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THE RELATIONSHIP OF CHINESE MALAYSIAN MATERNAL
CHILD REARING PRACTICES AND PRESCHOOL
CHILDREN'S EMPATHY

THESIS

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

BY

Yit-Fong Lee, B.A.

Denton, Texas

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The researcher examined 47 Chinese Malaysian mothers' nurturance and restrictiveness and their children's empathy levels. The Borke Empathy Scale was administered to the children at preschools. Mothers of the children completed the Modified Child Rearing Practices Report Inventory. Analyses also focused on correlations between mothers' socioeconomic status (SES) and their child rearing practices, and maternal SES and children's empathy. Results indicated that maternal SES was a significant predictor of children's empathy. Nurturing had a positive relationship with children's empathy while restrictiveness had a negative relationship with children's empathy. Maternal SES when tested together with nurturing and restrictiveness was the more important in predicting children's empathy. Findings reflect the need for schools to provide parenting programs and resources for low SES mothers.

TABLE OF CONTENTS

	Page
TABLE OF CONTENTS	iii
LIST OF TABLES	iv
Chapter	
1. INTRODUCTION	1
Rationale for the Study	
Purpose of the Study	
Statement of Problem	
Research questions	
Definition of Terms	
Limitation and Delimitation of Study	
2. REVIEW OF RELATED LITERATURE	6
Chinese personality and perception of child-rearing	
Child-rearing practices and their impacts on children's empathy	
Empathy	
Maternal child-rearing and empathy	
3. METHODS AND PROCEDURES	13
Subjects	
Instruments	
Data Collection	
Analysis of Data	
4. RESULTS	23
Empathy and MCRPR analysis	
Prediction analysis: MCRPR Scale and child's empathy	
Gender difference	
Correlational analyses: maternal SES and MCRPR Scale	
Prediction analyses: Maternal SES and child's empathy	

	Page
Prediction analyses: Nurturing, SES and empathy	
Prediction analyses: Restrictiveness, SES and empathy	
Reliability	
 5. CONCLUSIONS AND RECOMMENDATIONS	32
 APPENDIX	37
A: Consent letter	37
B: Family information survey	39
C: Consent form	41
D: MCRPR Scale (English version).....	43
E: MCRPR Scale (Chinese version)	51
F: Borke Empathy Scale	54
G: SPSS statistical program	74
 REFERENCES	76

LIST OF TABLES

Table	Page
1. MCRPR means and standard deviation	23
2. Child's empathy and maternal child-rearing	25
3. Independent t-test on mean difference	26
4. Correlation matrix between maternal SES and MCRPR scale	27
5. Predicting child's empathy based on mother's SES	27
6. Predicting child's empathy based on income and nurturing	29
7. Predicting child's empathy based on income and restrictiveness	30

CHAPTER 1

INTRODUCTION

Rationale for the Study

This study investigated the relationship of Chinese Malaysian mothers' child-rearing practices on their children's empathy. Specifically, the relationship between a mother's level of nurturing and/or restrictiveness in child-rearing and her child's level of empathy was investigated. This research provides educators with additional information necessary to develop a parenting program sensitive to the mother's child-rearing practice and empathy development in her child. Teachers in preschool can benefit by gaining a better understanding of the child's socializing behavior.

Purpose of Study

The purpose of the study was to examine the relationship between Malaysian maternal child-rearing practices and preschool children's empathic behavior. This study additionally investigated the relationship between socio-economic status (SES) and child-rearing practices, as well as explored whether gender differences exist in preschool children's empathy.

Statement of Problem

Research on the relationship between maternal child-rearing practices and children's empathy has been conducted in America and Germany (Hoffman, 1963; Jensen, Perry, Adams, & Gaynard, 1981; Trommsdorff, 1991). Hoffman and Saltzstein (1967) recommended that additional research be conducted on this topic. The relationship between these variables and other factors has not been studied in Malaysia.

The need to study the relationship between mothers' child-rearing practice and their children's empathy is important in a country like Malaysia due to the fact that it is a country in transformation from an agricultural to a semi-industrial economy. Malaysia is emerging into a modernized and urbanized country. The modernization and urbanization, in fact, could be responsible for the high youth crime rate (Baginda, 1984). A crime which is an anti-social behavior implies an unempathic act from the doer. Understanding maternal child-rearing factors could help to have a better understanding of children's empathy (Hoffman & Saltzstein, 1967; Borke & Su, 1972). This study of maternal child rearing factors is therefore important to the children's empathy as it links to altruistic and pro-social behaviors (Hoffman, 1963), and regulates aggressive behaviors (Fresbach, 1975).

Research Questions

This study posed the following research questions:

1. Did the maternal child-rearing nurturing level score as measured by the Modified Child Rearing Practices (MCRPR) significantly relate to the child's number of correctly identified empathy stories as measured by the Borke Empathy Scale?

2. Did the maternal child-rearing restrictiveness level score as measured by the MCRPR significantly relate to the child's number of correctly identified empathy stories as measured by the Borke Empathy Scale?

3. Was there a significant mean difference between boys and girls in the number of correctly identified empathy stories as measured by the Borke Empathy Scale?

4. Did a mother's socioeconomic status (SES) significantly correlate with their MCRPR nurturing level and restrictiveness level scores?

5. Did a mother's SES significantly relate to the child's number of correctly identified empathy stories as measured by the Borke Empathy Scale?

6. Did a mother's SES add significantly to the prediction of her child's number of correctly identified empathy stories above and beyond that predicted by the MCRPR nurturing level score?

7. Did a mother's SES add significantly to the prediction of their child's number of correctly identified

empathy stories above and beyond that predicted by the MCRPR restrictiveness level score?

Definition of Terms

Empathy, in general terms, refers to "the ability to perceive the world from the perspective of others" (Borke, 1973, p. 102). Empathy has been defined in both cognitive (Borke, 1971, Dymond, 1949) and affective terms (Berger, 1962). Borke (1971) defined empathy as a form of social cognition which refers to the understanding of social cues and social situations that involve role-taking skills. According to Borke, children's social experiences could enhance their understanding of other people's thoughts, feelings, and motives. Berger (1962) conceived empathy as an emotional response match between subject and object. Feshbach and Roe (1968) suggested that an affective experience is contingent upon the understanding of a social event. Aronfreed (1968) indicated that the affective component is also subject to development through learning experience. For purposes of this study, empathy is operationally defined as that which is measured by the Borke Empathy Scale (Borke, 1971).

Maternal child-rearing practices have typically been defined by the level of nurturing and the level of restrictiveness. The Modified Child-Rearing Practices Report [MCRPR] (Rickel & Biasatti, 1982) was used in this study to

measure both the level of nurturing and the level of restrictiveness.

Limitation and Delimitation of Study

This study was limited to mothers and their children who came from five private preschools located in Kuala Lumpur, Malaysia. These results would not be generalizable to fathers, to other mothers with children in the same schools, and to those mothers who were non-primary caretakers. Three different major ethnic groups were found in Malaysia: Chinese, Indian, and Malay. Subjects for this study were Chinese Malaysians rather than Indian or Malay Malaysians.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The following review of literature cited research related to child-rearing practices and empathy. The chapter was organized into specific sections pertaining to discussion of Chinese personality and perceptions of child-rearing, child-rearing practices and their impacts on children, general descriptions of empathy, empathy of Chinese children, and finally the relationship between maternal child-rearing and children's empathy.

Chinese Personality and Perceptions of Child-Rearing

In a study comparing four Chinese college-educated populations (Hong Kong, Mainland China, Taiwan, and the United States), Cheung, Conger, Hau, Lew, and Lau (1992) discovered that Chinese see themselves as self-controlled, responsible, tolerant, trustworthy, and principled, even though Yang (1986) proclaimed that they come from a diverse geo-political background.

In terms of child-rearing practices, the Chinese view order and organization or constructive control as necessary

or stabilizing harmony among family members (Cheung & Lau, 1985). Cheung and Lau found constructive control to be positively related to parental warmth. Ho (1981) found that Chinese parents traditionally place great emphasis on children's obedience, proper conduct, moral training, and the acceptance of social obligations, and they discourage high independence, assertiveness, and creativity. Chinese parents expect high educational achievement from their children (Ho, 1986).

Child-Rearing Practices and Their Impacts on Children

Baumrind's (1968) study of parental control described permissive parents as nonpunitive. Baumrind documented that permissive parents avoid the exercise of power control and discourage children's obedience by a defined standard; however, they encourage children to be self-regulated and free of restraint. Becker's (1964) study of parental discipline discovered that "permissiveness tends to lead to less persistence and increased aggressiveness" (p. 197).

Authoritarian parents exercise control, evaluate children's attitudes and behaviors based on a set of defined standards; value obedience from children, favor punitive techniques, and discourage open communication (Baumrind, 1968). Chamberlin's (1984) study also revealed that authoritarian mothers have low involvement in social conversation with their children. Also authoritarian mothers tend to use unmodified power that emphasizes order and

obedience, nonobjective criticism, and physical punishment (Chamberlin, 1969).

