's Perceptions and Culture Shock

Three hypotheses were formulated to answer the third general research question of this study:

> Are the children's perceptions of their own competence related to the parents' perceptions of their children's competence, as well as to the culture shock reported by the children and the parents?

4.3.1 Influence of Parents' Perception of Children's Competence

The seventh hypothesis of the study stated:

> There is no relationship between the children's perception of their own competence and the parents' perception of their children's competence.

The results of Spearman rank correlations rejected the null-hypothesis in the following cases:

1. The more positive the parents' perception of their children's *general adaptation*, the more positive the perception of the Saudi children of their own physical competence;
2. the more positive the parents' perception of their children's *social competence*, the more positive the
    1. Japanese children's perception of their own physical competence,
    2. Korean children's perception of their peer and maternal acceptance, and
    3. solitary children's perception of their cognitive competence and maternal acceptance.
3. the more positive the parents' perception of their children's *peer acceptance*, the more
    1. negative the Saudi children's perception of their cognitive competence, and
    2. positive the solitary children's perception of their peer acceptance.

Among these results, two aspects call for special attention because of their difficult explanations. The first one is of a general order and refers to the features of the subscales derived by cluster and

reliability analysis of the PPCC. On page 48 it was said in reference to the perception of social competence subscale that perhaps the conceptualization of the domains (cognitive, physical and social) was not confirmed. The present results appear to corroborate this assertion. On the other hand, one has to bear in mind that those domains are integrated in an individual, they are not separated as the different ingredients of a cake. They, as the final results of a culinary delicacy, hold together to characterize the individual child who goes to school and performs cognitive tasks, exercises, plays with friends and receives parental protection in order to survive. In sum, significant correlations were found but they were present in different domains in the various social groups. The other aspect which deserves explanation refers to the only negative correlation reported, namely in the case of Saudi children, the parents' positive perception of peer acceptance and the children's negative perception of cognitive competence. As mentioned before, the Saudi children of this study attend their own school, after the US school, from 3:30 to 5:30 pm. Everyday, they bring homework, which increases over the weekends. Hence, possibly the children's cognitive competence increases as the time to play with friends decreases, something that was mentioned repeatedly by the parents.

4.3.2 Influence of Parents' Culture Shock on Perceived Competence

The eighth hypothesis of this study stated:

> There is no relationship between the children's perception of their own competence, and the parents' culture shock.

The results of Spearman rank correlations rejected the null-hypothesis in even fewer instances. Among Korean families, the higher the parents' alienation from the new environment, the lower the perceived cognitive and physical competence - again, an apparently self-explanatory relationship. Although the Korean group is smaller than the others ($n = 7$), five of the responding parents were mothers. The findings thus appear to be in accordance with Ouster (1974) who claimed that the

effect of mobility on the child is a by-product of the effects on the mother.

The relationships found among the solitary families appear to point in the same direction: The higher the need for the own group, the lower perceived cognitive competence; and the higher the frustration level, the lower perceived physical competence.

4.3.3 Influence of Children's Culture Shock on Perceived Competence

The ninth and last hypothesis of the study stated:

> There is no relationship between the children's perception of their own competence and the children's culture shock.

The results of Spearman rank correlations rejected the null-hypothesis in few instances: In the case of the *Need for Own Group* subscale, Japanese children reported that the lower this need, the more positive the perception of their own physical competence, as well as peer acceptance. It is possible that less need for linkage to the own group is related to more proficiency with English, which in turn allows for making more friends among children of other countries or cultures. In the present case, positive perceptions of skills in sports (physical competence) and peer acceptance are again evident in the Japanese group. The new aspect is that they appear in this context in children who report less need for linkage to their own group. Among the Korean and solitary children, the higher the reported need for their own group, the more negative the children's perception of their maternal acceptance. The direction of causality is not clear, though one might postulate that the lower the perceived maternal acceptance, the less the ability to leave one's own group. At the same time, the higher the maternal acceptance, the higher the acceptance of the new environment. It is interesting to note in this context that Harter (1983) suggests that "low mother acceptance, coupled with low perceived competence, may both serve to influence one's feelings of low peer acceptance" (p. 289). Furthermore, among Korean children, it is also observed with diminishing

need for companionship, the perceived cognitive competence and peer acceptance increases - again, the direction of causality may not be clear, but the relationship appears self-explanatory.

4.3.4 Summary of Third Research Question

In summary, the utilization of a correlational design does not allow for a clear specification of the cause and effect relationships. Thus, in relation to the last three hypotheses, a case might be made that children's competence influences their parents' perceptions, as well as their own and their parents' ability to deal effectively with the new environment (as determined by the culture shock scale). On the other hand, parents' perceptions of children's competence, as well as culture shock, may well effect children's competence or at least their perception of the same.

4.4 Qualitative Observations

While the data analysis of this study concentrated on the objective responses to scales, both children and parents responded to open-ended questions as well. Responses by the children to three of them [7] are of particular interest here.

4.4.1 Knowledge about Future Place of Residence

Item 11 of the questionnaire asked, "Before you came to the USA [Michigan for US children] -- tell me -- what did you know about the people who live here in the USA [Michigan]?" Comparing the responses of the children in the various groups, certain trends become discernible.

The *Saudi* children mentioned mostly personal attributes, such as "they

[7] Items 11, 57 and 58 in Appendix C and D

are kind of nice", "they are not mean", or even "they cannot speak two languages like us".

The *Japanese* children as a whole referred to more concrete things such as physical attributes: "American children have yellow hair", or geographical differences: "America is a big country, Japan is small". A few mentioned such everyday concerns as "very hard meat" or "different bathtubs".

In the *Korean* group, there were more "don't know" responses, as well as expressions of feelings, such as "I was afraid because I can't speak" or "they are kind".

In the *solitary* group, responses ranged from "knew almost nothing" to comments about "will have friends and go to school", though comments about 'English spoken here' dominated.

The most surprising answers however came from the *US* children: "I didn't even know if they spoke English", "I think I knew that most of them were from other countries", and "knew about the weather, but didn't hear anything about the people".

4.4.2 Correspondence between Anticipated and Encountered Environment

Item 57 of the questionnaire asked, "Are the children in the USA [Michigan] just as you imagined them to be before you came here?"

Again, *Saudi* children made more references to personal attributes, "much nicer", "yes, they are happy", "thought they were mean like in the movies", or even "they eat pork", and "boys and girls do bad stuff".

The *Japanese* children continued to make references to physical attributes, such as "yellow hair" and "blue eyes". One ten year old girl observed, "They don't like things everyday, and they don't know how

to play with more than one friend".

The *Korean* children continued taciturn, while the *solitary* children also made references to personal characteristics, such as "different, they don't always play together", and general surprise, "thought was the same as in my country. Can't believe how it is different, the houses, places, everything".

Again, even the *US* children noted considerable differences: "I imagined they would be somewhat like my friends, once I came here, it was totally different", "even American children do things in big groups", and "Different. Didn't think they would talk a different language. The Michigan children are like the Illinois children".

4.4.3 Adapting to the New Environment

Finally, item 58 of the child interview asked, "How did you learn to understand?"

The *Saudi* children made more references to the learning process as such: "I watched", "I listened and asked my Daddy", "talking, watching and learning from them" or "watching, listening, and imitating". Some of the children also made reference to school and Sesame Street.

Among the *Japanese* and the *solitary* children, most made reference to their school, teachers, and the English as a second language classes. However, one solitary boy, six years at the time of arrival, stands out: "I decided to make up a club and invite some people. I did not know the words and they taught me. Now I use the high, hard words, and my parents don't know. It is fun!"

Among the *Korean* children, more references were made to friends, "from Korea", "Taiwan" or "Japan", only secondly to the school. The answer of a six and a half year old girl appears to summarize the experience of

these children: "My friends taught me, my teacher told me, and I grow up by myself to speak English".

Once more, the *US* children made numerous references to differences in the language: "This is a hard one. When I didn't understand, I asked them what they meant", or "As they talk more English, I got used to their accents", or even, "Most of them speak English, and I know English". One commented that "I didn't learn to understand them, I just know them", while one stated "It wasn't hard. I adapted very quickly, because I am an American".

4.4.4 Summary

Concerning the foreign children, it may be concluded that they indeed present some of the signs identified by Coelho & Stein (1980, p. 26) as pertaining to the uprooted: needs to change behavior patterns, learn new ones, as well as difficulties in communicating both verbally and nonverbally. What was more notable is that the US children appeared to show many of the same patterns, given the demographic composition of the two elementary schools and neighborhoods where the study took place.

4.5 Limitations and Directions for Further Research

There are various limitations to this study. With a view toward future research, several will be considered.

4.5.1 Subject Pool

As presented in the methodology chapter, no definitive information was available as to the number of potential subjects for this study. This contributed to the decision to work with large subsets, such as Saudi, Japanese and Korean families, as well as with the opposite extreme, i.e. solitary families. In view of what will be discussed below regarding cultural subgroups and socio-economic status, *further research* might

consider environments with a larger foreign population and/or several study sites.

4.5.2 Confounded Attributes

A note of caution needs to be added with respect to the national groups, and age and time variables, which appear to be confounded. Saudi children are the oldest, have been here longest, and expect to be here the longest. These age and time variations may well account for some of the group contrasts. On the other hand, Harter & Pike (1981b) point out that among the younger children there is a greater tendency to report relatively positive feelings of competence and acceptance. If age and group were confounded, the Saudi children, being the oldest, should have scored lowest; however, they were found to have scored highest in all four domains.

4.5.3 Culture

Of the four scales used in this study, the PSPCAYC was the most developed, being a thoroughly tested derivative of the *Perceived Competence Scale for Children*, which is based on applications with over 4000 children. Even so, Harter & Pike (1981) report no consistent domains. Given that the population used by Harter and her associates was mostly US middle class, there is no reason to assume that the scale is easily applicable to the present population, even though it proved reliable. *Further research* might (a) include more (sub-) cultures, (b) solicit from different groups lists of activities linked to culture specific competencies, (c) validate the reported competencies with direct observations, where possible, on playgrounds, school activites, etc., and (d) try to differentiate and refine the cognitive and physical competence domains.

4.5.4 Socio-economic Status Variables

Socio-economic status was not considered in this study for several reasons: (a) the sample was already small, hardly allowing for more breakdowns; and (b) a common referent for SES would have been very complex. For example, using US SES categories, this study is comparing Japanese university teachers with students from other countries. Using indigenous SES categories would lead to a series of other complicating considerations, such as comparability or even differing bases for SES (education, wealth, profession, etc). *Further research* would need to consider these factors with more care.

4.5.5 Cross-sectional versus Longitudinal Studies

Data were collected at one point in time only. Obviously, it would have been desirable to have known more about the families *before* they even arrived here. Similarly desirable would be follow-up contacts with them after they return home. Considering especially the analysis of time since arrival and time left until departure, a cross-lagged panel design with repeated observations would provide more powerful information, particularly regarding any U-curve type effects. Pre- and post-moving observations would indeed be very difficult to arrange, however, *further research* might consider a cross-lagged design for the time during the stay in the new environment.

4.6 Conclusions

The present study attempted to explore how six to twelve year old children, who have moved across cultural boundaries, perceive the new environment and their competence in dealing with it. Parents' perception of their children's competence, and children's and parents' culture shock were investigated as well. The results of the study

showed significant differences between children of various cultural backgrounds, as well as sex with respect to the peer acceptance domain of the PSPCAYC. Considering age and length of stay variables, no significant relations were found in the sample as a whole. When national groups were examined individually, however, some significant effects were found providing partial support for the hypotheses of the study. The findings reflect, in general, negative correlations between perceived competence as measured by the PSPCAYC and variables of age at arrival, age at interview, time of arrival, and time of departure. In relation to children's perceived competence, as measured by the PSPCAYC, and the measures of cultural shock in children and parents, as well as the parents' perception of their children's competence, few significant relationships were observed. It may be noted, however, that some discernible trends were found, such as (a) consistently positive relationships between parental perception of children's competence and the children's own perception of competence and acceptance, and (b) negative correlations between maternal acceptance and children's culture shock (need for own group and acceptance of the new environment). It appears that national and cultural groups show differential competencies in the various domains. Not only are they sensitive to the domains salient in their own cultures, but they are also sensitive to the demands in other domains that are particular to the new environment.

Furthermore, the results of the study support such previous findings as those presented by Turner & McClatchey (1978) who report: "The effects of mobility may not be a matter of degree: it may be advantageous to some, disadvantageous to others at different times". Additionally, the results suggested that social support, especially from their own group, helps newcomers to cope with the challanges they confront. As Adams & Lindemann (1974) stressed, emotional and social support, which is available and used as well as motivation and readiness to respond to the environmental challenge (Mechanic, 1974) are aspects of great importance in the way that new arrivals deal with the new environment.

REFERENCES

1. Adams, J. E., & Lindemann, E. Coping with long-term disability. IN Coelho *et al.*, 1974.

2. Ahmed, P. I., & Coelho, G. V. (Eds) *Toward a new definition of health*. New York: Plenum, 1979.

3. Allport, G. *Personality: A psychological interpretation*. New York: Holt, 1937.

4. Argyal, A. *Foundation for a science of personality*. New York: Commonwealth Fund, 1941.

5. Argyle, M., & Little, B. R. Do personality traits apply to social behavior? *Journal of Social Behavior*, 1972, *2*, 1-35.

