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The Role of the Family Dog in the Preadolescent's Psychosocial Development Relative to Selected Dimensions of the Self-Concept, Sex and Age

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THE ROLE OF THE FAMILY DOG
IN THE PREADOLESCENT'S PSYCHOSOCIAL DEVELOPMENT
RELATIVE TO SELECTED DIMENSIONS OF THE SELF-CONCEPT,
SEX, AND AGE

By

Janet Haggerty Davis

A Dissertation Submitted to the Faculty
of the Graduate School of Loyola University of Chicago
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VITA

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TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	ii
VITA	iii
LIST OF TABLES	vi
CONTENTS OF APPENDICES	ix
Chapter	
I. INTRODUCTION	1
Introduction	1
Background of the Problem	2
Purpose of the Research	5
Study Questions	6
Limitations	7
Significance of the Study	8
Method of Procedure and Overview	8
II. REVIEW OF THE LITERATURE	10
Introduction	10
Significance of Pets for the Young	10
The Preadolescent	14
Developmental Concerns of the	
Preadolescent	21
The Preadolescent/Pet Dyad	25
Summary	30
III. METHOD	33
Introduction	33
Study Questions	34
Setting	37
Sample	38
Procedure	38
Instrumentation	39
Design and Statistical Analysis	46
Summary	47

	Page
IV. DATA ANALYSIS AND DISCUSSION OF THE RESULTS.	49
Introduction.....	49
Self-Concept.....	50
Background of the Preadolescent/Pet.....	50
Relationship.....	54
Dog Care Responsibilities.....	56
Analysis of Study Questions.....	94
Discussion.....	103
Summary.....	
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS....	107
Summary.....	107
Results and Conclusions.....	109
Recommendations.....	112
REFERENCES	114
APPENDIX A	129
APPENDIX B	133
APPENDIX C	137
APPENDIX D	140
APPENDIX E	142

LIST OF TABLES

Table	Page
1. Self-Concept Results by Age	51
2. Self-Concept Results by Sex	52
3. Reasons for Acquiring the Family Dog	53
4. Perceived Self-Concept Characterizations Based on Family Dog Reflected Appraisals	55
5. Proportion of Specific Dog Care and Nurturance Activities Performed by Family Members	57
6. Relationship Between Self-Report Self-Concept and Amount of Dog Care Responsibility	58
7. Relationship between Self-Report Self-Concept and Affective Relationship with the Family Dog: "I Teach You What I Like"	60
8. Relationship Between Self-Report Self-Concept and Affective Relationship with the Family Dog: "I Can Depend on You"	61
9. Relationship Between Perceived Self-Concept and Amount of Dog Care Responsibility	63
10. Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog: "I Can Feel Sorry for You"	64

11.	Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog: "I Can Make You Feel Needed".....	66
12.	Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog: "I Care About How You Feel".....	67
13.	Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog: "I Feel Understood by You".....	69
14.	Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog: "I Worry About You".....	70
15.	Relationship Between Sex and Amount of Dog Care Responsibility.....	72
16.	Relationship Between Sex and Affective Relationship with the Family Dog: "I Can Make You Feel Special".....	73
17.	Relationship Between Sex and Affective Relationship with the Family Dog: "I Can Make You Feel Wanted".....	75
18.	Relationship Between Sex and Affective Relationship with the Family Dog: "I Feel Sad When You Do".....	76
19.	Relationship Between Sex and Affective Relationship with the Family Dog: "I Miss You When You Are Away From Me".....	77
20.	Relationship Between Age and Amount of Dog Care Responsibility.....	79
21.	Relationship Between Age and Affective Relationship with the Family Dog: "I Can Make You Feel Safe".....	80
22.	Relationship Between Age and Affective Relationship with the Family Dog: "I Dream About You".....	82

23.	Affective Relationship Items Entered in the Factor Analysis.....	84
24.	Factor 1: Empathy.....	86
25.	Factor 2: Tutelage.....	87
26.	Factor 3: Alliance.....	88
27.	Factor 4: Sociality.....	90
28.	Factor 5: Dominance.....	91
29.	Factor 6: Acceptance.....	92
30.	Factor 7: Impulse.....	93
31.	Factor 8: Comfort.....	95
32.	Factor 9: Fantasy.....	96

CONTENTS OF APPENDICES

	Page
APPENDIX A Informed Consent Forms.....	129
I. Parents' Cover Letter.....	130
II. Child's Cover Letter.....	131
III. Parent/Child Informed Consent.....	132
APPENDIX B Perceived Self-Concept Measure.....	133
I. Rosenberg's Perceived Self-Concept.....	134
Indicators.....	134
II. Perceived Self-Concept Scoring Criteria.....	136
APPENDIX C Dog Ownership History Questionnaire.....	138
APPENDIX D Dog Care Responsibility Inventory.....	141
APPENDIX E Pet/Friend Q-Sort Statements.....	143

CHAPTER I

INTRODUCTION

The close relationship between homo sapiens and other species has a long history. Throughout the ages, human beings have relied on animals as sources of food, labor, and recreation. Of all these, perhaps the most intriguing human/animal bond is that which exists between an owner and a pet. In American society, an intimate relationship between children and pets is generally encouraged and regarded as positive.

It is frequently assumed that it is important for children to grow up around pets because pet ownership teaches children social skills and responsibility. The belief that pets are resources for the accomplishment of developmental tasks and the fulfillment of developmental needs has not previously been extended to a researchable stage. Therefore the actual significance of pet ownership during the early years of the life cycle remains unclear.

Background of the Problem

Keeping pets is characteristic of many different cultures although within those cultures owners' affiliations with their pets vary from serious neglect to an overabundance of care and concern (Fox, 1979). In Western cultures since the 1800's, youngsters and animals have been presented as close companions in children's books, in popular literature, and in other media (Bossard & Boll, 1966). Due to the influence of the Victorian value of compassionate dominance over animals, the child/pet relationship has traditionally been characterized with sentimental and emotional overtones (Turner, 1980). Although the actual psychosocial relationship between the young and pets has not been widely researched (MacDonald, 1979) a general belief in the benefits of a child/pet bond has persisted to the present time.

Preadolescence or middle childhood appears to be the stage of childhood most closely associated with the benefits of pet ownership. Several authors have suggested that a pet has the strongest impact on an owner during preadolescence due to the developmental characteristics of middle childhood (Gesell, Ilg, & Ames, 1953; Jenkins, Shacter, & Bauer, 1966; Levinson, 1978). Pets are believed to be important during preadolescence due to two components of pet ownership, responsibility and friendly companionship. These components articulate with two major developmental concerns of the preadolescent as proposed by Erikson and Sullivan; the need

for feelings of accomplishment and the need for empathic friendship.

It is important to note that simply having a pet animal within the home does not guarantee that the preadolescent considers the animal his or her pet. Any given pet animal is distinguished not only by physical and temperamental characteristics, but also by ascribed social characteristics. A prime quality of the household pet is domestication, meaning that the animal must accept being dominated by human beings (Tuan, 1984). The process by which an animal becomes a domesticated pet has been studied by Hickrod and Schmitt (1982). They have identified four phases of this process. After an animal has been taken into a family unit it is first given a name. Then, if it is to remain within the family household, it must successfully learn the household rules during a probationary period. A deeper emotional relationship with the animal is fostered through mutual contact as owners both develop feelings for their animals as well as communicate personal feelings to them. Eventually "realization" (p. 60) occurs whereby the pet is acknowledged as a pseudo human being, an almost human agent who fulfills an actual role within the family unit. It would seem that the manner in which a person engages in the process of making an animal a pet is in part a function of the individual's development and experience.

Levinson (1964, 1968) has suggested that the pet's role in a family depends upon the family structure, the

personality characteristics of family members, and the social climate of the family. Bridger (1976) proposed that a pet can make the family setting a more secure place to test out independence, cooperation, and both positive and negative feelings. In light of the above it would appear that how an individual perceives a pet is influenced by family life, developmental status, and experience. These factors are also salient influences on the self-concept.

As Mead (1934) has pointed out, the ability to imbue objects and situations with personal meaning is a distinctly human talent and one that grows and changes over the life span. Perceptual interpretation is a process that is influenced by an individual's needs, wishes, and motives (Solley, 1966). During the preadolescent period needs for love, affection, and especially belongingness are prominent (Maslow, 1954). Cognitively the individual is able to gain insight into a wide array of interpersonal concepts (Kohen-Raz, 1971) but interprets the significance of relationships within the closely bound parameters of self-definition and self-reference (Kegan, 1983). Because the changes associated with preadolescence can result in a fragile self-concept, the preadolescent desires social relationships that serve to bolster a sense of self through mutuality in feelings (Youniss, 1980). The preadolescent's need for "collaborative friendship" as proposed by Sullivan (1953a) centers on this desire for empathic understanding in a friend.

According to Erikson (1959), during the middle years of childhood a person's sense of individual identity is strongly tied to task performance. The preadolescent is faced with both feelings of achievement from completing tasks well and feelings of failure from incompetence. An increased sense of ego strength or a weak self-concept are the dichotomous outcomes of these challenges.

The dynamic changes of the preadolescent period suggest that an owner/pet relationship operating during this time has qualitative properties which influence the saliency of a pet's role in self-concept development. Those factors that influence a person's self-appraisal via perceptions of the pet, relative to developmental status, have yet to be identified.

The family dog is generally considered to be the prototype pet and is very popular, especially among households with children (Francese, 1985). Dogs have a long history of domestication and are responsive animals that people construe to be emotional (Doyle Dane Bernbach, 1983; Feldmann, 1979; Harris, 1983; Searles, 1960). Because the dog is a sociable animal and requires consistent care, it will serve as the pet of interest in this investigation.

Purpose of the Research

The purpose of the study is to investigate the role of the family dog in the preadolescent's mastery of developmental tasks and fulfillment of developmental needs. The preadolescent's developmental concerns of "industry

versus inferiority" as identified by Erikson (1959) and "collaborative friendship" as identified by Sullivan (1953a) delimit the tasks and needs of interest. This study will explore this age group's affective relationship with the family dog relative to general self-report self-concept and self-concept based on reflected appraisals. The affective relationship will be further examined relative to sex, age, and amount of dog care responsibility. Additionally, the dimensions of the affective relationships preadolescents have with their family dogs will be delineated.

Study Questions

The following study questions were formulated to be tested in this investigation.

1. Within the preadolescent population of the study is there a relationship between general self-report self-concept and amount of dog care responsibility?

2. Within the preadolescent population of the study is there a relationship between general self-report self-concept and affective relationship with the dog?

3. Within the preadolescent population of the study is there a relationship between perceived self-concept based on reflected appraisals and amount of dog care responsibility?

4. Within the preadolescent population of the study is there a relationship between perceived self-concept based on reflected appraisals and affective relationship with the dog?

5. Within the preadolescent population of the study is there a relationship between sex and amount of dog care responsibility?

6. Within the preadolescent population of the study is there a relationship between sex and affective relationship with the dog?

7. Within the preadolescent population of the study is there a relationship between age and amount of dog care responsibility?

8. Within the preadolescent population of the study is there a relationship between age and affective relationship with the dog?

9. Within the preadolescent population of the study what are the underlying affective dimensions of the preadolescent's affective relationship with the family dog?

The background of the preadolescent/pet relationship was also of interest relative to how the family dog was acquired and mutual activities and affiliations the preadolescent shared with the dog.

Limitations

It is important to note that the study under investigation is limited in two ways. Generalization of the results is limited to a suburban population of preadolescents attending a private school. Additionally, generalization of the results is limited to dog owners.

Significance of the Study

There is no question that the popularity of pet animals, especially dogs, in American society reflects and in turn has an impact on the nation's economy, health, and social mores. The majority of households in the English-speaking world keeps pets (Fogle, 1983). Furthermore, in the United States more than half of the childrearing households own some type of pet (Purvis & Otto, 1976). The pet population in the United States is estimated to contain 48 million dogs, 27 million cats, 25 million caged birds, 125 million small mammals and reptiles and more than one billion fish (Beck, 1985). Annually over five billion dollars is spent by Americans to care for and feed their pets (Bureau of the Census, 1975). In light of the assumption that over the life cycle self-concept is influenced by developmental status and the social environment (Erikson, 1963; Sullivan, 1953a), examining the specific contributions a pet can make to the preadolescent's mental health would be useful.

Method of Procedure and Overview

Chapter II contains four major divisions. The first reviews the research literature concerning the significance of pets for the young. The second discusses the preadolescent period and its associated cognitive and social changes. The third section presents the developmental tasks of middle childhood and the developmental needs of this

period. The fourth and final section provides a background for considering the family dog a developmental resource.

Chapter III consists of a description of the research method and research design. It includes a discussion of the study questions, the selection, construction, and adaptation of the instruments employed, the selection of the sample, the procedure and data collection and finally the statistical procedures.

In Chapter IV the data are presented and analyzed. This Chapter will also include an interpretation and discussion of the results of the data. Chapter V summarizes the study, draws conclusions, and makes recommendations on the basis of the study.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The review of the literature is designed to provide an examination of four areas applicable to the nature of the present investigation. Research pertaining to youngsters' relationships with pets will be examined first in an attempt to establish the significance of pets during middle childhood. A discussion of the preadolescent period will follow in order to establish preadolescence as a critical period in self-concept development. The third section of the review will focus on the major developmental tasks and needs of middle childhood. Following this discussion, in the last section the pet's role as a developmental resource will be articulated relative to the developmental characteristics of preadolescence.

Significance of Pets for the Young

The psychosocial bond between the young and pet animals has been examined relative to its physiological and psychosocial dimensions. How adolescents and children

actually perceive companion animals has been explored in several studies.

The blood pressure of male and female children (average age 12) were found to be significantly lower when a dog was present in an experimental setting than when it was absent. The subjects' blood pressures were measured both when they were resting quietly and when they read a simple story aloud. The children did not touch or interact with the dog during the experiment. The investigators suggest that the "friendly" dog changed the subjects' perceptions of the experimental setting, making it less anxiety provoking which resulted in lower blood pressures (Friedmann, Katcher, Thomas, Lynch, & Messent, 1983).