Restrictiveness (Rickel & Biasatti, 1982) and authoritarian control (Kochanska, Kuczynski, & Radke-Yarrow, 1989) were associated with the use of commands, reprimands, physical enforcements, and prohibitive techniques. Becker (1964) found that "restrictiveness . . . tends to lead to fearful, dependent, and submissive behaviors, a dulling of intellectual striving and inhibited hostility" (p. 197). Chamberlin (1969, 1974) found that the authoritarian style or directive approach is related to a child's stubbornness, hitting, temper, disobedience, and whining. Moreover, Hoffman (1960) discovered that the reactive unqualified or unmodified power assertion (Chamberlin, 1969, 1974) is significantly correlated with a child's hostility toward other children. Hoffman (1963) described reactive unqualified power assertion as

the use of the following techniques after the child resists the parent's initial attempt: direct command, threat, deprivation, or physical force with no explanation or attempt to compensate the child for having to alter his behavior against his will. These techniques convey to the child that despite his wishes of the moment he must, without question, stop what he is doing and comply immediately. (p. 578)

Baumrind (1966) noted that authoritative parents attempt to use directive methods, but in a rational manner, in guiding children's activities; to encourage open communication; to value autonomous self-will and disciplined conformity; and to practice firm control rather than restrictiveness. Reasoning as well as power assertion are used to achieve parents' objectives (Baumrind, 1966) and children's obedience (Henry, 1980). Chamberlin (1984) defined accommodative parents as those who employ reasoning, request, and alternative offering. In comparison to authoritative parents, Chamberlin documented that a more relaxed relationship exists between the parents and children in the accommodative families. Baumrind's (1967) study of care practices anteceding preschool behavior found that parents of children who are high in self-reliance and self-control demonstrate firm control and are supportive and communicative; they balance high nurturance and high control.

Empathy

Empathy is an emotional response of a perceiver to a stimulus object (Feshbach, 1975; Feshbach & Roe, 1968). Feshbach (1975) documented that the process of empathy implies altruism, generosity, and the regulation of aggression and social cognition. In addition, Feshbach's (1975) report on empathy revealed that cognitive and emotional capabilities, two important components, constitute the empathic responses. The development of emotional or

affective components as well as cognitive components of empathy requires learning experiences (Feshbach, 1975). The studies of Feshbach (1975) and Feshbach and Roe (1968) revealed that similarities in race and gender between the subject and the object act as facilitators for empathic responses. For instance, in the study, Feshbach (1975) found that an African American girl empathized more with a African American stimulus person, and a white American girl responded with greater empathy to a white American stimulus person.

Some studies reported mixed results in regard to sex differences in empathy. Feshbach and Roe (1968) and Borke (1971) revealed no sex difference in empathy for children who were 6 to 7 years old. In contrast, compared with boys of the same age, girls at the age of 4 to 5 were found to be more empathic (Hoffman & Levine, 1976; Jensen et al., 1981).

In addition to sex differences, Borke (1973) discovered a relationship between parental socioeconomic status and children's ability to recognize emotional responses of other children. Borke found that Chinese middle-class children (ages 3 to 3 1/2) are more accurate in identifying angry and fearful responses than the same age range in Chinese lower-class children.

Borke (1971) challenged Piaget's (1967) concept of the egocentrism of young children between 18 months and seven years of age. Borke's study of young children's interpersonal perception indicated that children as young as

three are aware of others' feelings. In the early studies, however, Burns and Cavey (1957) discovered the empathic ability for younger children (age 3 to 5) is lower than that of older children (age 5 to 6 1/2).

In terms of Chinese children's empathy, Borke and Su (1972) discovered in their cross-cultural study of perception of empathic responses to social interactions different capabilities of perceiving sad and angry reactions between Chinese and American children. The kindergarten and second grade Chinese children perceived more angry reactions, whereas the kindergarten and second-grade American children perceive more sad reactions (Borke & Su, 1972). Moreover, Borke and Su revealed that Chinese kindergarten children perceived more fearful situations than did American kindergarten children.

Maternal Child-Rearing and Children's Empathy

Borke and Su (1972) speculated that differences in child-rearing practices have an impact on children's empathy. A number of studies found positive relationships between maternal behaviors and children's emotional responsiveness or empathy. Warm parenting (Barnett, 1987), positive reasoning (Jensen et al., 1981; Zahn-Waxler, Radke-Yarrow, and King, 1979), and nurturance (support and love) (Jensen et al., 1981) were found to be positively related to children's empathy. Hoffman and Saltztein (1967) discovered positive relationships between parental discipline and children's

empathy. Hoffman and Saltzstein believed that strict disciplinary techniques could inhibit children's empathy. Roe's (1977) cross-cultural study of empathy in children found that Greek children of middle-class parents who employed strict power-assertive disciplinary techniques scored lower on empathy than did American children. In addition to power assertion, parental encouragement of competitiveness can also inhibit the development of children's empathy (Feshbach, 1975).

In summary, research concluded that parental child rearing practices such as support (nurturance) and restrictiveness, have impacts on children's empathy. Nurturing practices related to children's self-control; whereas, restrictive practices lead to children's hitting and temper. Children who could empathize with other people were those who could have emotional responses to stimuli. Most importantly, empathy implied the regulation of aggression and altruism. Therefore, this study is based on the conclusion that maternal child rearing practices are important variables for children's empathy.

CHAPTER 3

METHODS AND PROCEDURES

Subjects

Participants for this study were 47 Chinese Malaysian mothers and their aged five to six year old children. Based on Kurt Wehbring's (1976) squatter in the federal territory information, residential areas were stratified as low and high socioeconomic status (SES). From the family survey information collected, the husbands of the low socioeconomic status families consisted of salesmen, factory laborers, construction workers, taxi drivers, carpenters, primary and secondary teachers, hawkers, and small-scale businessmen. On the contrary, the husbands of the high SES families were holding jobs such as doctors, managers, directors, administrative officers, and businessmen. In addition to the differences of living area and job holding, the high SES families tended to pay preschool tuition fees two to three times higher than those of the low SES families each year.

Preschools were selected from the area of Kuala Lumpur. Those preschools which were willing to participate were

included in this study. Two preschools were selected from the low SES; and three were selected from the high SES.

Mothers who met the following criteria were chosen:

1. The mother had one and/or two preschool child(ren),
and
2. The mother was a primary caretaker.

Twenty-one children (9 boys, 12 girls) and their mothers were chosen from the low SES families. Twenty-six children (12 boys, 14 girls) and their mothers were from the high SES families.

Instruments

The instruments used to measure maternal child-rearing and children's empathy were developed in the U.S. These tests have been shown to yield reliable and valid scores for Americans and Taiwanese. It is important to use reliable and valid tests (Ma & Leung, 1990) because validity and reliability in other cultures and across SES maximized likelihood of validity and reliability in Malaysia.

The Modified Child-Rearing Practices Report (MCRPR) (Rickel & Biasatti, 1982) was used to obtain each mother's child-rearing nurturance score and restrictiveness score. The nurturance score was based on 18 items scaled from 1 to 6 (1 = "not at all descriptive of me" to 6 = "highly descriptive of me"). Scores could range from 18 to 108. A high score indicated high nurturance, a mother's willingness to share feelings and experiences with her child, and to show

affection, acceptance, and responsiveness to her child's needs. The restrictiveness score was based on 22 items scaled from 1 to 6 (1 = not at all descriptive of me to 6 = highly descriptive of me). Scores could range from 22 to 132. A high score indicated high restrictiveness, a mother's high degree of control, setting narrow limits on her child's behavior, and the endorsement of strict rules.

The MCRPR has been shown to be reliable across different U.S. samples (Rickel & Biasatti, 1982). The scale is easy to administer and does not require much time to complete (Dekovic, Janssen, & Gerris, 1991). For this study, the English version of the MCRPR (See Appendix D) was translated into Chinese with the help of a bilingual translator before administering the scale to the mothers. Also, the Chinese version (see Appendix E) was translated back into English by another bilingual translator. The researcher compared the original and back-translated and found the meanings in each to be similar. By comparing the back-translated version with the original version, the researcher determined that the meanings of the original version had been retained in the Chinese version. This back-translation approach has been previously recommended (Brislin, 1970).

The Borke Empathy Scale (Borke, 1971) (see Appendix F) measures a child's level of empathy and has been shown to yield valid scores with preschoolers in U.S. and Taiwan (Hoffman, 1977). For this study, the number of empathy

stories correctly identified across four different emotional settings was determined. The four different emotional settings or categories depicted in the stories were: happy, sad, angry, and afraid. Ekman, Soresen, and Friesen (1969) had found evidence of pan-cultural elements in facial displays of affect in New Guinea, Borneo, the United States, Brazil, and Japan cultures.

There were two parts in the Borke Empathy Scale. Part I consisted of 11 stories and Part II consisted of 12 stories. However, scoring was done on the bases of only 4 stories in each of the four emotional categories from both Part I and Part II. The specific stories used for scoring in Part I and Part II are:

	Part I	Part II
Happy	1, 11	1, 12
Afraid	5, 9	5, 8
Sad	6, 10	4, 6
Angry	4, 7	7, 10

A child's empathy score ranged from 0 to 16 depending upon the number of correctly identified stories. Each story depicted either a happy, afraid, sad, or angry situation which the child was expected to identify. A child received a score of one if he or she correctly identified the emotion depicted in the story, otherwise he or she received a score of zero. A high score indicated a high degree of empathy on the part of the child.

Data Collection

The high SES mothers were contacted by phone by the researcher before the consent forms were sent to schools. The MCRPR scale was then delivered to the individual mothers by the class teacher soon after the teacher received the completed consent forms from the mothers. The low SES mothers, however, were directly contacted by the school principals. The high and low SES mothers were asked to fill out and return the instruments to the schools. They were asked to focus on their child in the family when completing the MCRPR.

The Borke Empathy Scale was administered to the children individually at their preschools by the researcher. Each story was accompanied by 4 stylized faces depicting the emotional responses of happy, sad, afraid, and angry. The emotions represented by each of the four faces were explained to the children before the scale was administered. The children responded by underlining the face which best showed how the child in each story might feel (Borke & Su, 1972, p. 310). Part I of the scale consisted of stories that described general situations that might make a child feel happy, sad, afraid, or angry. Part II of the scale consisted of stories that described situations in which one child might do something to another child that would result in that youngster's feeling happy, sad, afraid, or angry.

