

## **INFORMATION TO USERS**

The most advanced technology has been used to photograph and reproduce this manuscript from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book. These are also available as one exposure on a standard 35mm slide or as a 17" x 23" black and white photographic print for an additional charge.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

# **U·M·I**

University Microfilms International  
A Bell & Howell Information Company  
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA  
313/761-4700 800/521-0600



**Order Number 9009775**

**Themes obtained from the Animal Preference Test and their  
relationship to specific behavioral problems**

**Rojas, Evelyn Baez, Ph.D.**

**City University of New York, 1989**

**U·M·I**  
300 N. Zeeb Rd.  
Ann Arbor, MI 48106



THEMES OBTAINED FROM THE ANIMAL PREFERENCE TEST  
AND THEIR RELATIONSHIP TO SPECIFIC BEHAVIORAL PROBLEMS

by

Evelyn Baez Rojas

A dissertation submitted to the Graduate Faculty in  
Psychology in partial fulfillment of the requirements  
for the degree of Doctor of Philosophy, The City  
University of New York.

1989

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy

16-4-89  
date

*Stan D. P. D.*  
Chairman of Examining Committee

October 4, 1989  
date

*Herbert D. Salzman*  
Executive Officer

Dr. Steven Tuber

Dr. Paul Wachtel

Dr. Louis Gertsman  
Supervisory Committee

The City University of New York

## Abstract

THEMES OBTAINED FROM THE ANIMAL PREFERENCE TEST  
AND THEIR RELATIONSHIP TO SPECIFIC BEHAVIORAL PROBLEMS

by

Evelyn Baez-Rojas

Adviser: Professor Steve Tuber

This investigation attempted to determine whether performance on the Animal Preference Test correlated with parental assessment of children's pathological behavioral problems as measured by the Achenbach Child Behavior Checklist.

The 40 Black and Hispanic boys in this study, aged 6-12, were asked to name the three animals they would most like to be and the three animals they would least like to be if they were not a human being. Reasons for animal choice were categorized into one of four theme categories: Aggressive, Autonomy, Nurturance and Pleasure-Beauty.

Predominance of Nurturance-Pleasure-Beauty themes for the negative question (animal I would least like to be), correlated with pathological behaviors in 5 out of the 9 subscales of the Child Behavior Checklist at the .01 and .05 level of significance.

Predominance of Aggressive/Autonomy themes failed to correlate with any pathological behaviors of the Child Behavior Checklist.

The difference between the nurturing-rejecting group and the aggressive-rejecting group is explained in terms of Fairbairn's (1952) theory of early object relations.

It is postulated that the nurturing-rejecting group may have experienced more sadistic and depriving early object relationships which resulted in a more pervasive fragmentation of the ego than the aggression-rejecting group.

### Acknowledgement

I have come to the end of what, at one point, seemed to be an insurmountable task -- the completion of this dissertation. I am indebted to many for this accomplishment.

I thank the parents and children in this study who welcomed me into their lives and without whom this research would not have taken place.

I thank Steve Tuber for his steady, unyielding support, his encouragement and his keen sense of responsibility. I was always amazed at how quickly Steve gave me feedback on a given piece of written work.

I am grateful to Lou Gerstman for struggling unselfishly with the many ways of looking at the raw data and helping me make sense of it.

I thank Paul Watchel for his faith in me. Throughout the many years of formal training while in the program, Paul has shown considerable appreciation for me and my work. I want him to know how important and inspirational this has been.

I am forever thankful to Steve Goldstein for his relentless attack on my inclination for states of inertia. His weekly request for an "update" on the progress, or lack of, with regards to this work, proved to be pivotal in its completion.

I thank Carmen Vazquez, mi compatriota y musa, for her willingness and readiness to take part in this project. I always hoped she could partake of this event.

I must thank my father for being a good father, for giving me the opportunity to grow up around him and to take in so much of him. I continue to mourn his untimely death as I had hoped he would share this wonderful accomplishment with me.

Without my mother, I would have had to choose between my career and having a family. Thanks to her devotion, I have been able to do both. I am glad she is still with me at this stage in my life.

I thank my husband Edgar for his patience and endurance. Being closest to me meant he was often the unintended, undeserving target of many frustrations. I am grateful for his strength of character and his support throughout this endeavor.

And finally I wish to thank my daughters Katjia, Gaby, "Puqui" and Jilma who in countless ways, continuously, make me look inside and push me to grow. I am proud of them.

## Table of Contents

	Page
CHAPTER I	
Introduction	1
Statement of Purpose	8
Purpose and Objectives	8
Rationale of the Study	9
Definition of Terms	12
Delimitations of the Study	13
CHAPTER II	
Review of the Literature	14
CHAPTER III	
Introduction to the Chapter	20
Statement of the Hypotheses	20
Description of Subjects	21
Description of Research Instrumentation	22
CHAPTER IV	
Results	35
CHAPTER V	
Review of Purpose and Objectives	43
Review of the Literature	43
Review of the Hypotheses	45
Summary of the Hypotheses	46
Summary of Findings and Interpretation	49
Discussion of the Problems and Limitations	62
Discussion of the Practical Implications	63
Suggestions for Further Research	64
APPENDIX	65
BIBLIOGRAPHY	87

## List of Tables

Table 1	-	Distribution of Dominant Scores for Each Trait Category	37
Table 2	-	Comparisons Between Groups 1 and 2 on Positive Choices	41
Table 3	-	Comparisons Between Groups 1 and 2 on Negative Choices	42

## CHAPTER I

Animals play a prominent role in the physical and emotional worlds of young children. Children are surrounded by the magical world of animals through television programs, illustrated fairy tales, as well as pets and toy animals.

The tendency for children to identify with animals has been well documented by Freud (1936), Fenichel (1945), Goldfarb (1945), and Bellak (1952). The Children's Apperception Test (CAT) was constructed by Bellak (1949), on the assumption that children identify more readily with animals than with humans. The CAT depicts animals in situations which often lead to stories dealing with children's problems around eating, toilet training, separation, etc. Because animals play a major role in the fantasy life of children, children often react more intensely to animal symbols than to human symbols. Stories elicited through animal symbols are therefore likely to have more affectively laden material than stories elicited through the use of human symbols. Goldfried and Kissel (1963), found that children were more extreme in their expression of affect for animals than adults on the Semantic Differential Scale.

Children's anthropomorphic thinking, as well as their affinity for animals, has provided clinicians with a useful tool for the study of psychological processes in children. In 1949 Pigem asked subjects: "What would you like to be if

you had to return to this world and you could not be a person?" His "Wishing Test" had a second version: "Imagine that you are dead and standing before the Gates of Heaven. Saint Peter says to you that unfortunately he has no more room and must send you back to earth for a while but not in human form. What would you like to be?"

Van Krevelen (1956) adapted Pigem's question to be used with children and asked: "Imagine that a magician comes to you and wants to turn you into something and you are allowed to say what you would like to be. What would you say? You could choose anything there is."

In this fashion the child was not initially restricted to a non-human choice. Van Krevelen pointed out that human choices may also reflect clinically important material and gives some examples of these. However, his principal aim was to obtain an animal response. Thus if the child failed to choose an animal, the question was followed by:

It is very nice that you made your choice, but now I see I have forgotten something very important. The magician I told you about cannot choose a boy or a man, a girl or a woman. What would you like to be? Now you must imagine that the magician cannot turn you into the thing you wanted to be. Then he says to you: I am sorry but that is not possible. I must turn you into something you do not like. So tell me, what would you never like to be?

Van Krevelen thus obtained both a positive and a negative response. In each case the question was followed by an inquiry into why the individual did or did not want to be a particular animal.

Van Krevelen's vignettes succinctly illustrate how individuals project different conflicts into the same animal symbol. Thus whereas a happily married woman chose a dog "because a dog is a sociable animal," a young engineer who had recently discovered his I.Q. to be lower than he expected, chose a dog "because he never makes use of his intelligence when he goes to work...." Or the response of a lonely 12 year old boy who wished to be a dog because "a dog comes and sits by one when one is alone, because a dog is among people."

Van Krevelen posited that both children and adults project deep conflicts into the animal symbols they chose. He believed that the use of a hypothetical question such as this one, served to remove the individual from the realm of reality enough to allow the expression of fundamental needs such as the need for love, security, recognition and self-realization without unduly experiencing personal and social restrictions.

This projective question (PQ) demands that the subject make a personal choice. It is assumed that the choice, whether animal, human or inanimate object, has particular significance to the individual. The object chosen is likely

to possess certain qualities and attributes with which the individual identifies.

Aside from reflecting highly personal dynamic factors, animal choice may reflect conventional, stereotyped, or cultural factors as well. Our language idiom gives ample evidence of the common usage of certain animal symbols. The lion for instance is always the king of the jungle. To ape is to imitate. The evil doer is a viper. A person is cunning as a fox or proud as a peacock. The strong is like a lion, the gentle like a lamb. The woman may be a hen, bitch, cow or tigress. Animals such as pigs, snakes and donkeys have symbolic meanings of their own.

The fact that many animal symbols have a conventional meaning of general validity, appears to play a secondary role in the selection of a particular animal. The choice often appears to be provoked by aspects of the object which lies outside its conventional symbolism. For instance, whereas the fish is in general an example of freedom as it swims in the ocean, a boy chose to be a fish "in order to remain outside the net." Given this child's history of repeated stealing, his wish not to be caught reflects more an aspect of his personal problem than a major attribute of the animal.

It appears that even when the individual is acquainted with the conventional meaning of certain symbols, the choices are more often than not, provoked by aspects of the object

which do not necessarily conform to their conventional meaning.

Children have an affinity for animals which appear to transcend the barriers of language and culture. Most children have had in their lives real or toy animals companions. Young children seem to relate well to animals partly because animals are safe, playful, mischievous and frequently small, like themselves. Animals are also non-judgmental, non-threatening and accepting of the child.

Children's relationships to animals are not based on the fulfillment of mutual emotional needs. The animal makes few if any claims on the child. The child is not forced to respond to the animal in any specific way. He is not compelled to abandon his own wishes or needs in order to mold himself to the needs of the animals as he might do in a relationship with another person. The child is rather free to allow himself to be spontaneous in his needs and behaviors towards the animal as these bear little relation to the way in which the animal will respond to him.

Children's identification with animals, their perception of the animal as a safe, non-judgmental companion, make animals a likely medium for the expression of unconscious needs and feelings. Through projection the animal becomes a repository of the child's unconscious, intolerable feelings. As container of the child's unwanted conflicts, the animal

serves to free the child of intrapsychic pain while remaining non-threatening and available.

A poignant example follows: A four and one half year old girl whose grandmother had been away for a week and whom she expected back that day, woke up early in the morning requesting to see her grandmother. After listening to sympathetic explanations and repeatedly stating that she wanted her grandmother, she finally stopped making her demands and stated in a whimpering voice while hugging her stuffed animal dog, "my doggie wants to cry because his grandmother is not here."

Was it easier for this child to attribute her sadness and need to cry to her dog than to own these feelings herself? Roy Schafer (1954), defines projection as "a process by which an objectionable internal tendency is unrealistically attributed to another person or to other objects in the environment instead of being recognized in oneself."