6. Bardo, J. W., & Bardo, D. J. Sociodemographic correlates of adjustment for American migrants in Australia. *Journal of Social Psychology*, 1980, *112*, 255-260.

7. Becker, R. H. The effects of mobility on the social adjustment and self-esteem of middle and upper-class suburban children aged 8 through 11. *Dissertation Abstracts*, 1973, *34*, 2051A.

8. Berry, J. W. An ecological approach to cross-cultural psychology. *Nederlands Tijdschrift voor de Psychologie*, 1975, *30*, 51-84.

9. Bogat, G. A., Jones, J. W., & Jason, L. A. School transitions: Preventive intervention following an elementary school closing. *Journal of Community Psychology*, 1980, *8*, 343-352.

10. Bower, E. M. The modification, mediation and utilization of stress during the school years. *American Journal of Orthopsychiatry*, 1964, *34*, 664-667.

11. Bowlby, J. Grief and mourning in infancy and early childhood. *Psychoanalytic Study of the Child*, 1960, *15*,, 9-52.

12. Bowlby, J. Process of mourning. *International Journal of Psychoanalysis*, 1961a, *42*, 317-340.

13. Bowlby, J. Pathological mourning and childhood mourning. *Journal of American Psychoanalytical Association*, 1961b, *11*, 500-541.

14. Bronfenbrenner, U. *The ecology of human development*. Cambridge, MA: Harvard U Press, 1979.

15. Cattel, R. B. *The scientific analysis of personality*. Chicago: Aldine, 1965.

16. Coddington, R. D. The significance of life events as etiologic factors in the disease of children. II: A study of a normal population. *Journal of Psychosomatic Research*, 1972, *16*,, 205-213.

17. Coelho, G. V., Hamburg, D. A., & Adams, J. E. (Eds) *Coping and adaptation*. New York: Basic Books, 1974.

18. Coelho, G. V., & Ahmed, P. I. *Uprooting and Development*. New York: Plenum, 1980.

19. Coelho, G. V., & Stein, J. J. Change, vulnerability, and coping: Stresses of uprooting and overcrowding. IN Coelho & Ahmed, 1980.

20. Coleman, P. Do children suffer from a nomadic way of life? *The Times*, May 22, 1968.

21. Cottrell, S. B. Mixed children: Some observations and speculations. IN Hunter & Nice, 1978.

22. David, H. P. Healthy family functioning: Crosscultural perspectives. IN Coelho & Ahmed, 1980.

23. Dawson, F. An analytical study of the effects of maternal employment of same-sex chum denial in preadolescence, and of residential mobility on self-actualization achievement in a sample of adolescents. *Dissertation Abstracts*, 1969, *31*, 924A.

24. Dayton, A. N. *New facts on mental disorders*. Springfield, IL: Charles A. Thomas, 1940.

25. Dien, D. S., & Venacke, E. Self concept and parental identity of young adults with mixed Caucasian-Japanese parentage. *Journal of Abnormal and Social Psychology*, 1964, *69*, 463-466.

26. Dinges, N., & Duffy, L. Culture and competence. IN A. Marsella, R. Tharp, & T. Ciborowski (Eds) *Perspectives on cross-cultural psychology*. New York: Academic Press, 1979.

27. Dixon, W. J., & Brown, M. B. *BMDP-79 Biomedical Computer Programs P-Series*. Berkeley, CA: University of California Press, 1979.

28. Dollard, J. & Millard, N. *Personality and psychotherapy*.. New York: McGraw-Hill, 1950.

29. Epstein, S. Traits are alive and well. IN D. Magnusson & N. Endler (Eds), *Personality at the crossroads*. Hillsdale, NY: Erlbaum, 1977.

30. Erikson, E. *Childhood and society*. New York: Norton, 1952.

31. Eysenck, H. I., & Eysenck, S. B. G. *Personality structure and measurement*. San Diego, CA: Knapp, 1969.

32. Falik, L. H. The effects of high geographic mobility on the academic and social adjustment of children to their school environments. *Dissertation Abstracts*, 1966, *30*, 1015A.

33. Fenichel, O. *The psychoanalytic theory of neurosis*. New York: Norton, 1945.

34. Gibson, G. G. Education for the child in a service family. *Royal Air Force Education Bulletin*, 1973, *10*.

35. Ginter, M. M., & Felner, R. D. The use of school based support systems for preventive programming. Paper presented at the meeting of the American Psychological Assoication in New York, September 1979 (cited by Bogat *et al.*, 1980).

36. Glennon, B., & Weisz, J. R. An observational approach to the assessment of anxiety in young children. *Journal of Consulting and Clinical Psychology*, 1978, *46*, 1246-1257.

37. Goldfried, M. R., & D'Zurilla, T. A. A behavioral-analytic model of assessing competence. IN C. D. Spielberger (ED), *Current topics in clinical and community psychology*. New York: Academic Press, 1969.

38. Goldstein, K. *Human nature in the light of psychopathology*. Cambridge, MA: Harvard U Press, 1940.

39. Gordon, H. E., & Gordon, K. K. Emotional disorders of children in a rapidly growing suburb. *International Journal of Social Psychiatry*, 1958, *4*, 85-97.

40. Groos, K. *The play of man*. New York: Appleton, 1901.

41. Guilford, J. P. *Personality*. New York: McGraw-Hill, 1959.

42. Harter, S. Pleasure derived from cognitive challenge and mastery. *Child Development*, 1974, *45*, 661-669.

43. Harter, S. Developmental differences in the manifestation of mastery motivation on problem solving tasks. *Child Development*, 1975, *46*, 370-378.

44. Harter, S. The effects of social reinforcement and task difficulty level on the pleasure derived by normal and retarded children from cognitive challenges and mastery. *Journal of Experiemental Child Psychology*, 1977, *24*, 476-494.

45. Harter, S. Effectance motivation reconsidered: Toward a developmental model. *Human Development*, 1978, *1*, 34-64.

46. Harter, S. A model of mastery motivation in children: Individual differences and developmental changes. IN W. Andrew Collins (Ed), *Minnesota Symposia on Child Psychology*, Vol 14. Hillsdale, NY: Lawrence Erlbaum, 1981a.

47. Harter, S. A new self-report scale of intrinsic versus extrinsic orientation in the classroom: Motivational and informational components. *Developmental Psychology*, 1981b, *17*, 300-312.

48. Harter, S. A developmental perspective on some parameters of self-regulation in children. IN P. Karoly & F. H. Konfer (Eds) *Self-Management and Behavior Change: From Theory to Practice*. New York: Pergamon, 1982.

49. Harter, S. Developmental Perspectives on the Self-System. In E. M. Hetherington (ed), *Handbook of Child Psychology, Vol 4: Socialization, Personality, Social Development*. New York: Wiley, 1983.

50. Harter, S., & Pike, R. *The Pictorial Scale of Perceived Competence and Acceptance for Young Children*. Denver, CO: University of Denver, 1981a.

51. Harter, S., & Pike, R. *The Pictorial Scale of Perceived Competence and Acceptance for Young Children - MANUAL*. Denver, CO: University of Denver, 1981b (preliminary draft, mimeo).

52. Hartman, H. Comments on the psychoanalytic theory of the ego. *Psychoanalytic Study of the Child*, 1950, *5*, 74-95.

53. Hartup, W. W. The Peer System. In E. M. Hetherington (ed), *Handbook of Child Psychology, Vol 4: Socialization, Personality, Social Development*. New York: Wiley, 1983.

54. Heath, D. *Maturity and competence: A transcultural view.*. New York: Gardner, 1977.

55. Hendrick, I. Instinct and the ego during infancy. *Psychoanalytic Quarterly*, 1942, *11*, 33-58.

56. Hirschowitz, R. G. Groups to help people cope with the tasks of transition. IN R. G. Hirschowitz & B. Levy (Eds) *The changing mental health scene*. New York: Spectrum Press, 1976.

57. Huhr, W. M. Marginal children of war: An exploratory study of American-Korean children. *International Journal of the Sociology of the Family*, 1972, *2*, 10-20.

58. Janis, I. L. Vigilance and decision making in personal crises. IN Coelho *et al.*, 1974

59. Klein, D. C., & Ross, A. Kindergarten entry: A study of role transition. IN H. J. Parad (Ed) *Crisis intervention: Selected readings*. New York: Family Service Association, 1965.

60. Lambert, W. E., & Klineberg, O. Children's views of foreign peoples: A cross-national study. New York: Appleton-Century-Crofts, 1967.

61. Laosa, L. M. Social competence in childhood: Toward a developmental, socioculturally relativistic paradigm. IN M. W. Kent & J. E. Rolf (Eds) *Primary prevention in psychopathology*. Hanover, NH: U Press of New England, 1979.

62. Lazarus, R. S. A. A cognitively oriented psychologist looks at biofeedback. *American Psychologist*, 1975, *2*, 550-561.

63. Leifer, M. Psychological changes accompanying pregnancy and motherhood. *Genetic Psychology Monographs*, 1977, *95*, 55-96.

64. Lewin, K. A dynamic theory of personality. New York: McGraw-Hill, 1935.

65. Long, L. H. Does migration interfere with children's progress in school? *Sociology of Education*, 1975, *48*, 369-381.

66. Malzberg, B., & Lee, E. S. *Migration and mental disease*. New York: Social Science Research Council, 1956.

67. Maslow, A. *Motivation and personality*. New York: Harper, 1954.

68. Mechanic, D. Social structure and personal adaptation: Some neglected dimensions. IN Coelho *et al.*, 1974.

69. Mowrer, O. *Learning theory and personality dynamics*. New York: Ronald Press, 1950.

70. Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. H. *SPSS- Statistical Package for the Social Sciences*, 2nd edition. New York: McGraw-Hill, 1975.

71. Ouster, J. Children from families who move frequently. *Highlight*, 1974, *10*.

72. Owen, J.E. The effect of a low incidence of student mobility as compared to a high incidence of student mobility on the attitudes of seventh grade students. *Dissertation Abstracts*, 1971, *32*, 3869A.

73. Pareek, U., & Roa, T. V. Cross-Cultural Surveys and Interviewing. IN H. C. Triandis & J. W. Berry (Eds) *Handbook of Cross-Cultural Psychology*, vol 2: Methodology. Boston: Allyn & Bacon, 1980.

74. Parkes, M. C. Psycho-social transitions: A field of study. *Social Science and Medicine*, 1971 *5*, 101-115.

75. Pedersen, F. A., & Sullivan, E. J. Relationships among geographic mobility, parental attitude and emotional disturbance in children. *American Journal of Orthopsychiatry*, 1964, *34*, 575-580.

76. Piaget, J. Need and significance of cross-cultural studies in genetic psychology. In J. W. Berry & P. R. Dasen, *Culture and cognition*. London: Methuan, 1974.

77. Piaget, J., & Weil, A. M. The development in children of the idea of the homeland and of relations with other countries. *International Social Science Bulletin*, 1951, *3*, 561-578.

78. Pretzlaff, R. E. The relationship of transiency and geographic mobility to the social studies, understandings, attitudes and skills of sixth-graders. *Dissertation Abstracts*, 1969, *30*, 3648A.

79. Primavera, J., Ginter, M. M., Felner, R. D., & Cauce, A. M. The impact of school transitions: A focus for preventive efforts. Paper presented at the meeting of the American Psychological Association in New York, September 1979 (cited by Bogat *et al.*, 1980).

80. Ritchie, E. C. The effects of school changes on children - a review. *Torch*, 1965.

81. Robertson, J., & Robertson, J. (Producers). *John, 17 months. Nine days in a residential nursery*. Nacton, Ipswich: Concord Film, 1969.

82. Rogers, C. *On becoming a person*. Boston, MA: Houghton Miffling, 1961.

83. Spradley, J. P. *The Ethnographic Interview*. New York: Holt, Rinehart & Winston, 1979.

84. Strickland, R. C. The mobility and achievement of selected dependent junior high school pupils in Germany. *Dissertation Abstracts*, 1970, *32*, 144A.

85. Tietze, C., Lemkau, P., & Cooper, M. Personality disorders and spatial mobility. *American Journal of Sociology*, 1942, *48*, 29-40.

86. Thornton, K. A survey: Educational conditions of foreign children in an American public school system. *Dissertation Abstracts International*, 1980, *40*, 6181A. (Doctoral dissertation, Michigan State University, 1979).

87. Triandis, H. C. A theoretical framework for the study of bi-linggual-bicultural adaptation. *International Review of Applied Psychology*, 1980, *29*, 5-16.

88. Turner, I., & McClatchey, L. Mobility, school attainment and adjustment. *Association of Educational Psychologists Journal*,, 1978, *4(9)*, 45-50.

89. Useem, R. H., & Downie, R. D. Third-culture kids. *Today's Education*, 1976, 103-105.

90. U.S. Goverment, Department of the Army, Research Department. *Turbulence and children - An anthology of readings and bibliography*. Washington, DC: U.S. Government Printing Office, 1975.