The use of a pet as a transitional object during episodes of stress was identified by Wolfe (1977). Her sample was comprised of 22 young male and female adolescents. The study found that pets were used in ways highly similar to those described for a traditional transitional object. A factor analysis of the data indicated that the phenomenon consisted of two major components: interaction between the child and the pet where the pet provides consolation, reduces stress, and expedites adaptation to traumatic events; a perception of the pet as embodying the characteristics of consistency, constancy, empathy, gentleness, sympathy, and warmth.

✓ A survey of 10-to 14-year-olds and their parents revealed one significant difference between the subjects

with family pets and non-owners [REDACTED], Whiren, Keith, & Nelson, 1985). In this study the owners were more likely to have a higher self-esteem score on the Coopersmith's Self-Esteem Scale than the non-owners. There were no other significant differences in measured variables of interest such as sense of responsibility.

[REDACTED] (1985) conducted an exploratory study on factors in self-esteem of early adolescents (12- to 14-year-old males and females) which revealed the importance of a pet for this age group. In the course of the study the subjects were asked to list things that made them feel satisfied and good about themselves. In this category pets were ranked below parents but above other adults in the subjects' lives such as teachers.

Bucke (1903) investigated the thoughts, reactions, and feelings of 1,200 male and female pet owners aged 7 to 16 toward their pets. After a qualitative and quantitative analysis his results revealed that the sample saw their pets as companions, confidantes, and playmates. They also identified pets as responsive creatures that were dependent on human beings.

Kellert (1985) surveyed 267 students in the second, fifth, eighth, and eleventh grades regarding their attitudes toward domesticated and wild animals. The majority (87%) of the sample owned a pet. The most typical perception of animals was that they are anthropomorphic beings. The subjects also appreciated animals more for their

recreational and emotional attributes than for practical reasons such as a food source. The female subjects displayed more affection for pet animals than did the male subjects.

Bryant (1982) found that 83% of her 7- to 10-year-old subjects felt that their family pet was a special friend to them. Another finding of this study was that for the 10-year-olds, the incidence of intimate talks with a pet reliably predicted a measure of empathy. Additionally, children from large families had lower competitive attitudes if they reported having intimate talks with their pets on a routine basis.

MacDonald (1981) surveyed 10-year-old males and females (N=31) to identify their relationships with the family dog. The most frequent child/pet interactions were playing with the dog, exercising the dog, and talking to the dog. The majority of the sample felt that their dog understood the content of human communication.

In a study of Canadian children (N=216) ranging in age from five to 13 years, Solomon (1981) found that pet ownership in families peaked during the middle childhood years. The 10-year-olds in this study had the highest ownership level (94%) and the majority of this group (54%) said they loved their pet. Children in the fifth and sixth grades particularly emphasized the pet's companionship role along with the pet's importance as a playmate.

Most adults seem to feel that it is good for children to grow up around pets. Adults believe that youngsters can practice a variety of behaviors with pets that are later incorporated into other social relationships (Veevers, 1985). The major benefits of ownership are thought to be companionship and pleasure along with learning gentleness and responsibility (Cain, 1983; Horn & Meer, 1984; Huntington, 1986). In addition to learning how to nurture and care for another, parents have further noted that the family pet provides their children with opportunities to witness certain significant life events such as birth, illness, and death (Salmon & Salmon, 1983).

The study of human/pet relationships is a relatively new area of inquiry and until recently little theoretical consideration had been given to the role of pets in children's lives. The recurring themes from the available literature suggest: a) children are emotionally invested in their pets; b) pets are positive influences on youngsters; c) adults encourage and reinforce child/pet associations.

The Preadolescent

The belief that preadolescence is a distinct developmental period in an individual's life is based on the premise that the preadolescent has specific psychosocial needs and developmental tasks to accomplish and is in a specific state of personality evolution. An assumption underlying this premise is that human development is a sequential process. Preadolescence is influenced by the

experiences of earlier years and in turn, growth during preadolescence forms the foundation of adolescence. From adolescence the individual's development is further enhanced by the experiences of the adult years.

The preadolescent period is considered to span the middle years of childhood, from the ages of about 9 or 10 to 14 or 15. These ages represent the period of growth from pubescence to puberty (Thornburg, 1980). Overall, the preadolescent years have a transitional nature since throughout these years the individual is moving from childhood to adolescence (Lipsitz, 1980; Steinberg, 1980).

Havighurst (1952) has identified three "pushes" that affect the individual's development during childhood and preadolescence. The "intellectual push" opens the door into the realm of adult cognition. The "physical push" projects him or her into games and work that require coordination and skill. The "social push" propels the youngster out of the protective home environment and into the world of school and peers. It seems likely that the preadolescent is challenged by these demands, and as a result of being "pushed", is experiencing feelings of disequilibrium in relationship to the self.

Piaget (1962) had identified the middle years of childhood, from ages 7 to 11, as primarily a period of concrete operational thought although preoperational thinking may persist until age 10. In the concrete operational period the individual becomes capable of systematic, logical

thought within the context of experiential and well-defined matters. Only at around age 11 or 12 do individuals begin the transition to formal operational thought which allows a person to deal with hypothetical situations in a logical fashion and to make inferences about relationships that are not visible or tangible (Minuchin, 1977).

Concrete operations make preadolescent egocentrism different from that found in the preoperational stage. However, the subjective egocentrism of the preadolescent is still strongly bound to the emotional significance of concrete objects, classes of which include people, possessions, and pets (Elkind, 1970). Kegan (1983) suggests there are six different developmental levels of subject-object relations throughout the lifespan. He proposes that by preadolescence the individual allots significance to objects based on how they are perceived to complete a sense of self.

A preadolescent with cognitive maturity is able to reason logically and no longer imbues animals with fantastic and magical qualities which is a characteristic of younger children. However, at a subconscious level subjective associations with the animal world persist after a conscious differentiation has been effected (Searles, 1960). It has been found that children's cognitive attitudes toward pets progress through developmental stages; from preoperational to concrete operational thinking and from egocentric to empathic perspectives (Kidd & Kidd, 1985). Furthermore,

dreams illustrate that youngsters' perceptions of their relationships with animals change during the normal course of development. Animals appearing in the dreams of young children are likely to be frightful, unmanageable, and wild creatures. By school age children are more likely to dream about animals that they can control such as domesticated pets. This change reflects their own growing sense of self-competence (Foulkes, 1982).

Accompanying the transition from concrete to formal operational thought is the capacity to more objectively conceptualize and evaluate emotional states in relation to self and others. With this ability the preadolescent gains insight into a wide array of interpersonal concepts (Kohen-Raz, 1971). Understanding the feelings of others affects personal objectives concerning social relationships and the preadolescent begins to desire mutuality in benefits derived from interpersonal interactions (Youniss, 1980).

The preadolescent is undergoing a number of changes in interpersonal relations. Because the preadolescent looks more mature others view him or her as more adultlike and consequently expect more mature behavior (Steinberg, 1980). The preadolescent can no longer rely on childish charm to gain support and acceptance from others (Williams & Stith, 1974). These increased expectations can create tension and anxiety (Blair & Burton, 1951). Although the preadolescent wants to relate socially in a positive manner, significant

personal stress at this life stage can cause negative emotional outbursts (Eichhorn, 1980).

During this period of emotional flux, interaction with peers provides an anchor for the development of security (Eichhorn, 1980). Peers become a primary frame of reference and fitting in with or winning their approval assumes great importance. Among other things, the peer group provides companionship, opportunities to exercise new physical and mental capacities, and sex-role identification (Gabriel, 1969; Williams & Stith, 1974).

The preadolescent generally chooses friends of the same sex who complement his or her personal needs (Ausubel, 1958; Eder & Hallinan, 1978; Martin, 1971). These friendships increase self-understanding because they allow boys and girls the opportunity to see themselves through the eyes of others (Cohen & Frank, 1975). Typically the forms of friendship are different between the sexes. Boys tend to form gangs while girls are more apt to form cliques. In male groups there is an emphasis on activities especially upon competitive sports. Boys tend to maintain this group-centered activity character in their friendships throughout preadolescence (Hill, 1980). Female cliques consist of pairs or trios of friends. During the earlier preadolescent years the emphasis for girls is on shared activities but during the later years the emphasis shifts to the importance of just being together as opposed to having an agenda of activities (Douvan & Adelson, 1966; Gabriel, 1969).

As they mature, both sexes become increasingly able to differentiate between the features of a best friend and other friends (Youniss, 1980). A best friend would be described as congenial, authentic, and able to establish a sense of intimacy in the friendship (Bigelow & LaGaipa, 1975). This intimacy involves self-disclosure and the sharing of confidences (Lewis, 1978). Disruption of an intimate friendship can be quite anxiety provoking for the preadolescent; not only is the nurturing aspect of the relationship lost, but the confidentiality of shared feelings is also at risk.

An increased striving for personal independence within the security of a peer group characterizes the preadolescent's behavior. This desire for autonomy affects the individual's interactions with his or her parents and there is a waning of interest in the parent figures (Harris & Tseng, 1957). By the middle years of childhood, an individual tends to set boundaries on physical touch and gives up the spontaneous hugging and kissing characteristic of the younger years (Katcher, 1981). Affection for parents is more often demonstrated by constructive activities such as doing things for and with them (Williams & Stith, 1974). For example, during middle childhood boys and girls generally assume more responsibilities for household chores.

In regard to social development, particular ages within the preadolescent period are frequently grouped together and treated as a whole. However, Gordon (1972) has

proposed that the major dilemmas facing 10- and 12-year-olds differ and some of these differences have been identified. The younger child is concerned with peer relationships and the outcomes of evaluated abilities. By age 12 the individual's concerns have shifted to achievement and acceptance of self by others.

The 10-year-old is most likely enrolled in a primary grade school where he or she holds a "senior" status in relation to the younger students in the lower grades. In comparison, the 12-year-old may have already left elementary school to attend a junior high or middle school where he or she is considered a "freshman." The type of school a preadolescent attends has been found to affect self-esteem. Rosenberg (1979) found that 12-year-olds in junior high schools had more fragile self-images than a comparable group in elementary school.

It is more likely that at age 12, as compared to age 10, an individual is experiencing the rapid physical changes of puberty. These fatiguing changes can cause the 12-year-old to develop a lethargic attitude towards routine activities such as household chores. In general, the 10-year-old is characterized by consistency and perseverance in completing tasks (Gesell, Ilg, & Ames, 1953).

Even the reading preferences of younger and older preadolescents have been found to differ. Kohen-Raz (1971) found that animal stories were much more popular at ages 7 to 10 than at ages 10 to 13. In the younger group, 25% of

the girls and 27% of the boys in the sample preferred reading about animals to reading adventure or romantic stories. In the older group, these figures had dropped to 3% and 14% respectively.

Developmental Concerns of the Preadolescent

Erikson and Sullivan have formulated stage theories of psychosocial development which address the preadolescent period. These two theories will be used to identify the developmental concerns of the preadolescent because they emphasize the impact of a social system on self-concept development.

The self-concept is an integration of biological, psychological, cognitive, and social factors. It is a conceptual, symbolic abstraction that evolves in response to and as a part of the developmental process. Over the course of development, the concept of the self includes more and more attributes and experiences while simultaneously becoming more selective and discriminative as to which features of these attributes and experiences are accepted as salient to the self (Coopersmith, 1967). Therefore the self-concept is both an object of perception and an object of reflection. It is a mediational structure through which interaction with the environment is filtered (Piaget, 1981).

Cooley (1902) posits that there is a strong and definite relationship between the perceived self-concept and self-report self-concept. The self-report self-concept is the individual's conscious image of what he or she is

actually like (Piers, 1984). The perceived self-concept is an inferred self-image based on the principle of reflected appraisal; we unconsciously see ourselves as other significant people in our lives see us (Mead, 1934). Over the course of the life cycle, the set of significant other people to whom we are related changes in response to wider social experiences (Kahn & Quinn, 1976). During preadolescence, significant referents include parents, teachers, peer group, and especially a best friend. Pets can be a source of continuity in social referents because the pet is believed to be permanent. It does not move away, reject affection, or file for divorce (Veevers, 1985).

Developmental Tasks

Havighurst (1953, p. 2) defines a developmental task as a:

task which arises at or about a certain period in the life of an individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society and difficulty with later tasks.

Inherent in this definition is the idea that an individual must actively engage in the accomplishment of developmental tasks for healthy growth. A society delineates which tasks are appropriate for certain ages, based in part on biological maturation and cultural norms. Individuals are socialized into accepting the challenge of developmental demands and are able to meet those demands through activating internal cognitive resources and external social resources found in particular social systems (Aldous, 1978).

Erikson's developmental theory reflects a psychodynamic influence through its concern with ego maturation. It is a life-span approach that delineates qualitatively unique stages of ego development in chronological order. Each successive stage is related to an element of society. It is through interaction with the social world that persons resolve each of the ego crises which is connected to an age-specific social requirement that makes new adaptive behavior necessary (Erikson, 1963).

According to Erikson the child of between 6 and 12 years is in the developmental stage of "industry versus inferiority." The school is the important social institution at this time. It is during the middle childhood period that a person experiences feelings of achievement from completing tasks well (Erikson, 1963). Standards of task performance are internally and externally generated which means that the preadolescent who perceives his or her abilities as strongly positive is more likely to have a strong self-image (Cohen & Frank, 1975). A sense of competence from achievement outside the family system is the strength or virtue that develops from these positive feelings (Erikson, 1959).

During the middle years of childhood a person's "sense of individual identity" also referred to as ego strength or self-concept is strongly tied to school performance (Erikson, 1959). This is especially notable in technological societies where the young rarely assume

productive work roles (Gabriel, 1969). A young person's academic performance is judged in several ways, each of which is potentially stressful and presents a risk of failure. For example, the student is compared with age mates (Blaesing & Brockhaus, 1972), the teacher verbally evaluates the student (Williams & Workman, 1978), and the student is faced with external evidence of personal worth in the form of grades (Whaley & Wong, 1979). Concern about academic performance is a major worry during the preadolescent years (Gesell, Ilg, & Ames, 1953).