It would follow from this definition that this little girl's need to cry was an "objectionable" internal tendency from which she needed to defend and attribute to an outside object. The child perhaps felt it was safer to attribute her feelings to her doggie because she feared a negative or unaccepting reaction from the adult for having these feelings. Because animals have a limited capacity for self expression, the child is left free to speak for the animal.

This is safe in that the animal will not refute, fight or argue with the child over the feelings he/she is ascribing to it.

This child's anthropomorphic thinking allowed her to find comfort in believing that, like herself, her doggie needed to cry for his grandmother; that he was just as sad and angry as she was. It is as if she needed to find someone else who shared her feelings in order not to be alone in her pain. Until that moment, this little girl had been alone in missing her grandmother and in wanting her back. Although sympathetic and patient, the mother had given no indication of missing the grandmother herself. How disconsolate it had to be for this little girl to experience these strong emotions within herself and see no evidence of these feelings in the omnipotent adult. This is quite a lonely place to be. It is both comforting and reassuring for children to think in this fashion. She could then also comfort her doggie and vicariously enjoy this comfort.

The APT seems to be particularly well suited for children in that it makes use of animal symbols in facilitating the expression of unconscious material.

### Statement of Problem

The Animal Preference Test (APT), asks the subject to state what animal(s) he/she would like to be if he/she were not a human being, and what animal(s) he/she would not want to be if he/she were not a human being.

This study will attempt to determine:

1. Whether the APT can reliably depict important personality traits and conflict areas in children, and
2. Whether these personality traits positively correlate with an independent measure of their actual behaviors.

The problem this study examines is important for a number of reasons. First the study will add to the sparse literature on the Animal Preference Test as a useful projective technique with children.

Second, it will be one of the first studies to address the relationship between themes obtained from animal choices and an independent measure of children's behavioral problems.

Third, the study will elucidate areas of concern for the particular group of boys under study.

### Purpose and Objective of the Study

The purpose of this study is to examine whether performance on a projective test of animal preference correlates with parental assessment of children's pathological behavioral problems.

The specific objectives are as follows:

1. To determine if reasons for animal choice can reliably be categorized into one of four possible theme categories: 1) Aggression, 2) Autonomy, 3) Nurturance, and 4) Pleasure-Beauty.
2. To determine whether predominance of aggressive and/or nurturing themes in either the positive or negative animal choices, correlate with pathological behaviors as measured by the nine clinical subscales of the Achenbach Child Behavior Checklist (CBCL).

#### Rationale

The four theme categories used in this study were used by the writer in her 1978 Master's Thesis study which compared boys and girls from different socioeconomic levels and ages in their responses to the positive APT. At that time Aggression, Autonomy, Nurturance and Defence comprised the four theme category system. It was found however that many of the children's responses dealt with the pleasurable aesthetic aspects of the animals they chose. In addition Defence proved to be a less significant theme, which was difficult to differentiate from Autonomy. The Pleasure-Beauty category was added in this study in order to accommodate for the significant number of responses in this area.

Sex (pleasure) and aggression were posited by Freud as basic motivational forces in human nature. In the relational model, rage and pleasure-seeking are viewed not as primary forces but rather as reactions to object related exchanges.

Proponents of the relational model (Winnicott, 1958; Fairbairn, 1952; Guntrip, 1969), believe that there exists a fundamental need for human contact and relatedness. This need represents the fundamental source of human motivation.

There are inherent difficulties in the struggle to establish and maintain relationships with others. The availability of contact and emotional exchange with others results in the attainment of pleasure in the interpersonal exchange. When the search for contact is thwarted and frustrated, aggression results.

The four theme categories used in this study are believed to reflect basic human conditions resulting from the establishment and maintenance of relationship with others.

The hypotheses set forth in this paper assume a close relationship between aggression and depression and between need for contact and depression.

Depression is said to be the outcome of an aggressive conflict (Mahler, 1966; Jacobson, 1971; Klein, 1964). According to Melanie Klein, during periods of frustration and anxiety, the mother becomes the target of the child's rage. He destroys in fantasy the whole good mother who is frustrating. The loss of nurturance and love is experienced

as the results of one's own destructiveness and as retaliation for past injuries. The world and one's internal state is experienced as empty and depleted.

Mahler (1966), posits that when the child experiences failure at obtaining the frustrated gratification there is a loss of self esteem caused by the conflict between the ideal self image and the deflated failing self. It is both the diminished sense of self esteem and the intense ambivalence toward the good object which results in turning aggression against the self. The child feels not that he has a forbidden impulse (aggression) but that he is an evil person.

Clinically, childhood depression appears commonly in anxious restlessness and hyperactivity. Denial of depressive anxiety is manifested as a manic defense against the awareness of the painful affect of sadness. Therefore, these children are expected to show not only depressed traits such as "feels guilty", "lonely", "cries a lot", but also hyperactive behaviors such as "impulsive", "destroys his own things", "can't concentrate".

Children experiencing conflict over their needs for nurturance are also likely to manifest depressive behaviors.

Fairbairn (1952) speaks about the child's intense need for closeness, love and contact which may or may not be satisfied due to parental unavailability, arbitrariness or disorganization.

Due to his dependency, the child needs to preserve the integrity and goodness of his parents. He needs to feel that his parents are good and dependable. In order to do this, he separates and internalizes bad aspects of the parents through a series of internalizations, repressions and ego splits. It is not the parents who are bad, it is he. The badness is in him because it is better to carry the undesirable parental qualities in him than to experience them in the parents on whom he depends. This according to Fairbairn is the depressive position.

#### Definition of Terms

##### Animal Preference Test APT

Positive APT	What animal would you like to be if you were not a human being? Why?
Negative APT	What animal would you not like to be if you were not a human being? Why?
Full Dominance	All three reasons for all 3 animal choices are assigned to the same category.
Partial Dominance	When 2 out of 3 reasons for the 3 animal choices are assigned to the same categories.
No Dominance	When all 3 reasons for all 3 animal choices are assigned different categories.
Child Behavior Checklist CBCL	Standardized test designed to obtain data on "children's competencies and problems, as reported by their parents or parent-surrogates" and teachers.
Projective Question PQ	Any hypothetical question of the "If you..." variety.

The following categories will be used in scoring APT's positive and negative responses.

1. Aggression            When the animal is chosen because it attacks, bites, scratches, fights, is fierce, combative, dominating, hostile and unfriendly.
2. Autonomy            When the animal is chosen because of its freedom and independence, large size, muscular vigor, physical power, forcefulness, self-reliance, self-sufficiency, and decisiveness.
3. Nurturance            When the animal is chosen because it provides or craves for shelter, protection, love, affection, warmth, comfort, security, well being, food, offsprings and support.
4. Pleasure/  
Beauty                    When the animal is chosen because it is beautiful, delicate, graceful, aesthetically pleasing, attractive, sensual, leading a good life.
5. Other                    When the animal is chosen for any reason(s) other than the ones stated above.

#### Delimitation of the Study

The study has been restricted to an inner city area which is poor and mostly populated by Black and Hispanic families. Therefore, care will be exercised in extrapolating the results of the study to other groups and geographic areas.

## CHAPTER II

The Literature on the Animal Preference Test (APT) is limited to a few studies. David (1955) conducted an exploratory study on animal preference on 50 hospitalized neuro-psychiatric in-patients 50 matched non-hospitalized neuro-psychiatric out-patients, 150 medical students and 300 nurses. David asked, "What would you like to be if you were not a human being?" This was followed by an inquiry aimed at specifying the reason (s) for animal choice. The negative APT response was also obtained. Animal choices were grouped into three major categories:

1. Animal
2. Inanimate objects
3. Human or supernatural objects

Content analysis of the reasons for animal choice were grouped into eight categories:

- |                    |                       |
|--------------------|-----------------------|
| 1. Independence    | 5. Useful to people   |
| 2. Good life       | 6. Similar to people  |
| 3. Beauty          | 7. Safety             |
| 4. Liked by others | 8. Special attributes |

Themes for the negative APT responses tended to be the opposite of those enumerated above. David fails to explain the rationale for these theme categories.

Data were analyzed in terms of choice categories and theme categories. Male and female out-patients were pooled

into a single group. A similar procedure was followed for the hospitalized patients. Each group was then compared with every other group. Chi square was the statistical method utilized to determine group differences.

No explanation is offered as to the reason(s) for pooling male and female subjects into a single group. Any possible sex differences between and within each group was therefore not accounted for.

Chi square differences between the out-patient and either the medical group or student nurses were not significant with regards to choice categories. The difference between the results given by the medical students and the student nurses, was statistically significant ( $P < .05$ ). The principal reason for the obtained difference stemmed from the larger number of botanical choices made by the nurses. The latter also chose traditionally female symbols such as flowers.

Analysis of choice category only, showed significant differences between the out-patient group and the hospitalized patients at the  $P < .01$  level of significance.

Comparison of theme categories reflected differences between the out-patients and the medical and nursing students. Considerably fewer out-patients indicated wishes for independence. David tentatively interpreted this finding as supporting the claim that patients seen in out-patient care facilities tend to be dependent individuals.

One half of the psychiatric patients interviewed were either unwilling or unable to make non-human choices.

David emphasized the qualitative rich flavour of many of the responses. He offered the following response given by a 40 year old Yale college graduate as illustration.

That's a tough one... I'd want to be a wolf or tiger... but they get torn up just as much... maybe a field mouse... but they live in partial terror too... yet they are fairly safe... I don't know... hmm... an old man's house cat... doesn't have to make a living... gets lots of affection... gets fat... a happy animal... but I like to work too.

David and Leach (1957) classified the responses of 150 nurses, 50 medical students, 98 out-patients and 44 in-patients. The results confirmed the notion that choice categories reflected a stable variable among the four distinct populations. A comparison of theme categories showed remarkable consistency of positive APT responses for all four groups (medical students, nurses, out-patients and in-patients). Analysis of negative APT responses showed that hospitalized patients frequently failed to give a reply, give reasons for a particular choice, and were often unable to shift away from human concepts.

David and Leach suggest that positive APT choices reflect a more rational intellectual reasoning process,

whereas the negative APT response appears less rational and more emotional in content.

Freed (1965) attempted to define group reference points or base lines in his normative study on the APT with children ages eight to seventeen. A total of 3,863 children from a middle class suburban New Jersey town were tested. The results showed that 84.5% of the positive responses of boys were contained in 15 animal choices and 91.2% of the responses of girls were contained in nine animal choices.

In addition, 81.2% of all 3,863 positive choices of both boys and girls were in the following eight categories:

- |          |           |
|----------|-----------|
| 1. dog   | 5. monkey |
| 2. horse | 6. lion   |
| 3. cat   | 7. deer   |
| 4. bird  | 8. rabbit |

Greater individuality of choice was noted with increasing age particularly with 12-13 year old boys. Girls tended to be more conforming in their sex group norms than were boys.

In 1978 a pilot study was conducted by this writer and Susan Mintzer, whereby children's responses to the APT were scored in terms of four fundamental needs which according to Murray (1938), are expected to exist in children. These four needs were: Aggression, defence, autonomy and nurturance. The premise for this study was that these personality traits

or needs exist on some level in all children at different stages of their development.