91. Werkman, S. L. Coming home: Adjustment problems of adolescents who have lived overseas. IN Sh. C. Feinstein & P. L. Giovacchini (Eds), *Adolescent psychiatry: Developmental and clinical studies*, Vol VII. Chicago: U Chicago Press, 1979.

92. Whalen, T. E., & Fried, M. A. Geographic mobility and its effects on student achievement. *Journal of Educational Research*, 1973, *67*, 163-165.

93. White, R. Motivation reconsidered: A concept of competence. *Psychological Review*, 1959, *66*, 297-333.

94. White, R. Competence as an aspect of personal growth. IN M. W. Kent & J. E. Rolf (Eds) *Primary prevention in psychopathology*. Hanover, NH: U Press of New England, 1979.

95. Wolfenstein, M. *Disaster: A psychological essay*. London: Routledge and Kegan Paul, 1957.

96. Wooster, A. D., & Harris, G. Concepts of self and others in highly mobile service boys. *Educational Research*, 1972, *14*, 195-199.

MICHIGAN STATE UNIVERSITY

Department of Psychology
Psychology Research Building

East Lansing, MI 48824-1117

November 30, 1983

APPENDIX A

Dear Parents:

As a foreign student and child psychologist, I have often wondered how my daughter has reacted to our move to East Lansing, and how she will cope with our return.

Presently, I am working on my dissertation, which deals with children's reactionsto their new environment: How do they learn to deal with it? How do they learn to get along with new friends, in a new school, for some in a different language?

I would like to ask your cooperation in this study by allowing me or my research assistant to talk to you and to (one of) your child(ren). Permission has been obtained from the Department of Psychology at Michigan State University, as well as from the University Committee on Research Involving Human Subjects.

In a few days, we will call you to find out whether you agree to participate in this study.

Assuming you do agree to participate, we will set a time for us to meet with you at your convenience in you home. We wish to talk to one parent, and one child, between the age of six and twelve. We expect to spend a total of 1 1/4 hour with your family.

If you have any questions, please feel free to call me at home at 355-7800. At the conclusion of the study, I shall be happy to tell you about the findings.

Thank you very much in advance for your help and cooperation.

Sincerely,

Isolda de Araújo Günther	Dr. Ellen A.Strommen	Judy Callender
PhD Candidate in Psychology	Professor of Psychology	Research Assistant

MICHIGAN STATE UNIVERSITY

Department of Psychology
Psychology Research Building

East Lansing, MI 48824-1117

November 30, 1983

APPENDIX B

Departmental Research Consent Form

1. I have freely consented to take part in a scientific study conducted by Isolda de Araújo Günther, under the supervision of Dr. Ellen A. Strommen, professor of psychology.
2. The study has been explained to me, and I understand the explanation that has been given and what my participation will involve.
3. I understand that I will be interviewed, as well as one of my children.
4. I understand that I am free to discontinue my participation in the study, or the participation of my child, at any time without penalty.
5. I understand that the results of the study will be treated in strict confidence, and that I will remain anonymous. Within these restrictions, results of the study will be made available to me at my request.
6. I understand that my participation in the study does not guarantee any beneficial results to me.
7. I understand that, at my request, I can receive additional explanation of the study after my participation is completed.

Signed:

Date:

The title of the experiment is:

Foreign Children's Reactions to a Transitional Environment

APPENDIX C

Child Interview Schedule

IDENTIFICATION

Name ..... :

Address ..... :

Phone ..... :

Date of Interview ..... :

What time is it *now* .... :

ID Number ..... _____

INTRODUCTION

I am a psychologist who studies children and adolescents. I talk with both of them, but sometimes I wonder if my impressions about them, about what they think and do is different from the way they see things. I would like to know how you see your life, your friends, your school. I would like to take some notes and to tape record our talk, because that way I can go over it later. Would that be okay?

PRELIMINARY QUESTIONS

To establish rapport, deal with the following topics:

1. What is your name?
2. Can you write it for me?

   ..... _____

3. How old are you?

   ..... _____

4. What grade are you in at school?

   ..... _____

5. Who else lives with you at your home?

   ..... _____

6. Where did you live before coming here?

..... _____

7. What language do you speak there?

..... _____

ABOUT COMING TO THE USA

8. Can you tell me when you and your family came to the USA?

..... _____

9. Is this your first stay in the USA? ..... _____

10. You told me that you had lived in ----- before coming here. Tell me what you remember about living there?

..... _____

Before you came to the USA -- tell me -- what did you know about the people who live here in the USA?

11. If *NO*, Probe a little, nothing at all?

..... _____

12. If/When *YES*, Who told you about this?

..... _____

ABOUT FOOD

13. What can you tell me about the food you ate in ----- ?

..... _____

14. What do you eat at school here? Is it the same as in ----- ? What do you like better?

..... _____

15. What kind of food do you eat at home? Is it the same as in ----- ? What do you like better?

..... _____

16. Is the food at home the same as in school?

..... _____

17. What do you like most about the food in the USA?

..... _____

18. What do you like least about the food in the USA?

..... _____

ABOUT LANGUAGE

You said you speak ---- *language* in ---- *country*?

19. Do you speak ----- at home?

..... _____

20. Do you speak ----- at school?

..... _____

21. In school, do you speak ----- with other children from ----- ? Can you tell me why?

..... _____

22. If *YES*, What do the other children say, when you speak ----- at school?

..... _____

23. If *NO*, Why?

..... _____

24. Tell me -- how do you feel about that?

..... _____

25. And on the playground, do you speak ----- with other children from ----- ?

..... _____

26. If *YES*, What do the other children say, when you speak ----- on the playground?

..... _____

27. If *NO*, Why?

28. Tell me -- how do you feel about that?

29. Do you speak ----- in your friends' homes?

..... _____

ABOUT CLOTHES

31. What can you tell me about the clothes you wore in ----- ?

..... _____

32. Did you wear a uniform to school?

..... _____

33. What do you wear to school here?

..... _____

34. What do you wear on the playground here?

..... _____

35. What do you wear at home?

..... _____

36. Tell me -- how do you feel about the kind of clothes you wear here?

..... _____

37. Do your parents like the same kind of children's clothes as you do?

..... _____

ABOUT PLAYING

38. Tell me -- how did you play with other children in ----- ? What was it like?

..... _____

39. When you are at school now, what do you and your friends play?

..... _____

Tell me -- who do you usually play with?

40. at school?

..... _____

41. at home?

..... _____

42. on the playground?

..... _____

43. When you are at home, what do you and your friends play?

..... _____

ABOUT HOME

44. In -----, did you live in a house or an apartment?

..... _____

45. Where you live now, is it larger or smaller than your [home/apartment] in ----- ?

..... _____

46. Tell me -- what do you like most about your apartment here in the USA?

..... _____

47. And, tell me, what do you like least about your apartment here in the USA?

..... _____

ABOUT FRIENDS

48. Tell me -- which friends do you remember from ----- ?

..... _____

49. Who are your friends here?

..... _____

50. What country are they from?

..... _____

51. How/where did you meet these friends?

..... _____

52. What do you do together?

..... _____

53. Do you play together after school?

..... _____

54. Do you go to your friends' home?

..... _____

55. Do your friends come to your home?

..... _____

56. Do your friends do everything the same way you do?

..... _____

57. Are the children in the USA just as you imagined them to be before you came here?

..... _____

58. How did you learn to understand them?

ABOUT SCHOOL

59. *In case appropriate:* You said you went to school in ----- ?

..... _____

60. What was your school like there?

..... _____

61. Tell me about your school here?

..... _____

62. When you were in ----- what did you think it would be like to go to school here in the USA?

..... _____

63. What things does the teacher tell you that are the same as what your parents tell you?

..... _____

64. Are there things that your teacher at school tells you to do that your parents do not allow you to do at home?

..... _____

65. What things do your friends tell you to do that are the same as your parents tell you at home?

66. Can you tell me things your friends tell you to do that your parents do not allow you to do at home?

..... _____

STRUCTURED QUESTIONS

Now I would like to ask you some questions, and would like you to tell me, if these things happen to you 'all the time', 'sometime', or 'never'..

Hand child a card with the alternatives.

To help you remember, here is a card with the answers. See...

Explain card, pointing to the three alternatives.

For instance, if I ask you: Do you sleep at night?

you would answer, *PAUSE*, (expected response YES),

and if I ask you: Do you eat Pizza at school?

you would answer, *PAUSE*, (expected response SOMETIMES),

and if I ask you: Do you drive a real car?

you would answer, *PAUSE*. (expected response NO).

Now, let's begin:

67. Do you ever feel that you have a lot of friends? ..... _____
68. Do you enjoy going out without your family? ..... _____
69. Do you *dis*like people speaking to you in English? ..... _____
70. Do you feel happy at home? ..... _____
71. Do you ever think that you will miss your American friends after you go back home? ..... _____
72. Do you enjoy to speak English? ..... _____
73. Do you ever want to play only with other children from ----- [own country]? ..... _____
74. Do you dislike going out without your family? ..... _____
75. Do you feel happy while in school? ..... _____
76. Do you enjoy people speaking to you in English? ..... _____
77. Do you ever miss your friends from ----- ? ..... _____
78. Do you ever want to play only with American children? ..... _____
79. Do you ever want to go back to ----- ? ..... _____
80. Do you like to speak ----- rather than English? ..... _____
81. Do you ever feel lonely while at home here in the USA? ..... _____
82. Do you ever miss the food from ------ ? ..... _____
83. Do you ever feel that you do not have any friends? ..... _____
84. Do you ever feel lonely while in school? ..... _____

THREE THINGS LIKED MOST

Please tell me *three* things you like about living here.

85. A

..... _____

86. B

..... _____

87. C

..... _____

THREE THINGS LIKED LEAST

And now, please tell me *three* things you don't like about living here.

88. A

..... _____

89. B

..... _____

90. C

..... _____

SUGGESTIONS FOR A FRIEND FROM HOME COMING HERE

Imagine that you have friends in ----- who also want to come to East Lansing. It is a family with a father, a mother, a son and a daughter. They wrote to you and asked your help about moving here.

91. What advice would you give them?

..... _____

After waiting and noting spontaneous responses, ask specifically:

92. What advice would you give to the father?

..... _____

93. What advice would you give to the mother?

..... _____

94. What advice would you give to the son?

..... _____

95. What advice would you give to the daughter?

..... _____

HARTER SCALE. Finally, I would like to ask you a few more questions.

What time is it *now*?

APPENDIX D

Child Interview Schedule

IDENTIFICATION

Name ..... :

Address ..... :

Phone ..... :

Date of Interview ..... :

What time is it *now* .... :

ID Number ..... _____

INTRODUCTION

I am a psychologist who studies children and adolescents. I talk with both of them, but sometimes I wonder if my impressions about them, about what they think and do is different from the way they see things. I would like to know how you see your life, your friends, your school. I would like to take some notes and to tape record our talk, because that way I can go over it later. Would that be okay?

PRELIMINARY QUESTIONS

To establish rapport, deal with the following topics:

1. What is your name?

2. Can you write it for me?

   ..... _____

3. How old are you?

   ..... _____

4. What grade are you in at school?

   ..... _____

5. Who else lives with you at your home?

   ..... _____

6. Where did you live before coming here?

..... _____

ABOUT COMING TO MICHIGAN

8. Can you tell me when you and your family came to Michigan?

..... _____

9. Is this your first stay in Michigan? ..... _____

10. You told me that you had lived in ----- before coming here. Tell me what you remember about living there?

..... _____

Before you came to Michigan -- tell me -- what did you know about the people who live here in Michigan?

11. If *NO*, Probe a little, nothing at all?

..... _____

12. If/When *YES*, Who told you about this?

..... _____

ABOUT FOOD

13. What can you tell me about the food you ate in ----- ?

..... _____

14. What do you eat at school here? Is it the same as in ----- ? What do you like better?

..... _____

15. What kind of food do you eat at home? Is it the same as in ----- ? What do you like better?

..... _____

16. Is the food at home the same as in school?

..... _____

17. What do you like most about the food in Michigan?

..... _____

18. What do you like least about the food in Michigan?

..... _____

ABOUT LANGUAGE

30. Do you find that children here in Michigan speak differently than in ----- *previous state of residence*?

..... _____

ABOUT CLOTHES

31. What can you tell me about the clothes your wore in ----- ?

..... _____

32. Did you wear a uniform to school?

..... _____

33. What do you wear to school here?

..... _____

34. What do you wear on the playground here?

..... _____

35. What do you wear at home?

..... _____

36. Tell me -- how do you feel about the kind of clothes you wear here?

..... _____

37. Do your parents like the same kind of children's clothes as you do?

..... _____

ABOUT PLAYING

38. Tell me -- how did you play with other children in ----- ? What was it like?

..... _____

39. When you are at school now, what do you and your friends play?

..... _____

Tell me -- who do you usually play with?

40. at school?

..... _____

41. at home?

..... _____

42. on the playground?