A crisis in ego development can occur if the preadolescent fails to experience a sense of pride in personal achievements. This failure can compromise the individual's progress into a healthy adulthood. Not attaining a sense of "industry" or competency in achievement leaves the preadolescent ill-prepared to meet the demands of adolescence, the next developmental stage (Erikson, 1963).

Personality Development

Sullivan (1953a) has postulated an interpersonal theory of personality development that includes age-related stages and the process he calls "reflected appraisals". According to his theory, the way in which a person develops and maintains a sense of self is related to perceptual feedback from others (Riddle, 1972). How others perceive an individual and how the individual interprets these communicated perceptions affect the self-image.

According to Sullivan's theory, the self-concept is based on an internal processing of the external environment which contains different significant figures throughout the life cycle, persons who are important frames of reference at different ages. For the preadolescent the important figure is a special friend who demonstrates empathic understanding as it is during preadolescence that individuals discover in themselves and others "a need for interpersonal sensitivity" (Sullivan, 1953a, p. 246). As Sullivan (1953a, p. 41) states:

The worth of self as an individual is founded on the same criteria which apply to the other's worth. As a consequence, the self takes definition in relation with other and, when working to enhance a relationship, contributes to the promotion of self and other.

In essence, friendship functions to validate the personal worth of each partner. Sullivan terms this reciprocity "collaboration."

The preadolescent who does not have a "collaborative friendship" lacks an age appropriate significant figure. This deficit hampers both present and future personality development since peer relations are the source from which a sense of equality, the need for intimacy, and the ability for mutual understanding evolve (Sullivan, 1953a).

The Preadolescent/Pet Dyad

The preadolescent developmental concerns as presented by Erikson and Sullivan include the task of developing a sense of achievement and the need for an empathic friend. These concerns are resolved through the

dynamics of the broader social system which includes the owner/pet dyad. In healthy psychosocial development the preadolescent/pet dyad would serve in a supportive capacity relative to other developmentally significant social relationships.

Bronfenbrenner (1979) has delineated the parameters of what he terms a "developmental dyad", a social relationship that positively influences developmental outcomes. Such a relationship involves reciprocity, a balance of power that shifts in favor of the developing, by which he seems to infer younger, person and mutual affection. This type of relationship implies that there is a continuity of interaction between the dyad's members and that the behavioral, affective, and cognitive aspects of the interaction are intertwined (Hinde, 1979). The social dynamics associated with pet ownership suggest that a pet could be a member of a developmental dyad.

A primary characteristic of the ascribed status "pet" is that an animal is perceived as being more person-oriented than animal-oriented (Shepard, 1965). Since pets are considered human-like owners include them in a range of social activities and rituals. In a survey of over 13,000 pet owners it was found 50% of the respondents reported they kept pictures of pets in their wallet or on display in the home; 25% had a drawing or portrait made of their pet; and, 25% celebrated the pet's birthday (Horn & Meer, 1984). Another study of 500 pet owners revealed the majority (56%)

of the respondents allowed the household pet to share a bed with a family member; while eating meals the majority (64%) gave the pet food directly from the table; and most (54%) celebrated the pet's birthday (Voith, 1983). Sharing activities with an anthropomorphized pet apparently meets the social needs of some owners.

Interaction with a household pet on a daily basis has several features which might enhance an individual's developmental progress. One aspect of interaction with companion animals concerns owner/pet play. Owners of all ages usually consider much of their interaction with a pet to be playful. Play is defined by the following conditions: a) it must be pleasurable; b) an end in and of itself; c) spontaneous; d) freely chosen by the players; e) involve some active physical and mental engagement (Garvey, 1977). Play involves mental health considerations since it is a voluntary activity that provides a safe outlet for the expression of feelings (Monte, 1980). The expression, "I was only playing" succinctly summarizes the commonly accepted view that play is not considered to be an overtly serious endeavor but that true feelings do emerge in the process of play. How a playmate companion reacts to the verbal and nonverbal expression of feelings would affect the cathartic aspect of the play situation.

A pet has several characteristics which make it an ideal playmate. First, it is a consistently available companion and is never too busy to play. The pet is

automatically a subordinate to its owner and the preadolescent finds it easier to express feelings to a nonauthoritative playmate such as a friend or younger sibling than to an older sibling or an adult (Siegel, 1962; Stephenson, 1973). An animal can certainly be trusted not to reveal confidences shared during play which is another useful characteristic.

In addition to play, pets can become members of developmental dyads in other ways. An individual's self-esteem or self-image may be positively affected by a relationship with a pet. In the animal's view the young owner is omnipotent because, unlike human beings, an animal is unable to perceive human inadequacies (Fox, 1981; Levinson, 1969). Also, a pet does not make interpersonal demands which the young owner cannot fulfill (Levinson, 1969). Human/pet relationships are not stressed by the anxiety of personal inadequacy or failure that may accompany other personal relationships (Bruner, 1983). Consequently, a preadolescent/pet relationship might promote self-assurance and confidence.

In some instances the pet might function as an ego-extension relative to self-esteem. As an ego-extension the animal is subjectively incorporated into the preadolescent's sense of self and is felt to represent positive dimensions of the self-image (Rosenberg, 1979). When the pet serves as a responsive source of approval it enhances the preadolescent's self-image.

A pet may make a preadolescent owner feel cared for but the pet itself also requires care and attention (Schowalter, 1983). Interest in caring for pets has been noted to peak during the middle years of childhood (Gesell, Ilg, & Ames, 1953; Jenkins, Shacter, & Bauer, 1966). The young person who is able to demonstrate competence to his or her own caretakers and parents by taking on the responsibilities of pet care such as feeding and grooming can develop a sense of pride in these accomplishments (Bossard, 1944; Van Leeuwen, 1981). Being able to meet the needs of a dependent creature is an important achievement and meaningful task accomplishment contributes to social status, recognition, and ultimately, to a positive self-concept (Brickel, 1985).

It appears that a pet can serve as a member of a developmental dyad as articulated by Bronfenbrenner (1979) because pet animals participate in social systems. In the preadolescent/pet dyad, the balance of power is definitely in favor of the preadolescent. Interactions between owners and pets occur across a variety of social situations and contain components of both play and work. Furthermore, these components have behavioral, affective, and cognitive aspects.

Maslow (1954) proposed that individuals can only mature and achieve a sense of self-actualization if their environment provides basic life-sustaining as well as complex emotional support. He identified five essential

needs that must be met for healthy self-concept development; a sense of security, a sense of trust, positive feedback, a sense of purpose, and a sense of personal competence. These needs are met through affectionate and accepting relationships with others and respect from others for personal accomplishments. When the immediate environment contains a pet it appears that the owner/pet dyad has the potential to fulfill these needs.

Summary

The Review of the Literature concentrated on four specific aspects pertinent to the nature of studying the family dog's role in the preadolescent's psychosocial development. The first section presented research that explored the significance of pets for the young. Although the accumulated body of work is not large, it revealed that for the young a pet is both a playmate and a responsibility. Additionally, adults use pets to teach children about responsibility and caring. Children frequently classify their pet as a social companion and confidante. From these conclusions it is evident that young subjects are able to specifically identify a pet's function in their lives. There are some differences related to age, sex, and personality traits in how young people perceive a companion animal's attributes.

The second section of the review of the literature focused on the nature of preadolescence in American society. The middle years of childhood were portrayed as a time of

emotional flux. The preadolescent is a mature child, in transition from the earlier babylike years to the more adultlike status of adolescence. These complex changes can result in a fragile self-concept.

The third section of the literature review focused on the developmental concerns of preadolescence. The stage-based theories of Erikson and Sullivan were used to present the developmental tasks of the preadolescent period and the developmental needs of this segment of the life span. Both theorists address the impact of social experiences on the preadolescent's self-concept. Self-concept was presented as having both conscious and inferred components. An individual develops positive self-regard and a strong self-image by continual evidence of personal adequacy.

The final section of the review of the literature addressed the preadolescent/pet dyad relative to Bronfenbrenner's (1979) "developmental dyad" construct. It appears that the owner/pet relationship is tailored to the developmental needs of the preadolescent. The pet is a trustworthy companion, it communicates regard for its owner, and it fosters responsibility. These features address the preadolescent's need to develop a positive self-concept through accomplishing tasks and to perceive that a close friend values and supports the individual's self-worth.

The literature supports the need for investigation into the family dog's role in the preadolescent's psychosocial development. Although conventional wisdom

suggests that a pet is a child's friend and teaches a child responsibility, there is no conclusive evidence that this is the case. Furthermore, the implications of a child/pet dyad relative to self-concept have not been delineated. The preadolescent period of the life cycle provides a developmentally rich background upon which the significance of a pet in an individual's life can be examined such as in the present study.

Chapter III will contain statements of the study questions, discussion of the sample, collection of the data, selection and modification of the instruments, and statistical methods of the present study.

CHAPTER III

METHOD

Introduction

Chapter Three describes the study questions, the selection and demographic characteristics of the subjects, the procedure employed in the study, the selection and nature of the instruments, and the statistical methods selected to examine the study questions.

Study Questions

As stated in Chapter One the purpose of the present research is to discover the role of the family dog in the preadolescent's psychosocial development. The variables of interest are general self-report self-concept, perceived self-concept, sex, and age as related to the amount of dog care responsibility assumed by the preadolescent and affective relationship associated with the dog. The underlying dimensions of the affective relationships held with the family dog are also of interest.

Study Questions 1 and 2

The first two major study questions concerned the relationship between general self-report self-concept and two dimensions of the preadolescent/dog dyad. They were stated as follows:

1. Within the preadolescent population of the study is there a relationship between general self-report self-concept and amount of dog care responsibility?

2. Within the preadolescent population of the study is there a relationship between self-report self-concept and affective relationship with the dog?

General self-report self-concept was measured by the Piers-Harris Children's Self-Concept Scale (Piers, 1984). Amount of dog care responsibility was assessed by the Responsibility Inventory. Affective relationship with the dog was identified with the Pet/Friend Q-Sort.

Study Questions 3 and 4

The second set of major study questions concerned the relationship between perceived self-concept based on reflected appraisals and selected dimensions of the preadolescent/dog dyad. They were stated as follows:

3. Within the preadolescent population of the study is there a relationship between perceived self-concept based on reflected appraisals and amount of dog care responsibility?

4. Within the preadolescent population of the study is there a relationship between perceived self-concept based

on reflected appraisals and affective relationship with the dog?

Perceived self-concept was assessed by Rosenberg's Perceived Self-Concept Indicators (Rosenberg, 1979). Amount of dog care responsibility was measured with the Responsibility Inventory and affective relationship with the dog was measured with the Pet/Friend Q-Sort.

Study Questions 5 and 6

The third set of major study questions concerned the relationship between sex and selected dimensions of the preadolescent/pet dyad. They were stated as follows:

5. Within the preadolescent population of the study is there a relationship between sex and amount of dog care responsibility?

6. Within the preadolescent population of the study is there a relationship between sex and affective relationship with the dog?

Sex was identified via self-report on the Dog Ownership History questionnaire. Amount of dog care responsibility was measured with the Responsibility Inventory and affective relationship with the dog was measured with the Pet/Friend Q-Sort.

Study Questions 7 and 8

The last set of major study questions concerned the relationship between the preadolescent's age and selected dimensions of the preadolescent/dog dyad. They were stated as follows:

7. Within the preadolescent population of the study is there a relationship between age and amount of dog care responsibility?

8. Within the preadolescent population of the study is there a relationship between age and affective relationship with the dog?

Age was identified via self-report on the Dog Ownership History questionnaire. Amount of dog care responsibility was measured with the Responsibility Inventory and affective relationship with the dog was measured with the Pet/Friend Q-Sort.

Study Question 9

The last major study question of this investigation concerned the types of preadolescent/dog affective relationships. It was stated as follows:

9. Within the preadolescent population of the study what are the underlying affective dimensions of the preadolescent's affective relationship with the family dog?

Types of affective relationships were identified through the Pet/Friend Q-Sort. When identifying underlying constructs of interest with a Q-sort tool, it is recommended that general study questions, not statistical hypotheses be posed (Stephenson, 1953).

The background of the preadolescent/pet relationship was of interest relative to how the family dog was acquired and mutual activities and affiliations the preadolescent shared with the dog.

Setting

The study was conducted at a private day school located in Chicago's North Shore suburbs. This school contains grades K-12 and has three major divisions. Kindergarten through fifth grade make up the Lower School; the sixth, seventh, and eighth grades the Middle School; and, the ninth to twelfth grades comprise the Upper School. Approximately 400 students are enrolled in the school and 47 faculty members teach there. The Middle School headmaster was contacted regarding the study and gave permission for the school to participate. The nature and scope of the study were explained in detail in additional correspondence and copies of the study instruments were sent to the headmaster for his approval.

All 10- to 12-year-old dog owners in fifth, sixth, and seventh grades were invited to an informational session on the study. The purpose and scope of the project were explained to the students along with the process of informed consent. Each of the 36 students attending this session was given the informed consent materials (Appendix A) and if he or she desired to participate in the study, was instructed to return signed consent forms to the classroom teacher within a one month time span. Twenty-four students returned signed consent forms; two children later declined to participate in the study.

Sample

The final convenience sample consisted of 22 preadolescents at appropriate grade level for age. The sample was fairly homogeneous in respect to social class, family composition, and race. The subjects were of a middle and upper-middle socioeconomic status according to information from the school. All lived in two-parent households and sibling order indicated that 10 participants were the oldest or only child living at home, eight were middle children, and four were the youngest members of their families. The sample was predominantly Caucasian with one Asian subject. There were nine males and 13 females. Four 10-year-olds, five 11-year-olds, and 13 12-year-olds were in the group and the average age was 11.4 years.