One hundred and fifty nine boys and girls of lower and middle class backgrounds were interviewed. The results indicated significant sex differences; girls were more prone to give nurturant responses, whereas boys tended to give more aggressive reasons for choosing a particular animal. Similarly, younger children were more likely to give nurturant responses than aggressive ones. Middle class children were found to give more defensive and autonomous responses than lower class children. Responses such as a "dog because I could take care of the house," and a "bird so that I could fly wherever I want" were characteristically given by the middle class children. Many responses appeared to deal with the Pleasurable/Aesthetic aspects of the animals chosen. These were difficult to score given the set of categories used. A few changes were made in the present study in order to incorporate this finding.

In 1981 this writer interviewed 100 Dominican lower class children and 76 lower class Black and Hispanic children in New York City. The Dominican sample was composed of 50 girls and 50 boys between the ages of four and 11. The New York sample had 37 boys and 39 girls ages nine and ten. There were 35 Hispanics and 34 Blacks in this group.

Results from the New York City sample showed that girls, regardless of age, gave nurturing reasons for their choice of

animal more often than boys, [ $\chi^2(3)=25.61, P<.001$ ]]. Similarly, another sex difference was noted regarding aggressive content. While 55.9% of the boys gave aggressive reasons, only 10% of the girls did the same.

Findings from the Dominican sample failed to show any significant difference with regards to age or sex. This is difficult to explain. (See Appendix for results of 1978 study).

The results of the previous studies suggest that the APT has been a useful tool, not only in eliciting dynamically rich material but also in tapping certain "themes" or personality variables with some degree of consistency. This simple projective test deserves further attention. The major aim of the present study is to determine whether certain personality variables can be tapped through the APT, and whether these can be correlated with an independent measure of behavior.

### CHAPTER III

Chapter 3 will present the methods and procedures of the study. For the purpose of presentation the Chapter has been divided into 3 sections, namely description of the hypotheses, description of the subjects and description of research instrumentation.

#### Hypotheses

A child's scores on the Positive and Negative APT's are expected to elucidate problem areas which will correlate with particular behavioral scales of the CBCL.

The following hypotheses are formulated:

1. Independent scoring of the APT responses into one of four theme categories will show significant inter-rater reliability.
2. A dominant score of aggression on the APT will positively correlate with scores in the clinical range of the:
  - A. Aggressive scale of the CBCL for boys
  - B. Depressed scale of the CBCL for boys
  - C. Hyperactive scale of the CBCL for boys
  - D. Aggressive scale of the TRF for boys
3. A dominant score of the Nurturing/Dependent category on the APT will positively correlate with scores in the clinical range of the:

- A. Depressed scale of the CBCL for boys and girls
  - B. Somatic scale of the CBCL for boys
  - C. Hyperactive scale of the CBCL for boys and girls
  - D. Aggressive scale of the TRF for boys
4. A dominant score of the Autonomous/Strong category on the APT will not correlate with clinical scores on any of the scales of the CBCL or TRF.
  5. A dominant score on the Pleasure/Beauty category of the APT will not correlate with clinical scores on any of the scales of the CBCL or TRF.

#### Subjects

A total of 40 Black and Hispanic boys ages 6 through 12 were interviewed. Thirty-one of the 40 boys were of Hispanic background. All Hispanic children were bilingual; many attended bilingual classes.

All 40 children came from poor socioeconomic areas of the Bronx. All the children were involved in therapy at one of three different Mental Health Clinics of the South Bronx at the time of testing.

Children and their mothers were interviewed either at the out-patient clinic they attended or at their homes. The children were given the APT by the writer, while a trained bilingual interviewer administered the Achenbach Child Behavior Checklist to their mothers.

The interviewer helped those parents who could not read or who were too intimidated by the checklist.

An official Spanish translation, provided by Achenbach and Associates, was used when appropriate.

The Teacher's Report Version of the Child Behavior Profile were hand-delivered to the various schools to be filled out by the teachers.

#### Description of Instrumentation

The Child Behavior Checklist is a standardized test designed to record the behavioral/emotional problems and competencies of children ages 4 through 16, as reported by their parents and or their teachers.

The CBCL is comprised of 118 behavioral/emotional items which include a broad range of problems that parents can report with minimal inference. The behavioral problem items, i.e., "Argues a lot," "Doesn't eat well," "Disobedient at home," "Worrying," are scored on a 3-step response scale (0,1,2) for each item that describes the child currently or within the last six months. A score of 2 indicates very true or often true, 1 indicates the item is somewhat true and 0 is scored if the item is not true of the child.

The 20 social competence items encompass parent's reports of their child's participation and performance in areas designated as activities, social and school. The school scale is not scored for 4-5 year old but the scoring

rules are otherwise the same for all age groups. Unlike the behavioral problem scales, low scores in the competence items are clinically significant.

Behavioral problem scales were obtained through the retention of those items with the highest loading on each factor. There were a total of 9 scales which were given descriptive labels to summarize the items which comprised them. The 9 scales for boys ages 6-11 are Schizoid/Anxious, Depressed, Uncommunicative, Obsessive, Compulsive, Somatic Complaints, Social Withdrawal, Hyperactive, Aggressive and Delinquent. For girls the same age the scales are Depressed, Social Withdrawal, Somatic Complaints, Schizoid-Obsessive, Hyperactive, Sex Problems, Delinquent, Aggressive and Cruel.

The scales of the Teacher's Report Form for boys ages 6-11 are Anxious, Social Withdrawal, Unpopular, Self-Destructive, Obsessive Compulsive, Inattentive, Nervous-Overactive, Aggressive and Other Problems. For girls the same age the scales are Anxious, Social Withdrawal, Depressed, Unpopular, Self-Destructive, Inattentive, Nervous-Overactive, Aggressive and Other Problems.

These scales are scored for each sex/age group on the Child Behavior Profile, which provides a comprehensive view of the behavioral problems reported.

The behavioral problem scales were formed and refined through successive analysis of CBCL behavioral problem items rated by parents of children referred for out-patient mental

health service located mainly in the Eastern United States. The sample comprised a total of 2,300 children. Each sample of boys and girls ages 6-11 numbered 450, while each sample of boys and girls ages 4-5 numbered 250 due to low referral rate for children this age.

The overall racial distribution was 81.2% white, 17.1% black, and 1.8% other.

Second-order factor analyses of the behavioral problem scales showed that the scales formed two broad-band groupings in all sex/age groups. These groupings reflect the distinction between fearful, inhibited, overcontrolled behavior and aggressive, antisocial, undercontrolled behavior. These groupings were named Internalizing and Externalizing, respectively. On the Child Behavior Profile, the narrow band behavioral problem scales are arranged in the order of their loadings on the second order factors. Starting at the left of the Profile, the scale having the highest loading on the Internalizing factor is followed by those having progressively lower loadings on the Internalizing factor. This is followed by the scales having progressively higher loadings on the Externalizing factor. The Profile ends on the right with the scale having the highest loading on the Externalizing factor.

Children are classified as Internalizers or Externalizers when their total behavior problem score exceeds the 90th percentile for their sex/age group and there is a

difference of at least 10 points between their Internalizing and Externalizing T scores.

#### Reliability of the CBCL

Achenbach and Edelbrock report three forms of reliability: test-retest reliability, inter-rater agreement and longer term stability.

For individual items, intraclass correlations (ICCs) were computed between item scores obtained from mothers of non-referred children at 1-week intervals, mothers and fathers filling out of the CBCL on their clinically referred children and three different interviewers obtaining CBCLs from parents of demographically matched triads of children. All these ICCs were in the 90's. The overall ICC for individual items was .952 for the 118 behavioral problems and .996 for the social competence items, (N=72).

In order to assess the degree of agreement in both rank order and magnitude of scale scores, the test-retest reliabilities for raw scale scores were computed in terms of Pearson correlation and t-test of differences between scores of referred children at 1 week intervals. The median correlation for all behavioral problem scales of mothers' ratings was .89. Nominally significant changes in scores occurred from the first to the second ratings in 21 out of 110 comparisons. These changes reflect a tendency to report

fewer problems and more competencies from the first to the second ratings.

The median Pearson correlation between mothers' and fathers' ratings was .66. Nominally significant differences between mothers' and fathers' ratings occurred in 16 out of 110 comparisons, 11 would be expected to occur by chance.

Of 110 correlations between mothers' and fathers' ratings, 94 were statistically significant at the  $P < .05$  or better. On the average overall scores yielded by CBCLs filled out by mothers and fathers did not differ much. Major disagreements found are likely to reflect important clinical factors.

Test-retest correlations for out-patients' scores over a 6 month period averaged .60 for both behavioral problem and competence scores. Scores ranged from .46 to .76 over an 18 month period for the various age/sex groups. Most of the behavioral problem scores improved significantly over the 18 month period while competence scores improved significantly only among the 6-11 year old.

### Validity

The content validity of CBCL is viewed in terms of "whether its items are related to the clinical concerns of parents and mental health workers," (Achenbach, T. and Edelbrock, C. 1983).

Achenbach and Edelbrock contend that the CBCL adequately discriminates various forms of behavioral problems in children ages 4 through 16. They report that clinically referred children received significantly higher scores ( $P < .001$ ) than demographically similar nonreferred children on 116 of the 118 behavioral problem items of the CBCL. In addition, the clinically referred children received significantly lower scores ( $P < .01$ ) than nonreferred children on all 20 social competence items. These findings are given as evidence for criterion related validity in terms of the significant differences found between demographically matched referred and nonreferred children.

In order to test for construct validity, Achenbach and Edelbrock studied the relationship between scores derived from the CBCL and roughly analogous scores derived from other instruments. Pearson correlation between raw scores in the CBCL and raw scores on the Conners (1973) Parent Questionnaire and the Quay-Peterson (1983) Revised Behavior Problem Checklist were all found to be significant. The correlations between the total behavioral problem score and the total scores of these other two instruments ranged from .71 to .92. Achenbach and Edelbrock report similar findings by Weissman, Orvaschel and Padian (1980). In their study, total scores on the Conners Parent Questionnaire correlated .91 with T scores for total behavioral problems on the CBCL filled out by mothers of 28 children ages 6-17.

Correlations between the total CBCL behavioral problem scores and total scores on these widely used parent rating forms are reportedly as high as those typically found between tests of general intelligence.

#### Teacher's Report Form (TRF)

The teacher's version of the Child Behavior Profile is designed to obtain teachers' reports of their pupils' problems and adaptive functioning. Most of the TRF's problem items were derived from CBCL items. The CBCL problem and competence items that were not appropriate for teachers, were replaced or altered slightly with items that teachers were able to judge.

Scores for school performance, four other aspects of adaptive function: (Working Hard, Behaving Appropriately, Learning and Happy), and the sum of these four, are entered on the adaptive functioning portion of the profile. Separate versions of the teacher profile were constructed for each sex at ages 6-11 and 12-16 in order to reflect sex and age differences.

The normative samples of nonreferred children (n=1,100), were obtained by having teachers complete TRFs on randomly selected pupils attending school in Nebraska, Tennessee, and Pennsylvania.