..... _____

43. When you are at home, what do you and your friends play?

..... _____

ABOUT HOME

44. In -----, did you live in a house or an apartment?

..... _____

45. Where you live now, is it larger or smaller than your [home/apartment] in ----- ?

..... _____

46. Tell me -- what do you like most about your apartment here in Michigan?

..... _____

47. And, tell me, what do you like least about your apartment here in Michigan?

..... _____

ABOUT FRIENDS

48. Tell me -- which friends do you remember from ----- ?

..... _____

49. Who are your friends here?

..... _____

50. What country are they from?

..... _____

51. How/where did you meet these friends?

..... _____

52. What do you do together?

..... _____

53. Do you play together after school?

..... _____

54. Do you go to your friends' home?

..... _____

55. Do your friends come to your home?

..... _____

56. Do your friends do everything the same way you do?

..... _____

57. Are the children in Michigan just as you imagined them to be before you came here?

..... _____

58. How did you learn to understand them?

ABOUT SCHOOL

59. *In case appropriate:* You said you went to school in ----- ?

..... _____

60. What was your school like there?

..... _____

61. Tell me about your school here?

..... _____

62. When you were in ----- what did you think if would be like to go to school here in Michigan?

..... _____

63. What things does the teacher tell you that are the same as what your parents tell you?

..... _____

64. Are there things that your teacher at school tells you to do that your parents do not allow you to do at home?

..... _____

65. What things do your friends tell you to do that are the same as your parents tell you at home?

..... _____

66. Can you tell me things your friends tell you to do that your parents do not allow you to do at home?

STRUCTURED QUESTIONS

Now I would like to ask you some questions, and would like you to tell me, if these things happen to you 'all the time', 'sometime', or 'never'.

Hand child a card with the alternatives.

To help you remember, here is a card with the answers. See...

Explain card, pointing to the three alternatives.

For instance, if I ask you: Do you sleep at night?

you would answer, *PAUSE*, (expected response YES),

and if I ask you: Do you eat Pizza at school?

you would answer, *PAUSE*, (expected response SOMETIMES),

and if I ask you: Do you drive a real car?

you would answer, *PAUSE*. (expected response NO).

Now, let's begin:

67. Do you ever feel that you have a lot of friends? ..... _____

68. Do you enjoy going out without your family? ..... _____

70. Do you feel happy at home? ..... _____

73. Do you ever want to play only with other children from ----- *previous state of residence*? ..... _____

74. Do you dislike going out without your family? ..... _____

75. Do you feel happy while in school? ..... _____

77. Do you ever miss your friends from ----- ? ..... _____

79. Do you ever want to go back to ----- ? ..... _____

81. Do you ever feel lonely while at home here in Michigan? ..... _____

82. Do you ever miss the food from ------ ? ..... _____

83. Do you ever feel that you do not have any friends? ..... _____

84. Do you ever feel lonely while in school? ..... _____

THREE THINGS LIKED MOST

Please tell me *three* things you like about living here.

85. A

..... _____

86. B

..... _____

87. C

..... _____

THREE THINGS LIKED LEAST

And now, please tell me *three* things you don't like about living here.

88. A

..... _____

89. B

..... _____

90. C

..... _____

SUGGESTIONS FOR A FRIEND FROM HOME COMING HERE

Imagine that you have friends in ----- who also want to come to East Lansing. It is a family with a father, a mother, a son and a daughter. They wrote to you and asked your help about moving here.

91. What advice would you give them?

..... _____

After waiting and noting spontaneous responses, ask specifically:

92. What advice would you give to the father?

..... _____

93. What advice would you give to the mother?

..... _____

94. What advice would you give to the son?

..... _____

95. What advice would you give to the daughter?

..... _____

HARTER SCALE. Finally, I would like to ask you a few more questions.
What time is it *now*?

APPENDIX E

Parent Interview Schedule

IDENTIFICATION

Name ..... :

Address ..... :

Phone ..... :

Date of Interview ..... :

What time is it *now* .... :

ID Number ..... _____

INTRODUCTION

As you know, I am a psychologist who studies children and adolescents. In this study I am interested in finding out the children's reactions to a new environment. I just talked to ----- *name of the child* about her/his reactions to coming to the USA. Now I would like to ask you some questions as well, both about your own reaction to your move here, as well as your observations about your child's reactions.

PRELIMINARY QUESTIONS

To establish rapport, deal with the following topics initially:

1. How long have you been in Michigan?

..... _____

2. Have you lived elsewhere in the US before?

..... _____

3. How did you get to know East Lansing? *i.e.*, about where to buy food, clothing, household, doctor?

..... _____

4. Are you a student? What is your field of study? What degree?

..... _____

5. What does your spouse do, is he/she also a student?

..... _____

6. When do you plan to go back to ----- ?

..... _____

ABOUT YOUR FAMILY

7. Did you come here initially with your family, or did they come later?

..... _____

8. How many children do you have? Are they boys or girls, what are their ages?

..... _____

9. How did ----- *name of the child interviewed* react, when you first spoke about moving to the USA?

..... _____

Did you prepare ----- in any way for the move?

10. If *YES*, What did you do?

..... _____

11. If *NO*, Why not?

..... _____

12. Do you think ----- has changed since coming here?

..... _____

After waiting an noting (above this line) *any spontaneous responses, ask specifically:*

Do you think ----- changed in her/his relation with

13. father

..... _____

14. mother

..... _____

15. brother/sister

..... _____

16. other family members

..... _____

17. friends

..... _____

18. school

..... _____

19. self

..... _____

STRUCTURED QUESTIONS

In the following, I would like to ask you some questions about your reactions to coming to Michigan/USA. I have prepared a series of statements, and would like you to tell me if these things happen to you 'all the time', 'often', 'sometime', 'seldom' or 'never'.

Hand parent a card with the alternatives Here is a card with the answers. See...

Explain card, pointing to the five alternatives. All you would have to tell me is the number that goes with the statement. If you don't have any questions, let's begin.

20. Do you ever feel that you have a lot of friends? ..... _____
21. Do you enjoy going shopping without your family? ..... _____
22. Do you ever miss your family and friends in ----- *home country*? .... _____
23. Do you dislike people speaking to you in English? ..... _____
24. Do you ever feel confined in your home here in the USA? ..... _____
25. Do you like to speak ----- rather than English at home? ..... _____
26. Are you ever concerned about your child's ability to speak ----- ? . _____
27. Do you ever want to have more American friends? ..... _____
28. Do you feel happy at home? ..... _____
29. Do you ever miss the food from ----- ? ..... _____
30. Are you ever unable to relax in the company of Americans? ..... _____
31. Are you ever proud of your child(ren)'s progress in English? ..... _____
32. Do you dislike going shopping without your family? ..... _____
33. Do you like to speak English? ..... _____
34. Do you ever feel that you do not have any friends? ..... _____
35. Do you ever wish to go back to ----- ? ..... _____
36. Do you ever need the help of your child(ren) in social situations? . _____
37. Do you ever think about missing U.S. food after you go back home? . _____
38. Do you like for people to speak to you in English? ..... _____
39. Are you ever unable to relax in the company of others from ----- *home country*? ..... _____
40. Do you ever feel uncomfortable while attending class? ..... _____
41. Do you ever feel uncomfortable speaking ----- in front of Americans? _____
42. Do you ever feel embarrassed when asking your child(ren)'s help in social situations? ..... _____
43. Are you ever concerned that your child(ren) will have difficulty after returning to ----- ? ..... _____

    44. If *YES*, What kind of difficulty?

SUGGESTIONS FOR A FRIEND FROM HOME COMING HERE

Imagine that you have friends in ----- who also want to come to East Lansing. It is a family of four (father, mother, a son and a daughter). They write to you and ask your advice about coming here to study.

45. What advice would you give them?

..... _____

After waiting and noting (above this line) *any spontaneous responses, ask specifically:*

46. What advice would you give to the father?

..... _____

47. What advice would you give to the mother?

..... _____

48. What advice would you give to the son?

..... _____

49. What advice would you give to the daughter?

..... _____

THREE THINGS LIKED
Please tell me the *three* things your child likes to do most:

46. A

..... _____

47. B

..... _____

48. C

..... _____

THREE THINGS DISLIKED
Please list the *three* things your child least likes to do:

49. A

..... _____

50. B

..... _____

51. C

..... _____

HARTER SCALE: Finally, I would like to ask you a few more questions.
What time is it *now* .... :

Name of the Child ..... :

ID Number ..... _____

Please indicate how you see your child in terms of the following statements.

	not very much				very much
1. My child seems to like living in East Lansing	1	2	3	4	5
2. My child seems to like school	1	2	3	4	5
3. My child likes to do school work	1	2	3	4	5
4. My child prefers to figure out problems on his/her own	1	2	3	4	5
5. My child's friends have mostly a different nationality	1	2	3	4	5
6. My child relies on others for help and guidance (i.e., father, mother, brother, sister)	1	2	3	4	5
7. My child has difficulties in making friends	1	2	3	4	5
8. My child enjoys being with friends	1	2	3	4	5
9. My child prefers to watch, rather than play in sports	1	2	3	4	5
10. My child likes sports	1	2	3	4	5
11. My child prefers to play alone	1	2	3	4	5
12. My child likes new activities	1	2	3	4	5
13. My child's friends are mostly from our home country	1	2	3	4	5
14. My child prefers to play in sports rather than watch	1	2	3	4	5

APPENDIX F

Parent Interview Schedule

IDENTIFICATION

Name:

Address:

Phone:

Date of Interview:

What time is it *now*:

ID Number ..... _____

INTRODUCTION

As you know, I am a psychologist who studies children and adolescents. In this study I am interested in finding out the children's reactions to a new environment. I just talked to ----- *name of the child* about her/his reactions to coming to Michigan. Now I would like to ask you some questions as well, both about your own reaction to your move here, as well as your observations about your child's reactions.

PRELIMINARY QUESTIONS

To establish rapport, deal with the following topics initially:

1. How long have you been in Michigan?

..... _____

2. Where did you live before coming to Michigan?

..... _____

3. How did you get to know East Lansing? *i.e.*, about where to buy food, clothing, household, doctor?

..... _____

4. Are you a student? What is your field of study? What degree?

..... _____

5. What does your spouse do, is he/she also a student?

..... _____

6. Do you plan to go back to ----- ?

..... _____

ABOUT YOUR FAMILY

7. Did you come here initially with your family, or did they come later?

..... _____

8. How many children do you have? Are they boys or girls, what are their ages?

..... _____

9. How did ----- *name of the child interviewed* react, when you first spoke about moving to Michigan?

..... _____

Did you prepare ----- in any way for the move?

10. If *YES*, What did you do?

..... _____

11. If *NO*, Why not?

..... _____

12. Do you think ----- has changed since coming here?

..... _____

After waiting an noting (above this line) *any spontaneous responses, ask specifically:*

Do you think ----- changed in her/his relation with

13. father

..... _____

14. mother

..... _____

15. brother/sister

..... _____

16. other family members

..... _____

17. friends

..... _____

18. school

..... _____

19. self

..... _____

STRUCTURED QUESTIONS

In the following, I would like to ask you some questions about your reactions to coming to Michigan/USA. I have prepared a series of statements, and would like you to tell me if these things happen to you 'all the time', 'often', 'sometime', 'seldom' or 'never'.

Hand parent a card with the alternatives Here is a card with the answers. See...

Explain card, pointing to the five alternatives. All you would have to tell me is the number that goes with the statement. If you don't have any questions, let's begin.

20. Do you ever feel that you have a lot of friends? ..... _____

21. Do you enjoy going shopping without your family? ..... _____

22. Do you ever miss your family and friends in -----
previous state of residence? ..... _____

24. Do you ever feel confined in your home here in Michigan? ..... _____

27. Do you ever want to have more friends from Michigan? ..... _____

28. Do you feel happy at home? ..... _____

29. Do you ever miss the food from ----- ? ..... _____

30. Are you ever unable to relax in the company of people from Michigan? _____

32. Do you dislike going shopping without your family? ..... _____

34. Do you ever feel that you do not have any friends? ..... _____

35. Do you ever wish to go back to ----- ? ..... _____

40. Do you ever feel uncomfortable while attending class? ..... _____

SUGGESTIONS FOR A FRIEND FROM HOME COMING HERE

Imagine that you have friends in ----- who also want to come to East Lansing. It is a family of four (father, mother, a son and a daughter). They write to you and ask your advice about coming here to study.