Procedure

Data were gathered in three sessions. Each session was conducted during the 50 minute special activities period scheduled once a week at the school. Data were collected over 3 consecutive weeks in a one month period.

At the beginning of each session the participants were seated at desks, the investigator introduced herself to the group, briefly explained the focus of the study, and assured the participants that the activities were not tests and that their answers would be kept confidential. Procedural questions from the group were answered as they arose.

At the first session the History of Dog Ownership questionnaire and the Responsibility Inventory were administered. At the second session the Pet/Friend Q-Sort was given. During the third session the Piers-Harris Children's Self-Concept Scale (Piers, 1984) and Rosenberg's Perceived Self-Concept Indicators (Rosenberg, 1979) were administered.

All instruments were collected immediately after each session. Identifying information was coded to assure confidentiality.

Instrumentation

Instruments selected for the purposes of measuring the variables of interest were the Piers-Harris Children's Self-Concept Scale (Piers, 1984) and Rosenberg's Perceived Self-Concept Indicators (Rosenberg, 1979). Instruments developed for the purposes of measuring the amount of dog care responsibility and type of affective relationship with the dog were, respectively, the Responsibility Inventory and the Pet/Friend Q-Sort. The demographic variables of interest and background of the preadolescent/pet relationship were assessed via self-report on the Dog Ownership History questionnaire, another instrument designed for this study.

The Piers-Harris Children's Self-Concept Scale

The Piers-Harris Children's Self-Concept Scale (Piers, 1984) measures general self-report self-concept as it is reflected by concerns children have about themselves. This instrument contains 80 short statements (44 negative

and 36 positive) which the respondent answers with "yes" or "no" concerning applicability to the self. One point is given for each answer indicative of a positive self-concept. The total score can range from 0-80 with a higher score indicating a more positive self-concept. To label the child's total score, 1 of 9 descriptors spaced at a 1/2 standard deviation unit is used. These descriptors are as follows: Very Much Above Average, Much Above Average, Above Average, Slightly Above Average, Average, Slightly Below Average, Below Average, Much Below Average, Very Much Below Average.

The Piers-Harris Children's Self-Concept Scale has been standardized on more than 1,100 children in grades 4-12. A number of studies have investigated the test-retest reliability of the Scale with both normal and special samples. The reliability coefficients ranged from .42 (with an interval of 8 months) to .96 (with an interval of 3 to 4 weeks). The median test-retest reliability was .73. This Scale is probably the most widely used self-concept measure for children aged 9-12 and has been recommended as the most psychometrically sound instrument for children in this age range (Crandall, 1973; Hughes, 1984; Wylie, 1974).

Rosenberg's Perceived Self-Concept Indicators

Rosenberg's Perceived Self-Concept Indicators consist of 9 items used as guidelines to measure perceived self-concept based on reflected appraisals of significant other people in the preadolescent's social system

(Rosenberg, 1979). According to Rosenberg, the list of individuals important in reflected appraisal includes teachers, peers, and the best friend. Rosenberg used the Perceived Self-Concept Indicators as an interview guide with 1,917 children from grades 3-12 in the Baltimore City public schools.

For the purposes of this study the guide was presented as a paper-and-pencil instrument. The first item set pertains to reflected self-concept based on the evaluations of parents, teachers, and peers. A scale is provided to score these items. The second item set pertains to reflected self-concept based on the evaluations of parents, teachers and the best friend. Manifest content analysis (Fox, 1982) as described by Rosenberg is used to code these responses. The resultant reflected appraisal self-concept is then labeled Positive, Neutral, or Negative depending on the majority of classified responses.

Three items pertaining to the family dog as a reflected appraisal figure were added to the guide for the purposes of this investigation. The responses to these items were evaluated separately following Rosenberg's procedures (Appendix B).

Instrument Development

Dog Ownership History Questionnaire

The Dog Ownership History questionnaire designed for this study contains 16 items. It includes demographic items such as age, sex, and family composition. The background of

dog ownership component consists of questions pertaining to why the family dog was obtained along with mutual activities and affiliations shared with a pet which are also applicable to people. This latter section was based on several questionnaires used in owner/pet research which considered items on pets' names (Harris, 1983), pets' roles in families (Cain, 1983; Willie, 1982), and pets' sleeping quarters (Horn & Meer, 1984; Sheldon, Levy, & Shott, 1985) important when analyzing owner/pet relationships (Appendix C).

The Dog Ownership History questionnaire was critiqued by three parents of preadolescents with family dogs. The parents judged items for accuracy, realism, and representativeness of the preadolescent/pet relationship. The parents had several suggestions concerning how a few items could be improved to more accurately reflect age associated activities of dog ownership. These suggestions were incorporated into the instrument.

The questionnaire was given to a classroom of 23 fourth grade students in order to evaluate the clarity of the item statements. As a group the students had no difficulty reading and understanding the instrument.

Responsibility Inventory

An 18-item Responsibility Inventory was developed for this study (Appendix D). The questions pertain to the usual care and nurturing duties of family pet ownership such as feeding, grooming, and physical care. The responsibilities included in the Inventory were designed to

be specifically age appropriate for preadolescence (Covert, Whiren, Keith, & Nelson, 1985). Three parents of preadolescents with a family dog critiqued this questionnaire and provided several suggestions concerning how some items could be improved to more accurately reflect the responsibilities associated with dog ownership. These suggestions were incorporated into the instrument. Percentages of family members' pet-related concerns and tasks were figured. The preadolescent's amount of dog care responsibility was then calculated.

Pet/Friend Q-Sort

A Q-sort pertaining to the dimensions of the preadolescent's subjective, affective relationship with the family dog was designed for this study. Q-sorts have been used to study a wide array of research problems (Hinds, Burgess, Leon, McCormick, & Svetich, 1985; Jacobson, 1983; Waters, Garber, Cornal, & Vaughn, 1983; Wessman & Ricks, 1966) but do not appear to have been used extensively with children actually participating in doing the card sort. Bennett (1964) developed a self-concept Q-sort for use with elementary age children and Johnson (1976) developed a Q-sort personality test for youngsters aged 5 to 16. Children appear to really enjoy actually sorting the card deck because it is a game-like exercise (Bennett, 1964; Polit & Hungler, 1978).

The specific statements presented on the Pet/Friend Q-Sort cards were based on research findings related to the

emotional relationship between children and pets (Bryant, 1982; Solomon, 1981; Wolfe, 1977), interviews with 28 preadolescents (12 males and 16 females) concerning their feelings about their family dog, and pet/owner research instruments used to identify attitudes toward pet ownership (McCulloch, 1981; Templer, 1981). Statements were also developed to reflect the criteria for friendship during preadolescence such as stability, open and honest communication, sensitivity to needs and interests, and preference for spending spare time with the friend (Mannarino, 1978). Through an examination of these four sources, a Q-population of positive declarative self-referent statements was generated to represent the conceptual domain (Stephenson, 1980) of affective friendship (Appendix E).

The Q-Sort statements were submitted to a group of 23 fourth graders to evaluate item clarity. Several statements proved difficult for a few students to understand and these items were consequently modified.

The Sort was next administered to a group of ten preadolescent dog owners in order to assess its ability to measure subjective, affective relationships. The cards were sorted on a 5-point discrimination scale consisting of the following designations: Very Much Like, Pretty Much Like, Unsure, A Little Bit Like, Not at All Like. A free sort procedure as supported by Block (1961) and others (Livson & Nichols, 1956) was used. The participants first sorted the

cards as applicable to their relationships with their best friends and then after completing this task they sorted the Q-deck as applicable to their relationships with the family dog. Correlation between the Q-Sort sets was measured through use of the Spearman rank-order correlation coefficient (ρ). The entire procedure was repeated approximately 2 months later. On each occasion the obtained coefficient for correlation between 1) sorting the cards as applicable to the best friend and 2) sorting the cards as applicable to the family dog was the same, $p = .96$. It is suggested these results support the Pet/Friend Q-Sort's ability to represent the alleged friendship component of dog ownership.

The accepted method for establishing reliability for a Q-sort instrument is test-retest (Nunnally, 1978; Talbot, 1971). Initial reliability for the Pet/Friend Q-Sort was established by administering it to a group of sixth grade dog owners consisting of 5 females and 5 males. The participants easily sorted the cards, as applicable to their relationships with the family dog, following the five-point (Very Much Like to Not at All Like) discrimination scale and using the free sort procedure. The group was retested after an interval of 8 weeks and correlation between the two administrations of the Sort was assessed through use of the Spearman rank-order correlation coefficient (ρ). The obtained test-retest reliability coefficient was $p = .82$

which was considered satisfactory reliability for use in the research.

In the pilot administrations one card statement, "I teach you how to care", was rated Unsure in the large majority (75%) of the individual sorts. This statement was consequently dropped from the Pet/Friend Q-Sort resulting in a final Q-population of 60 statements. The usual number of statements in a Q-sort ranges from 50 to 100 as this number allows analysis without tiring subjects (Kerlinger, 1986; Polit & Hungler, 1978).

Affective relationship with the family dog was examined based on a frequency count of the discrimination ratings (Very Much Like to Not at All Like) received by each statement card in relation to the personality and demographic variables of interest. The underlying dimensions of affective relationships with the family dog were identified through factor analysis. Through this procedure information as to how the content items clustered together was obtained (Nunnally, 1978), making possible an exploration of underlying affective relationship constructs which could then be labeled.

Design and Statistical Analysis

The nature of the present study is essentially descriptive, based on a small representative sample as is the norm in Q-methodology research (Cummins, 1963; Stephenson, 1967). Two separate procedures were used to analyze the results. Chi-square procedures were used to

analyze the relationship between: 1) the personality and demographic variables of interest and amount of dog care responsibility; 2) the personality and demographic variables of interest and affective relationship with the dog. Factor analysis was used to analyze the underlying types of affective relationships associated with the family dog. The computer Statistical Package for the Social Sciences, (SPSSX) was used to carry out these procedures (SPSSX, 1983).

Summary

This chapter dealt with the major study questions, the setting, subject selection and description of the subjects, the research instruments and development of the original instruments, the data collection procedure, and statistical methods of the study.

Subjects were 22 10- to 12-year-olds from middle to upper-middle socioeconomic backgrounds who attended a private school. There were nine males and 13 females in the group. The group was predominantly Caucasian.

The subjects were given the following five instruments: The Piers-Harris Children's Self-Concept Scale (Piers, 1984), Rosenberg's Perceived Self-Concept Indicators (Rosenberg, 1979), a Dog Ownership History questionnaire, a dog care Responsibility Inventory, and the Pet/Friend Q-Sort.

The design of the study is descriptive with statistical procedures consisting of Chi-square and factor analysis.

Chapter IV will consist of the presentation of the results of the analysis of the data and discussion of the results.

CHAPTER IV

DATA ANALYSIS AND DISCUSSION OF THE RESULTS

Introduction

This study was designed to investigate the role of the family dog in the preadolescent's psychosocial development relative to selected personality and demographic variables. The research questions examined the relationship between general self-report self-concept, perceived self-concept, age, and sex and; first, amount of dog care responsibility; second, affective relationship with the dog. The affective dimensions underlying the preadolescent/family dog dyad were also examined. This chapter will be concerned with the presentation and analysis of the statistical results of the data. Additionally, findings concerning self-concept, the background of the preadolescent/pet relationship, and dog care responsibilities assumed by the preadolescent are presented. In this chapter the results of the study will also be interpreted and discussed.

Self-Concept

The mean of the 22 self-report self-concept scores was 54.1 (Range = 30 - 75; SD = 13.6) which is within the range of an Average score for the Piers-Harris Children's Self-Concept Scale (Piers, 1984). The group's self-report self-concept scores were consolidated into three categories for the purposes of data analysis. Respondents with Slightly Above Average (n = 2), Above Average (n = 2), Much Above Average (n = 2), and Very Much Above Average (n = 3) scores were consolidated into an above average group. Respondents with Slightly Below Average (n = 1), Below Average (n = 1) and Much Below Average (n = 2) scores were consolidated into a below average group. The Average (n = 9) scores made up the average group.

There was a total of 14 Positive, two Negative, and six Neutral perceived self-concept scores. Table 1 presents the self-report self-concept and perceived self-concept results by age. Table 2 presents the self-report self-concept and perceived self-concept results by sex.

Background of the Preadolescent/Pet Relationship

In the majority (64%) of households, wanting to acquire a dog was identified as a desire shared by several family members. In four families the preadolescent was identified as the single member who most wanted to acquire a dog. As presented in Table 3, specific reasons for acquiring the dog were classified under five major headings

Table 1

Self-Concept Results by Age

Self-Concept Measures	Age in Years		
	<u>10</u>	<u>11</u>	<u>12</u>
<u>Self-Report Self-Concept</u>			
Above Average	2	3	4
Average	-	-	4
Below Average	1	3	5
<u>Perceived Self-Concept</u>			
Positive	3	6	5
Neutral	-	1	5
Negative	-	-	2
<u>N</u> = 22			

Self-Concept Results by Sex

Self-Concept Measures

Sex

Self-Report Self-ConceptMale Female

Above Average

4

5

Average

3

6

Below Average

2

2

Perceived Self-Concept

Positive

5

9

Neutral

2

4

Negative

2

-

N = 22

Reasons for Acquiring the Family DogPet Deficit

Because our old dog died	Because she is our first pet and we wanted a pet
Because our other one died	Because we needed one
The other dog died	For a pet
To replace another dog	We didn't have a pet

Entertainment Value

All we had was fish and it was boring	Because it was cute
Because they're fun and cute	For fun

Parental Initiated

Because my mom grew up with a dog and thinks it's important for me and my sister to grow up with one	My mother likes animals
My dad thought it would be fun for me and my sister	My father loves dogs

Love of Animals

Because we have always had a dog and we like them	Because I love dogs
	Because we love animals

Companionship

To be my friend and to love him, he's cute	For company
I have always wanted one and also to keep me company	

with the general Pet Deficit category accounting for the most reasons for dog acquisition.