Analysis of Data

The mother's SES, nurturing level score, and restrictiveness level score were analyzed along with her child's empathy score and gender to investigate the relationship of maternal child-rearing on children's empathy. Specific research questions were postulated for the study with associated statistical analyses as follows:

1. Did the maternal child-rearing nurturing level score as measured by the MCRPR significantly relate to the child's number of correctly identified empathy stories as measured by the Borke Empathy Scale?

Linear regression was used to determine whether the mother's nurturing score on the MCRPR significantly predicted their child's number of correctly identified empathy stories. The regression equation was: $Y = \beta X + e$, where Y = the number of correctly identified empathy stories by the child, X = the mother's nurturing score, β = regression weight, and e = residual error or prediction error. The null hypothesis was: $H_0 : R^2 = 0$, and the alternate hypothesis was $H_A : R^2 > 0$.

2. Did the maternal child-rearing restrictiveness level score as measured by the MCRPR significantly relate to their child's number of correctly identified empathy stories as measured by the Borke Empathy Scale?

Linear regression was to determine whether the mother's restrictiveness score on the MCRPR significantly predicted

their child's number of correctly identified empathy stories. The regression equation was: $Y = \beta X + e$, where Y = the number of correctly identified empathy stories by the child, X = the mother's restrictiveness score, β = regression weight, and e = residual error or prediction error. The null hypothesis was: $H_0 : R^2 = 0$, and the alternate hypothesis was $H_A : R^2 > 0$.

3. Was there a significant mean difference between boys and girls in the number of correctly identified empathy stories as measured by the Borke Empathy Scale?

An independent t-test determined if a significant mean difference existed in the number of correctly identified empathy stories between boys and girls. The null hypothesis was $H_0 : \mu_{\text{boys}} = \mu_{\text{girls}}$, and to the alternate hypothesis was $H_A : \mu_{\text{boys}} \neq \mu_{\text{girls}}$. A two-tailed test at the .05 level of significance was used to test this hypothesis.

4. Did a mother's SES significantly correlate with their MCRPR nurturing level and restrictiveness level scores?

Pearson product-moment correlation coefficients were computed. The correlations were tested for significance using a two-tailed test at the .05 level of significance.

5. Did a mother's SES significantly correlate to the child's number of correctly identified empathy stories as measured by the Borke Empathy Scale?

Linear regression was used to determine whether the mother's SES predicted their child's number of correctly identified empathy stories. The regression equation was: $Y = \beta X + e$, where Y = the number of correctly identified empathy stories by the child, X = the mother's SES, β = regression weight, and e = residual error or prediction error. The null hypothesis was: $H_0 : R^2 = 0$, and to the alternate hypothesis was $H_A : R^2 > 0$.

6. Did a mother's SES add significantly to the prediction of their child's number of correctly identified empathy stories above and beyond that predicted by the MCRPR nurturing level score?

The previous multiple regression analysis in research question one (R^2 Restricted) was compared to a multiple regression analysis (R^2 Full) using mother's SES and nurturing level score to predict their child's number of correctly identified empathy stories. This was accomplished using an F test as follows:

$$F = \frac{R^2_{\text{Full}} - R^2_{\text{Restricted}} / (df_1 - df_2)}{(1 - R^2_{\text{Full}}) / (n - p - 1)}$$

where df = degree of freedom, n = total number of mothers, and p = number of predictors. The multiple regression equation for this second analysis was: $Y = \beta_1 X_1 + \beta_2 X_2 +$

e, where Y = the number of correctly identified empathy stories, X1 = mother's nurturing level score, X2 = mother's income level, β 's = regression weights, and e = residual error or prediction error.

7. Did a mother's SES add significantly to the prediction of their child's number of correctly identified empathy stories above and beyond that predicted by the MCRPR restrictiveness level score?

The previous multiple regression analysis in research question one (R^2 Restricted) was compared to a multiple regression analysis (R^2 Full) using mother's SES and restrictiveness level score to predict their child's number of correctly identified empathy stories. This was accomplished using an F test as follows:

$$F = \frac{R^2_{\text{Full}} - R^2_{\text{Restricted}} / (df_1 - df_2)}{(1 - R^2_{\text{Full}} / n - p - 1)}$$

where df= degree of freedom, n= total number of mothers, and p=number of predictors. The multiple regression equation for this second analysis was: $Y = \beta_1 X_1 + \beta_2 X_2 + e$, where Y = the number of correctly identified empathy stories, X1 = mother's restrictiveness level score, X2 = mother's income level, β 's = regression weights, and e = residual error or prediction error.

8. Were the MCRPR maternal child-rearing nurturing and restrictiveness scales reliable for my subjects?

Cronbach's Alpha internal consistency reliability coefficient was computed for each set of items that comprised the two scales.

CHAPTER 4

RESULTS

The mean scores and standard deviations of the MCRPR scale are presented in Table 1. The group mean, which was based on 18 items and has the range scores from 18 to 108, was 81.02. For the restrictive factor, the calculated group mean was 74.21. The restrictive factor consisted of 22 items, and its scores ranged from 22 to 132.

Table 1. MCRPR Analysis: MCRPR means and standard deviations

Scale	n	Mean	S
Nurturing (18 items)	47	81.02	12.78
Restrictiveness (22 items)	47	74.21	15.09

Note: Items were scaled from 1 to 6 for each scale.

Table 2 presents the correlations and the prediction analyses between empathy and MCRPR scale. Nurturing and empathy were significantly and positively correlated ($r=.32$, $p<.05$). A mother with a high score in nurturing tended to have a child with high empathy score, and low in nurturing scores tended to have a child with low empathy score. Results indicate that regression weight ($\beta=.05$, $p<.05$) was significantly different from zero. A mother's nurturing level score could act as a predictor for her child's empathy level score; although only ten percent ($R^2=.10$) of empathy variation could be explained for the nurturing variation.

Further, the restrictiveness factor of child-rearing practices was significantly correlated ($r=-.35$, $p<.05$) with empathy. However, restrictiveness was negatively correlated with empathy level. A mother with a high restrictiveness level would be more likely to have a child with a low empathy score, and a mother with a low restrictiveness level would be more likely to have a child with a high empathy. Restrictiveness and empathy had a negative linear relationship ($\beta=-.05$, $p<.05$). Thus, mother's restrictive practice acted as a predictor for her child's empathy. Twelve percent ($R^2=.12$, $p<.05$) of the empathy variable could be accounted for restrictiveness. In sum, a mother's nurturing and restrictiveness in child-rearing practices were related to her child's empathy.

Table 2. Prediction Analysis: Predicting Child's Empathy based on Mother's Nurturing and Restrictiveness Scores.

Scale	β	$SE\beta$	r	R^2	F(1,44)
Nurturing	.05	.02	.32	.10	5.17*
Restrictiveness	-.05	.02	-.35	.12	6.15*

* $p < .05$

The mean scores and the standard deviations of empathy for the 47 children (21 boys, 26 girls) are presented in Table 3. An independent t-test on mean difference in the number of correctly identifying empathy stories between the opposite sex children was computed. Results indicated there was no significant mean difference between both sexes ($t(45) = -.05$, $p > .05$). For this data, boys and girls are not different in their ability to empathize as measured by the Borke Empathy Scale.

Table 3. Gender Difference: Independent t-test on mean difference between boys and girls.

Gender	n	Mean	Standard Deviation	t(45)
Boys	21	11.62	2.09	
Girls	26	11.92	2.02	
Total	47	11.79	2.03	
				-.51

Pearson correlations were computed between maternal SES and MCRPR Scale scores (nurturing and restrictiveness scores). Table 4 shows there was a significant correlation ($r=.47$, $p<.05$) between maternal SES (high or low) and nurturing level score. Both factors were positively correlated. A mother from a high SES tended to have a high nurturing score, and vice versa. Table 4 also presents that there was a significant and negative correlation between a mother's SES and restrictiveness level score ($r=-.31$, $p<.05$). This significant result indicates that a mother of a high SES had a low restrictiveness level score; and a mother of a low SES had a high restrictiveness level score.

Table 4. Correlation Analysis: Correlation matrix between SES level, MCRPR scale scores

	SES	N	R
SES	1.0		
nurturing(N)	.47*	1.0	
restrictiveness (R)	-.31*	.05	1.0

* $p < .05$

Table 5 presents correlation and prediction analysis between maternal SES and child's empathy. A mother's SES could be used to predict her child's empathy ($\beta = 2.02$, $p < .05$).

Table 5. Prediction Analysis: Predicting Child's Empathy based on Mother's SES.

	β	$SE\beta$	r	R^2	F(1,44)
SES	2.02	.52	.50	.25	15.08*

* $p < .05$

A multiple regression model was used to test whether a mother's SES added significantly to the prediction of her child's empathy scores above and beyond that predicted by the MCRPR scores. Table 6 presents the results of the multiple regression test. As the results indicate, as mother's SES was added to predict her child's empathy score, mother's SES and nurturing level score contributed together twenty six percent of her child's empathy score ($R^2=.26$, $p<.05$). However, a mother's nurturing level score was not a significant predictor for her child's empathy score when the mother's SES was taken into consideration in the prediction of the child's empathy ($\beta_N=.02$, $p>.05$). In contrast, a mother's SES acted as a predictor for her child's empathy score ($\beta_X =1.82$, $p<.05$). The F test indicated that a mother's SES added significantly to the prediction of her child's empathy score ($F_{X(1,44)}=9.51$, $p<.05$). Stepwise regression investigated further that a mother's SES, not a mother's nurturing factor, acted as a significant contributor to a child's empathy score.