46. What advice would you give them?

..... _____

After waiting and noting (above this line) *any spontaneous responses, ask specifically:*

47. What advice would you give to the father?

..... _____

48. What advice would you give to the mother?

..... _____

49. What advice would you give to the son?

..... _____

50. What advice would you give to the daughter?

..... _____

THREE THINGS LIKED
Please tell me the *three* things your child likes to do most:

47. A

..... _____

48. B

..... _____

49. C

..... _____

THREE THINGS DISLIKED
Please list the *three* things your child least likes to do:

50. A

..... _____

51. B

..... _____

52. C

..... _____

HARTER SCALE: Finally, I would like to ask you a few more questions.
What time is it *now* .... :

Name of the Child ..... :

ID Number ..... _____

Please indicate how you see your child in terms of the following statements.

	not very much				very much
1. My child seems to like living in East Lansing	1	2	3	4	5
2. My child seems to like school	1	2	3	4	5
3. My child likes to do school work	1	2	3	4	5
4. My child prefers to figure out problems on his/her own	1	2	3	4	5
5. My child's friends have mostly a different nationality	1	2	3	4	5
6. My child relies on others for help and guidance (i.e., father, mother, brother, sister)	1	2	3	4	5
7. My child has difficulties in making friends	1	2	3	4	5
8. My child enjoys being with friends	1	2	3	4	5
9. My child prefers to watch, rather than play in sports	1	2	3	4	5
10. My child likes sports	1	2	3	4	5
11. My child prefers to play alone	1	2	3	4	5
12. My child likes new activities	1	2	3	4	5
13. My child's friends are mostly from our home country	1	2	3	4	5
14. My child prefers to play in sports rather than watch	1	2	3	4	5

APPENDIX G

Post Interview Observations

Identification

Name ..... :

Address ..... :

Phone ..... :

Date of Interview ..... :

Time of observations ... :

ID Number ..... _____

Environment

1. How comfortable was the environment? [on a scale from 1 (low) to 5] _____
2. Number of people present in the home.

   ..... _____
3. Any appliances that interfered? (TV, radio, stereo, phone, other)

   ..... _____
4. Other interfering circumstances? (visitors)

   ..... _____
5. Which interview took place first, with the parent or the child?

   ..... _____
6. In case the interview was abandoned, why?
7. Other comments:

Parent Interview Situation

8. Who was interviewed, father or mother (circle one)? ..... _____

9. Was the other spouse present? During the entire interview?

..... _____

10. How cooperative was the interviewee? [on a scale from 1 (low) to 5] _____

11. In case others were present, did they comment, contribute, distract?

..... _____

Emotional Involvement of Interviewee

12. imitation of other people's voices ..... _____

13. change in voice volume ..... _____

14. change in voice tone ..... _____

15. body movement ..... _____

16. any signs of re-experiencing of feelings linked to situations being described ..... _____

17. other

..... _____

Emotional Involvement of Interviewee's Spouse (in case present)

18. imitation of other people's voices ..... _____

19. change in voice volume ..... _____

20. change in voice tone ..... _____

21. body movement ..... _____

22. any signs of re-experiencing of feelings linked to situations being described ..... _____

23. other

..... _____

Child Interview Situation

24. Who else was present? During what part of the interview?

..... _____

25. Did the child cooperate? [on a scale from 1 (low) to 5] ..... _____

26. Did the child understand the questions?
[on a scale from 1 (low) to 5 (high)] ..... _____

Emotional Involvement of the Child

27. Physical complaints (subject has a headache, stomachache, has to go to the bathroom) ..... _____

28. Expression of fear or worry (use of such words as afraid, scared, worried) ..... _____

29. Crying: visible tears ..... _____

30. Trembling voice ..... _____

31. Whisper (subject speaks without vocal cords) ..... _____

32. Silence to a particular question ..... _____

33. Nail biting during the interview ..... _____

34. Gratuitous hand movements to body (ear, hair, etc.) ..... _____

35. Gratuitous hand movements to an object separate from the body, or piece of clothing ..... _____

36. Rigid posture ..... _____

37. distractions ..... _____

38. Avoidance of eye contact ..... _____

APPENDIX H

Sample Page of the

Pictorial Scale of Perceived Competence and Acceptance

for Young Children

(Harter & Pike, 1981a)

ITEM 1

This girl isn't very good at numbers
Are you

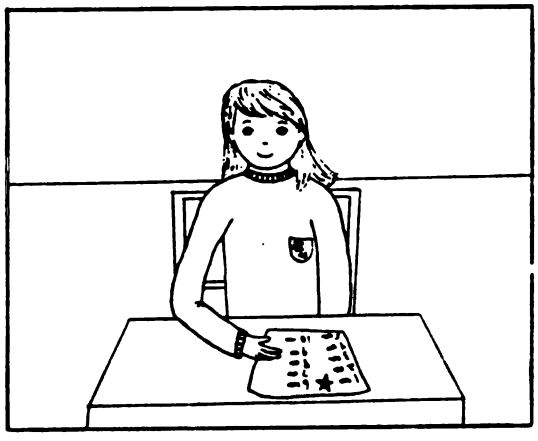
Not too good at numbers OR Sort of good

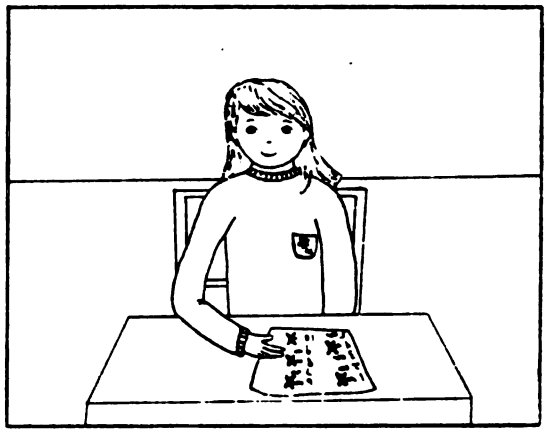
1 2

This girl is pretty good at numbers
Are you

Pretty good OR Really good at numbers

3 4





APPENDIX I

Reliability Analyses: PSPCAYC

Cognitive Competence

1.	H01	NUMBERS
2.	H05	KNOW THINGS IN US SCHOOL
3.	H09	READING SKILLS IN ENGLISH
4.	H13	WRITING SKILLS IN ENGLISH
5.	H17	SPELLING SKILLS IN ENGLISH
6.	H21	ADDING SKILLS

		MEANS	STD DEV	CASES
1.	H01	3.378	.806	45.0
2.	H05	3.289	.787	45.0
3.	H09	3.178	.960	45.0
4.	H13	3.289	.944	45.0
5.	H17	3.200	.944	45.0
6.	H21	3.644	.570	45.0

CORRELATION MATRIX

	H01	H05	H09	H13	H17	H21
H01	1.00000					
H05	.28989	1.00000				
H09	.14618	.17110	1.00000			
H13	.54014	.64971	.31797	1.00000		
H17	.61547	.56304	.43628	.82606	1.00000	
H21	.29889	.28473	.03504	.44822	.34621	1.00000

N OF CASES = 45.0

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	19.978	12.977	3.6	6

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	3.330	3.2	3.6	.5	1.1	.029

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
H01	16.600	9.700	.523	.415	.780
H05	16.689	9.674	.548	.439	.775
H09	16.800	10.164	.309	.234	.835
H13	16.689	7.765	.821	.756	.702
H17	16.778	7.677	.843	.763	.695
H21	16.333	11.227	.373	.219	.808

A VALUE OF 99.0 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED

RELIABILITY COEFFICIENTS 6 ITEMS

ALPHA = .80246 STANDARDIZED ITEM ALPHA = .79861

Physical Competence

1.	H03	SWINGING BY ONESELF
2.	H07	CLIMBING
3.	H11	BOUNCING BALL
4.	H15	SKIPPING

5.	H19	RUN FAST
6.	H23	JUMPING ROPE

		MEANS	STD DEV	CASES
1.	H03	3.778	.560	45.0
2.	H07	3.733	.495	45.0
3.	H11	3.511	.661	45.0
4.	H15	3.667	.640	45.0
5.	H19	3.311	.763	45.0
6.	H23	3.333	.707	45.0

CORRELATION MATRIX

	H03	H07	H11	H15	H19	H23
H03	1.00000					
H07	.60117	1.00000				
H11	.25247	.14798	1.00000			
H15	.29633	.14344	.35820	1.00000		
H19	.43151	.28442	.12804	.17066	1.00000	
H23	-.03829	.06487	.30780	.05025	.05613	1.00000

N OF CASES = 45.0

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	21.333	5.000	2.2	6

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	3.556	3.3	3.8	.5	1.1	.041

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
H03	17.556	3.616	.503	.490	.498
H07	17.600	3.973	.396	.372	.544
H11	17.822	3.559	.402	.242	.530
H15	17.667	3.773	.329	.178	.561
H19	18.022	3.477	.330	.194	.565
H23	18.000	4.091	.143	.128	.643

A VALUE OF 99.0 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED

RELIABILITY COEFFICIENTS 6 ITEMS

ALPHA = .60291 STANDARDIZED ITEM ALPHA = .62446

Peer Acceptance

1.	H02	FRIENDS TO PLAY
2.	H06	OTHERS SHARE TOYS WITH YOU
3.	H10	FRIENDS TO PLAY GAMES
4.	H14	FRIENDS ON PLAYGROUND
5.	H18	GETS ASKED TO PLAY BY OTHERS
6.	H22	OTHERS WANT TO SIT NEXT TO CHILD

		MEANS	STD DEV	CASES
1.	H02	3.378	.834	45.0
2.	H06	3.422	.657	45.0
3.	H10	3.511	.661	45.0
4.	H14	3.444	.785	45.0
5.	H18	3.044	.903	45.0
6.	H22	3.044	.952	45.0

CORRELATION MATRIX

	H02	H06	H10	H14	H18	H22
H02	1.00000					
H06	.20018	1.00000				
H10	.58995	.11977	1.00000			
H14	.67533	.20084	.47185	1.00000		
H18	.49022	.42732	.37955	.35610	1.00000	
H22	.63675	.04199	.57652	.48978	.39387	1.00000

N OF CASES = 45.0

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	19.844	11.862	3.4	6

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	3.307	3.0	3.5	.5	1.2	.043

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
H02	16.467	7.664	.759	.632	.727
H06	16.422	10.340	.258	.216	.830
H10	16.333	9.000	.611	.426	.769
H14	16.400	8.427	.618	.473	.762
H18	16.800	8.164	.558	.379	.777
H22	16.800	7.755	.603	.490	.767

A VALUE OF 99.0 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED

RELIABILITY COEFFICIENTS 6 ITEMS

ALPHA = .80514 STANDARDIZED ITEM ALPHA = .80221

Maternal Acceptance

1. H04 ALLOW TO EAT DINNER AT FRIENDS' HOUSE
2. H08 MOM TAKES TO PLACES LIKED
3. H12 MOM COOKS LIKED FOOD
4. H16 MOM READS TO CHILD
5. H20 ALLOWS TO STAY OVERNIGHT
6. H24 MOM TALKS WITH CHILD

	MEANS	STD DEV	CASES
1. H04	2.244	.957	45.0
2. H08	3.022	.988	45.0
3. H12	3.000	1.022	45.0
4. H16	2.111	.959	45.0
5. H20	1.889	.935	45.0
6. H24	3.289	.843	45.0

CORRELATION MATRIX

	H04	H08	H12	H16	H20	H24
H04	1.00000					
H08	-.27015	1.00000				
H12	.02322	.51728	1.00000			
H16	.14309	.14125	0	1.00000		
H20	.46288	-.16948	-.02378	.16625	1.00000	
H24	.07952	.18314	.31653	.12815	.04168	1.00000

N OF CASES = 45.0

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	15.556	8.571	2.9	6

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.593	1.9	3.3	1.4	1.7	.337

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
H04	13.311	6.901	.150	.294	.430
H08	12.533	6.800	.154	.384	.429
H12	12.556	5.934	.319	.354	.324
H16	13.444	6.616	.210	.098	.396
H20	13.667	6.864	.170	.229	.418
H24	12.267	6.609	.289	.120	.355

A VALUE OF 99.0 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED

RELIABILITY COEFFICIENTS 6 ITEMS

ALPHA = .43814 STANDARDIZED ITEM ALPHA = .44044

APPENDIX J

Variable Cluster Analysis

Correlations and Cluster Boundaries

for

J-1: Parent's Perceptions of Children's Competence

J-2: Culture Shock Scale for Children

J-3: Culture Shock Scale for Parents

APPENDIX J-1
VARIABLE CLUSTER ANALYSIS: PARENTS' PERCEPTIONS OF CHILDREN'S COMPETENCE

CORRELATIONS

		PH01	PH02	PH03	PH04	PH05	PH06	PH07	PH08	PH09	PH10	PH11
PH01	84	1.0000										
PH02	85	.6063	1.0000									
PH03	86	.3284	.4835	1.0000								
PH04	87	-.0958	.2159	.0861	1.0000							
PH05	88	.1497	.1470	.3333	.2572	1.0000						
PH06	89	.2824	.0000	.1149	-.3386	.0332	1.0000					
PH07	90	.0242	-.1537	-.4540	-.0883	-.1318	.0499	1.0000				
PH08	91	.0151	.3873	.2711	.3897	.2498	-.2284	-.2361	1.0000			
PH09	92	.0627	-.0071	-.0532	-.1671	-.1154	-.0149	.0412	-.2320	1.0000		
PH10	93	.2144	.1527	.3047	.0980	.6051	.1284	.0346	.1425	-.2489	1.0000	
PH11	94	.0422	-.1278	-.2955	-.2601	-.2250	.1383	.2898	-.0985	.2263	-.5216	1.0000
PH12	95	-.1241	-.0324	.3525	.2268	.2302	-.0914	-.4232	.0350	.0629	.1605	-.3324
PH13	96	-.1749	-.3415	-.4911	-.2128	-.6531	-.1284	.2290	-.4101	.2699	-.4306	.2638
PH14	97	-.1822	-.1328	.0000	.3199	.3169	-.1069	-.0144	.3191	-.6964	.4343	-.2717