The majority (91%) of the dogs had been owned by the families for over 1 year. Breeds included Bichon Frise, Brittany Spaniel, English Springer Spaniel, Golden Retriever, Labrador Retriever, Lhasa Apso, Miniature Schnauzer, Poodle, Terrier, and Shih Tzu, along with several mixed breeds. A picture of the dog was kept by the majority (86%) of the respondents and the majority (68%) gave the dog presents on holidays. Over half of the group (55%) neither celebrated the dog's birthday nor (59%) shared sleeping quarters with the animal.

More than half (59%) of the preadolescents felt their family dog was very important to them along with very much like a person to them (64%). Sixty-five percent of the respondents believed the family dog thinks they are wonderful individuals. Additionally, the majority (65%) believed the dog likes them very much. The group's responses to: "Let's pretend your family dog wanted to tell someone all about you. What type of person would he/she say you are?" are presented in Table 4. These comments are indicative of a Positive or Neutral reflected appraisal self-concept per analysis with Rosenberg's (1979) criteria (Appendix B).

Dog Care Responsibilities

The number of specific dog care and nurturance responsibilities usually performed by the preadolescent

Table 4

Perceived Self-Concept Characterizations Based on Family Dog Reflected Appraisals

Positive Self-Concept

Awesome	The best person in the world
A caring master	Great, awesome
I am the best	I care about people
I love her the best, nice	Kind and nice
Nice, loving	A nice person
A nice person	Pretty and sweet
Sweet	Wonderful

Neutral Self-Concept

I spoil her	Nice but I forget to feed her
A pretty nice person	Somebody that likes to play
Sometimes nice, sometimes not	

ranged from a minimum of one to a maximum of 10. For the purposes of data analysis the amount of dog care responsibility was classified as Low for 1 to 5 performed activities and High for 6 to 10 activities. As shown in Table 5, giving the dog "treats" was the dog care activity performed by the greatest percentage of the preadolescents. Making the dog behave and overall taking care of the dog were performed by the smallest percentage of preadolescents. Among family members the father was identified most frequently as the person who made the dog behave and the mother was identified most frequently as the person who usually took care of the animal.

Analysis of Study Questions

The first set of study questions concerned the relationship between general self-report self-concept and selected dimensions of the preadolescent/pet association.

Study Question 1

Within the preadolescent population of the study is there a relationship between general self-report self-concept and amount of dog care responsibility?

The results of the chi-square procedure which was employed to test the first study question were not significant at the .05 level of probability $\chi^2(2, N = 22) = 3.32, p \leq .18$. Table 6 presents these results. Hence there was not a relationship between general self-report self-concept and amount of dog care responsibility.

Table 5

Proportion of Specific Dog Care and Nurturance Activities
Performed by Family Members

<u>Activity</u>	<u>Preadolescent</u>	<u>Father</u>	<u>Mother</u>	<u>Sibling</u>
First notices when dog is hungry/thirsty	38%	5%	48%	10%
First notices when dog is sick	29%	5%	67%	-
First notices when dog wants to go out	41%	14%	45%	-
Usually brushes dog	29%	14%	38%	14%
Usually cleans up after dog	21%	16%	58%	-
Usually fixes dog's meals	19%	24%	43%	14%
Usually gives dog medicine/vitamins	9%	14%	73%	-
Usually gives dog "treats"	67%	10%	10%	14%
Usually goes to the vet with dog	18%	14%	64%	-
Usually looks for dog when it's lost	53%	11%	37%	-
Usually makes dog behave	5%	65%	25%	5%
Usually plays with dog	57%	5%	10%	29%
Usually takes care of dog	5%	14%	76%	5%
Usually takes dog along when going outside	20%	25%	45%	10%
Usually teaches dog new things	45%	20%	25%	10%
Usually walks dog	25%	30%	35%	5%
Usually washes dog	14%	24%	33%	-
Usually watches out for dog	40%	15%	35%	10%

N = 22

Table 6

Relationship Between Self-Report Self-Concept and Amount of Dog Care Responsibility

<u>Self-Report Self-Concept</u>	<u>Amount of Dog Care Responsibility</u>	
	High	Low
Above Average	3	2
Average	5	3
Below Average	2	7

$$\chi^2(2, N = 22) = 3.32, p \leq .18$$

Study Question 2

Within the preadolescent population of the study is there a relationship between general self-report self-concept and affective relationship with the dog?

The chi-square procedure used to test the second study question resulted in two statistically significant findings at the .05 level of probability. Table 7 presents the results of the relationship between general self-report self-concept and the affective relationship item, "I teach you what I like" $\chi^2(8, N = 22) = 18.30, p \leq .01$. The Cramer's V ($V = .65$; range = 0 - 1) and the contingency coefficient ($C = .67$; upper limit = .89) indicate a moderately strong association between self-report self-concept and "I teach you what I like." The majority (63%) of the average self-concept group indicated they were Unsure about this item. The largest proportion (44%) of the above average self-concept group found this item Pretty Much Like their relationships with their family dog.

Table 8 presents the results of the relationship between general self-report self-concept and the affective relationship item, "I can depend on you" $\chi^2(8, N = 22) = 16.19, p \leq .03$. The Cramer's V ($V = .61$; range = 0 - 1) and the contingency coefficient ($C = .65$; upper limit = .89) indicate a moderately strong association between self-report self-concept and "I can depend on you." One half of the average self-concept group indicated this item was Not at All Like their relationships with the dog. Of the above

Table 7

Relationship Between Self-Report Self-Concept and Affective Relationship with the Family Dog

<u>Self-Report Self-Concept</u>	<u>Affective Relationship Item "I Teach You What I Like"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Above Average	2	2	1	4	-
Average	2	-	5	-	1
Below Average	1	2	-	-	2

$$\chi^2(8, N = 22) = 18.30, p \leq .01$$

$$V = .65$$

$$C = .67$$

Table 8

Relationship Between Self-Report Self-Concept and Affective Relationship with the Family Dog

<u>Self-Report Self-Concept</u>	<u>Affective Relationship Item "I Can Depend On You"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Above Average	1	2	2	4	-
Average	4	-	2	1	1
Below Average	2	-	-	-	3

$$\chi^2(8, N = 22) = 16.19, p \leq .03$$

$$V = .61$$

$$C = .65$$

average self-concept group, the largest proportion (44%) found this item Pretty Much Like their relationships with the family dog.

The second set of research questions concerned the relationship between perceived self-concept and selected dimensions of the preadolescent/pet dyad.

Study Question 3

Within the preadolescent population of the study is there a relationship between perceived self-concept based on reflected appraisals and amount of dog care responsibility?

The results of the chi-square procedure used to examine this question failed to obtain statistical significance at the .05 level of probability $\chi^2(2, N = 22) = .10, p \leq .94$. Therefore no relationship was found between perceived self-concept based on reflected appraisal and amount of dog care responsibility (Table 9).

Study Question 4

Within the preadolescent population of the study is there a relationship between perceived self-concept based on reflected appraisals and affective relationship with the dog?

Five of the chi-square results for this question were statistically significant at the .05 level. Table 10 presents the results of the relationship between perceived self-concept and the affective relationship item, "I can feel sorry for you" $\chi^2(8, N = 22) = 19.67, p \leq .01$. The Cramer's V ($V = .67$; range = 0 - 1) and the contingency

Table 9

Relationship Between Perceived Self-Concept and Amount of Dog Care Responsibility

<u>Perceived Self-Concept</u>	<u>Amount of Dog Care Responsibility</u>	
	High	Low
Positive	6	8
Neutral	3	3
Negative	1	1

$$\chi^2(2, N = 22) = .10, p \leq .94$$

Table 10

Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog

<u>Perceived Self-Concept</u>	<u>Affective Relationship Item "I Can Feel Sorry For You"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Positive	-	1	-	1	12
Neutral	-	-	1	3	2
Negative	1	-	-	-	1

$$\chi^2(8, N = 22) = 19.67, p \leq .01$$

$$V = .67$$

$$C = .69$$

coefficient ($C = .69$; upper limit = $.89$) indicate a moderately strong association between perceived self-concept based on reflected appraisals and "I can feel sorry for you." The majority (68%) of responses to this item were in the Very Much Like discrimination category. Respondents with a Positive self-concept accounted for the majority (80%) of these responses.

Table 11 illustrates the relationship between perceived self-concept and the affective relationship item, "I can make you feel needed" $\chi^2(8, N = 22) = 15.94, p \leq .04$. The Cramer's V ($V = .60$; range = 0 - 1) and the contingency coefficient ($C = .65$; upper limit = $.89$) indicate a moderately strong association between perceived self-concept based on reflected appraisals and "I can make you feel needed." The largest proportion (41%) of responses to this item was in the Very Much Like discrimination category. Respondents with a Positive self-concept accounted for the majority (78%) of these responses.

In Table 12 the results of the relationship between perceived self-concept and the affective relationship item "I care about how you feel" are presented $\chi^2(6, N = 22) = 12.74, p \leq .04$. The Cramer's V ($V = .54$; range = 0 - 1) and the contingency coefficient ($C = .61$; upper limit = $.87$) indicate a moderately strong association between perceived self-concept based on reflected appraisals and "I care about how you feel." The majority (55%) of responses to this item were in the Very Much Like discrimination category.

Table 11

Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog

<u>Perceived Self-Concept</u>	<u>Affective Relationship Item "I Can Make You Feel Needed"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Positive	-	3	3	1	7
Neutral	-	3	-	1	2
Negative	1	-	1	-	-

$$\chi^2(8, N = 22) = 15.94, p \leq .04$$

$$V = .60$$

$$C = .65$$

Table 12

Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog

<u>Perceived Self-Concept</u>	<u>Affective Relationship Item "I Care About How You Feel"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Positive	-	1	-	3	10
Neutral	-	3	1	1	1
Negative	-	-	1	-	1

$$\chi^2(6, N = 22) = 12.74, p \leq .04$$

$$V = .54$$

$$C = .61$$

Respondents with a Positive self-concept accounted for the majority (83%) of these responses.

Table 13 contains the results of the relationship between perceived self-concept and the affective relationship item "I feel understood by you" $\chi^2(8, N = 22) = 15.10, p < .05$. The Cramer's V ($V = .59$; range = 0 - 1) and the contingency coefficient ($C = .64$; upper limit = .87) indicate a moderately strong association between perceived self-concept based on reflected appraisals and "I feel understood by you." Only respondents with a Positive self-concept found this item Very Much Like their relationships with the family dog. All respondents with a Negative self-concept indicated it was A Little Bit Like their relationships with the dog.

In Table 14 the results of the relationship between perceived self-concept and the affective relationship item, "I worry about you" appear $\chi^2(6, N = 22) = 13.22, p < .03$. The Cramer's V ($V = .55$; range = 0 - 1) and the contingency coefficient ($C = .62$; upper limit = .87) indicate a moderately strong association between perceived self-concept based on reflected appraisals and "I worry about you." The majority (64%) of responses to this item were in the Very Much Like discrimination category. Respondents with a Positive self-concept accounted for the majority (86%) of these responses.

Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog

<u>Perceived Self-Concept</u>	<u>Affective Relationship Item "I Feel Understood By You"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Positive	4	1	2	2	5
Neutral	1	1	1	3	-
Negative	-	2	-	-	-

$$\chi^2(8, N = 22) = 15.10, p \leq .05$$

$$V = .59$$

$$C = .64$$

Relationship Between Perceived Self-Concept and Affective Relationship with the Family Dog

<u>Perceived Self-Concept</u>	<u>Affective Relationship Item "I Worry About You"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Positive	-	1	-	1	12
Neutral	-	-	1	3	2
Negative	-	-	1	1	-

$$\chi^2(6, N = 22) = 13.22, p \leq .03$$

$$V = .55$$

$$C = .61$$

The third set of study questions concerned the relationship between sex and selected dimensions of the preadolescent/pet association.

Study Question 5

Within the preadolescent population of the study is there a relationship between sex and amount of dog care responsibility?

The results of the chi-square procedure employed to examine this question were not significant at the .05 level of probability $\chi^2(1, N = 22) = 0, p \leq 1$). Hence no relationship was found between sex and amount of dog care responsibility. Table 15 illustrates these results.

Study Question 6

Within the preadolescent population of the study is there a relationship between sex and affective relationship with the dog?

Using the chi-square test, at the .05 level of probability, four statistically significant results for the sixth research question were found. A significant relationship $\chi^2(4, N = 22) = 13.93, p \leq .007$ was found between sex and the affective relationship item "I can make you feel special (Table 16). The Cramer's V ($V = .80$; range = 0 - 1) and the contingency coefficient ($C = .62$; upper limit = .89) indicate a moderately strong association between sex and "I can make you feel special." The largest proportion (41%) of responses to this item was in the Very

Relationship Between Sex and Amount of Dog Care Responsibility

<u>Sex</u>	<u>Amount of Dog Care Responsibility</u>	
	High	Low
Male	4	5
Female	6	7

$$\chi^2(1, N = 22) = 0, p \leq 1.0$$

Table 16

Relationship Between Sex and Affective Relationship with the Family Dog

<u>Sex</u>	<u>Affective Relationship Item</u> <u>"I Can Make You Feel Special"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Male	-	3	3	3	-
Female	1	2	1	-	9

$$\chi^2(4, N = 22) = 13.93, p < .00$$

$$V = .80$$

$$C = .62$$

Much Like discrimination category. Female respondents accounted for all of these responses.

A significant relationship $\chi^2(4, N = 22) = 11.38$, $p \leq .02$ was found between sex and the affective relationship item, "I can make you feel wanted" (Table 17). The Cramer's V ($V = .72$; range = 0 - 1) and the contingency coefficient ($C = .58$; upper limit = .89) indicate a moderately strong association between sex and "I can make you feel wanted". The largest proportion (45%) of responses to this item was in the Very Much Like discrimination category. Females accounted for 90% of these responses.