Behavioral problem scales were constructed from principal component analysis of TRF completed for 1,1700

pupils referred to special schools and mental health services for behavioral and social/emotional problems.

A total of 9 syndromes were identified from TRF ratings of each sex group. For girls aged 6-11 the 9 scales are Anxious, Social Withdrawal, Depressed, Unpopular, Self-Destructive, Inattentive, Nervous-Overactive, Aggressive and Other Problems. For boys the same age the scales are Anxious, Social Withdrawal, Unpopular, Self-Destructive, Obsessive-Compulsive, Inattentive, Nervous-Overactive, Aggressive and Other Problems.

As in the CBCL Profile, the two broad-band groupings of Internalizing and Externalizing were identified. The narrow band scales or syndromes are arranged in the order of their loadings on the Internalizing/Externalizing factors as in the CBCL Profile.

#### Reliability of the TRF

Three sources of differences between scores were examined: Test-retest reliability, stability and teacher-teacher aide agreement. These sources of differences were analyzed through Pearson correlations ( $r$ ) and  $t$  tests.

Test-retest reliability the median test-retest Pearson correlation was .90 over a 1-week period. After a 15 day period, the median test-retest correlation was .84. There was a general tendency for mean scores to decline somewhat. Over a two-month period, the median test-retest correlation

was .74 and .68 for the four-month interval. Again, median score showed a tendency to decline over both periods with most of the declines being significant over the four-month period.

The median Pearson correlation for teacher-aide agreement was .57. Teachers tended to rate pupils slightly less favorably than aides with higher scores on most problem scales and lower scores on most adaptive functioning scales.

#### Validity

As with the case of the CBCL, correlations between the TRF and corresponding scales of the Conners Revised Teacher Rating scale, were found to range from .62 to .90.

Referral for services for behavioral or social/emotional problems was used as a general criterion against which to test the discriminative power of the scales. Scores obtained by pupils who had been referred for services were compared to scores obtained by demographically matched pupils.

Only blacks and whites (23% versus 77% respectively) were selected due to the limited number of pupils of other groups in the sample studied.

Referral status accounted for 21% of the variance in school performance scores, race accounted for 2% of the variance, and socioeconomic factors had a significant effect that accounted for 4% of the variance. Referred children

obtained significantly lower adaptive functioning scores and higher problem scores on all scales in all groups ( $P < .001$ ).

The separate effects of socioeconomic status and race accounted for less than 8% of the variance. Although small, all significant socioeconomic status effects indicated more problems and less adaptive functioning for lower socioeconomic status than upper socioeconomic status pupils. These differences are much smaller than between referred and nonreferred pupils.

#### Other Studies

Achenbach et al (1987), conducted a cross-cultural study on Dutch and American children aimed at testing the applicability of the CBCL across different cultures. The CBCL was completed by parents of 1,300 American and 2,033 Dutch nonreferred children ages 4-16 randomly selected from the general population.

Data from both countries showed that upper socioeconomic class parents tended to report fewer problems and more competencies than lower socioeconomic class parents. This finding conforms to the original results reported on the CBCL by Achenbach and Edelbrock. The differences here accounted for a very small proportion of the variance (the largest effect reached 4% of the variance; most accounted for less than 1% of the variance).

Results also showed that American and Dutch parents did not differ significantly in their tendency to report problems on the CBCL. The total mean problem score for the American sample of 19.97 and 20.45 for the Dutch sample differed by less than half of a point on a scale ranging from 0 to 240.

Comparisons of competence scores between the 2 groups showed a strong tendency for American parents to rate their children higher on the competence items than Dutch parents. Reports of children's competencies appear to be more culture bound than reports of behavioral/emotional problems.

In summary, both American and Dutch parents reported more problems for boys, younger children and children from lower socioeconomic backgrounds than for girls, older children and children from upper socioeconomic backgrounds.

A second study reported by Achenbach et al (1987) was conducted by Montenegro in 1983 on a Chilean population. CBCLs were obtained from 409 nonreferred and 933 clinically referred school children ages 6-11. The subjects were selected in a stratified fashion to include approximately equal number of each sex from lower, middle and upper socioeconomic levels at each age.

Scores for both referred and nonreferred Chilean children were about 7 to 8 points above those for the United States samples. For 933 referred Chilean children, the mean total score of both sexes combined was 65.4, compared with the mean of 28.7 for the nonreferred Chilean children. In

the United States sample, the mean for 600 referred children of both sexes combined was 58.7, compared with the mean of 20.8 for nonreferred children.

The gap between referred and nonreferred children in the two countries was very similar; 36.7 for Chile and 37.9 points for the United States. Thus, despite the higher score in the Chilean group, the CBCL appears to discriminate equally between referred and non referred subjects in the two cultures.

In general, the Chilean parents tended to report more problems than the United States or Dutch parents. Differences may be due to the school based sampling in the Chilean groups rather than population-based sampling in the United States group. Also, differences between the two cultures in the degree of mental health service availability, may have affected the proportion of clinically deviant children who were excluded from the sample. Cultural or linguistic differences may have also affected the degree or readiness for reporting particular problems.

Results of other cultural studies on the CBCL await publication. This writer is particularly interested in the results of the study conducted in Puerto Rico mentioned in Achenbach et al's report. Given the vast differences between the Chilean metropolitan population, and the New York City group to be sampled in the present study, few inferences or conclusions should be drawn from the Chilean study. Most of

the inner city children in the present study, are likely to come from very poor neighborhoods of Puerto Rican, Dominican or Black extraction. At most, one can postulate higher scores on the CBCL for this population based on the results given here on the tendency for lower socioeconomic parents to report more behavior problems than higher socioeconomic parents.

## CHAPTER IV

### Results

#### Animal Preference Test (APT)

There were a total of 250 animal choices made by the 40 boys studied. Choices are described as either positive (I want to be a \_\_\_\_), or negative (I don't want to be a \_\_\_\_). Of the 240 animals, there were a total of 69 different types of animals named. These ranged from common household pets such as cats, dogs and fish, to well known wild animals such as tigers, lions and elephants, to more unusual animals such as python, slug and maggot. (See Appendix B for a list of animals named by at least 2 subjects.)

The most frequently named animals were lions and tigers, each named 21 times. These animals were usually chosen for their aggressive/autonomous traits in the positive choice situation and more often than not rejected for these same aggressive qualities in the negative choice situation.

There were a total of 20 elephants named as the animal children did not wish to be because of their lack of beauty. Cats and dogs (named 17 and 16 times each respectively), were primarily chosen for their nurturing traits in the positive animal choices and rejected for either their nurturing or aggressive qualities in the negative choice situation.

### Inter-Rater Reliability for the APT

Children's reasons for choosing these animals were rated by 2 independent judges as falling into 1 of 4 categories: Aggression, Autonomy, Nurturance or Pleasure-Beauty. Inter-rater consensus for both the positive and negative choices was 91%. The remaining 9% disparity was resolved by the writer by independently scoring these remaining 9% responses and using her score as the final one.

Each child's set of 3 positive and 3 negative responses was then examined for internal consistency or theme dominance. Theme dominance refers to the degree of homogeneity or similarity in the categorization of why an animal was chosen for either the 3 positive and/or the 3 negative choices. When all 3 responses in a given set were assigned the same thematic category, the set manifested "full dominance". Partial dominance indicated that 2 of the 3 responses had been similarly categorized. The term no dominance identified those sets of responses where no two responses were placed in the same thematic category.

As shown in Table I, for the 3 positive animal choices, a total of 14 children gave reasons which were categorized as either all Aggressive, all Autonomous, all Nurturant or all Pleasure-Beauty. A total of 19 boys gave reasons which were categorized 2 of 3 times as either Aggressive, Autonomous, Nurturant or Pleasure-Beauty. Seven children gave different reasons for all 3 of their positive choices.

Table 1  
Distribution of Dominant Scores for Each Trait Category

POSITIVE CHOICES					
Dominance	Aggressive	Autonomy	Nurturant	Pleasure-Beauty	Total
Full 3 of 3	3	8	2	1	14
Partial 2 of 3	2	6	8	3	19
No Dominance					7
NEGATIVE CHOICES					
Full 3 of 3	12	0	2	1	15
Partial 2 of 3	10	1	5	6	22
No Dominance					3

On the 3 negative choices, the animals children did not wish to be, a total of 15 boys showed full dominance. Twenty-two boys had partial dominance and 3 boys gave different reasons on all negative choices.

There were 6 cases in which the child gave full dominance responses for both the positive and the negative choices. Only one child obtained the same theme dominance for all 6 animal choices.

### Child Behavioral Scores and Theme Dominance

The Achenbach Child Behavioral Checklist (CBCL) was administered by a trained bilingual interviewer. The teachers filled out the Teacher's Report Form. Both questionnaires were tallied by the writer.

No relationship was found between children's responses to the positive and negative APT questions and the teachers' ratings of the children's behavior on the Teacher Form of the Child Behavior Checklist.

Two of the four hypotheses originally set forth in this study concerning the relationship between dominant scores on the 4 categories and clinical behavior as reported by parents, were not confirmed.

1. Dominant scores on the Aggressive category on the positive and negative APT, did not correlate with scores in the clinical range of the Aggressive, the Depressed or the Hyperactive scales of the CBCL.
2. Dominant scores on the Nurturant category of the positive or negative APT, did not correlate with scores in the clinical range of the Depressed, the Somatic or the Hyperactive scales of the CBCL.
3. As hypothesized, dominant scores on Autonomy on the positive or negative APT, did not correlate with scores in the clinical range on any of the scales of the CBCL.

4. As hypothesized, dominant scores on Pleasure-Beauty on the positive or negative APT, did not correlate with clinical scores on any of the scales of the CBCL.

#### T-Test Analysis of Combined Groups

In order to further discern any possible relationship between animal choices and behavior as measured by the CBCL, the 4 group category system was collapsed by combining the Aggressive category with the Autonomy category and the Nurturant category with the Pleasure-Beauty category.

Although not wishing to forego the original categories for which there was meaningful reliability, it made clinical sense to combine the categories. The two newly formed groups, Aggressive/Autonomy (Group 1) and Nurturance/Pleasure-Beauty (Group 2), seemed to distinguish children whose reasons for positively or negatively wishing to be an animal were determined by aspects of that animal dealing with aggressiveness, physical powerfulness, forcefulness, independence (a moving away from others) and self-sufficiency from those attracted by the nurturing, comforting, loving, attractive and sensual traits of the animal (a moving towards others).

In addition, given the relatively small sample size, the combination of categories ensured a larger number of boys per group for purpose of comparison.

The positive choices of the two newly formed groups were first compared with parental reports of pathological behavior as measured by the nine clinical subscales of the CBCL. The negative choices of the 2 groups were then compared with CBCL findings. Group differences for both positive and negative choices were assessed using t-test.

#### Positive Choices

No significant differences were found between Group 1 and Group 2 on any of the CBCL subscales when examining the reasons for positive animal choices.

#### Negative Choices

Group 1 (Aggressive/Autonomy) and Group 2 (Nurturant/Pleasure-Beauty) differed significantly on 5 out of the 9 subscales of the CBCL when examining their negative choices.