		PH12	PH13	PH14
PH12	95	1.0000		
PH13	96	-.0546	1.0000	
PH14	97	.1098	-.2777	1.0000

CLUSTER BOUNDARIES

NAME	VARIABLE NO.	OTHER BOUNDARY OF CLUSTER	NUMBER OF ITEMS IN CLUSTER	DISTANCE OR SIMILARITY WHEN CLUSTER FORMED
PH01	84	13	14	15.18
PH02	85	1	2	80.32
PH03	86	14	7	50.00
PH12	95	3	2	67.62
PH05	88	10	2	80.25
PH10	93	3	4	58.02
PH04	87	14	3	65.96
PH08	91	4	2	69.49
PH14	97	1	9	40.89
PH06	89	13	5	43.58
PH07	90	11	2	64.49
PH11	94	6	3	52.49
PH09	92	13	2	63.49
PH13	96	1	14	15.18

APPENDIX J-2
VARIABLE CLUSTER ANALYSIS: CHILDREN'S CULTURE SHOCK SCALE

CORRELATIONS

		C67	C68	C69	C70	C71	C72	C73	C74	C75	C76	C77
C67	14	1.0000										
C68	15	-.2670	1.0000									
C69	16	-.0702	.1390	1.0000								
C70	17	.0861	-.1999	-.1263	1.0000							
C71	18	.0230	.2017	-.0408	-.1271	1.0000						
C72	19	-.1164	.0221	-.3472	-.0501	-.0038	1.0000					
C73	20	-.1210	-.2879	.3194	.3584	-.3739	-.1397	1.0000				
C74	21	.0944	.0610	-.0437	-.0114	-.3305	-.0098	.1047	1.0000			
C75	22	.3064	-.0380	-.1174	.1353	.2031	.4639	-.1155	-.0830	1.0000		
C76	23	.1376	.0266	-.4179	.1113	.0297	.6446	-.1682	-.0772	.5583	1.0000	
C77	24	-.0541	.1199	-.1494	-.1690	-.1034	.4215	-.0421	.0546	-.0321	.4381	1.0000
C78	25	-.0694	-.1446	.0230	-.2457	.1984	.1574	-.1410	-.2653	.1198	.2118	-.2513
C79	26	.0679	-.2689	-.0717	.1678	-.4214	.0589	.3162	.0535	-.2223	-.0137	.3996
C80	27	.1293	-.1692	.0600	.1268	-.3756	-.2660	.1719	.1186	-.0468	-.1521	-.1430
C81	28	.1758	-.1254	.1758	-.0754	.1929	-.2086	-.0920	-.1274	-.0109	-.1335	-.1060
C82	29	-.1055	.2905	.0204	.1087	-.0235	-.1934	.0245	.1528	-.1249	-.0041	-.2253
C83	30	-.0165	.1955	-.1034	-.0675	-.1578	-.0993	-.1659	.1318	.1107	-.0142	-.2251
C84	31	-.2694	.1159	.1032	-.1189	-.1786	.0608	.2804	-.1904	-.2338	-.0396	.0979

		C78	C79	C80	C81	C82	C83	C84
C78	25	1.0000						
C79	26	-.4573	1.0000					
C80	27	-.1577	.2774	1.0000				
C81	28	.1275	-.0240	-.2071	1.0000			
C82	29	.3953	-.2362	.0262	.0194	1.0000		
C83	30	.0301	-.2598	.2090	.1224	.2322	1.0000	
C84	31	-.0377	.1955	-.1279	.0096	-.0435	.2205	1.0000

CLUSTER BOUNDARIES

NAME	VARIABLE NO.	OTHER BOUNDARY OF CLUSTER	NUMBER OF ITEMS IN CLUSTER	DISTANCE OR SIMILARITY WHEN CLUSTER FORMED
C67	14	18	18	27.14
C80	27	1	2	56.47
C74	21	1	3	54.72
C70	17	7	2	67.92
C73	20	1	5	43.95
C77	24	13	2	69.98
C79	26	1	7	41.55
C68	15	18	11	29.11
C71	18	2	2	60.09
C72	19	9	3	73.19
C76	23	6	2	82.23
C75	22	2	5	48.10
C69	16	18	6	44.83
C81	28	3	2	58.79
C78	25	16	2	69.76
C82	29	3	4	50.97
C83	30	18	2	61.03
C84	31	1	18	27.14

APPENDIX J-3
VARIABLE CLUSTER ANALYSIS: PARENTS' CULTURE SHOCK SCALE

CORRELATIONS

		P20	P21	P22	P23	P24	P25	P26	P27	P28	P29	P30
P21	61	.1544	1.0000									
P22	62	-.1823	-.1889	1.0000								
P23	63	.0136	.1377	-.1095	1.0000							
P24	64	-.2462	-.2388	.2702	.0658	1.0000						
P25	65	-.0828	-.1191	.1025	.1601	.1627	1.0000					
P26	66	.1464	-.3581	.0470	-.0452	.1020	.2154	1.0000				
P27	67	.4006	-.0517	.0085	.2452	.0064	.0927	.1557	1.0000			
P28	68	.1683	.0047	-.3290	.1469	-.1210	-.0832	.0538	.2912	1.0000		
P29	69	.0741	.0186	-.0261	.4308	.0659	.0638	.1467	.5222	-.0107	1.0000	
P30	70	-.1637	.2035	-.0240	-.0738	.0712	-.3208	-.2355	.0123	.1462	.2681	1.0000
P31	71	-.3148	-.1757	.2803	-.2251	-.0070	-.2061	-.1578	-.1252	.2739	-.2288	.0401
P32	72	-.2124	-.4396	.2897	.0299	.2207	.2257	.1079	.2478	.0474	.1868	-.0237
P33	73	.1543	-.0546	-.0100	-.2687	.0155	-.1468	-.0477	.1086	.1018	-.1332	.0285
P34	74	-.4527	-.2490	.2824	.0159	.1091	-.1680	.0629	-.1004	-.1433	.1452	.3045
P35	75	-.4143	-.4034	.3447	-.0633	.3543	.1376	.0886	-.2371	.1070	-.3625	-.0661
P36	76	-.1397	-.1998	.3020	.0775	-.0267	-.2046	.0257	-.0674	-.1409	.0473	.1878
P37	77	-.0150	.1525	-.2103	-.1866	-.1010	.1583	.0609	-.0769	-.2408	.0947	.0085
P38	78	.1547	.0159	-.2073	-.2098	.0297	-.0630	-.2553	-.0320	.0579	-.1858	.1515
P39	79	-.3434	-.0800	.2102	.2098	.2757	-.0379	.0502	.0479	-.1117	.0945	-.0720
P40	80	.2125	-.3064	-.3369	.0695	.0229	.0196	.3309	.4135	.3633	.2948	.0023
P41	81	-.2007	-.0560	-.0917	-.0497	-.0464	-.0443	-.1366	-.0770	-.1611	.0026	.0497
P42	82	.0647	.0275	.0751	.0667	.2115	.0475	-.1985	-.2062	-.1441	-.2546	-.0083
P43	83	-.0438	.0642	.1735	.0040	.2730	.1809	.1369	.0357	-.0912	.2389	.2833

		P31	P32	P33	P34	P35	P36	P37	P38	P39	P40	P41
P32	72	.1819	1.0000									
P33	73	.3717	-.1759	1.0000								
P34	74	.0894	.2204	-.1127	1.0000							
P35	75	.5261	.1678	.2553	.1433	1.0000						
P36	76	.0870	.1038	-.1195	.5551	.2307	1.0000					
P37	77	-.2634	-.1982	-.1015	-.0862	-.3023	-.1236	1.0000				
P38	78	.1171	-.2490	.6655	-.2348	.1489	-.2271	.1142	1.0000			
P39	79	.0404	.0077	-.1803	.4936	.1344	.2538	-.2962	-.3243	1.0000		
P40	80	.0183	.1715	.2502	-.1756	.0982	.1289	.0074	.1397	-.1471	1.0000	
P41	81	-.0347	.0936	-.0205	.5105	.2053	.3780	-.1087	.0701	.2927	-.0763	1.0000
P42	82	.0173	-.0247	.0228	.2014	.2153	.0461	-.0010	.2552	.2504	-.1329	.3455
P43	83	-.0186	-.1112	.1495	.3843	.0367	.1459	.2208	.0979	.2155	.0090	.0870

		P42	P43
		82	83
P43	83	.3486	1.0000

CLUSTER BOUNDARIES

NAME	VARIABLE NO.	OTHER BOUNDARY OF CLUSTER	NUMBER OF ITEMS IN CLUSTER	DISTANCE OR SIMILARITY WHEN CLUSTER FORMED
P20	60	22	24	27.36
P28	68	21	2	68.17
P40	80	1	3	58.41
P33	73	19	2	83.27
P38	78	1	5	52.89
P25	65	18	3	53.05
P26	66	6	2	60.77
P37	77	1	8	37.23
P21	61	10	5	46.31
P30	70	2	2	60.17
P23	63	10	3	62.26
P27	67	10	2	76.11
P29	69	1	13	32.10
P22	62	22	11	44.44
P32	72	3	2	64.48
P31	71	16	2	76.31
P35	75	3	4	58.39
P24	64	22	7	47.68
P39	79	5	2	63.78
P42	82	24	2	67.43
P43	83	5	4	60.57
P34	74	22	3	68.90
P36	76	15	2	77.76
P41	81	1	24	27.36

APPENDIX K

Reliability Analyses: Parents' Perception of Children's Competence

Reliability Analysis for Scale (CLUSTER 10)

1. PH03 CHILD LIKES TO DO SCHOOL WORK
2. PH12 CHILD ENJOYS NEW ACTIVITIES
3. PH05 CHILD'S FRIENDS MOSTLY FOREIGN
4. PH10 CHILD ENJOYS SPORTS
5. PH04 CHILD FIGURES PROBLEMS BY SELF
6. PH08 CHILD ENJOYS BEING WITH FRIENDS
7. PH14 CHILD PREFERS TO PLAY SPORTS

	MEANS	STD DEV	CASES
1. PH03	4.056	1.068	36.0
2. PH12	4.444	.909	36.0
3. PH05	3.889	1.430	36.0
4. PH10	4.528	1.000	36.0
5. PH04	3.889	.887	36.0
6. PH08	4.639	.899	36.0
7. PH14	4.250	1.204	36.0

CORRELATION MATRIX

	PH03	PH12	PH05	PH10	PH04	PH08
PH03	1.00000					
PH12	.29786	1.00000				
PH05	.32236	.21506	1.00000			
PH10	.29303	.14332	.60193	1.00000		
PH04	.09719	.24022	.26023	.10022	1.00000	
PH08	.20006	-.04274	.23454	.12272	.41376	1.00000
PH14	-.01111	.10447	.31529	.43319	.32089	.32321

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	29.694	19.704	4.4	7

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	4.242	3.9	4.6	.8	1.2	.094

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
PH03	25.639	15.837	.321	.253	.676
PH12	25.250	16.936	.260	.192	.688
PH05	25.806	12.047	.565	.431	.601
PH10	25.167	14.657	.529	.473	.622
PH04	25.806	16.161	.386	.288	.660
PH08	25.056	16.397	.343	.295	.670
PH14	25.444	14.540	.404	.338	.655

RELIABILITY COEFFICIENTS 7 ITEMS

ALPHA = .68975 STANDARDIZED ITEM ALPHA = .68546

Reliability Analysis for Scale (CLUSTER 09)

1. PH03 CHILD LIKES TO DO SCHOOL WORK
2. PH12 CHILD ENJOYS NEW ACTIVITIES
3. PH05 CHILD'S FRIENDS MOSTLY FOREIGN

4. PH10 CHILD ENJOYS SPORTS

	MEANS	STD DEV	CASES
1. PH03	4.056	1.068	36.0
2. PH12	4.444	.909	36.0
3. PH05	3.889	1.430	36.0
4. PH10	4.528	1.000	36.0

CORRELATION MATRIX

	PH03	PH12	PH05	PH10
PH03	1.00000			
PH12	.29786	1.00000		
PH05	.32236	.21506	1.00000	
PH10	.29303	.14332	.60193	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	16.917	9.736	3.1	4

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	4.229	3.9	4.5	.6	1.2	.094

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
PH03	12.861	6.409	.405	.173	.594
PH12	12.472	7.513	.280	.105	.665
PH05	13.028	4.428	.542	.394	.496
PH10	12.389	6.130	.527	.373	.519

RELIABILITY COEFFICIENTS 4 ITEMS

ALPHA = .64737 STANDARDIZED ITEM ALPHA = .64490

Reliability Analysis for Scale (CLUSTER 05)

1. PH04 CHILD FIGURES PROBLEMS BY SELF
2. PH08 CHILD ENJOYS BEING WITH FRIENDS
3. PH14 CHILD PREFERS TO PLAY SPORTS

	MEANS	STD DEV	CASES
1. PH04	3.889	.887	36.0
2. PH08	4.639	.899	36.0
3. PH14	4.250	1.204	36.0

CORRELATION MATRIX

	PH04	PH08	PH14
PH04	1.00000		
PH08	.41376	1.00000	
PH14	.32089	.32321	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	12.778	5.092	2.3	3