Table 6. Prediction Analysis: Added contribution of SES
in predicting Child's Empathy

Variable	β	$SE\beta$	R^2	$F(1,44)$	$F_X(1,44)$
Nurturing(N)	.02	.02			
			.26	7.74*	9.51*
SES(X)	1.82	.59			

* $p < .05$

Mother's SES and restrictiveness level score were also tested to see whether both variables added significantly to the prediction of child's empathy score. Table 7 shows the results of the regression test. The results indicated that twenty nine percent of the child's empathy score could be accounted by a mother's SES and restrictiveness level score ($R^2 = .29$, $p < .05$). A mother's restrictiveness level score, as similar to the nurturing level score, was not a significant predictor ($\beta_{RE} = -.03$, $p > .05$) for her child's empathy score when the mother's SES was added as another predictive variable ($\beta_X = 1.76$, $p < .05$). In contrast, a mother's SES added significantly to the prediction of her child's empathy score ($F_X(1,44) = 15.05$, $p < .05$). Further, from the stepwise regression, it showed that a mother's restrictive factor was

not in the equation of the prediction.

Table 7. Prediction Analysis: Added contribution of SES
in Predicting Child's Empathy

Variable	β	SE β	R ²	F(1,44)	EX(1,44)
Restrictive(RE)	-.03	.02			
			.29	9.07*	15.06*
SES (X)	1.76	.54			

* $p < .05$

Cronbach's Alpha internal consistency reliability coefficient was computed for the MCRPR scales to determine if the scales yielded reliable scores for the forty seven Malaysia Chinese mothers in this study. For the MCRPR nurturance scale, Alpha was .88. For the MCRPR restrictiveness scale, Alpha was .83. The MCRPR scale yielded significant reliable scores for the subjects. According to Rickel & Biasatti (1982), the MCRPR has been shown to be reliable across different samples who came from different socioeconomic backgrounds and races.

In sum, maternal nurturing and restrictiveness were related to maternal SES. A high SES mother tended to practice nurturing type of child rearing; and a low SES

mother tended to practice restrictive type of child rearing. The results of the study revealed that nurturing and restrictiveness variables were related to a child's empathy if each of the variables were tested by itself with child's empathy. A mother's SES was also correlated with a child's empathy. The results showed that a mother's SES variable, compared to maternal nurturing and restrictiveness, was more important factor for the prediction of her child's empathy.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The results of this study indicate that there were no sex differences in empathy for the preschool children in this sample. These findings are consistent with Feshbach and Roe's (1968) studies of American preschoolers and Borke's (1971) studies of American and Taiwanese preschoolers.

The findings of this study were also consistent with Borke's (1973) results with respect to the relationship between maternal socioeconomic status (SES) and children's ability to empathize as measured by Borke's scale. High maternal SES was associated with children's high ability to empathize with other children; whereas low maternal SES is related to children's low ability to empathize.

The results of this study was also consistent with Jensen et al's (1981) data which discovered that maternal nurturance was positively related to children's empathy. Nurturing mothers, those who self-reported to share feelings and experiences with their children, and to show affection, acceptance, and responsiveness to their children's needs, tended to have children who were high in empathy.

Restrictive mothers, in contrast, those who self-reported to practice high degree of control, set narrow limits on their children's behaviors, and endorse strict rules, tended to have children who were low in empathy. These findings suggest that maternal child rearing practices are important variables for children's empathy (Borke, 1972).

This study also revealed that when maternal SES was tested together with maternal nurturing and restrictiveness factors, nurturing and restrictiveness variables were not significant factors in children's empathy. However, maternal SES was the more important variable in children's empathy. Nurturing and restrictiveness variables are not significant predictors of children's empathy. In short, high and low maternal SES are the key variables in children's empathy.

There are a number of possible reasons for the results of this study. Compared with low SES mothers, high SES mothers are more able to afford to hire maids for extra help at home; consequently, they can spend more time with their children conducting moral training and emphasizing their children's self-direction. They may be more responsive to changes in regards to their practices. They search for a variety of information and advice, discuss with friends, and consult professionals. Also, these mothers may have higher and more expectations for their children. They may be able to involve themselves in many more events with their children due to the excessive time that the high SES mothers have.

Furthermore, improper conducts will make the high SES mothers "lose face" (feel humiliated or ashamed). Children of high SES may be taught directly or indirectly to maintain good images in schools so that their mothers could confer respectability and status from the society. Therefore, children of high SES may learn empathy through the subjective teaching of being "good" children. Low SES mothers, on the contrary, may be relatively less responsive to changes in regards to their practices. They may also be less responsive to seek for professional advices and to discuss with friends due to the fact that they can not afford spending money to hire extra help at home. Subsequently, they may have less resources and time in helping their children recognize or unlearn problematic behaviors that are nonconsiderate to others.

Another possible explanation may be the factor of heritage. A child's empathy may be related to biological disposition. A child who can empathize with others is able to take on another's perspective and so the child may tend to possess nurturing characteristics. Nurturing characteristics may in turn be necessary characteristics for the managing and professional occupations. A professional or a self-directing job always involves the manipulation of people. The empathic person who possesses a professional job may lead him or her to a high SES. This same speculation also applies to a child who has difficulty empathizing with

others. An unempathic child may tend to possess restrictive characteristics. A person with restrictive as opposed to nurturing characteristics may hold a job that requires only the manipulation of objects. The job that the person possesses may have kept him or her in the low SES.

This research provides Malaysian and cross-cultural educators and counselors with information necessary to plan a parenting program or intervention sensitive to the mother's child-rearing practice and SES and empathy in her child. A low SES mother typically lacks time and parenting resources. A teacher, who may be the most accessible to a low SES mother, can provide the mother a parenting program and a mother-child interaction program, and also provide the mother with necessary handouts, so that the mother could assess new information and alternate choices on parenting. Besides the required school syllabus, a teacher also needs to structure 10 to 15 minutes of specific activities regarding empathy for a group of children to promote each child's awareness of empathy. In terms of physical environment of a preschool, a teacher may need to consider the teacher-child ratio of a class. Overcrowdedness in terms of excessive number of children for a teacher may inhibit the teacher in having a better communication and attention for an individual child. Apparently, overcrowdedness may inhibit communication and a friendly social learning between children. Maternal SES plays a significant role in the development of a child's

empathy. The results of this study provide researchers the knowledge of the importance of the mother's SES in considering a child's development of empathy.

In conducting research regarding maternal SES and child's empathy, a researcher may need to take into consideration alternate factors that may be related to maternal SES and child's empathy. Alternate factors include mother's educational background and empathy, the father-child interaction, the value system, and the heritage factor. In addition, studies focused solely on maternal SES and comparing working and non working mothers need to be conducted to further understand the developmental course of empathy.

APPENDIX A
CONSENT LETTER

Dear Mothers:

I am conducting a study designed to describe your child-rearing practices and your child's emotional response to certain stories that involve social interactions depicted in stories. I will provide you a short child-rearing inventory to fill out. Also, I will administer a brief inventory to your child at school.

The information obtained from you and your child will be kept confidential and not be shared with anyone. Your name, the name of your child, and the name of the school will not be used. I may need to examine certain school records to verify this data. The results of the study will be available at your school.

The results of this study will help mothers find better ways to understand their children and themselves. If you have any question or want further information, please call me at 03-255-8468. If you agree to participate and agree to have your child participate in this study, please sign the enclosed consent form and fill out the family survey form; and return them to the school principal's office.

Thank you for your support.

Sincerely,

APPENDIX B
FAMILY INFORMATION SURVEY

1. How many child(ren) do you have? _____

2. How many adult(s) are living at
the same house with you?

Who are they?

_____ Husband

_____ Father and/or
mother

_____ Father and/or
mother in-laws

_____ Others.

3. What is your occupation? _____

4. What is your husband's occupation? _____

5. What are those adults' occupations?

_____ Father

_____ Mother

_____ Father in-law

_____ Mother in-law

_____ Others

APPENDIX C
CONSENT FORM

Mother's Child Rearing Practices and Child's Empathy Study

I agree to participate in this study and grant permission for my child to participate in the study. I understand that certain school records may need to be examined for verification of data. All information is to be kept confidential.

YES	NO	I have one and/or two preschool child(ren)
YES	NO	I give my consent to take part in the study.
YES	NO	I grant permission for my child to participate.

Child's name: _____

Parent's signature

Date

APPENDIX D

MCRPR SCALE (ENGLISH VERSION)

Nurturance

How do you think about the items below in describing your child-rearing practices? Please go through each item and circle a number 1 to 6. If you think the statement can highly describe your parenting practices, then you circle 6.

Responses

DESCRIPTIVE

	NOT	A LITTLE	SOMEWHAT	DESCRIPTIVE	VERY	HIGHLY
1. My child and I have warm intimate moments together.	1	2	3	4	5	6
2. I encourage my child to talk about his troubles.	1	2	3	4	5	6
3. I joke and play with my child.	1	2	3	4	5	6
4. I make sure my child knows that I appreciate what he tries to accomplish.	1	2	3	4	5	6
5. I encourage my child to wonder and think about life	1	2	3	4	5	6
6. I feel that a child should have time to daydream, think, and even loaf sometimes.	1	2	3	4	5	6

Responses

DESCRIPTIVE

	NOT	A LITTLE	SOMEWHAT	DESCRIPTIVE	VERY	HIGHLY
7. I express my affection by hugging, kissing, and holding my child.	1	2	3	4	5	6
8. I talk it over and reason with my child when misbehaves.	1	2	3	4	5	6
9. I find it interesting and educational to be with my child for long periods.	1	2	3	4	5	6
10. I encourage my child to be curious, to explore, and question things.	1	2	3	4	5	6
11. I find some of my greatest satisfactions in my child.	1	2	3	4	5	6
12. When I am angry with my child, I let him know about it.	1	2	3	4	5	6
13. I respect my child's opinion and encourage him to express it.	1	2	3	4	5	6

Responses

DESCRIPTIVE

	NOT	A LITTLE	SOMEWHAT	DESCRIPTIVE	VERY	HIGHLY
14. I feel that a child should be given comfort and understanding when he is scared or upset.	1	2	3	4	5	6
15. I am easygoing and relaxed with my child.	1	2	3	4	5	6
16. I trust my child to behave as he should, even when I am not with him.	1	2	3	4	5	6
17. I believe in praising a child when he is good and think it gets better results than punishing him when he is bad.	1	2	3	4	5	6
18. I usually take into account my child's preference when for the family.	1	2	3	4	5	6

Restrictiveness

How do you think about the items below in describing your child-rearing practices? Please go through each item and circle a number 1 to 6. If you think the statement can highly describe your parenting practices, then you circle 6.