A significant relationship $\chi^2(4, N = 22) = 10.27$, $p \leq .03$ was found between sex and the affective relationship item, "I feel sad when you do" (Table 18). The Cramer's V ($V = .68$; range 0 - 1) and the contingency coefficient ($C = .56$; upper limit = .89) indicate a moderately strong association between sex and "I feel sad when you do." No males indicated this item was Very Much Like their relationships with the family dog; the majority (56%) of males indicated they were Unsure about this item. Equal proportions of females indicated this item was A Little Bit Like (38%) and Very Much Like (38%) their relationships with the family dog.

A significant relationship $\chi^2(3, N = 22) = 7.79$, $p \leq .05$ was found between sex and the affective relationship item, "I miss you when you are away from me" (Table 19). The Cramer's V ($V = .60$; range 0 - 1) and the contingency

Relationship Between Sex and Affective Relationship with the Family Dog

<u>Sex</u>	<u>Affective Relationship Item</u> <u>"I Can Make You Feel Wanted"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Male	1	2	2	3	1
Female	2	2	-	-	9

$$\chi^2(4, N = 22) = 11.38, p \leq .02$$

$$V = .72$$

$$C = .58$$

Table 18

Relationship Between Sex and Affective Relationship with the Family Dog

<u>Sex</u>	Affective Relationship Item <u>"I Feel Sad When You Do"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Male	1	1	5	2	-
Female	1	5	1	1	5

$$\chi^2(4, N = 22) = 10.27, p \leq .03$$

$$V = .68$$

$$C = .56$$

Relationship Between Sex and Affective Relationship with the Family Dog

<u>Sex</u>	Affective Relationship Item				
	<u>"I Miss You When You Are Away From Me"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Male	-	4	1	3	1
Female	-	2	-	2	9

$$\chi^2(3, N = 22) = 7.79, p \leq .05$$

$$V = .60$$

$$C = .51$$

coefficient ($C = .51$; upper limit = $.87$) indicate a moderately strong association between sex and "I miss you when you are away from me." The largest (45%) proportion of responses to this item was in the Very Much Like discrimination category. Females accounted for 90% of these responses.

The last set of research questions concerned the relationship between age and selected dimensions of the preadolescent/pet dyad.

Study Question 7

Within the preadolescent population of the study is there a relationship between age and amount of dog care responsibility?

The results of the chi-square test for this question were not statistically significant at the $.05$ level of probability $\chi^2(2, N = 22) = 1.78, p \leq .40$. Therefore no relationship was found between age and amount of dog care responsibility. Table 20 offers the obtained results.

Study Question 8

Within the preadolescent population of the study is there a relationship between age and affective relationship with the dog?

Table 21 presents the chi-square results $\chi^2(6, N = 22) = 12.22, p \leq .05$ for the relationship between age and the affective relationship item "I can make you feel safe." The Cramer's V ($V = .53$; range = $0 - 1$) and the contingency coefficient ($C = .60$; upper limit = $.87$) indicate a

Table 20

Relationship Between Age and Amount of Dog Care Responsibility

<u>Age</u>	<u>Amount of Dog Care Responsibility</u>	
	High	Low
Ten Years	1	2
Eleven Years	2	5
Twelve Years	7	5

$$\chi^2(2, N = 22) = 1.78, p \leq .40$$

Table 21

Relationship Between Age and Affective Relationship with the Family Dog

<u>Age</u>	<u>Affective Relationship Item</u> <u>"I Can Make You Feel Safe"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Ten Years	-	-	-	2	1
Eleven Years	-	-	-	-	7
Twelve Years	-	1	4	3	4

$$\chi^2(6, N = 22) = 12.22, p \leq .05$$

$$V = .53$$

$$C = .60$$

moderately strong association between age and "I can make you feel safe." The majority (55%) of responses to this item was in the Very Much Like discrimination category. Eleven-year-olds accounted for the majority (58%) of these responses.

Table 22 presents the chi-square results $\chi^2(8, N = 22) = 18.44, p \leq .01$ for the relationship between age and the affective relationship item "I dream about you." The Cramer's V ($V = .65$; range = 0 - 1) and the contingency coefficient ($C = .68$; upper limit = .89) indicate a moderately strong association between age and "I dream about you." The majority (55%) of responses to this item was in the Not at All discrimination category. Twelve-year-olds accounted for the majority (75%) of these responses.

The final study question concerned the underlying affective dimensions of the preadolescent/family dog dyad.

Study Question 9

Within the preadolescent population of the study what are the underlying affective dimensions of the preadolescent's affective relationship with the family dog?

Dimensions of the affective relationship with the family dog were analyzed with principal components factor analysis and an orthogonal Varimax rotation. Two factor analyses were performed. The initial principal components analysis using all 60 affective relationship items and a criterion of .50 minimum factor loading provided a listing of 13 factors with an eigenvalue above 1.0. These 13

Table 22

Relationship Between Age and Affective Relationship with the Family Dog

<u>Age</u>	Affective Relationship Item <u>"I Dream About You"</u>				
	Not at All Like	A Little Bit Like	Unsure	Pretty Much Like	Very Much Like
Ten Years	1	-	-	-	2
Eleven Years	2	1	3	-	1
Twelve Years	9	1	-	2	-

$$\chi^2(8, N = 22) = 18.44, p \leq .01$$

$$V = .65$$

$$C = .68$$

factors failed to converge in 24 iterations. An extra selection criterion was then applied for the second factor analysis so that a more parsimonious factor solution might emerge and it is not uncommon for several factor analysis approaches to be considered (Waltz & Bausell, 1981).

All statement items with an average discrimination rating of Very Much Like, Pretty Much Like, A Little Bit Like, or Not at All Like in addition to having the minimum factor loading of .50 were retained for the second factor analysis. As presented in Table 23, these criteria yielded 32 affective statements for entry into the factor analysis. The Varimax rotation reduced the 32 statements to nine orthogonal factors in 12 iterations. To determine a conceptual interpretation of the factors, items clustering on each factor were studied. The name or label of each factor was arrived at based on guidelines suggested by Waltz and Bausell (1981) whereby factor components are considered in descending order of factor loading and a constitutive definition of each factor was arrived at through use of the dictionary. A description of each factor's nature pertinent to underlying dimensions of the preadolescent/family dog affective relationship follows.

Factor 1

Factor 1 contains 10 items, has an eigenvalue of 12.1 and accounted for 38% of the variance. It was named Empathy (Webster's, 1984). This factor contains affective items that reflect an understanding of another's feelings as

Table 23

Affective Relationship Statements Entered in the Factor Analysis

I can act crazy with you	I have secrets with you
I can be myself with you	I know what you want
I can depend on you	I like to play with you
I can feel sorry for you	I like to spend time with you
I can make you feel angry	I like you just the way you are
I can make you feel happy	I like you more than anyone else
I can make you feel loved	I love you
I can make you feel safe	I love you more than anyone else
I care about how you feel	I protect you
I daydream about you	I teach you how to be kind
I depend on you	I teach you how to love people
I dream about you	I teach you what I like
I feel relaxed with you	I think you are entertaining
I feel warm towards you	I think you are funny
I forgive you if you hurt me	I understand what you tell me I worry about you

well as close loving and affiliation sentiments (Table 24). The two items with the highest factor loadings, "I can feel sorry for you" (.88) and "I worry about you" (.86), also had significant relationships with perceived self-concept based on reflected appraisals as shown in, respectively, Table 10 and Table 14.

Factor 2

Factor 2 contains six items, has an eigenvalue of 3.4 and accounted for 11% of the variance. It was named Tutelage (Webster's, 1984). This factor contains affective items centering on instructive disclosure of self (Table 25). The highest loading item, "I teach you what I like" (.82) and self-report self-concept were found to have a significant relationship as presented in Table 7. The weakest loading item, "I dream about you" (.52) and age were found to have a significant relationship as presented in Table 22.

Factor 3

Factor 3 contains four items, has an eigenvalue of 2.8 and accounted for 9% of the variance. It was named Alliance (Webster's, 1984). This factor contains items portraying mutual understanding and collaboration for mutual benefit (Table 26). One loaded item, "I can depend on you" (.71) was found to have a significant relationship with self-report self-concept as offered in Table 8.

Table 24

Factor 1: Empathy

<u>Items</u>	<u>Item Loading</u>
I can feel sorry for you	.88
I worry about you	.86
I think you are entertaining	.78
I can make you feel loved	.77
I like you just the way you are	.75
I forgive you if you hurt me	.63
I love you more than anyone else	.56
I have secrets with you	.53
I love you	.53
I depend on you	.51

Factor 2: Tutelage

<u>Items</u>	<u>Item Loading</u>
I teach you what I like	.82
I teach you how to love people	.79
I depend on you	.72
I feel relaxed with you	.70
I understand what you tell me	.69
I dream about you	.52

Factor 3: Alliance

<u>Items</u>	<u>Item Loading</u>
I think you are funny	.80
I know what you want	.76
I can depend on you	.71
I teach you how to be kind	.62

Factor 4

Factor 4 contains three items, has an eigenvalue of 2.2 and accounted for 7% of the variance. The loaded items address spending free time in play with another (Table 27). This factor was labeled Sociality (Webster's, 1984).

Factor 5

Factor 5 contains two items, has an eigenvalue of 1.9 and accounted for 6% of the variance. The affective items loading on this factor express a sense of vigorous aggravation and desire for control of another (Table 28). This factor was named Dominance (Webster's, 1984).

Factor 6

Factor 6 contains two items, has an eigenvalue of 1.8 and accounted for 6% of the variance. This factor was labeled Acceptance (Webster's, 1984). The loaded items center on an open and expressive sense of affiliation with another (Table 29).

Factor 7

Factor 7 contains one item, has an eigenvalue of 1.5 and accounted for 5% of the variance. The one highly loaded (.95) item, "I can act crazy with you", making up this factor reflects a sense of spontaneity and sudden inclination to action (Table 30). Therefore the factor was named Impulse (Webster's, 1984).

Factor 8

Factor 8 contains two items, has an eigenvalue of 1.2 and accounted for 4% of the variance. The items

Factor 4: Sociality

<u>Items</u>	<u>Item Loading</u>
I like to play with you	.89
I like to spend time with you	.71
I feel relaxed with you	.54

Factor 5: Dominance

<u>Items</u>	<u>Item Loading</u>
I protect you	.86
I can make you feel angry	.77

Table 29

Factor 6: Acceptance

<u>Items</u>	<u>Item Loading</u>
I can be myself with you	.89
I love you more than anyone else	.59

Factor 7: ImpulseItemItem Loading

I can act crazy with you

.95

contained in this factor convey a sense of concern and care that might ease the distress of another (Table 31). This factor was labeled Comfort (Webster's, 1984). One loaded (.73) item, "I care about how you feel" was significantly related to perceived self-concept as presented in Table 12.

Factor 9

Factor 9 contains two items, has an eigenvalue of 1.1 and accounted for 3% of the variance. This factor portrays a sense of invention and imagination (Table 32). The factor was named Fantasy (Webster's, 1984). One item, "I can make you feel safe", that loaded (.66) on this factor was found to have a significant relationship with age as revealed in Table 21.

Discussion

The discussion will first center on background features of the preadolescent/pet relationship. Care and nurturance as part of the preadolescent/family dog association will then be addressed. A discussion of personality and demographic characteristics of interest as related to affective relationship with the dog follows. Lastly the significance of affective dimensions of the preadolescent/pet dyad will be developed.

Background of the Preadolescent/Pet Dyad

Important findings pertinent to the preadolescent/pet relationship included why and how the family dog was obtained, social activities that included the pet, and perception of the animal as an anthropomorphic

Table 31

Factor 8: Comfort

<u>Items</u>	<u>Item Loading</u>
I go to you when I mess up	.84
I care about how you feel	.73

Table 32

Factor 9: Fantasy

<u>Items</u>	<u>Item Loading</u>
I daydream about you	.67
I can make you feel safe	.66

creature. In general wanting to acquire a dog was a familial desire. The preadolescent was identified as the sole initiator of pet acquisition in only a minority of households. Some authors have suggested that when dog ownership is for the most part a truly family affair, this indicates healthy family interpersonal dynamics (Robin, ten Bensel, Anderson, & Quigley, 1983). Therefore it appears that generally well families were represented in this study. Reasons for acquiring the dog included the need to fulfill a general pet deficit, the dog's value as an object of entertainment, a broadly defined love of dogs, parents felt having a dog would be good for the children, and the dog was to keep the preadolescent company. These reasons are reflective of companion animals' major purpose in American families, to provide personal enjoyment for owners (Horn & Meer, 1984). The high incidence of social activities such as keeping a picture of the animal and giving the dog presents on holidays as well as the lower incidence of celebrating the dog's birthday and not sharing sleeping quarters with the animal are within the expected parameters of owner/pet activities as revealed by previous research (Horn & Meer, 1984; Voith, 1983).

The general perception of the family dog as an anthropomorphic, important figure in the preadolescent's life also supports previous findings (Bryant, 1982; Bucke, 1930; Kellert, 1985). That preadolescents project onto their dogs an open acceptance of self emerges from the

findings since perceived self-concept based on the reflected appraisal of the family dog was, in no case, Negative. This can be contrasted with the finding that Negative perceived self-concepts did result based on the reflected appraisals of other significant figures in the preadolescent's life such as parents, teachers, and peers. The important role of the family dog as a positive reflected appraisal figure as identified in this study is in line with the findings from other research (Juhasz, 1985).

Responsibility for Dog Care

For the most part it appears that the preadolescent does not actually assume a large proportion of daily, routine pet care activities. Neither age nor sex apparently has much influence on the amount of dog care responsibility the preadolescent does assume. Furthermore there is apparently little association between either general self-report self-concept or perceived self-concept and amount of dog care responsibility. There was no consistent pattern among these factors; those in the below average self-report self-concept group tended to have few responsibilities and the same applied to those with a Positive perceived self-concept.