Group 2 (Nurturant/Pleasure-Beauty) scored significantly higher, a higher score indicating greater pathology than Group 1 (Aggressive/Autonomy) on the following scales of CBCL: Aggressive, Depressed, Social Withdrawal, Uncommunicative and Hyperactive. There was a trend toward a significant relationship on the Delinquent subscale in which the Group 2 children again had a higher mean score. In fact, the Group 2 children had higher mean scores (although not approaching statistical significance) on the three remaining subscales as well.

Table 2  
 Comparisons Between Groups 1 and 2 on Positive Choices

CBCL Scales	Group 1 Aggressive/Autonomy		Group 2 Nurturance/Beauty-Pleasure		T-Value	Significance
	M	SD	M	SD		
Anxious	3.9	3.2	3.8	2.8	.02	P < .98
Depressed	10.2	6.7	9.8	7.0	.17	P < .86
Uncommunicative	5.9	3.4	5.2	3.1	.69	P < .49
Obsessive/ Compulsive	9.4	5.0	8.7	6.7	.37	P < .71
Somatic Complaints	3.0	1.9	3.1	2.9	.08	P < .93
Social Withdrawal	4.3	2.9	4.0	3.1	.32	P < .75
Hyperactive	10.2	4.2	8.9	4.3	.98	P < .33
Aggressive	23.5	10.0	18.6	10.0	1.55	P < .13
Delinquent	7.1	4.1	5.6	4.4	1.16	P < .25

Table 3  
 Comparisons Between Groups 1 and 2 on Negative Choices

CBCL Scales	Group 1 Aggressive/Autonomy		Group 2 Nurturance/Beauty-Pleasure		T-Value	Significance
	M	SD	M	SD		
Anxious	3.5	3.0	4.5	3.0	1.02	P <.31
Depressed	7.7	5.7	14.08	6.8	3.16	P <.003
Uncommunicative	4.7	3.4	7.1	2.6	2.35	P <.024
Obsessive/ Compulsive	8.0	5.7	10.9	5.4	1.59	P <.121
Somatic Complaints	2.6	2.2	3.8	2.6	1.48	P <.148
Social Withdrawal	3.2	2.3	5.8	3.2	2.94	P <.006
Hyperactive	8.5	4.0	11.6	4.0	2.34	P <.025
Aggressive	17.6	8.5	27.5	9.9	3.34	P <.002
Delinquent	5.6	4.2	7.9	4.1	1.71	P <.096

## CHAPTER V

### Review of the Purpose and Objectives

This investigation attempted to determine whether performance on a projective test of animal preference correlated with parental assessment of children's pathological behavioral problems.

The specific objectives of the study were as follows:

1. To determine if reasons for animal choices could reliably be categorized into one of four possible theme categories: (1) Aggressive, (2) Autonomy, (3) Nurturance and (4) Pleasure-Beauty.
2. To demonstrate that predominance of aggressive and/or nurturing themes in either the positive animal choices or the negative animal choices (animal I wish to be or animal I do not wish to be), correlated with pathological behaviors as measured by the nine clinical subscales of the Achenbach Child Behavior Checklist (CBCL).

### Review of Literature

The Animal Preference Test (APT) asks children what animal they would most/least like to be if they could be any animal in the world for one day.

It is assumed that animal choices and reasons for choices represent children's projections of intrapsychic event.

A review of the literature on this projective question, reveals a handful of studies spanning from the late 1940's to the mid 1960's. These preliminary studies demonstrated the usefulness of the APT in eliciting clinically rich material from both children and adults.

The APT seems to be particularly useful in tapping conflictual material in children. It appears that children's relationships to animals, real or otherwise, is for the most part free of anxiety; free of the many expectations and demands for reciprocity which characterize most relationships with other humans. Unlike human beings, the animal has few reactions of his own. The animal is felt to be within the bounds of the child's omnipotent control. The use of animal preference as a projective tool has been viewed as both appealing and unthreatening to the child.

The question asked through this study is whether projected material elicited through the APT could be meaningfully placed in theme categories, and whether placement in a given theme category corresponded with specific pathological behavioral scores of the Achenbach Child Behavioral Checklist (CBCL). The CBCL is a standardized test designed to record the behavioral-emotional problems of children as reported by their parents. This test

has been adequately tested in terms of reliability and validity of content.

This study is the first attempt at examining the relationship between theme categories obtained from the APT, and specific pathological behavioral manifestation of children's problems.

#### Review of the Hypotheses

Following are the five original hypotheses which were posed for testing in the study:

- H1- Independent scoring of the APT responses into one of four theme categories will show significant inter-rater reliability.
- H2- A dominant score of aggression on the APT will positively correlate with scores in the clinical range of the:
  - a. Aggressive scale of CBCL
  - b. Depressed scale of the CBCL
  - c. Hyperactive scale of the CBCL
  - d. Aggressive scale of the Teacher's Report Form (TRF)
- H3- A dominant score of the Autonomy category on the APT will not correlate with clinical scores on any of the scales of the CBCL or TRF.
- H4- A dominant score of the Nurturant category on the

APT will positively correlate with scores in the clinical range of the:

- a. Depressed scale of CBCL
- b. Somatic scale of the CBCL
- c. Hyperactive scale of the CBCL
- d. Aggressive scale of the (TRF)

H5- A dominant score on the Pleasure-Beauty category of the APT will not correlate with clinical scores on any of the scales of the CBCL or the TRF.

#### Summary of the Hypotheses

The first hypothesis postulated significant inter-rater reliability between independent scoring of the APT. This hypothesis was confirmed. Judges' independent placement of APT responses into one of four theme categories was 91%. The fact that responses to the APT can be consistently and reliably rated into theme categories (See Appendix C for similar results from Master's Thesis), attests to the utility of the APT in tapping certain psychological processes in an economical fashion.

The second hypothesis dealt with the correlation between dominant theme scores on the Aggressive category of the positive or negative APT and scores in the pathological range of the (a) Aggressive, (b) Depressed and (c) Hyperactive scales of the Child Behavior Checklist (CBCL).

Results indicated that dominant scores of aggression on either the positive or the negative APT did not correspond to pathological scores on the Aggressive, Depressed or Hyperactive scales of the CBCL. Children's projected aggression as measured by the APT was not related to aggressive, depressed or hyperactive behaviors as assessed by their parents.

The third hypothesis was confirmed. A dominant score on the autonomy category of either the positive or the negative APT, did not correlate with pathological scores on any of the scales of the CBCL or the TRF (Teacher's Report Form).

The fourth hypothesis dealt with the correlation between a dominant theme score on the Nurturant category of the positive or negative APT and pathological scores on the (a) Depressed, (b) Somatic Complaints, (c) Hyperactive scales of the CBCL as well as on the Aggressive scale of the TRF. Findings failed to confirm this hypothesis. Dominant theme scores of Nurturant in either the positive or negative APT failed to correlate with pathological parental assessment of children's behaviors.

The fifth hypothesis concerned the relationship between a dominant theme score of Pleasure-Beauty on either the positive or negative APT and the lack of pathological behaviors on the CBCL and TRF scales. This hypothesis was confirmed.

Failure to confirm either of the two major hypotheses (Hypotheses 2 and 4) concerning aggression and nurturance, led to the formation of a two category system by combining the Aggressive category with the Autonomy category (Group 1), and the Nurturant category with the Pleasure-Beauty category (Group 2).

Comparison of the negative APT responses of the two newly formed groups with CBCL findings, revealed that the Nurturant/Pleasure-Beauty group scored significantly higher than the Aggressive/Autonomy group on the following scales of the CBCL: Aggressive, Depressed, Social Withdrawal, Uncommunicative and Hyperactive.

Merging the groups did not appear to alter the integrity of the four-category system. The two larger groups continue to represent opposite ends of a continuum between the aesthetic, pleasurable and nurturing and the strong, forceful and aggressive.

It is, however, the Group 2 children, those rejecting the nurturing, comforting and sensual characteristics of the animal, who received more pathological scores on the above mentioned CBCL scales.

### Summary of Findings and Interpretations

The analysis of the data collected relative to the principle objectives of the study indicated that:

1. Responses to the APT can be reliably categorized into the following theme categories: Aggression, Autonomy, Nurture and Pleasure-Beauty.
2. Children whose animal choices were included in the combined categories of Nurture/Pleasure Beauty on the negative APT, received scores in the clinical range of behavior on five out of the nine scales of the Achenbach Child Behavior Checklist. These children were described by their parents as more depressed, more socially withdrawn, more uncommunicative and more hyperactive than those children whose choices were in the dominant theme category of Aggression/Autonomy.
3. The analysis of the behavioral differences between the aggression/Autonomy group and the Nurture/Pleasure-Beauty group on the positive APT, did not reveal any significant findings.

These findings indicate that negative responses to the APT appear to be better indicators of children's behavioral difficulties as assessed by their parents, than responses to the positive APT.

I interpret the difference in positive versus negative APT choices in the following way: whereas the positive

responses seem to reflect certain aspects of the child's conscious or unconscious ego ideal, the negative responses seem to reflect rejected parts of the self which are projected onto the animal choice. Thus, reasons for not wanting to be a particular animal disclose what the child considers unacceptable and undesirable about the animal; in fact, the child reveals that which is intolerable within himself. The APT seems to allow for the projection of specific intrapsychic events which are prevalent at the time of testing.

The rejection of animals on the basis of nurturing traits, appears to be a deviant response rather than the normative one. More children rejected animals because of their aggressiveness than because of their nurturance. This is a socially appropriate rejection.

The findings also demonstrate that children who reject animals on the basis of their nurturing, pleasurable or aesthetic qualities, exhibited more symptomatic behaviors than those children whose rejection of the animal was based on their aggressive, autonomous traits. I interpret this finding as a reflection of these children's intense need for contact, closeness and nurturance.

The work of Fairbairn (1952) is seen as useful in supporting my argument. According to Fairbairn, this need for contact and relatedness is present from birth and it is said to have adaptive roots in the infant's biological

survival. The infant is totally dependent on his parents who may or may not be emotionally available to meet the child's dependency needs.

The child's relationship to the mother has both gratifying and ungratifying aspects to it. The ungratifying part of the mother consists of the rejecting aspects as well as the enticing, promising parts of her. Fairbairn posits that the child has 3 experiences of the mother; he experiences her as the gratifying ideal object, as the enticing and promising object and as the depriving and rejecting object.

As the relationship to the real mother becomes unsatisfying, parts of the "integral" ego are split off and bound up with the various internal objects which the child has of his mother. The part of the ego attached to and identified with the exciting, promising object, is termed the libidinal ego. The libidinal ego is that part of the child's original ego which remains bound to unfulfilled promises and potentialities for contact with the mother which never took place. The libidinal ego longs for the promise of relatedness in its relationship to the exciting internal object because the hope for satisfaction of real infantile needs from the real mother, has become too painful.