Responses

DESCRIPTIVE

	NOT	A LITTLE	SOMEWHAT	DESCRIPTIVE	VERY	HIGHLY
1. I believe a child should be aware of how much I sacrifice for him.	1	2	3	4	5	6
2. I expect my child to be grateful and appreciate all advantages he has.	1	2	3	4	5	6
3. I teach my child that in one way or another, punishment will find him when he is bad.	1	2	3	4	5	6
4. I teach my child to keep control of his feelings at all times.	1	2	3	4	5	6
5. I believe children should not have secrets from their parents.	1	2	3	4	5	6
6. I control my child by warning him about the bad things that can happen to him.	1	2	3	4	5	6

Responses

DESCRIPTIVE

	NOT	A LITTLE	SOMEWHAT	DESCRIPTIVE	VERY	HIGHLY
7. I do not allow my child to say bad things about his teacher.	1	2	3	4	5	6
8. I dread answering my child's question about sex.	1	2	3	4	5	6
9. I believe that scolding and criticism make a child improve.	1	2	3	4	5	6
10. I let my child know how ashamed and disappointed I am when he misbehaves.	1	2	3	4	5	6
11. I want my child to make a good impression on others.	1	2	3	4	5	6
12. I try to keep my child away from children or families whose ideas or values are different from our own.	1	2	3	4	5	6
13. I think a child should be encouraged to do things better than others.	1	2	3	4	5	6

Responses

DESCRIPTIVE

	NOT	A LITTLE	SOMEWHAT	DESCRIPTIVE	VERY	HIGHLY
14. I instruct my child not to get dirty when he is playing.	1	2	3	4	5	6
15. I don't want my child to be different from others.	1	2	3	4	5	6
16. I don't think that children of different sexes should be allowed to see each other naked.	1	2	3	4	5	6
17. I do not allow my child to question	1	2	3	4	5	6
18. I believe that a child should be seen and not heard.	1	2	3	4	5	6
19. I do not allow my child to get angry with me.	1	2	3	4	5	6
20. I believe in toilet training a child as soon as possible.	1	2	3	4	5	6

Responses

DESCRIPTIVE

	NOT	A LITTLE	SOMEWHAT	DESCRIPTIVE	VERY	HIGHLY
21. I prefer my child not try things if there is a chance he might fail.	1	2	3	4	5	6
22. I don't think children should be given sexual information	1	2	3	4	5	6

APPENDIX E

MCRPR SCALE (CHINESE VERSION)

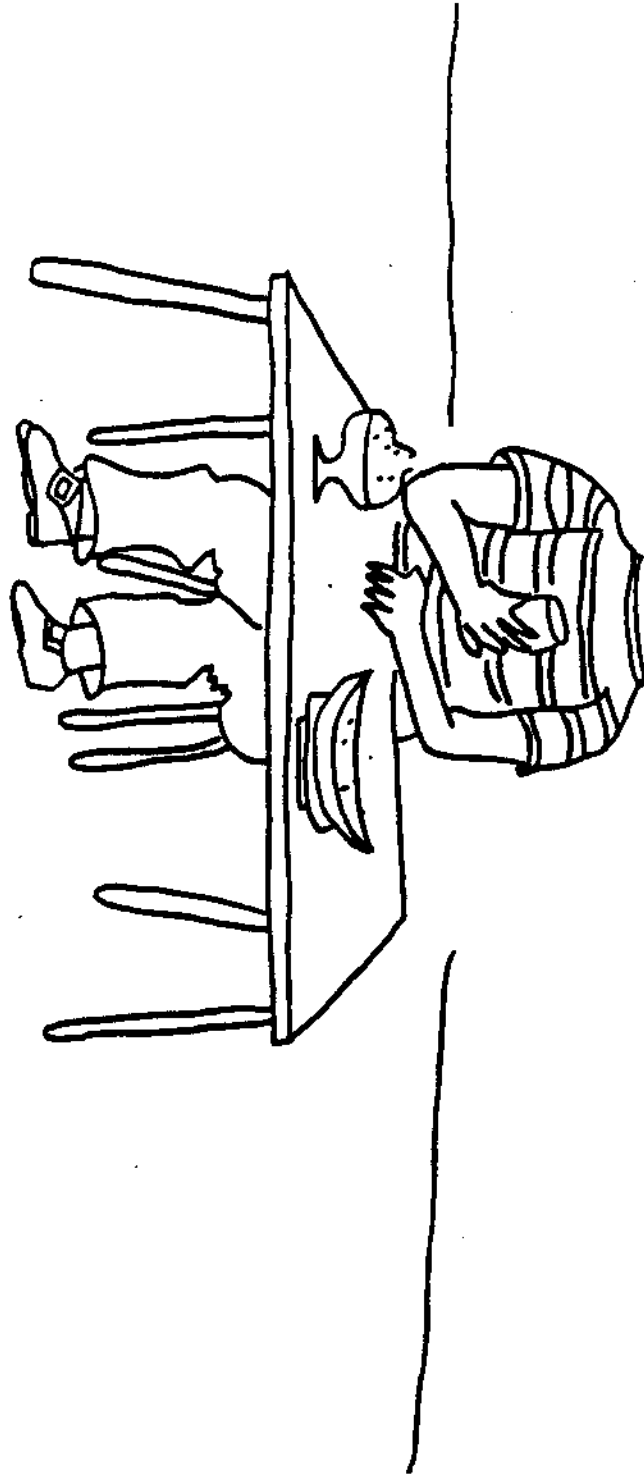
表格

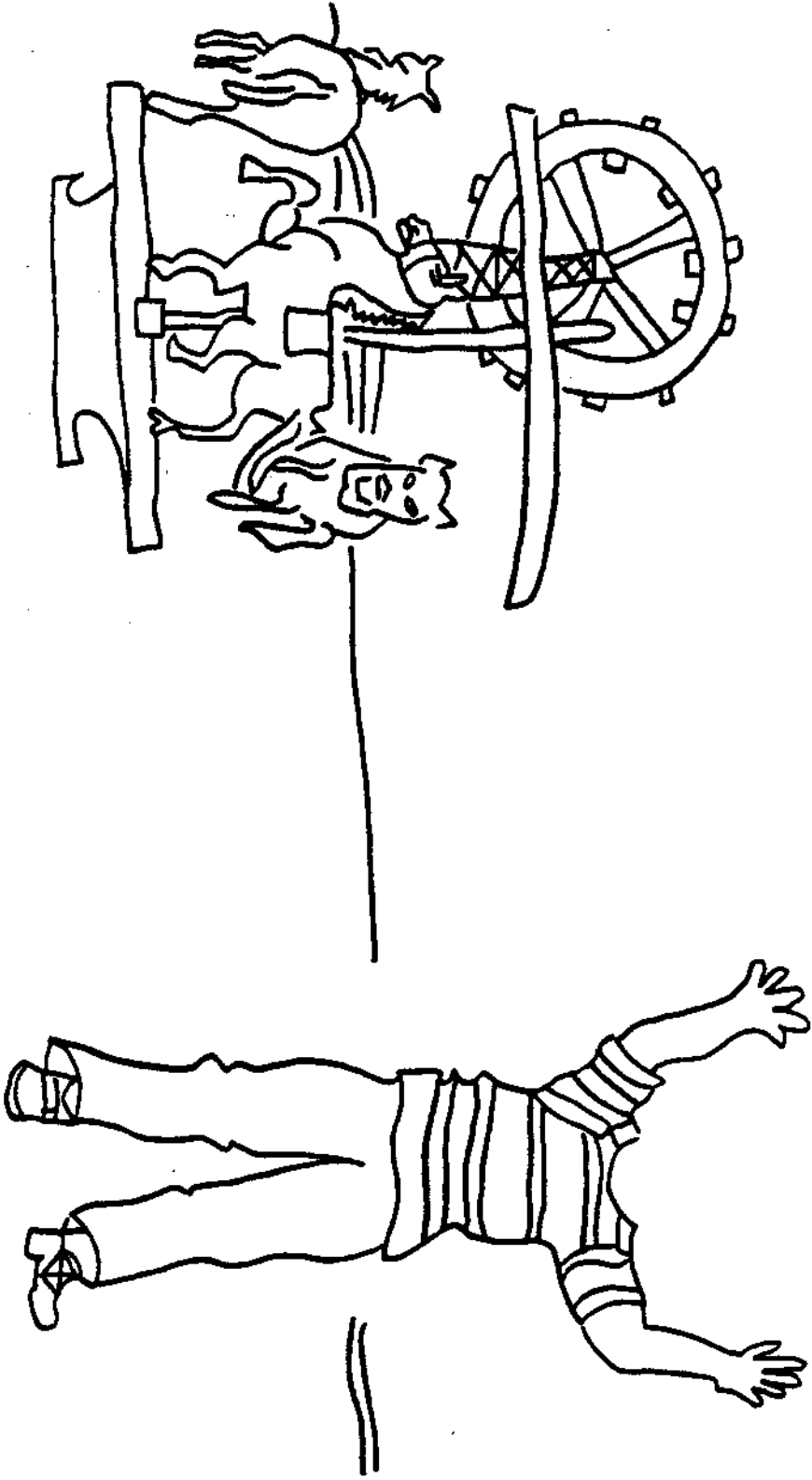
您認為下列的句字是能夠形容您對孩子的教導方式嗎？
請評定每個項目然後從6到1圈起一個號碼。6是代表您
認為最能形容您的教導方式。