The findings that the preadolescent is the family member who usually gives the dog "treats" and is the family member who usually plays with the dog suggest a preadolescent's pet care responsibilities have a recreational flavor. This is congruent with the results of

research that has been done on children's pet care behavior (MacDonald, 1981). The task of looking for the dog when it was lost, another responsibility frequently assumed by the preadolescent, has an intermittent and adventurous quality suggesting this task was more play than actual work. A sense of productive performance (Erikson, 1959) in relation to preadolescents and family pet ownership did not emerge from the results of this study. Such feelings may be limited to selected preadolescents heavily invested in dog care.

Of all family members, the mother appears to be the one with the most assigned or ascribed dog care and nurturance responsibilities. The father is most likely to demonstrate dominant behavior over the dog through disciplining the animal. Therefore if the preadolescent is learning how to be responsible from having a dog in the home, he or she is most likely learning this behavior through observing parents model how to care for and manage the pet. This conclusion is contrary to the conventional wisdom of popular literature which advocates pet ownership as a means through which youngsters actively practice caring and nurturing behaviors.

Affective Relationship with the Family Dog

General Self-Report Self-Concept

General self-report self-concept and two different affective relationship items "I teach you what I like" and "I can depend on you" were found to be significantly related. This finding suggests that self-report self-

concept is associated with certain aspects of the preadolescent/dog relationship. No distinctive response patterns, based on general self-report self-concept, for the affective items emerged which suggests that preadolescents are in a state of flux concerning developing a sense of autonomy and dependability. These concerns apparently transcend self-concept strength.

Perceived Self-Concept

Perceived self-concept and five affective relationship items were found to be significantly associated. This suggests that perceived self-concept based on reflected appraisals is related to certain aspects of an affective relationship with the family dog. A Positive self-concept individual tended to find the following five items highly descriptive of the preadolescent/pet dyad: "I can feel sorry for you"; "I can make you feel needed"; "I care about how you feel"; "I feel understood by you"; "I worry about you". These results are indicative of being attuned to the feelings and needs of another and believing that one can indeed meet the emotional demands of another living creature. The Negative self-concept group tended to have divergent responses on four of the above items but did converge on one statement, "I feel understood by you", rating this item slightly descriptive of the preadolescent/family dog relationship. This finding suggests the family dog is not automatically an overwhelmingly empathic referent for the preadolescent with

a weak self-concept. A relationship with a pet apparently does not completely eradicate feelings of negative self-regard.

Sex

Sex and four affective relationship items were found to be significantly related. This suggests sex is associated with certain aspects of the preadolescent/pet dyad. No distinctive response patterns emerged for the item: "I feel sad when you do." Females tended to find the following statements more descriptive of their relationships with the family dog than did the male subjects: "I can make you feel special"; "I can make you feel wanted"; "I miss you when you are away from me." That female preadolescents are apparently more expressive about their emotional attachments to their pets is in line with other research results (Kellert, 1985).

Age

Age and two affective relationship items were significantly related. This suggests age is associated with certain aspects of the preadolescent/pet relationship. Eleven-year-olds especially found the statement, "I can make you feel safe", descriptive of their relationships with their pets. "I dream about you" was definitely not applicable to the twelve-year-olds' relationships with their dogs. These findings reveal that ages within the preadolescent range have distinctly different perceptions of their pets perhaps related to psychosocial maturity

(Foulkes, 1982; Kohen-Raz, 1971). This suggests ages included within the span of middle childhood should be considered separately when examining preadolescent/pet relationships.

Affective Relationship Factors

Nine underlying factors were found to emerge from the factor analysis of affective relationship statements. This suggests that the preadolescent's affective relationship with the family dog is a complexly organized, multidimensional construct. The preadolescent/pet dyad serves to provide the preadolescent with more than simple companionship. It parallels the function of the best friend and the peer group (Eichhorn, 1980; Gabriel, 1969; Williams & Stith, 1974) and is revealed as having a rich emotional nature.

Underlying affective factors of the preadolescent/pet relationship such as those named Acceptance, Alliance, and Comfort reflect the intimacy and mutuality associated with preadolescent friendship (Mannarino, 1978). This association appears to provide an avenue for open and honest communication, especially when engaged in play (Monte, 1980). The factors labeled Sociality and Impulse indicate the saliency of sheer pleasure in preadolescent/dog interaction. The factor called Dominance suggests the preadolescent apparently feels secure enough in his or her relationship with the family dog to test that relationship with expressions of superiority.

Perhaps the inferior social position of the pet calls forth the temptation to exercise personal power (Tuan, 1984). A sense of being attuned to the needs and interests of another along with taking responsibility for communicating personal needs and interests to another is reflected in the factor identified as Tutelage.

The preadolescent's affective relationship with the family dog suggests the functions of the preadolescent/dog dyad mimic the functions of a best friend. The preadolescent/dog relationship appears to have the ability to provide the preadolescent with a feeling of consensual validation of the self (Sullivan, 1953a). A sense of security and trust along with the provision of positive feedback is evident in the underlying dimensions of this human/companion animal bond. The pleasure of play and companionship is a strong theme in the relationship and is congruent with reasons why the family dog was acquired.

Summary

Chapter IV first focused on the statistical analyses and results of the data. In general, wanting to acquire a dog was a desire shared by several family members in order to eliminate a family pet deficit. The most prominent preadolescent dog care and nurturance activity was giving the dog "treats." The dog was positively regarded as a personally important creature by the majority of the respondents. The animal was also perceived as human-like by the majority of the group.

Based on the results of the chi-square procedure, no statistically significant relationship was found between: self-report self-concept and amount of dog care responsibility; perceived self-concept and amount of dog care responsibility; sex and amount of dog care responsibility; age and amount of dog care responsibility.

Based on the results of the chi-square procedure, a statistically significant relationship was found between self-report self-concept and affective relationship with the family dog. Two affective relationship items were found to have moderately strong associations with self-report self-concept. Those items were: "I teach you what I like"; "I can depend on you."

A statistically significant relationship was found between perceived self-concept and affective relationship with the family dog, using the chi-square test. Five affective relationship items were found to have moderately strong associations with perceived self-concept. Those items were: "I can feel sorry for you"; "I can make you feel needed"; "I care about how you feel"; "I feel understood by you"; "I worry about you."

A statistically significant relationship was found between sex and affective relationship with the family dog, based on the chi-square test. Four affective relationship items were found to have moderately strong associations with sex. Those items were: "I can make you feel special"; "I

can make you feel wanted"; "I feel sad when you do"; "I miss you when you are away from me."

A statistically significant relationship, using the chi-square procedure, was found between age and affective relationship with the family dog. Two affective relationship items were found to have moderately strong associations with age. Those items were: "I can make you feel safe"; "I dream about you."

A principal components factor analysis with an orthogonal Varimax rotation revealed nine underlying factors in the preadolescent/family dog affective relationship. Those factors were named: 1) Empathy, 2) Tutelage, 3) Alliance, 4) Sociality, 5) Dominance, 6) Acceptance, 7) Impulse, 8) Comfort, 9) Fantasy. Seven of the affective statement items entered in the factor analysis were also significantly related to the selected personality or demographic variables of interest.

Chapter IV also reviewed the results of the study focusing on interpretation and discussion. The preadolescent/dog dyad corresponds to human dyads important during preadolescence, especially the bond formed with the best friend. The activities and feelings preadolescents ascribe to their relationships with the family dog closely parallel expectations of a relationship with a best friend as delineated in the literature. The preadolescent/dog relationship is apparently less successful in filling its

assigned function of developing a sense of competence in a
youngster.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

As discussed in Chapter 1, in American society an intimate relationship between children and pets is generally encouraged and regarded as positive. It is frequently assumed that it is important for children to grow up around pets because pet ownership teaches children social skills and responsibility. In this regard the family dog is an especially popular pet in American households. In light of the assumption that over the life cycle self-concept, developmental status, and the social environment are interlinked (Erikson, 1963; Sullivan, 1953a), examining the specific contributions a pet can make to the preadolescent's mental health was proposed as a useful undertaking.

This study was concerned with the role of the family dog in the preadolescent's mastery of developmental tasks and fulfillment of developmental needs relative to selected dimensions of the self-concept, sex, and age.

Nine major research questions pertaining to the preadolescent/pet dyad were formulated for this investigation. The first examined the relationship between general self-report self-concept and amount of dog care responsibility. The second research question analyzed the relationship between general self-report self-concept and affective relationship with the dog. The next two questions were concerned with the relationship between perceived self-concept based on reflected appraisals and: 1) amount of dog care responsibility; 2) affective relationship with the dog. The fifth question was directed to the relationship between sex and amount of dog care responsibility and the sixth to the relationship between sex and affective relationship with the dog. The last set of study questions examined the relationship between age and amount of dog care responsibility and between age and affective relationship with the dog. The final study question was stated as follows: Within the preadolescent population of the study what are the underlying affective dimensions of the preadolescent's affective relationship with the family dog?

Three instruments were developed to investigate preadolescents' relationships with the family dog. A Dog Ownership History questionnaire was used to identify social aspects of the preadolescent/pet relationship along with the demographic variables of interest. A dog care Responsibility Inventory was used to identify caretaking and nurturance responsibilities performed by the preadolescent.

A Pet/Friend Q-Sort was used to explore the affective dimensions of the preadolescent/pet relationship. The Piers-Harris Children's Self-Concept Scale (Piers, 1984) and Rosenberg's Perceived Self-Concept Indicators (Rosenberg, 1979) were employed to examine, respectively, self-report self-concept and perceived self-concept based on reflected appraisals.

The sample consisted of 22 preadolescents at appropriate grade level for age. The subjects were of a middle and upper-middle socioeconomic status and all lived in two-parent households. There were nine males and 13 females in the group. The average age was 11.4 years. The sample was predominantly Caucasian.

The nature of the study was essentially descriptive. The analyses of the relationships between general self-report self-concept, perceived self-concept, sex, age, and amount of dog care responsibility were conducted with the chi-square procedure. The relationships between general self-report self-concept, perceived self-concept, sex, age, and affective relationship with the family dog were also tested with the chi-square procedure. Underlying conceptual dimensions of the preadolescent's affective relationship with the family dog were explored with a factor analysis procedure.

Results and Conclusions

No statistically significant relationship was found between: 1) self-report self-concept and amount of dog care

responsibility; 2) perceived self-concept and amount of dog care responsibility; 3) sex and amount of dog care responsibility; 4) age and amount of dog care responsibility.

A statistically significant relationship was found between self-report self-concept and affective relationship with the family dog. A moderately strong association was found between self-report self-concept and two affective items: "I teach you what I like"; "I can depend on you." No distinctive response patterns for the affective items emerged, based on general self-report self-concept, which suggests that preadolescents are in a state of flux concerning developing a sense of autonomy and dependability. These concerns transcend any self-concept support provided by the family dog.

A statistically significant relationship was found between perceived self-concept and affective relationship with the family dog. A moderately strong association was found between perceived self-concept and five affective relationship items: "I can feel sorry for you"; "I can make you feel needed"; "I care about how you feel"; "I feel understood by you"; "I worry about you." The preadolescent with a Positive perceived self-concept was more likely than a preadolescent with a Negative perceived self-concept to find the above items very descriptive of the relationship with the family dog. This finding suggests that a

relationship with the family dog does not automatically compensate for feelings of estrangement.

A statistically significant relationship was found between sex and affective relationship with the family dog. A moderately strong association was found between sex and: "I feel sad when you do"; "I can make you feel special"; "I can make you feel wanted"; "I miss you when you are away from me." No distinctive response pattern emerged concerning the first item. Females were more likely than males to find the last three items descriptive of their relationships with the family dog and may be more expressive about some aspects of the preadolescent/dog bond.

A statistically significant relationship was found between age and affective relationship with the family dog. A moderately strong association was found between age and "I can make you feel safe" and between age and "I dream about you." These results suggest that across the preadolescent age span perceptions of the family dog may be related to cognitive maturity.

A principal components factor analysis with an orthogonal Varimax rotation revealed nine underlying factors in the preadolescent/family dog affective relationship. Those factors were named: 1) Empathy, 2) Tutelage, 3) Alliance, 4) Sociality, 5) Dominance, 6) Acceptance, 7) Impulse, 8) Comfort, 9) Fantasy. The preadolescent's relationship with the family dog was revealed to be a multi-

dimensional bond. It is very similar to the relationship with the best friend during preadolescence.

Recommendations

On the basis of this study two sets of recommendations are offered. The first set concerns parents and professionals who work with children. The second set of recommendations concerns directions for future research on the preadolescent/pet bond.

Although popular lay literature touts the benefits of pet ownership for teaching children responsibility, it appears that youngsters may not actually assume a great deal of the daily care a pet requires. Therefore before a pet is acquired for the purpose of promoting personal growth in responsibility, a careful family assessment of the child's potential involvement in pet care is necessary. Furthermore the addition of pet care and nurturance tasks on a mother's household workload should be considered since the mother is the family member to whom a large proportion of caretaking activities falls.

This study has illustrated that research on children and pets is a fruitful area of inquiry. Additional studies might be directed toward refinement of the research instruments developed in the course of this project, for example, to analyze the relative amount of pet care responsibilities shared by family members versus assumed by a single member. Another area for investigation is differences in pet care responsibilities between children

living in one-parent and two-parent households. Parents' perceptions of child/pet interactions are also worthy of study.

The psychosocial focus used in this research can be expanded to address other research questions such as: What is the role of the pet in a child's a) cognitive, b) moral, or c) physical development? Comparison group research designs with pet owners and non-owners would be particularly useful in answering such questions.

REFERENCES

- Aldous, J. (1978). Family careers. New York: Wiley.
- Ausubel, D.P. (1958). Theory and problems of child development. New York: Grune & Stratton.
- Beck, J. (1985, June 10). Urban dogs: Pets or pests? Chicago Tribune, Section 1, p. 14.
- Bennett, V.D.C. (1964). Development of a self-concept Q-sort for use with elementary age school children. Journal of School Psychology, 3, 19-25.
- Bigelow, B.J., & LaGaipa, J.J. (1975). Children's written descriptions of friendships: A multidimensional analysis. Developmental Psychology, 11, 857-858.
- Blaesing, S., & Brockhaus, J. (1972). The development of body image in the child. Nursing Clinics of North America, 7, 597-608.
- Blair, A.W., & Burton, W.H. (1951). Growth and development of the preadolescent. New York: Appleton-Century-Crofts.
- Block, J. (1961). The Q-sort method in personality assessment and psychiatric research. Springfield, IL: C.C. Thomas.
- Bossard, J.H.S. (1944). The mental hygiene of owning a dog. Mental Hygiene, 28, 408-413.