Fairbairn's anti-libidinal ego is that part of the ego which remains attached to and identified with the rejecting, depriving mother. It contains all the sadism, depression and

disorganization which has been part of the child's experience with the real parents. Much of the rage contained in this subsidiary ego is directed at the enticing and yet unrewarding mother. Rage is also directed at the libidinal ego for its hope and devotion to the exciting object. The child preserves the integrity of the parents' goodness through a series of splits, internalizations and repression. It is easier for the child to experience the badness in himself than to experience it in the parents on whom he depends. The child experiences his love as being faulty. He fears he must have driven his parents away by his own dependency, his neediness and greed. He sees himself as unworthy of parental love because it is his love which has driven his parents away. If he were different they would love him. Love is bad. His love is bad. Depression results from the internalization and primary identification with the bad features of the parents which are now inside the child.

The last of the subsidiary egos, the central ego, is bound to and identified with the ideal or gratifying and nurturing aspects of the real mother. This is also the part of the ego which is available for real relationships with others.

The internalization of the ideal object is said to be the result of a secondary development termed the moral defense. The central ego strives to meet the ideals of the good mother. The assumption is that if these ideals are met,

the contact with the mother, the fulfillment of promises, will result. The striving for moral perfection serves as a defense against the anti-libidinal ego.

Fairbairn's internal objects are a compensatory retreat from disturbances in relations with real people. The greater the deprivation or interference in relations, the greater the need for the establishment of relations with compensatory internal objects.

The central anxiety for Fairbairn involves the protection of the tie to the real external object in the face of deprivation. Pathology results from the fragmentation of the ego in the service of protecting the tie to the promising and yet depriving features of the parents. The ego is so fragmented and bound up with compensatory internal objects, that what is left of the original integral ego for engaging in fulfilling relations with others, is not enough to offset the destructive patterns in relating established as a result of these internal object relations and the projection of them onto the outside world.

In this study, children who rejected animals on the basis of their nurturing, pleasurable attributes are therefore hypothesized to be defending against intense and painful needs for closeness and relatedness.

The negative APT seems to provide the ideal vehicle for the expression of the denial of conflicts. The child is asked to tell which animal(s) he would not like to be and

why. His answers seem to disclose that which the child is defending against.

In this case the child's denial of his need for nurturance and love, talks to the pain involved in the longing and dependency on others for the fulfillment of that which may be physically or emotionally unavailable. It talks to the denial of the inherent longing for contact and closeness of which Fairbairn speaks. This child longs for the hope of meaningful relations with others and yet hates and pulls away from the person who offers such possibilities because fulfillment of needs seems impossible. He is bad and unworthy of gratification. The child has introjected the parents' badness inside himself in order to preserve the illusion of the goodness of his parents.

The second group of children, who did not resort to a repudiation of nurturing animal choices, manifested significantly less symptomatology than the children discussed above. These children seem to be invested and capable of controlling their own anger and conforming to socially sanctioned behaviors as evident in their behavioral profile. It may be accurate to say that this group of children has retained a more intact, less fragmented central ego which in its identification with the ideal object, strives to meet parental ideals and expectations (moral).

It seems likely that the extent and severity of splitting of the central ego into the previously discussed

libidinal and anti-libidinal egos, has been less severe in this second group of children. The degree of splitting that takes place depends upon the extent and degree of "badness" of external objects; the extent of the ego's identification with the bad objects and the strength and nature of the defenses protecting the ego from the objects.

One may postulate that this group had less rejecting and more gratifying external objects with whom to identify and that the nature of the splitting of the central ego was therefore less severe. The integrity of the central ego seems to have been better preserved than in the previous group, perhaps because there was less of a need to pull apart irreconcilable features of the parents. The children in this group appear to be closer to the experience of anger. The awareness of anger or conflictual feelings over anger, is greater in this group and may be indicative of a more complete, whole, sense of self, than that of the children who need to reject nurturing objects, at least as manifested by their negative APT choices.

In addition to the importance attributed to early object relations in the development of a healthy self, the larger contextual environment from which these children derive physical and emotional sustenance, needs to be considered as well.

The children in this study came from poor, violent and drug infested neighborhoods in the South Bronx. Many of these children came from broken families. In an undetermined number of cases, the child was a foster child, who at his age had already been placed with several families. Brown and Parnell's (1989) description of a typical family residing in the Morrisania community where many of these children live, is poignant:

A typical case in our clinic is a single parent, mother of several children, living in a deteriorated building that has no locks on the entrance door and where mailboxes are regularly violated. The apartment door may have several locks attesting to the degree of concern about intruders. There may be one or more of abandoned buildings on the block.

The presenting problem may be the mother's "nervousness", depression or disorganized behavior, or one of the children misbehaving in school. The mother regrets that she dropped out of school and wants her children to do better.

The family subsists on Welfare assistance, food stamps and Medicaid, has a two-party rent check (requiring the signatures of both the tenant and the landlord) because of previous non-payment.

The children are likely to be kept indoors after school because drugs and violence are so prevalent in the neighborhood. Many of our families have been the victims of burglaries, muggings, physical and sexual abuse, murder and/or have been touched by crime through family or social network connections."

They go on to say:

Our patients know that, at best, they are not valued and, at worst, they are seen by the larger society as burdens, lazy, dumb and worthless. Their existence is one of vulnerability to the violence in the streets. Life is a series of crises held together by their relationships with, and the resourcefulness of, their family, friends, and religion.

In fact, for many Hispanic families who have settled here from different Latin American countries, the resourcefulness of their family and close friends, is no longer available. The crucial support system offered by the extended family is often times not in existence and attempts at its replacement through government institutions is ineffectual.

The social-emotional depletion evident in this environment, pervades the generations of children and parents which populate the area.

Relational theorists (Winnicott, 1958; Fairbairn, 1952; Guntrip, 1969), suggest that the emergence of a healthy self is contingent upon certain environmental provisions which ensure the facilitation of adequate responsiveness to the needs of the infant. These environmental conditions refer to adequate mothering.

Winnicott theorizes that the specific and emotional reactions of the "good-enough" mother are critical in the development of the structure of the self and the organization of psychopathology. A "facilitating" environment is one in which the mother meets both the biological and relational needs of the infant. She does this by being sensitive and attuned to her infant's needs. Ideally, she is said to shape the world to her infant's demands while remaining a non-demanding presence. The mother's gradual failures in shaping the world according to the infant's demands, forces

the child to come to terms with his limitations and the reality of life. This increases greater differentiation between mother and child.

It is more than just speculation to infer that the children in this investigation lacked, for the most part, the facilitating environment of which Winnicott talks about. It is quite likely that necessary provisions of nurturance and proper infant care were not available. These provisions are often not forthcoming because the parents themselves are depressed, empty and depleted. In addition to specific characterological features in these parents which may prevent the fulfillment of their caretaking functions, there are insurmountable difficulties in living given the social reality, the cycles of failures, in which these families live.

It seems absurd to speak about or to expect these mothers to be the "good-enough" mothers of whom Winnicott speaks. It is illusory to speak of the perfect environment; one in which maternal preoccupation, the mother's unconditional devotion and empathic anticipation of her infant's every need, takes paramount importance, when basic needs for survival in a hostile environment, are not being met.

We have already looked at the vicissitudes of the internal object world of the child as it confronts deprivation and the resulting interference in the normal

development of the self. It is the writer's contention that the symptomatic group of children in this study are likely to have experienced more interferences in early relations to others than the asymptomatic group.

The symptomatic children in this study are believed to be clinically depressed. Responses to the APT reflected a strong though warded off need for love and contact, and major concerns regarding perceived deficiencies in the capacity to be attractive, wanted and accepted by others.

Parental description of these children's behaviors, obtained through the analysis of the Achenbach Child Behavior Checklist, concurs with what is known about childhood depression. The typical description of a case is that of a child who is argumentative, loud, threatening and demanding lots of attention. He is described as being frequently sad, lonely, needing to be perfect and yet feeling guilty, unloved and worthless. Socially, he is unpopular, withdrawn and isolated.

It is the writer's suggestion that these children's depression is the result of early emotional deprivation and its consequences in the development of the self; deprivation which has gone unmitigated and which in fact is compounded by the continual social-emotional depletion of the world in which these children live. Given these external realities, it is likely that a major concern for this group of boys is the fear and terror of an internal/external world depleted of

others to love and be loved by, a lonely, unsatisfying world. They may in fact feel they have created such a world because they are themselves bad and unworthy. As perpetrator, the source of the guilt is personal and the result depression.

These children defend against this terror and anxiety regarding their object world, through denial of their need for nurturance, love and acceptance of who they are. The acknowledgment of the need for contact, closeness and pleasure, is subjectively intolerable in the face of the social-emotional reality in which the child lives. The existence of such needs are denied. "I want love" becomes "I do not want love".

Avoidance of pain and unpleasure through the use of denial of these needs is only partially successful. The child is then driven into action by his unacknowledged needs and emotions. Behaviorally, the children in question were typically described by their parents as both depressed and aggressive; withdrawn, uncommunicative, while at the same time hyperactive. These are extreme manifestations of depression as usually seen in children.

In summary, the children in this study differed in the reasons for rejecting a particular animal and in their parents' description of their behaviors.

The nurturing-rejecting group was found to have a significant number of pathological behaviors which the aggression-rejecting group did not have.

The difference between these two groups has been explained in terms of Fairbairn's theory of object relations. These differences are posited to stem from differences in the degree of splitting of the central ego in the face of unsatisfying early relations with the caring adult.

It is postulated that the nurturing-rejecting group may have experienced a more sadistic and depriving early object resulting in a more pervasive fragmentation of the ego than the aggression-rejecting group.

The rejection of aggression by this latter group of well behaved, presumably better adjusted group of children, is seen as a manifestation of the moral defense; namely the wish to be good and perfect in order to regain good relations with the mother.

It is my thesis, that given the social context, both these groups have experienced interferences in early object relations, but to differing degrees. The APT test, especially the negative APT portion, appears to be a useful means of discerning behavioral group differences in these children. Its ease of administration and reliability further suggest its expanded use in the ongoing attempt to assess and treat troubled children.

### Problems and Limitations

There were a number of problems and limitations that were encountered in the process of implementing this research study which should be considered when interpreting these data.

1. The number of children interviewed was limited to forty boys. Given the relatively small sample size, group comparisons of the four original theme categories, were ineffectual in highlighting possible group differences. The analysis of discrete differences amongst the four original categories, seems diagnostically important given the cultural significance attached to the various traits in question. For example, although on the same continuum, aggression and autonomy are different conceptually as well as being perceived and encouraged differently in our children.

Similarly, the traits of nurturance and pleasure-beauty, can at times be in direct opposition to each other.

The combination of groups (Aggression/Autonomy, Nurturance/Pleasure-Beauty), may have obscured more distinct findings that a larger scale study could document.

2. The subjects in this study were Black and Hispanic boys aged 6-12. Care should be taken not to generalize present findings to other sub-groups or to the population at large. An extension of this study to differences in sex, age, socioeconomic status and cultural background of subjects, among other variables, is warranted.

3. The present study failed to control for the reasons for referral as well as for children's diagnoses. This information might have provided another basis on which to compare these children in relationship to their performance on both the APT and the CBCL. Additional information on the children's diagnoses as well as a complete developmental history might have lent support to the conclusions set forth in this study.