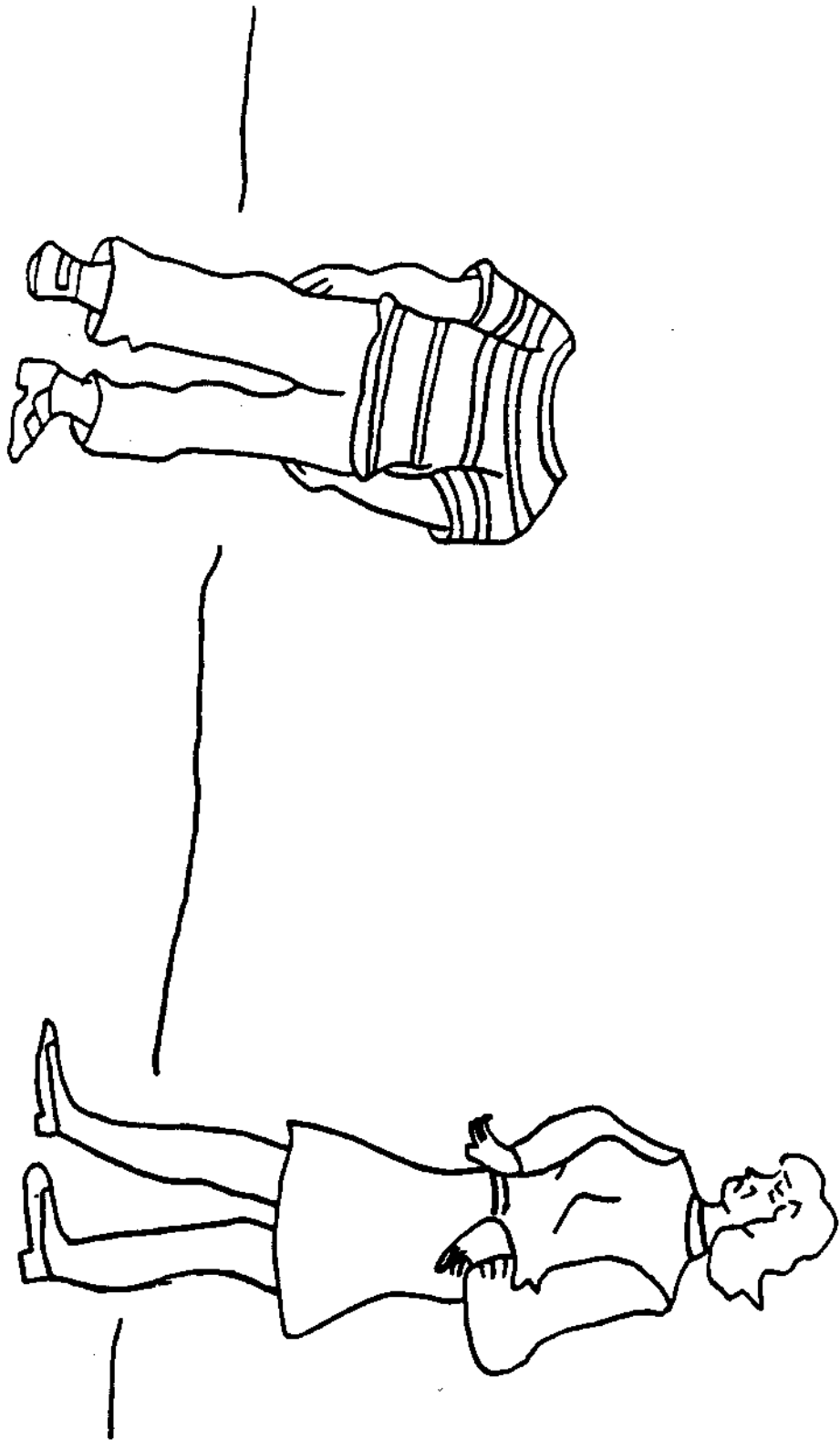
	完全 能形容 我	一 定 能 形 容 我	相 當 能 形 容 我	能 形 容 我	非 常 能 形 容 我	最 能 形 容 我
1. 我知孩子有溫馨、親密的相處片刻	1	2	3	4	5	6
2. 我鼓勵孩子談談他的困擾	1	2	3	4	5	6
3. 我知孩子开玩笑，一起玩	1	2	3	4	5	6
4. 我儘可能告訴孩子，他的努力令我心悅	1	2	3	4	5	6
5. 我鼓勵孩子探討生命的奧秘	1	2	3	4	5	6
6. 我覺得孩子應該有時間作白日夢， 沉思，甚至閒晃	1	2	3	4	5	6
7. 我用擁抱、親吻去表達我對孩子的愛	1	2	3	4	5	6
8. 当孩子做错事時，我知他溝通，講道理	1	2	3	4	5	6
9. 我发现和孩子長時間相處既有趣 又有意义	1	2	3	4	5	6
10. 我鼓勵孩子對所有事都保持好奇心， 勇於探索，質問。	1	2	3	4	5	6
11. 我发现从孩子身上，我得到很大的滿足	1	2	3	4	5	6
12. 当我生孩子的氣時，我讓他知道我在生氣。	1	2	3	4	5	6
13. 我尊重孩子的意見，並鼓勵他表達。	1	2	3	4	5	6
14. 我覺得当孩子害怕、沮喪時，父母親應該 試著了解，安慰他	1	2	3	4	5	6
15. 当我知孩子相處時，我很輕鬆，隨和	1	2	3	4	5	6
16. 我相信即使我子在孩子身旁，他也能 循規蹈矩。	1	2	3	4	5	6
17. 我認爲正面的獎勵比負面的指責更好	1	2	3	4	5	6
18. 当我擬定家庭計劃時，我通常將孩子的 意願列入考慮	1	2	3	4	5	6

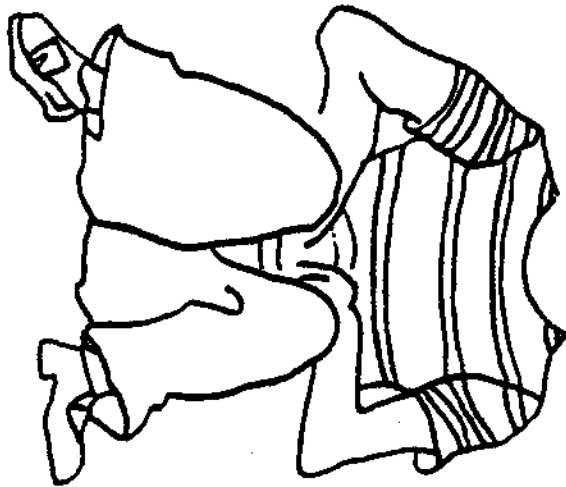
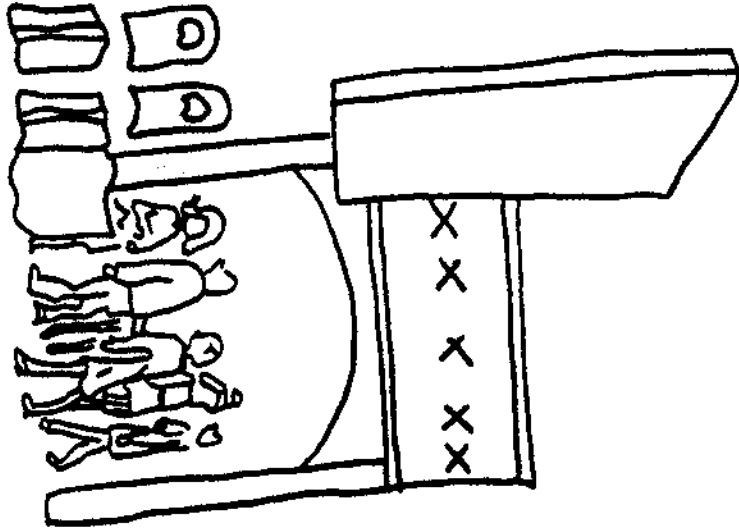
	完全不能形 成	一 定 能 形 成	相 当 能 形 成	能 形 成	非 常 能 形 成	最 能 形 成
19. 我相信孩子应该了解我为他的犧牲有多少	1	2	3	4	5	6
20. 我希望我的孩子会珍惜,感激他所得到的一切好处	1	2	3	4	5	6
21. 我教誨孩子,只早他不学好,迟早会受罰	1	2	3	4	5	6
22. 我教誨孩子,任何時刻都早克制自己的情绪	1	2	3	4	5	6
23. 我认为孩子不该对父母有任何隐瞒	1	2	3	4	5	6
24. 我告訴孩子,如果他不听我的话,后果堪慮	1	2	3	4	5	6
25. 我不准孩子說老师的坏話	1	2	3	4	5	6
26. 我怕回答孩子任何有关理方面的问题	1	2	3	4	5	6
27. 我认为指責,批評孩子,会促使他进步	1	2	3	4	5	6
28. 我让孩子知道,当他作錯事时,我有多失望,多流面子	1	2	3	4	5	6
29. 我希望我的孩子给别人良好的印象	1	2	3	4	5	6
30. 当别人的孩子或别的家庭知我家不同的价值观或意見时,我想办法不让我的孩子和他们接近	1	2	3	4	5	6
31. 我认为应该鼓励孩子事事比人强	1	2	3	4	5	6
32. 我教誨孩子,玩耍時早保持乾淨	1	2	3	4	5	6
33. 我不早别人对待我的孩子和对待别人的孩子有所不同	1	2	3	4	5	6
34. 我认为男孩和女孩不该看到彼此的裸体	1	2	3	4	5	6
35. 我不早孩子对我的决定有任何疑问	1	2	3	4	5	6
36. 我认为孩子在人前不必多言	1	2	3	4	5	6
37. 我不早孩子对我生气	1	2	3	4	5	6
38. 我相信早给孩子廁所訓練愈好	1	2	3	4	5	6
39. 我早可孩子不做任何可能失败的嘗試	1	2	3	4	5	6
40. 我认为不该提供给孩子任何性方面的資訊	1	2	3	4	5	6