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	4.259	3.9	4.6	.8	1.2	.141

ITEM-TOTAL	SCALE	SCALE	CORRECTED

STATISTICS	MEAN IF ITEM DELETED	VARIANCE IF ITEM DELETED	ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
PH04	8.889	2.959	.441	.210	.473
PH08	8.139	2.923	.442	.212	.469
PH14	8.528	2.256	.383	.147	.585

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .60271 STANDARDIZED ITEM ALPHA = .62036

Reliability Analysis for Scale (CLUSTER 11)

1. PH06 CHILD RELIES ON OTHERS FOR HELP
2. PH07 CHILD MAKES FRIENDS WITH DIFFICULTY
3. PH11 CHILD PREFERS PLAYING ALONE
4. PH09 CHILD PREFERS TO WATCH SPORTS
5. PH13 CHILD'S FRIENDS ARE MOSTLY COMPATRIOTS

	MEANS	STD DEV	CASES
1. PH06	3.000	1.312	37.0
2. PH07	1.865	1.273	37.0
3. PH11	1.432	.765	37.0
4. PH09	2.135	1.417	37.0
5. PH13	2.514	1.484	37.0

CORRELATION MATRIX

	PH06	PH07	PH11	PH09	PH13
PH06	1.00000				
PH07	.04989	1.00000			
PH11	.13830	.28981	1.00000		
PH09	-.01493	.04120	.22634	1.00000	
PH13	-.12840	.22899	.26384	.26990	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	10.946	11.830	3.4	5

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.189	1.4	3.0	1.6	2.1	.361

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
PH06	7.946	10.219	-.013	.050	.496
PH07	9.081	8.465	.236	.114	.307
PH11	9.514	9.312	.414	.176	.252
PH09	8.811	8.102	.213	.103	.325
PH13	8.432	7.530	.258	.168	.282

RELIABILITY COEFFICIENTS 5 ITEMS

ALPHA = .39012 STANDARDIZED ITEM ALPHA = .44145

Reliability Analysis for Scale (CLUSTER 07)

1. PH06 CHILD RELIES ON OTHERS FOR HELP
2. PH07 CHILD MAKES FRIENDS WITH DIFFICULTY
3. PH11 CHILD PREFERS PLAYING ALONE

		MEANS	STD DEV	CASES
1.	PH06	3.000	1.312	37.0
2.	PH07	1.865	1.273	37.0
3.	PH11	1.432	.765	37.0

CORRELATION MATRIX

	PH06	PH07	PH11
PH06	1.00000		
PH07	.04989	1.00000	
PH11	.13830	.28981	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	6.297	4.937	2.2	3

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.099	1.4	3.0	1.6	2.1	.655

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
PH06	3.297	2.770	.102	.019	.408
PH07	4.432	2.586	.179	.084	.215
PH11	4.865	3.509	.294	.099	.095

RELIABILITY COEFFICIENTS 3 ITEMS
ALPHA = .30657 STANDARDIZED ITEM ALPHA = .36249

APPENDIX L

Reliability Analyses: Culture Shock in Children

Reliability Analysis for Scale (CLUSTER 12)

1. C67 FEELING TO BE WITHOUT FRIENDS
2. C80 PREFERS NATIVE LANGUAGE
3. C74 DISLIKE GOING OUT WITHOUT FAMILY
4. C70 FEEL HAPPY AT HOME
5. C73 LIKE TO PLAY ONLY WITH SAME NATIONALITY
6. C77 MISSES FRIENDS FROM HOME
7. C79 WANT TO GO BACK HOME

	MEANS	STD DEV	CASES
1. C67	1.613	.615	31.0
2. C80	2.065	.629	31.0
3. C74	2.032	.875	31.0
4. C70	1.516	.626	31.0
5. C73	2.419	.672	31.0
6. C77	1.774	.845	31.0
7. C79	1.839	.688	31.0

CORRELATION MATRIX

	C67	C80	C74	C70	C73	C77	
C67	1.00000						
C80	.06668	1.00000					
C74	.14782	.17778	1.00000				
C70	.01676	.08197	.15125	1.00000			
C73	-.07802	.24927	.14629	.41944	1.00000		
C77	-.10963	-.09710	.01018	-.15052	-.00379	1.00000	
C79	.00508	.17893	.06432	.19990	.36754	.45142	

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	13.258	5.798	2.4	7

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	1.894	1.5	2.4	.9	1.6	.094

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
C67	11.645	5.370	.017	.056	.487
C80	11.194	4.828	.208	.126	.411
C74	11.226	4.247	.218	.079	.408
C70	11.742	4.798	.222	.232	.405
C73	10.839	4.340	.359	.308	.338
C77	11.484	4.925	.042	.312	.504
C79	11.419	4.052	.460	.382	.283

RELIABILITY COEFFICIENTS 7 ITEMS

ALPHA = .44832 STANDARDIZED ITEM ALPHA = .46211

Reliability Analysis for Scale (CLUSTER 11)

1. C67 FEELING TO BE WITHOUT FRIENDS
2. C80 PREFERS NATIVE LANGUAGE

```
   3.  C74         DISLIKE GOING OUT WITHOUT FAMILY
   4.  C70         FEEL HAPPY AT HOME
   5.  C73         LIKE TO PLAY ONLY WITH SAME NATIONALITY

                      MEANS      STD DEV     CASES

   1.  C67             1.613        .615      31.0
   2.  C80             2.065        .629      31.0
   3.  C74             2.032        .875      31.0
   4.  C70             1.516        .626      31.0
   5.  C73             2.419        .672      31.0

 CORRELATION MATRIX

            C67       C80       C74       C70       C73

 C67        1.00000
 C80         .06668   1.00000
 C74         .14782    .17778  1.00000
 C70         .01676    .08197   .15125  1.00000
 C73        -.07802    .24927   .14629   .41944  1.00000

 STATISTICS FOR             MEAN     VARIANCE STD DEV    VARIABLES
 SCALE                     9.645        3.703     1.9          5

 ITEM  MEANS          MEAN    MIN    MAX    RANGE  MIN/MAX  VARIANCE
                     1.929    1.5    2.4       .9      1.6      .135


 ITEM-TOTAL     SCALE      SCALE    CORRECTED
 STATISTICS      MEAN   VARIANCE        ITEM-     SQUARED    ALPHA
              IF ITEM   IF ITEM       TOTAL    MULTIPLE  IF ITEM
              DELETED   DELETED CORRELATION CORRELATION  DELETED

 C67            8.032     3.166        .073        .038      .489
 C80            7.581     2.785        .249        .088      .382
 C74            7.613     2.245        .264        .073      .373
 C70            8.129     2.716        .289        .187      .356
 C73            7.226     2.581        .311        .236      .336


    RELIABILITY COEFFICIENTS       5 ITEMS

    ALPHA =  .44570     STANDARDIZED ITEM ALPHA =  .44443


                  Reliability Analysis for Scale ( CLUSTER 02 )

   1.  C67         FEELING TO BE WITHOUT FRIENDS
   2.  C80         PREFERS NATIVE LANGUAGE
   3.  C74         DISLIKE GOING OUT WITHOUT FAMILY

                      MEANS      STD DEV     CASES

   1.  C67             1.613        .615      31.0
   2.  C80             2.065        .629      31.0
   3.  C74             2.032        .875      31.0

 CORRELATION MATRIX

            C67       C80       C74

 C67        1.00000
 C80         .06668   1.00000
 C74         .14782    .17778  1.00000

 STATISTICS FOR             MEAN     VARIANCE STD DEV    VARIABLES
```

SCALE	5.710	1.946	1.4	3	

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	1.903	1.6	2.1	.5	1.3	.063

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
C67	4.097	1.357	.147	.024	.288
C80	3.645	1.303	.172	.033	.244
C74	3.677	.826	.223	.050	.125

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .31326 STANDARDIZED ITEM ALPHA = .31096

Reliability Analysis for Scale (CLUSTER 13)

1. C68 ENJOY GOING OUT WITHOUT FAMILY
2. C71 THINK TO MISS US FRIENDS
3. C72 LIKE TO SPEAK ENGLISH
4. C76 HAPPY SPOKEN TO IN ENGLISH
5. C75 HAPPY IN SCHOOL

	MEANS	STD DEV	CASES
1. C68	2.389	.688	36.0
2. C71	1.750	.732	36.0
3. C72	1.361	.543	36.0
4. C76	1.389	.494	36.0
5. C75	1.250	.439	36.0

CORRELATION MATRIX

	C68	C71	C72	C76	C75
C68	1.00000				
C71	.19865	1.00000			
C72	.07231	.01798	1.00000		
C76	.04668	.03948	.63307	1.00000	
C75	-.04730	.20000	.56952	.59216	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	8.139	3.037	1.7	5

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	1.628	1.3	2.4	1.1	1.9	.216

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
C68	5.750	2.307	.123	.072	.601
C71	6.389	2.130	.174	.108	.579
C72	6.778	2.063	.436	.470	.399
C76	6.750	2.136	.455	.483	.399
C75	6.889	2.216	.481	.462	.402

RELIABILITY COEFFICIENTS 5 ITEMS

ALPHA = .53371 STANDARDIZED ITEM ALPHA = .60200

Reliability Analysis for Scale (CLUSTER 07)

1. C72 LIKE TO SPEAK ENGLISH
2. C76 HAPPY SPOKEN TO IN ENGLISH
3. C75 HAPPY IN SCHOOL

	MEANS	STD DEV	CASES
1. C72	1.361	.543	36.0
2. C76	1.389	.494	36.0
3. C75	1.250	.439	36.0

CORRELATION MATRIX

	C72	C76	C75
C72	1.00000		
C76	.63307	1.00000	
C75	.56952	.59216	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	4.000	1.600	1.3	3

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	1.333	1.3	1.4	.1	1.1	.005

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
C72	2.639	.694	.676	.459	.741
C76	2.611	.759	.693	.480	.715
C75	2.750	.879	.642	.414	.773

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .81399 STANDARDIZED ITEM ALPHA = .81709

Reliability Analysis for Scale (CLUSTER 15)

1. C69 DISLIKE SPOKEN TO IN ENGLISH
2. C81 FEELS LONELY AT HOME
3. C78 LIKE TO PLAY ONLY WITH US CHILDREN
4. C82 MISSES FOOD FROM HOME
5. C83 FEELS THAT HAS LOTS OF FRIENDS
6. C84 FEELS LONELY AT SCHOOL

	MEANS	STD DEV	CASES
1. C69	2.600	.553	35.0
2. C81	2.686	.471	35.0
3. C78	2.200	.632	35.0
4. C82	2.314	.718	35.0
5. C83	2.686	.530	35.0
6. C84	2.743	.505	35.0

CORRELATION MATRIX

	C69	C81	C78	C82	C83	C84
C69	1.00000					
C81	.06774	1.00000				
C78	-.01682	.11848	1.00000			
C82	.02961	.03974	.37550	1.00000		
C83	-.04015	.18185	.01756	.18991	1.00000	
C84	.14730	.02118	-.01840	-.01389	.23851	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	15.229	2.887	1.7	6

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.538	2.2	2.7	.5	1.2	.051

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
C69	12.629	2.476	.061	.038	.405
C81	12.543	2.432	.159	.056	.346
C78	13.029	2.087	.219	.159	.304
C82	12.914	1.845	.270	.182	.258
C83	12.543	2.255	.221	.138	.308
C84	12.486	2.434	.126	.087	.364

RELIABILITY COEFFICIENTS 6 ITEMS

ALPHA = .37718 STANDARDIZED ITEM ALPHA = .37015

Reliability Analysis for Scale (CLUSTER 14)

1. C69 DISLIKES SPOKEN TO IN ENGLISH
2. C81 FEELS LONELY AT HOME
3. C78 LIKES TO PLAY ONLY WITH US CHILDREN
4. C82 MISSES FOOD FROM HOME

	MEANS	STD DEV	CASES
1. C69	2.600	.553	35.0
2. C81	2.686	.471	35.0
3. C78	2.200	.632	35.0
4. C82	2.314	.718	35.0

CORRELATION MATRIX

	C69	C81	C78	C82
C69	1.00000			
C81	.06774	1.00000		
C78	-.01682	.11848	1.00000	
C82	.02961	.03974	.37550	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	9.800	1.929	1.4	4

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.450	2.2	2.7	.5	1.2	.053

ITEM-TOTAL STATISTICS	SCALE MEAN	SCALE VARIANCE	CORRECTED ITEM-	SQUARED	ALPHA

	IF ITEM DELETED	IF ITEM DELETED	TOTAL CORRELATION	MULTIPLE CORRELATION	IF ITEM DELETED
C69	7.200	1.576	.034	.007	.417
C81	7.114	1.575	.112	.019	.336
C78	7.600	1.129	.298	.153	.114
C82	7.486	1.022	.270	.142	.138

RELIABILITY COEFFICIENTS 4 ITEMS

ALPHA = .33566 STANDARDIZED ITEM ALPHA = .31329

APPENDIX M

Reliability Analyses: Culture Shock in Parents

Reliability Analysis for Scale (CLUSTER 16)