#### Practical Implications

There were a number of findings derived from the study which may have practical implications for others involved in research or applied practice in the area.

1. The positive APT (animal I want to be) seems to reflect conscious wishes and ego ideals, whereas the negative (animal I do not want to be) seems to expose characteristics, intrapsychic material of which the child is not aware.
2. The results of this study support the established theory regarding hyperactivity and behavioral problems in children with depression. The APT provided the material for the understanding of the intra-psychic components of depression, while the CBCL furnished the behavioral manifestations of the same.

### Suggestions for Further Research

It is interesting to note that teachers failed to report any significant number of pathological behaviors even when the parents did so.

Contrary to previous reported findings by Achenbach et al (1986), in this study there was no correlation between teachers' and parents's ratings.

It is possible that parental reports of behavioral problems were exaggerated or even inaccurate (it has been documented that lower class parents report more problems and less competencies in their children than white middle class parents), or that teachers failed to report pathological behaviors in their students. Approximately 90% of the teachers in this study were of Hispanic background. Perhaps some felt a sense of protection towards these children; protection against labelling them as behavior problem children.

It may be of value to investigate whether teachers' ethnicity vis-a-vis the children's background compromise the way in which the child's behaviors are reported.

APPENDIX

## APPENDIX A

Procedure

The subjects were obtained from Morrisania Neighborhood Family Care Center, Unitas and the South Bronx Mental Health Counsel, all Public Mental Health Clinics in lower class neighborhoods of the South Bronx.

The writer made personal contact with the agencies' respective directors who were given a written as well as oral presentation of the proposed research.

The writer administered the APT to all the children. A bilingual interviewer helped parents fill out the CBCL. Teachers completed the Teachers' Report Form (TRF).

The interview for the APT ran as follows:

"What is your name?"

"How old are you?"

"I am going to ask you a few questions and I would like you to try to answer them the best you can."

"If you could not be a person anymore and you had to be turned into an animal, what animal would you like to be?"

"What animal would be your second choice?"

"What animal would be your third choice?"

"Aside from that, what animal would you most not want to be?"

"What animal would be your second choice?"

"What animal would be your third choice?"

At this point the interviewer went back to the child's first positive choice and said:

"When I asked you what animal you would like to be, you said you wanted to be a(n) \_\_\_\_\_ (animal).

Why would you like to be a:

1. \_\_\_\_\_ (First choice)
2. \_\_\_\_\_ (Second choice)
3. \_\_\_\_\_ (Third choice)

If the child was unable to state why he wanted to be a particular animal, he/she was asked, "What do you like about \_\_\_\_\_?"

After obtaining reasons for positive animal choices, the interviewer addressed the negative animal choices by asking:

"Now tell me, why would you not like to be a(n):

1. \_\_\_\_\_ (First choice)
2. \_\_\_\_\_ (Second choice)
3. \_\_\_\_\_ (Third choice)

Again, if the child was unable to give the reason for choice, he/she was encouraged to give an answer by asking him/her: "What don't you like about \_\_\_\_\_? (animal chosen)"

At that time the interviewer asked the child if he had an animal pet and/or a stuffed animal.

The child was asked to choose three animals he/she would like to be (Positive APT) and three animals he/she would not

like to be (Negative APT). Choices were independently scored by two judges into one of the five categories listed.

Each subject received a score for each of his choices. There will be three category scores for the Positive APT and three for the Negative APT.

## APPENDIX B

Examples of Reasons for Animal Choice and  
Their Classification into Theme Categories

Animal Choice	Reason	Theme
Dinosaur	They bite people. Break the house.	Aggression
Cat	It has long claws. It scratches	Agression
Tiger	They kill.	Aggression
Horse	They run too fast.	Autonomy
Tiger	To be strong	Autonomy
Elephant	To run and to work, to sleep and to write, to play and to be fast.	Autonomy
Dog	I like puppies. They are cuddly, they are cute.	Nurturance
Cow	They give milk.	Nurturance
Chicken	Because they eat lots of things. They lay eggs.	Nurturance
Alligator	They are ugly and dirty.	Pleasure/ Beauty
Monkey	I don't like their ears and their tails. They look ugly.	Pleasure/ Beauty
Zebra	It got different colors.	Pleasure/ Beauty

## APPENDIX C

## Animals Reported by Two or More Children

Animal	Positive Choices	Negative Choices	Total
Lion	16	5	21
Tiger	14	7	21
Elephant	7	13	20
Cat	9	8	17
Dog	13	3	16
Monkeys	6	5	11
Bear	6	4	10
Fish	3	6	9
Bird	5	3	8
Giraffe	4	4	8
Snake	2	5	7
Horse	5	1	6
Kangaroo	2	4	6
Alligator	2	2	4
Eagle	3	1	4
Cheetah	3	0	3
Chicken	1	2	3
Cow	1	2	3
Dinosaur	2	1	3
Pig	0	3	3
Rat	0	3	3
Shark	0	3	3
Bee	0	2	2
Bunny	1	1	2
Coyote	0	2	2
Fly	0	2	2
Fox	1	1	2
Frog	1	1	2
Gorilla	0	2	2
Rabbit	1	1	2
Raccoon	0	2	2
Total	108	99	207

## APPENDIX D

Method session of pilot study "The Animal Preference Test as a Projective Technique with Children" conducted by writer in 1978.

## Hypotheses

1. Female subjects will give significantly higher number of nurturing traits in their reasons for animal choice than will male subjects.
2. Male subjects will give significantly higher number of aggressive traits in their reasons than will female subjects.
3. Lower income children will give significantly higher number of aggressive traits in their reasons than upper income children.
4. Younger children will given significantly higher number of nurturing traits in their reasons than older children.
5. Older children will give significantly higher number of aggressive and autonomous reasons than younger children.

Subjects

A total of 93 lower income children and 66 upper income children were tested. From the predominantly Hispanic lower income public school, there were 20 kindergarten males and 24 females; 32 fifth grade males and 17 fifth grade females. From

the upper income private school, there were 17 kinder-garten males and 16 females; 15 fifth grade males and 18 females. The difference in the number of subjects for each school was due to the fact that the classes in the lower income group were much larger than those in the private school and the experimenters decided to include entire classes rather than exclude certain children.

TABLE I  
Total Number of Boys and Girls in Lower and Upper Income  
Kindergarten and Fifth Grade Classes

Groups	Lower Income	Upper Income
Girls		
Kindergarten	24	16
Fifth Grade	17	18
Boys		
Kindergarten	20	17
Fifth Grade	32	15
Total	93	66

### Procedure

In the upper income kindergarten classes, the experimenters were individually introduced by their teachers with the following introduction:

"Here are two friends of mine, Susan and Evelyn, who are also going to school like you. They are doing a study about children and they are specially interested about the way you think about certain things, and what you have to say could really help them. I would like you to talk to them for a few minutes."

The teacher determined the order in which the children were called. The experimenters worked at opposite ends of the room, far enough from each other to insure that each interview remained out of earshot from the children being interviewed. The interview ran as follows:

"Hello, my name is Evelyn. What is your name? How are you?

How old are you?

Do you have any brothers and sisters?

How old is he/she?

Now I am going to ask you a silly question. If you could be any animal in the whole wide world, which animal would you like to be? Why would you like to be a/n

\_\_\_\_\_?

Thank you, that is all that I wanted to ask you.

If the child chose an animal but gave no reason for his/her choice, the experimenter probed the child by asking:

"how is a \_\_\_\_\_ (chosen animal) different from a  
\_\_\_\_\_ (opposite kind of animal)?

For the fifth graders the question was phrased as:

"If you could imagine yourself being an animal, which animal  
would you like to be? Why would you like to be a  
\_\_\_\_\_?"

For the lower income kindergarten classes, the experimenters  
were introduced to the entire class.

For all fifth grade lower income classes, the experimenters  
introduced themselves to the children as they were sent by their  
teachers to a secluded part of the room where the experimenters  
were. Each experimenter interviewed students from different  
fifth grade classes.

All children's responses and their reasons were blindly  
judged by the experimenters and Dr. Gertrude Schmeidler of the  
City University of New York, as having either aggressive,  
defensive, autonomous or nurturant traits. Those responses upon  
which the three judges could not agree, were omitted. These  
amounted to a total of 11 cases, seven boys and four girls.

TABLE 2  
 Examples of Reasons for Animal Choice and Their  
 Classification into Personality Variables

Animal Choice	Reason	Personality Traits
Tiger	So that I could hurt my friend.	Aggression
Elephant	It is big and strong. Breaks cage. Sees people very small. When he gets somebody, he destroys them.	Aggression
Lion	So no one could hurt my family.	Defendence
Dog	A watch dog to sleep over and watch for burglars.	Defendence
Deer	They are very pretty, they can live out in the wild and nobody bugs them. Free.	Autonomy
Bird	Could fly through the Free. I could do anything I wanted.	Autonomy
Dog	I will be taken care of better.	Nurturance
Chicken	To lay eggs and have lots of chicks.	Nurturance

### Results

The most common animal responses for all ages and both socioeconomic levels were dog and cat. Upper income kindergarten and fifth graders named a total of 17 different animals, while lower income kindergarten and fifth graders named 15 different animals.

As hypothesized, female subjects gave more nurturant reasons than did males regardless of age or socioeconomic status, [ $X(1)=5.2$ ,  $P<.05$ ]. Male subjects gave more aggressive reasons than females [ $X(1)=12.6$ ,  $P<.001$ ]. In addition, kindergarten subjects gave more nurturant reasons than fifth graders, [ $X(1)=4.12$ ,  $P<.05$ ].

An unexpected finding was that as a group, lower income children gave more nurturant reasons than the upper income group, [ $X(1)=6.44$ ,  $P<.02$ ].

Although there was no significant difference in the number of aggressive reasons given by the two groups, when looking at the frequency distribution in Table 2, it is evident that the older lower income males gave more aggressive reasons than older upper income males.

TABLE 3  
Summary of Results Between Groups

Groups	X	df	Significance	Trait
Males Vs. Females	18.75	3	P<.001	All Traits
Kindergarten Vs. Fifth Grade	10.78	3	P<.02	All Traits
Upper Income Vs. Lower Income	6.02	3	N.S.*	All Traits
Males Vs. Females	5.20	1	P<.05	Nurturance
Kindergarten Vs. Fifth Grade	4.12	1	P<.05	Nurturance
Upper Income Vs. Lower Income	6.44	1	P<.02	Nurturance
Males Vs. Females	12.60	1	P<.001	Aggression
Kindergarten Vs. Fifth Grade	.74	1	N.S.	Aggression
Lower Income Vs. Upper Income	1.40	1	N.S.	Aggression
Males Vs. Females	.03	1	N.S.	Autonomy
Kindergarten Vs. Fifth Grade	4.18	1	P<.05	Autonomy

\*Not Significant

### Discussion

Our finding that female subjects gave more nurturant reasons for animal choices than male subjects, point to the presence of traditional sexual roles upheld by our society. Girls interviewed, generally preferred animals such as cows, kittens, teddy bears and chickens. Their reasons: to give milk, because they are soft and cuddly and to have chicks, all give evidence of a nurturing trait usually associated with female roles.