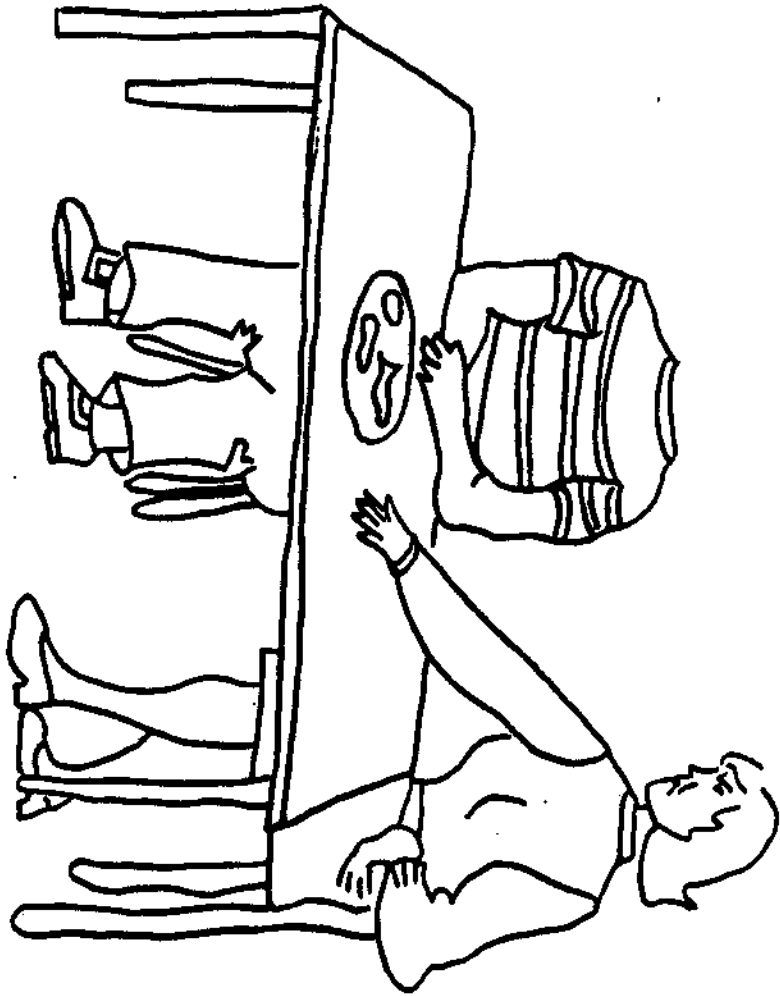
APPENDIX F
BORKE EMPATHY SCALE





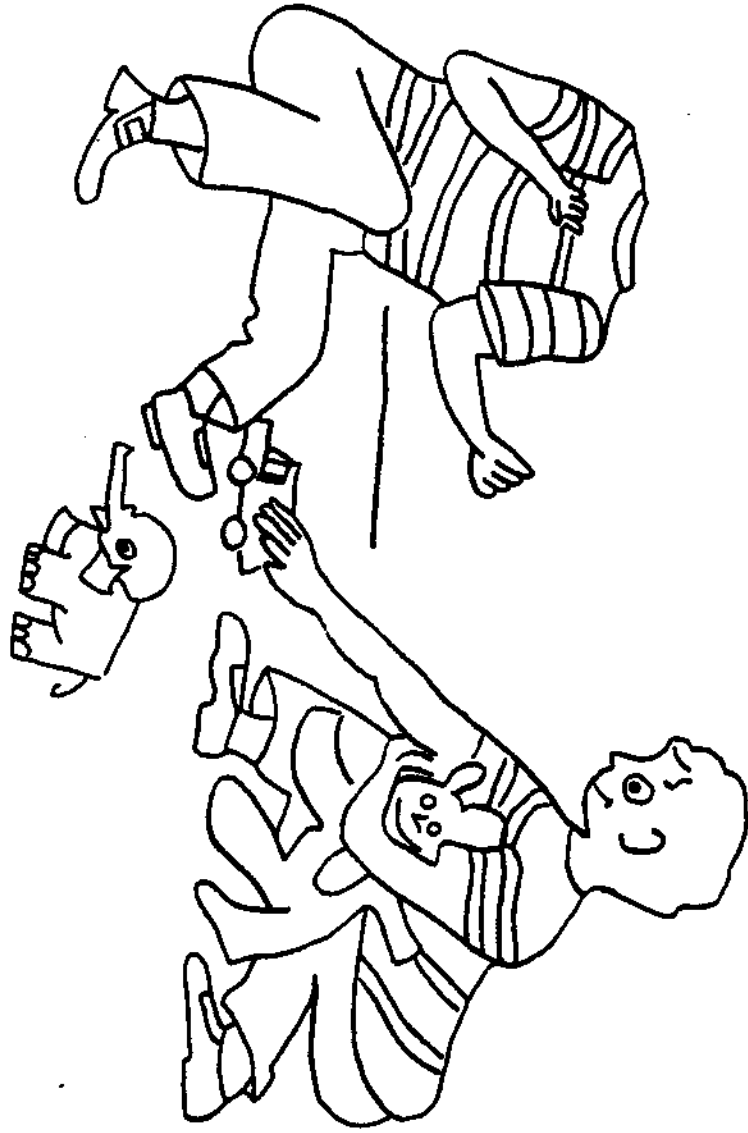




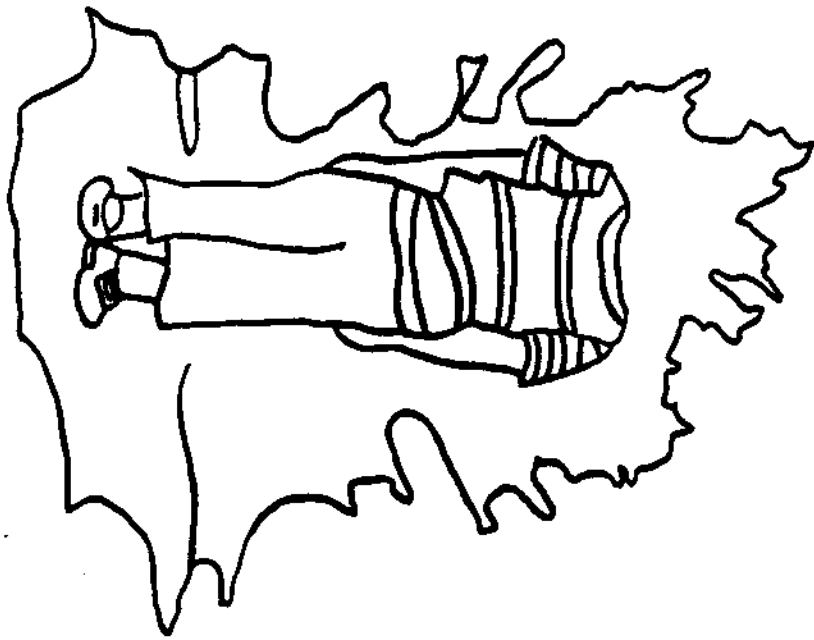


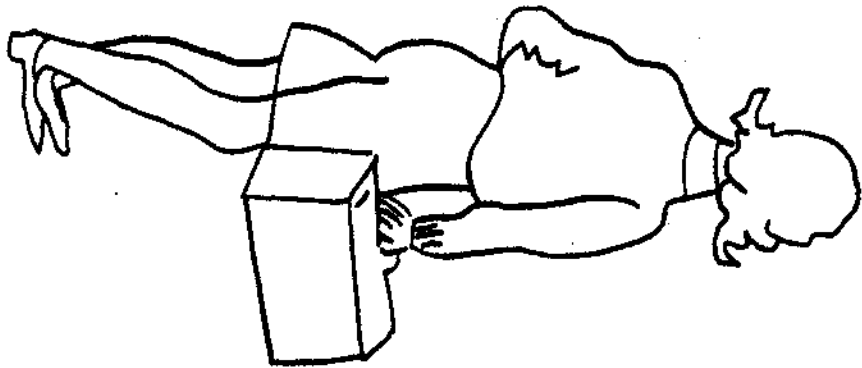
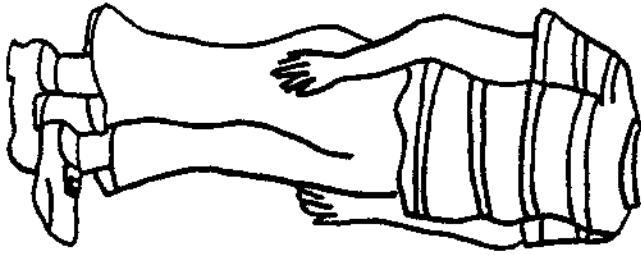