1. P20 FEEL TO HAVE MANY FRIENDS
2. P28 FEEL HAPPY AT HOME
3. P40 FEEL ANXIETY WHILE ATTENDING CLASS
4. P33 LIKES SPEAKING ENGLISH
5. P38 LIKE BEING SPOKEN TO IN ENGLISH
6. P25 ENJOY SPEAKING NATIVE LANGUAGE
7. P26 CONCERNED ABOUT CHILDREN'S LANGUAGE
8. P37 THINKS WILL MISS US FOOD

	MEANS	STD DEV	CASES
1. P20	1.935	1.209	31.0
2. P28	1.484	.811	31.0
3. P40	3.645	1.170	31.0
4. P33	1.806	.910	31.0
5. P38	1.839	1.157	31.0
6. P25	1.839	1.068	31.0
7. P26	2.710	1.736	31.0
8. P37	3.968	1.197	31.0

CORRELATION MATRIX

	P20	P28	P40	P33	P38	P25
P20	1.00000					
P28	.03288	1.00000				
P40	.19524	.39751	1.00000			
P33	.26091	.26658	.27765	1.00000		
P38	.15902	.22789	.15318	.66565	1.00000	
P25	-.18906	-.06084	.03270	-.06752	-.04873	1.00000
P26	.13370	-.18098	.34138	..00545	-.18999	.24370
P37	-.07058	-.25806	.01535	-.12836	.09237	.07406

	P26	P37
P26	1.00000	
P37	-.00466	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	19.226	17.181	4.1	8

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.403	1.5	4.0	2.5	2.7	.877

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P20	17.290	14.213	.165	.143	.364
P28	17.742	15.998	.081	.360	.395
P40	15.581	11.985	.472	.392	.206
P33	17.419	13.785	.380	.529	.285
P38	17.387	13.778	.240	.518	.328
P25	17.387	15.712	.039	.116	.416
P26	16.516	12.591	.128	.339	.404
P37	15.258	16.265	-.053	.173	.463

RELIABILITY COEFFICIENTS 8 ITEMS

ALPHA = .39497 STANDARDIZED ITEM ALPHA = .42593

Reliability Analysis for Scale (CLUSTER 15)

1. P20 FEEL TO HAVE MANY FRIENDS
2. P28 FEEL HAPPY AT HOME
3. P40 FEEL ANXIETY WHILE ATTENDING CLASS
4. P33 LIKES SPEAKING ENGLISH
5. P38 LIKE BEING SPOKEN TO IN ENGLISH

	MEANS	STD DEV	CASES
1. P20	1.935	1.209	31.0
2. P28	1.484	.811	31.0
3. P40	3.645	1.170	31.0
4. P33	1.806	.910	31.0
5. P38	1.839	1.157	31.0

CORRELATION MATRIX

	P20	P28	P40	P33	P38
P20	1.00000				
P28	.03288	1.00000			
P40	.19524	.39751	1.00000		
P33	.26091	.26658	.27765	1.00000	
P38	.15902	.22789	.15318	.66565	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	10.710	11.280	3.4	5

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.142	1.5	3.6	2.2	2.5	.735

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P20	8.774	8.181	.237	.092	.649
P28	9.226	8.981	.337	.198	.591
P40	7.065	7.596	.359	.214	.581
P33	8.903	7.490	.595	.495	.474
P38	8.871	7.249	.432	.449	.539

RELIABILITY COEFFICIENTS 5 ITEMS

ALPHA = .62297 STANDARDIZED ITEM ALPHA = .64161

Reliability Analysis for Scale (CLUSTER 02)

1. P20 FEEL TO HAVE MANY FRIENDS
2. P28 FEEL HAPPY AT HOME
3. P40 FEEL ANXIETY WHILE ATTENDING CLASS

	MEANS	STD DEV	CASES
1. P20	1.935	1.209	31.0
2. P28	1.484	.811	31.0
3. P40	3.645	1.170	31.0

CORRELATION MATRIX

	P20	P28	P40
P20	1.00000		
P28	.03288	1.00000	
P40	.19524	.39751	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	7.065	4.862	2.2	3

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.355	1.5	3.6	2.2	2.5	1.300

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P20	5.129	2.783	.153	.040	.543
P28	5.581	3.385	.274	.160	.327
P40	3.419	2.185	.378	.191	.059

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .42326 STANDARDIZED ITEM ALPHA = .44149

Reliability Analysis for Scale (CLUSTER 05)

1. P25 ENJOY SPEAKING NATIVE LANGUAGE
2. P26 CONCERNED ABOUT CHILDREN'S LANGUAGE
3. P37 THINKS WILL MISS US FOOD

	MEANS	STD DEV	CASES
1. P25	1.839	1.068	31.0
2. P26	2.710	1.736	31.0
3. P37	3.968	1.197	31.0

CORRELATION MATRIX

	P25	P26	P37
P25	1.00000		
P26	.24370	1.00000	
P37	.07406	-.00466	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	8.516	6.658	2.6	3

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.839	1.8	4.0	2.1	2.2	1.146

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P25	6.677	4.426	.243	.065	-.009
P26	5.806	2.761	.153	.060	.137
P37	4.548	5.056	.032	.006	.357

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .24176 STANDARDIZED ITEM ALPHA = .25903

Reliability Analysis for Scale (CLUSTER 17)

1.	P21	ENJOY GOING OUT WITHOUT FAMILY
2.	P30	UNABLE TO RELAX WITH MICHIGAN-US PEOPLE
3.	P23	DISLIKE BEING SPOKEN TO IN ENGLISH
4.	P27	WANT MORE MICHGIAN-US FRIENDS
5.	P29	MISS NATIVE FOOD

		MEANS	STD DEV	CASES
1.	P21	3.194	1.546	36.0
2.	P30	3.500	1.404	36.0
3.	P23	4.278	1.111	36.0
4.	P27	2.500	1.298	36.0
5.	P29	3.722	1.504	36.0

CORRELATION MATRIX

	P21	P30	P23	P27	P29
P21	1.00000				
P30	.20403	1.00000			
P23	.15061	-.01831	1.00000		
P27	-.04982	.04702	.19803	1.00000	
P29	.02389	.33814	.37217	.49731	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	17.194	16.161	4.0	5

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	3.439	2.5	4.3	1.8	1.7	.432

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P21	14.000	12.457	.120	.081	.567
P30	13.694	11.761	.252	.203	.475
P23	12.917	12.650	.288	.193	.457
P27	14.694	11.990	.276	.265	.459
P29	13.472	9.171	.519	.434	.275

RELIABILITY COEFFICIENTS 5 ITEMS

ALPHA = .51171 STANDARDIZED ITEM ALPHA = .51696

Reliability Analysis for Scale (CLUSTER 08)

1.	P23	DISLIKE BEING SPOKEN TO IN ENGLISH
2.	P27	WANT MORE MICHGIAN-US FRIENDS
3.	P29	MISS NATIVE FOOD

		MEANS	STD DEV	CASES
1.	P23	4.278	1.111	36.0
2.	P27	2.500	1.298	36.0
3.	P29	3.722	1.504	36.0

CORRELATION MATRIX

	P23	P27	P29
P23	1.00000		
P27	.19803	1.00000	
P29	.37217	.49731	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	10.500	8.943	3.0	3

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	3.500	2.5	4.3	1.8	1.7	.827

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P23	6.222	5.892	.337	.139	.659
P27	8.000	4.743	.445	.248	.525
P29	6.778	3.492	.567	.325	.327

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .63046 STANDARDIZED ITEM ALPHA = .62366

Reliability Analysis for Scale (CLUSTER 18)

1. P22 MISS FAMILY & FRIENDS AT HOME
2. P32 DISLIKE GOING OUT WITHOUT FAMILY
3. P31 BEING PROUD ABOUT CHILDREN'S ENGLISH
4. P35 WANT TO GO BACK HOME

	MEANS	STD DEV	CASES
1. P22	2.314	1.207	35.0
2. P32	3.486	1.579	35.0
3. P31	1.629	1.060	35.0
4. P35	2.143	1.396	35.0

CORRELATION MATRIX

	P22	P32	P31	P35
P22	1.00000			
P32	.30337	1.00000		
P31	.30091	.18135	1.00000	
P35	.37393	.16773	.51405	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	9.571	13.076	3.6	4

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	2.393	1.6	3.5	1.9	2.1	.616

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P22	7.257	8.432	.455	.209	.510
P32	6.086	8.081	.279	.101	.659

P31	7.943	9.055	.454	.283	.523
P35	7.429	7.605	.457	.317	.500

RELIABILITY COEFFICIENTS 4 ITEMS

ALPHA = .61731 STANDARDIZED ITEM ALPHA = .63913

Reliability Analysis for Scale (CLUSTER 20)

1. P24 FEEL CONFINED IN APARTMENT
2. P39 UNABLE TO RELAX WITH COMPATRIOTS
3. P42 EMBARRASED TO ASK CHILDREN'S HELP
4. P43 CONCERN FOR CHILD'S READAPTATION
5. P34 FEEL LACK OF FRIENDS
6. P36 NEED CHILD'S HELP IN SOCIAL SITUATION
7. P41 UNCOMFORTABLE SPEAKING NATIVE LANGUAGE

		MEANS	STD DEV	CASES
1.	P24	3.136	1.521	22.0
2.	P39	3.909	1.444	22.0
3.	P42	4.000	1.309	22.0
4.	P43	2.773	1.602	22.0
5.	P34	3.864	1.457	22.0
6.	P36	2.591	1.182	22.0
7.	P41	3.091	1.540	22.0

CORRELATION MATRIX

	P24	P39	P42	P43	P34	P36
P24	1.00000					
P39	.37433	1.00000				
P42	.16737	.35249	1.00000			
P43	.46290	.42290	.34064	1.00000		
P34	.24510	.53678	.27455	.49620	1.00000	
P36	.19148	.33987	.27703	.30083	.65749	1.00000
P41	-.00554	.32494	.33058	.02808	.55743	.41390

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	23.364	43.576	6.6	7

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	3.338	2.6	4.0	1.4	1.5	.337

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P24	20.227	34.946	.351	.267	.779
P39	19.455	31.688	.603	.393	.727
P42	19.364	35.195	.429	.271	.762
P43	20.591	31.777	.511	.493	.747
P34	19.500	29.976	.719	.690	.702
P36	20.773	34.565	.548	.450	.743
P41	20.273	34.303	.382	.466	.773

RELIABILITY COEFFICIENTS 7 ITEMS

ALPHA = .77654 STANDARDIZED ITEM ALPHA = .78106

Reliability Analysis for Scale (CLUSTER 19)

1. P24 FEEL CONFINED IN APARTMENT
2. P39 UNABLE TO RELAX WITH COMPATRIOTS
3. P42 EMBARRASED TO ASK CHILDREN'S HELP
4. P43 CONCERN FOR CHILD'S READAPTATION

		MEANS	STD DEV	CASES
1.	P24	3.136	1.521	22.0
2.	P39	3.909	1.444	22.0
3.	P42	4.000	1.309	22.0
4.	P43	2.773	1.602	22.0

CORRELATION MATRIX

	P24	P39	P42	P43
P24	1.00000			
P39	.37433	1.00000		
P42	.16737	.35249	1.00000	
P43	.46290	.42290	.34064	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	13.818	17.965	4.2	4

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	3.455	2.8	4.0	1.2	1.4	.357

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P24	10.682	11.084	.451	.255	.639
P39	9.909	10.944	.516	.268	.596
P42	9.818	12.823	.366	.171	.685
P43	11.045	9.760	.564	.323	.560

RELIABILITY COEFFICIENTS 4 ITEMS

ALPHA = .68916 STANDARDIZED ITEM ALPHA = .68618

Reliability Analysis for Scale (CLUSTER 14)

1. P34 FEEL LACK OF FRIENDS
2. P36 NEED CHILD'S HELP IN SOCIAL SITUATION
3. P41 UNCOMFORTABLE SPEAKING NATIVE LANGUAGE

		MEANS	STD DEV	CASES
1.	P34	3.864	1.457	22.0
2.	P36	2.591	1.182	22.0
3.	P41	3.091	1.540	22.0

CORRELATION MATRIX

	P34	P36	P41
P34	1.00000		
P36	.65749	1.00000	
P41	.55743	.41390	1.00000

STATISTICS FOR SCALE	MEAN	VARIANCE	STD DEV	VARIABLES
	9.545	12.165	3.5	3

ITEM MEANS	MEAN	MIN	MAX	RANGE	MIN/MAX	VARIANCE
	3.182	2.6	3.9	1.3	1.5	.411

ITEM-TOTAL STATISTICS	SCALE MEAN IF ITEM DELETED	SCALE VARIANCE IF ITEM DELETED	CORRECTED ITEM-TOTAL CORRELATION	SQUARED MULTIPLE CORRELATION	ALPHA IF ITEM DELETED
P34	5.682	5.275	.712	.531	.571
P36	6.955	6.998	.603	.436	.715
P41	6.455	5.784	.541	.315	.783

RELIABILITY COEFFICIENTS 3 ITEMS

ALPHA = .77349 STANDARDIZED ITEM ALPHA = .78088