Boys on the other hand, chose to be tigers, lions, horses and eagles. Their reasons: to be the king of the jungle, run fast, fly wherever they want to and beat others, manifest unquestionably aggressive characteristics.

Like the female subjects in our study, younger children gave more nurturant responses than older children. Given their greater dependence on the caring adult, one might expect the younger child to give evidence of nurturing needs at this stage in their emotional development. For instance, a young child chose to be a teddy bear because it was soft and cuddly. This response invokes a sense of closeness and warmth usually associated with the mothering figure. Such a reason for preference qualifies to be categorized as nurturant.

TABLE 4  
 Frequency Distribution of Personality  
 Traits for All Children

Lower Income	Personality Trait				N
	AGGRESSION	DEFENDENCE	AUTONOMY	NURTURANCE	
<b>Kindergarten</b>					
Girls	4	2	4	13	23
Boys	3	2	1	10	16
<b>Fifth Grade</b>					
Girls	1	1	2	12	16
Boys	13	3	9	6	31
<b>Upper Income</b>					
<b>Kindergarten</b>					
Girls	1	2	3	10	16
Boys	7	2	1	6	16
<b>Fifth Grade</b>					
Girls	5	6	3	0	14
Boys	1	4	6	5	16
Total N =					148

Our results indicate that older children gave less nurturant reasons for animal preference and more autonomous traits in their responses. One may postulate that at age ten or 11, this prepubescent group has begun to experience an increasing need to become independent from their parents. Developmentally, one would expect to see incipient attempts at breaking away from parental figures.

The most interesting and puzzling finding is the striking presence of nurturing reasons so much more in the lower income group as compared to the upper income group. One is tempted to postulate a higher degree of social/emotional deprivation which manifests itself in a larger number of nurturant reasons. After all, these are the children of working class immigrant Hispanic parents, who come home after a laborious day's work with little time or energy left to spend on their children. Therefore, these children are said to lack sufficient love, attention and care which they so badly need.

The greater majority of the children tested were recent arrivals (one Year) from Puerto Rico and the Dominican Republic. Children in these families tend to acculturate faster than their parents. Their rapid acquisition of the language and facts about the new culture, puts these children in the position of mediators between their parents and mainstream society. At an early age, they must deal with major institutions such as banks, housing agencies, the welfare system, school and a host of other awesome ecological systems. This not only poses a source of stress for

the child, who at this tender age is ill-equipped to deal with the many difficult situations, but reverses in fact, the parent-child role by putting the child in the position of having to "care" for the adult. The parent not only prematurely loses his omnipotence in the eyes of the child, but ceases to be a very real source of security and dependency. The higher number of nurturant reasons in this group may reflect a higher need for nurturant in these children whose life circumstance requires that they assume early adult roles.

Of interest is the fact that both lower and upper income groups had very similar distribution of choice categories. That is, both groups shared a significant number of animals in common. Despite this, their reasons for animal choice varied significantly. In other words, one child may want to be a cat because it is pretty and soft, while another may want to be the same animal because it can leap and climb tall trees. Children seem to project particular areas of needs, conflicts and preoccupations. Projective question material, although close to conscious levels of ego functioning, allows for the expression of material which the subject is unable to state directly.

In some instances, responses to the PQ may reflect cultural and conventional stereotypes. With proper inquiry, it is relatively easy to find themes of personal meanings even in what initially appears to be a purely conventional response.

The studies by David (1955), and David and Leach (1956), suggest that responses to the Negative PQ may reflect less

rational, more emotionally laden material than responses to the Positive PQ. Further research is needed in this area. Thus far, these exploratory studies suggest that this question may be a helpful tool for screening purposes. It seems to be clinically valuable in its ability to easily elucidate particular areas of conflict. It also elicits clearly deviant thinking patterns in more disturbed subjects.

The PQ is an economical way of orienting oneself to the particular direction of further inquiry. Although not designed to replace more intensive projective methods, it can be a valuable technique for clinical evaluations and the study of personality.

APT DATA SHEET

DATE \_\_\_\_\_

TIME \_\_\_\_\_

PLACE \_\_\_\_\_

NAME \_\_\_\_\_

AGE \_\_\_\_\_

D.O.B. \_\_\_\_\_

SEX F \_\_\_\_\_

M \_\_\_\_\_

ETHNICITY \_\_\_\_\_

SOURCE OF REFERRAL \_\_\_\_\_

POSITIVE CHOICES -- ANIMAL I WOULD LIKE TO BE.

	ANIMAL	REASONS
1.	_____	_____ _____ _____ _____
2.	_____	_____ _____ _____ _____
3.	_____	_____ _____ _____ _____

**NEGATIVE CHOICES -- ANIMAL I WOULD NOT LIKE TO BE.**

<b>ANIMAL</b>	<b>REASONS</b>
1. _____	_____ _____ _____ _____
2. _____	_____ _____ _____ _____
3. _____	_____ _____ _____ _____

**COMMENTS** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



BIBLIOGRAPHY

- Achenbach, T.M. The classification of children's psychiatric symptoms: A factor analytic study. Psychological Monographs: General and Applied, 1966, 80(7), 37.
- Achenbach, T.M., and Edelbrock, C. (1986). Manual for the Child Behavior Checklist and Revised Child Behavior Profile. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T.M., and Edelbrock, C. (1986). Manual for the Teacher's Report Form and Teacher Version of the Child Behavior Profile. Burlington, VT: University of Vermont Department of Psychiatry.
- Achenbach, T.M., Verhulst, F.C., Baron, D., Akkerhuis, G.W. Epidemiological comparisons of American and Dutch Children: I. Behavioral/Emotional problems and competencies reported by parents for ages 4 to 16. J. of the American Academy of Child and Adolescent Psychiatry, 26, 1987.
- Achenbach, T.M., et al. Epidemiological comparisons of American and Dutch children. II. Behavioral/emotional problems reported by teachers for ages 6-11. J. of the American Academy of Child and Adolescent Psychiatry, 26, 1987.
- Armstrong, M.A.S. Children's responses to animal and human figures in thematic pictures. J. of Consulting Psychology, 1954, 18, 67-70.
- Apfelbaum, B. On ego psychology. A Critique. International Journal of Psychoanalysis, 1966, 4, 47.
- Blatt, S. J. The validity of projective techniques and their research and clinical contribution. J. of Personality Assessment, 1975, 39, 327-343.
- Bellak, L., and Bellak, S. An introductory note on the Children's Apperception Test. J. of Projective Techniques, 1950, 14, 173--180.
- Biersdorf, K.R. and Marcuse, F.L. Responses of children to human and animal pictures. J. of Projective Techniques, 1953, 17, 455-459.

- Bills, R.E. Animal pictures for obtaining children's projections. J. of Clinical Psychology, 1950, 6, 291-293.
- Boernstein, W.S. The verbal self-portrait. Psychiatric Quarterly Supplement, 1954, 28, 15-25; 209-227.
- Boyd, N. and Mandler, G. Children's responses to human and animal stories and pictures. J. of Consulting Psychology, 1955, 19, 367-371.
- Budoff, M. The relative utility of animal and human figures in a picture story test for young children. J. of Projective Techniques, 1960, 24, 347-352.
- Bum, G. and Hunt, H.F. The validity of the Blacky Pictures. Psychological Bulletin, 1952, 49, 238-250.
- David, H. Brief unstructured items: The projective question. J. of Projective Techniques, 1955, 19, 292-300.
- David H. and Leach, W.W. The projective question: Further studies. J. of Projective Techniques, 1957, 21, 3-9.
- Feifel, H. Note on hypothetical situations in personality appraisal. J. of Clinical Psychology, 1955, 11, 415-416.
- Fairbairn, W. R. D. An object-relations Theory of the Personality. New York: Basic Books. 1951.
- Freed, E.X. Normative data on a self-administered projective question for children. J. of Projective Techniques, 1965, 29, 3-6.
- Freud, S. Analysis of a phobia in a five year old. In Collected Papers, vol. 3, London, England; Hogarth Press, 1953.
- Goldfarb, W. The animal symbol in the Rorschach Test and an animal association test. Rorschach Exchange, 1945, 9, 8-22.
- Goldfried, M.R. and Kissel, S. Age as a variable in the connotative perception of some animal symbols. J. of Projective Techniques, 1963, 27, 171-180.
- Goldfried, M.R. The connotative meaning of some animal symbols for college students. J. of Projective Techniques, 1963, 27, 60-67.

- Gorham, D.R. A proverb test for clinical and experimental use. Psychological Reports Monograph Supplement, 1956, 1, 1-12.
- Greenberg, J.R. and Mitchell, S.A. Object relations in psychoanalytic theory, 1983. Harvard University Press, Cambridge Massachusetts & London, England.
- Horowitz, R. and Murphy, L.B. Projective methods in the psychological study of children. J. of Experimental Education, 1939, 7, 133-140.
- Kanner, L. Do behavioral symptoms always indicate psychopathology? J. of Child Psychology and Psychiatry, 1960, 1, 17-25.
- Kass, W. Projective techniques as research tools in studies of normal personality development. J. of Projective Techniques, 1956, 20, 269-272.
- Klein, M. Contributions to psychoanalysis, 1921-1945. New York: McGraw-Hill, 1964.
- Knight, R.P. Introjection, projection and identification. Psychoanalytic Quarterly, 1940, 9, 334-341.
- Koocher, G. and Simmonds, D.W. The animal and opposite animal drawing technique; Implications for personality assessment. International J. of Symbology, 1971, 2, 9-12.
- Korner, A.F. Theoretical considerations concerning the scope and limitations of projective techniques. J. of Abnormal Psychology, 1950, 45, 619-627.
- Lehner, G.F.J. and Saper, B. Use of hypothetical situations in personality assessment. J. of Personality, 1952, 21, 91-102.
- Murray, H.A. Explorations on personality. New York: Oxford University Press, 1938.
- Novey, S. A clinical view of affect theory in psychoanalysis. International J. of Psychoanalysis, 1959, 40, 94-104.
- Rabin, A.L. Projective methods: a historical introduction. In A. L. Rabin (ed), Projective Techniques in Personality Assessment. New York: Springer, 1968.
- Rappaport, D. Techniques and the theory of thinking. J. of Projective Techniques, 1952, 16, 269-275.

- Rappaport, D. Diagnostic psychological testing. Yearbook Publishers, 1945.
- Redfearn, J.W. When are things persons and persons things? J. of Analytical Psychology, 1982, 27, 215-237.
- Simmons, D.D. Children's preferences for humanized versus natural animals. J. of Projective Techniques and Personality Assessment, 1967, 31, 39-41.
- Van Krevelen, D.A. The use of Pigem's test with children. J. of Projective Techniques, 1955, 19, 292-300.
- Veiel, H. and Coles, E.M. Methodological ambiguities of the projective technique: an overview and attempt to clarify. Perceptual and Motor Skills, 1982, 54, 443-450.
- Winnicott, D.W. *Playing and Reality*. Tavistock Publications, London & New York, 1971.
- Zwerling, I. The favorite joke in diagnostic and therapeutic interviewing. Psychoanalytic Quarterly, 1955, 24, 104-114.