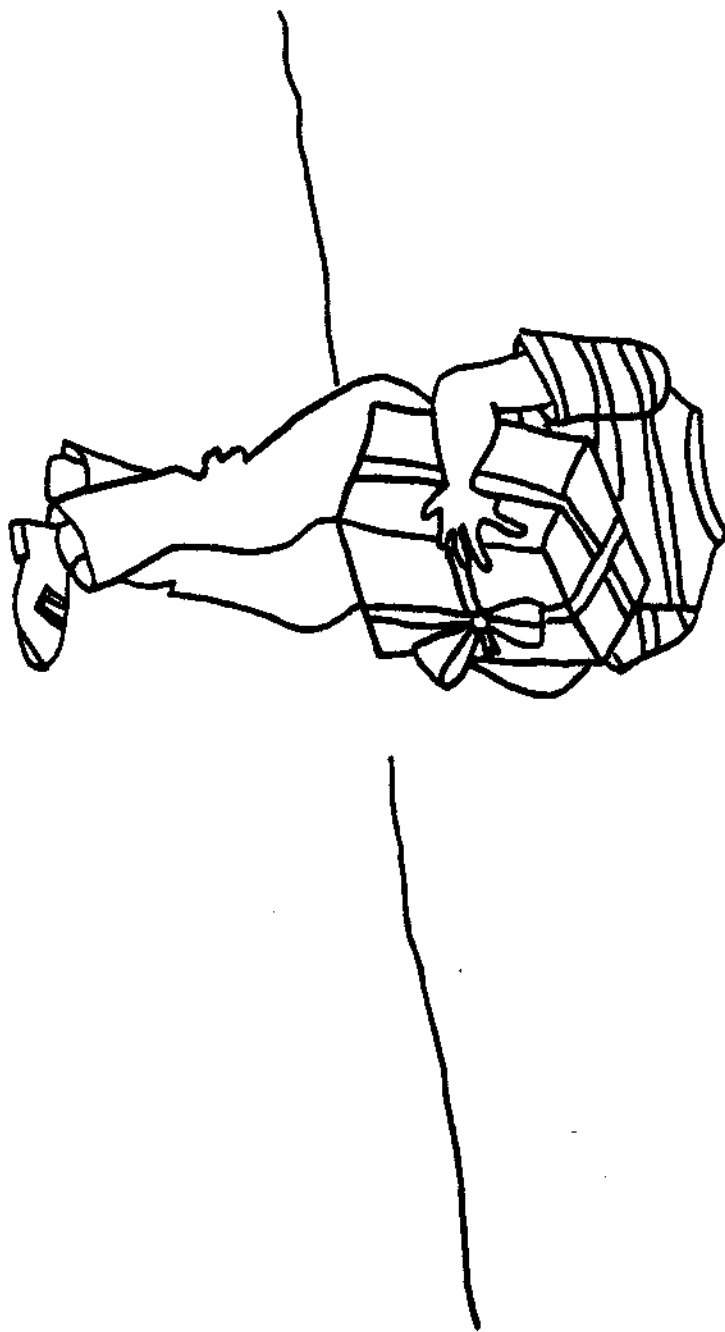


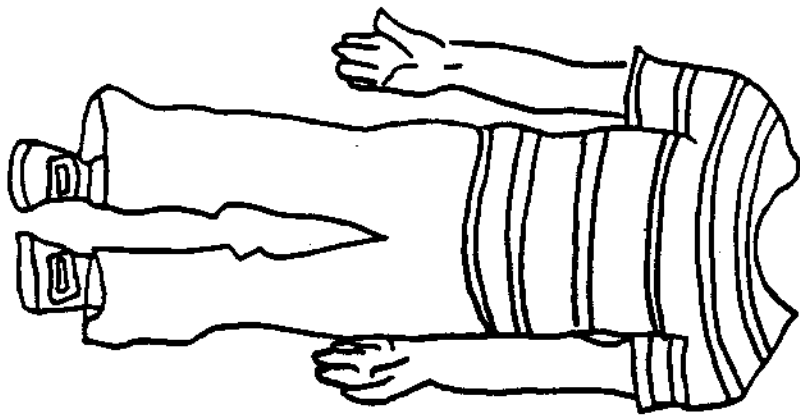












CARNEGIE-MELLON UNIVERSITY

Interpersonal Awareness Test

Part I

Name: _____ Date of Birth: _____

Age: _____ Date: _____

Examiner: _____

Instructions: 1. Examiner places pictures showing child of same sex as subject in following order: Happy, Sad, Afraid and Angry. These are pictures of Nancy (Johnny). Can you tell me how Nancy (Johnny) feels in each picture? How does Nancy (Johnny) feel in this picture? Examiner points to first picture. Examiner tells subject the names of any feelings child is unable to identify. Examiner circles faces child names correctly:

Happy Sad Afraid Mad None

2. Illustration A: Examiner picks up faces and shuffles them making sure the "happy" face is not on top. Examiner lays out the faces in the new order and then places the picture for the first illustration story in front of the subject. Show me how Nancy (Johnny) would feel if she were eating the food she liked best. Would she feel (examiner names the emotions according to the new sequence of faces). Pick up the face you think and put it on the picture. Examiner circles the face selected by the subject:

Happy Sad Afraid Mad None

If the subject does not select a face, the examiner places the "Happy" face on the picture saying: Nancy (Johnny) would probably feel "happy" if she were eating the food she liked best.

If the subject does select a face, regardless of which one, the examiner says: Very good. Why do you think Nancy (Johnny) would feel _____ if she were eating the food she liked best?

Now I am going to tell you some more stories about Nancy (Johnny) and I want you to show me how Nancy (Johnny) feels in each story. There are no right or wrong answers. All I want to know is how you think Nancy (Johnny) feels in each story.

NOTE: Examiner reshuffles pictures before each story and circles Child's response.

1. Show me how Nancy (Johnny) would feel if her mother was going to take her some place she liked to go. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____ ?

H S A M

2. Show me how Nancy (Johnny) would feel if she wanted to do something and her mother said, "No." Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
3. Show me how Nancy (Johnny) would feel if her mother promised she could go to a movie and then didn't take her. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
4. Show me how Nancy (Johnny) would feel if her mother forced her to eat something she didn't like. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
5. Show me how Nancy (Johnny) would feel if she dreamed that a tiger was chasing her. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
6. Show me how Nancy (Johnny) would feel if she fell and hurt herself. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
7. Show me how Nancy (Johnny) would feel if her sister or her brother took her toys away from her. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
8. Show me how Nancy (Johnny) would feel if she couldn't go out to play because she was sick and had to stay in bed. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
9. Show me how Nancy (Johnny) would feel if she were alone in the dark. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M

10. Show me how Nancy (Johnny) would feel if someone she liked very much had to go away. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
11. Show me how Nancy (Johnny) would feel if she got a new toy as a gift. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M

CARNEGIE-MELLON UNIVERSITY

Interpersonal Awareness Test

Part II

Name: _____ Date of Birth: _____
 Age: _____ Date: _____
 Examiner: _____

Instructions: Now I am going to tell you some more stories only this time there will be just this one picture of Nancy (Johnny) to put the face on. Examiner shuffles faces making sure the "happy" face is not on top. Show me how Nancy (Johnny) would feel if you let her play with your toys. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Examiner circles the face selected by the subject:

Happy Sad Afraid Mad None

Why do you think Nancy (Johnny) would feel _____ if you let her play with your toys?

NOTE: Examiner reshuffles pictures before each story and circles child's responses.

1. Show me how Nancy (Johnny) would feel if you gave her some ice cream. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
2. Show me how Nancy (Johnny) would feel if she wanted to play with you and you couldn't play because it was too late. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
3. Show me how Nancy (Johnny) would feel if you broke her favorite toy. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
4. Show me how Nancy (Johnny) would feel if you pushed her down and she got hurt. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M

3. Show me how Nancy (Johnny) would feel if you pretended to be a ghost and ran after her in the dark. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
6. Show me how Nancy (Johnny) would feel if you left her and went to play with someone else. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
7. Show me how Nancy (Johnny) would feel if she just finished building a tower of blocks and you knocked it down. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
8. Show me how Nancy (Johnny) would feel if you told her a ghost story. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
9. Show me how Nancy (Johnny) would feel if you tore her best drawing into little pieces. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
10. Show me how Nancy (Johnny) would feel if you said something bad about her father or mother. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
11. Show me how Nancy (Johnny) would feel if you wouldn't let her play with you. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M
12. Show me how Nancy (Johnny) would feel if you invited her to come and play with you. Would she feel (examiner names emotions according to sequence). Pick up the face you think and put it on the picture. Why do you think Nancy (Johnny) would feel _____? H S A M



APPENDIX G
SPSS PC STATISTICAL PROGRAM


```
Title   Mothers child rearing practices and child empathy
        study.
Data List Fixed / ID 1-2 SES 4-6 gender 7 empathy 9-10
          N1 to N18 12-29 R1 to R22 31-52.
compute nurture = sum(N1 to N18).
compute restrict = sum (R1 to R22).
variable label gender 1 'boy' 2 'girl'.
* empathy scores range from 0 to 16.
* nurture scores range from 18 to 108.
* restrict scores range from 22 to 132.
begin data.
<data goes here - sample below>
01 222 1 16 123456123456123456 1234561234561234561234
end data.
descriptives variables=nurture restrict.
reliability variables=n1 to n18 r1 to r22/
  scales (mcrprn) = n1 to n18/
  scales (mcrprrr) = r1 to r22.
regression variables = empathy nurture restrict/
  dependent = empathy/
  analysis=nurture/
  analysis=restrict.
t-test groups=gender(1,2)/variables=empathy.
correlation income nurture restrict.
regression variables=empathy nurture income/
  dependent=empathy.
regression variables=empathy restrict income/
  dependent=empathy.
finish.
```

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