- Bossard, J.H.S., & Boll, E.S. (1966). The sociology of child development. New York: Harper.
- Brickel, C.M. (1985). Initiation and maintenance of the human-animal bond: Familial roles from a learning perspective. In M.B. Sussman (Ed.), Pets and the family (pp. 31-34). New York: Haworth.
- Bridger, H. (1976). The changing role of pets in society. Journal of Small Animal Practice, 17, 1-8.
- Bronfenbrenner, U. (1979). The ecology of human development. Cambridge, MA: Harvard University Press.
- Bruner, J. (1983). Play, thought, and language. Peabody Journal of Education, 60(3), 60-69.
- Bryant, B.K. (1982). Sibling relationships in middle childhood. In M.E. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 87-122). Hillsdale, NJ: Lawrence Erlbaum.
- Bucke, W.F. (1903). Cyno-psychoses: Children's thoughts, reactions, and feelings toward pet dogs. Pedagogical Seminary and Journal of Genetic Psychology, 10, 459-513.
- Bureau of the Census. (1975). Statistical abstract of the United States. Washington, DC: Department of Commerce.

- Cain, A.O. (1983). A study of pets in the family system. In A.H. Katcher & A.M. Beck (Eds.), New perspectives on our lives with companion animals (pp. 72-81). Philadelphia: University of Pennsylvania Press.
- Cohen, D., & Frank, R. (1975). Preadolescence: A critical phase of biological and psychological development. In D.V. Siva Sankar (Ed.), Mental health in children (Vol. I) (pp. 129-165). Westburg, NY: PJD.
- Cooley, C.H. (1902). Human nature and the social order. New York: Scribners.
- Coopersmith, S. (1967). The antecedents of self-esteem. San Francisco: W.H. Freeman.
- Covert, A.M., Whiren, A.P., Keith, J., & Nelson, C. (1985). *ok* Pets, early adolescents, and families. In M.B. Sussman (Ed.), Pets and the family (pp. 95-106). New York: Haworth.
- Crandall, R. (1973). The measurement of self-esteem and related constructs. In J. Robinson & P. Shaver (Eds.), Measures of social psychological attitudes (pp. 45-168). Ann Arbor, MI: Institute for Social Research.
- Cummins, R.E. (1963). Some applications of "Q" methodology to teaching and educational research. The Journal of Educational Research, 57, 96-98.

- Douvan, E., & Adelson, J. (1966). The adolescent experience. New York: Wiley.
- Doyle Dane Bernbach. (1983, September). The turbulent emotional life of the pet owner: Fantasies of potential disasters; the reality of mundane problems. Soundings, pp. 1-8.
(Available from Doyle Dane Bernbach, Inc.
5900 Wilshire Blvd., Los Angeles, CA 90036).
- Eder, D., & Hallinan, M. (1978). Sex differences in children's friendships. American Sociological Review, 43, 237-250.
- Eichhorn, D.A. (1980). The school. In M. Johnson (Ed.), Toward adolescence: The middle school years. Seventy-ninth yearbook of the National Society for the Study of Education (pp. 56-73).
Chicago: University of Chicago Press.
- Elkind, D. (1970). Children and adolescents. New York: Oxford University Press.
- Erikson, E.H. (1959). Identity and the life cycle: Selected papers. (Psychological Issues Monograph No. 1). New York: International Universities.
- Erikson, E.H. (1963). Childhood and society (2nd ed.). New York: Norton.

- Feldmann, B.M. (1979). Why people own pets. In R.D. Allen & W.H. Westbrook (Eds.), The handbook of animal welfare - biomedical, psychological, and ecological aspects of pet problems (pp. 15-22). New York: Garland.
- Fogle, B. (1983). Pets and their people. London: Collins Harvill.
- Foulkes, D. (1982). Children's dreams: Longitudinal studies. New York: John Wiley & Sons.
- Fox, D.J. (1982). Fundamentals of research in nursing. (4th ed.). Norwalk, CONN: Appleton-Century-Crofts.
- Fox, M.W. (1979). The values and uses of pets. In R.D. Allen & W.H. Westbrook (Eds.), The handbook of animal welfare - biomedical, psychological, and ecological aspects of pet problems (pp. 23-35). New York: Garland.
- Fox, M.W. (1981). Relationships between the human and nonhuman animals. In B. Fogel (Ed.), Interrelations between people and pets (pp. 23-40). Springfield, IL: C.C. Thomas.
- Francese, P. (1985, December 8). Dogs are having their day. Richmond Times-Dispatch, p. F4.
- Friedmann, E., Katcher, A.H., Thomas, S.A., Lynch, J.J., & Messent, P.R. (1983). Social interaction and blood pressure. Journal of Nervous and Mental Disease, 171, 461-465.

- Gabriel, J. (1969). Children growing up (3rd ed.). New York: American Elsevier.
- Garvey, C. (1977). Play. Cambridge, MA: Harvard University Press.
- Gesell, A. Ilg, F.L., & Ames, L.B. (1953). Youth. The years from ten to sixteen. New York: Harper.
- Gordon, C. (1972). Social characteristics of early adolescence. In J. Kagan & R. Coles (Eds.), Twelve to sixteen: Early adolescence (pp. 25-54). New York: Norton.
- Harris, D.B., & Tseng, S.C. (1957). Children's attitudes toward peers and parents as revealed by sentence completions. Child Development, 28, 401-411.
- Harris, M.B. (1983). Some factors influencing selection and naming of pets. Psychological Reports, 53, 1163-1170.
- Havighurst, R.J. (1952). Developmental tasks and education. New York: Wiley.
- Havighurst, R.J. (1953). Human development and education. New York: Longman, Green.
- Hickrod, L.J.K., & Schmitt, R.L. (1982). A naturalistic study of interaction and frame. Urban Life, 11(1), 55-57.
- Hill, J.P. (1980). Understanding early adolescence: A framework. University of North Carolina at Chapel Hill, Center for Early Adolescence.

- Hinde, R.A. (1979). Towards understanding relationships.
New York: Academic Press.
- Hinds, P.S., Burgess, P., Leon, J., McCormick, J., &
Svetich, L. (1985). Self-identified stressors in
the role of nursing faculty. Journal of Nursing
Education, 24, 63-68.
- Horn, J.C., & Meer, J. (1984). The pleasure of their
company. Psychology Today, 18(8), 51-57.
- Hughes, H.M. (1984). Measures of self-concept and self-
esteem for children ages 3-12 years: A review and
recommendations. Clinical Psychology Review, 4,
657-692.
- Huntington, A. (1986, May 4). Pets may help you train,
nurture your child. Chicago Tribune, Section 15, p.
19.
- Jacobson, S.P. (1983). Stresses and coping strategies of
neonatal intensive care unit nurses. Research in
Nursing and Health, 6, 33-40.
- Jenkins, G.G., Shacter, H.S., & Bauer, W.W. (1966). These
are your children (3rd ed.). Glenview, IL: Scott &
Foresman.
- Johnson, O. (1976). Tests and measurements in child
development (Vol II). San Francisco: Jossey Bass.
- Juhasz, A.M. (1985). Measuring self-esteem in early
adolescents. Adolescence, 20, 877-887

- Kahn, R.L., & Quinn, R.P. (1976). Mental health, social support, and metropolitan problems. University of Michigan, Institute for Social Research.
- Katcher, A.H. (1981). Interactions between people and their pets: Form and function. In B. Fogel (Ed.), Interrelations between people and their pets (pp. 41- 67). Springfield, IL: C.C. Thomas.
- Kegan, R. (1983). A Neo-Piagetian approach to object relations. In B. Lee & G.C. Noam (Eds.), Developmental approaches to the self (pp. 267-308). New York: Plenum.
- Kellert, S.R. (1985). Attitudes toward animals: Age-related development among children. Journal of Environmental Education, 16(3), 29-39.
- Kerlinger, F. (1986). Foundations of behavioral research (3rd ed.). New York: Holt, Rinehart, & Winston.
- Kidd, A.H., & Kidd, R. M. (1985). Children's attitudes toward their pets. Journal of the Delta Society, 2(1), 67-68.
- Kohen-Raz, R. (1971). The child from 9 to 13. Chicago: Aldine-Atherton.
- Levinson, B.M. (1964). Pets: A special technique in psychotherapy. Mental Hygiene, 48, 243-248.
- Levinson, B.M. (1968). Household pets in residential schools. Mental Hygiene, 2, 411-414.

- Levinson, B.M. (1969). Pet-oriented child psychotherapy.
Springfield, IL: C.C. Thomas.
- Levinson, B.M. (1978). Pets and personality development.
Psychological Reports, 42, 1031-1038.
- Lewis, R.A. (1978). Emotional intimacy among men. Journal
of Social Issues, 34, 108-121.
- Lipsitz, J. (1980). Growing up forgotten. New Brunswick,
NJ: Transaction.
- Livson, N.H., & Nichols, T.F. (1956). Discriminating and
reliability in Q-sort personality descriptions.
Journal of Abnormal and Social Psychology, 52,
159-165.
- MacDonald, A.J. (1979). Review: Children and companion
animals. Child: Care, Health and Development, 5,
359-366.
- MacDonald, A.J. (1981). The pet dog in the home: A study
of interactions. In B. Fogel (Ed.), Interrelations
between people and pets (pp. 195-206).
Springfield, IL: C.C. Thomas.
- Mannarino, A.P. (1978). Friendship patterns and self-
concept development in preadolescent males. The
Journal of Genetic Psychology, 133, 105-110.
- Martin, E. (1971). Reflections on the early adolescent in
school. Daedalus, 100, 1087-1103.
- Maslow, A.H. (1954). Motivation and personality. New
York: Harper.

- McCulloch, M.J. (1981). The pet as prosthesis - defining criteria for the adjunctive use of companion animals in the treatment of medically ill depressed outpatients. In B. Fogel (Ed.), Interrelations between people and pets (pp. 101-123). Springfield, IL: C.C. Thomas.
- Mead, G.H. (1934). Mind, self, and society. Chicago: University of Chicago Press.
- Minuchin, P.P. (1977). The middle years of childhood. Belmont, CA: Wadsworth.
- Monte, C.F. (1980). Beneath the mask (2nd ed.). New York: Holt, Rinehart, & Winston.
- Nunnally, J.C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.
- Piaget, J. (1962). The stages of the intellectual development of the child. Bulletin of the Menninger Clinic, 26, 120-128.
- Piaget, J. (1981). Intelligence and affectivity. Annual reviews monographs. Palo Alto, CA: Annual Reviews.
- Piers, E.V. (1984). The Piers-Harris Children's Self-Concept Scale. Los Angeles, CA: Western Psychological Services.
- Polit, D.F., & Hungler, B.P. (1978). Nursing research: Principles and methods. Philadelphia: J.B. Lippincott.

- Purvis, M.J., & Otto, D.M. (1976). Household demand for pet food and the ownership of cats and dogs: An analysis of a neglected component of U.S. food use. St. Paul: University of Minnesota, Department of Agriculture and Applied Economics.
- Riddle, I. (1972). Nursing intervention to promote body image integrity in children. Nursing Clinics of North America, 7, 651-661.
- Robin, M., ten Benschel, R.W., Anderson, R.K., & Quigley, J. (1983). Abused children and their pets. In R.S. Anderson, B. Hart, & L. Hart (Eds). The pet connection (pp. 111-117) Minneapolis: Center to Study Human-Animal Relationships and Environments.
- Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.
- Salmon, P.W., & Salmon, I.M. (1983). Who owns who? Psychological research into the human-pet bond in Australia. In A.H. Katcher & A.M. Beck (Eds.), New perspectives on our lives with companion animals (pp. 244-265). Philadelphia: University of Pennsylvania Press.
- Schwalter, J.E. (1983). The use and abuse of pets. Journal of the American Academy of Child Psychiatry, 22, 68-73.
- Searles, H.F. (1960). The nonhuman environment. New York: International Universities.

- Sheldon, S.H., Levy, H.B., & Shott, S. (1985). The distribution of pets and the pet attachment patterns in a sample of victims of child abuse and neglect. People-Animals-Environment, 3(1), 14. (Available from the Delta Society, 212 Wells Ave. South, Suite C, Renton, WA 98055).
- Shepard, P. (1965). Thinking animals. New York: Viking.
- Siegel, A. (1962). Reaching the severely withdrawn through pet therapy. American Journal of Psychiatry, 118, 1045-1046.
- Solley, C.M. (1966). Affective processes in perceptual development. In A.H. Kidd & J.L. Rivoire (Eds.), Perceptual development in children (pp. 275-304). New York: International Universities.
- Solomon, A. (1981, June). Animals and children: The role of the pet. Canada's Mental Health, pp. 9-13.
- SPSSX user's guide. (1983). New York: McGraw-Hill.
- Steinberg, L.D. (1980). Understanding families with young adolescents. University of North Carolina at Chapel Hill, Center for Early Adolescence.
- Stephenson, P.S. (1973). Working with 9-to-12-year-old children. Child Welfare, 52, 375-382.
- Stephenson, W. (1953). The study of behavior: Q technique and its methodology. Chicago: University of Chicago Press.

- Stephenson, W. (1967). The play theory of mass communication. Chicago: University of Chicago Press.
- Stephenson, W. (1980). Newton's fifth rule and Q methodology. American Psychologist, 35, 882-889.
- Sullivan, H.S. (1953a). Conceptions of modern psychiatry. New York: Norton.
- Sullivan, H.S. (1953b). The interpersonal theory of psychiatry. New York: Norton.
- Talbot, A.D. (1971). Q technique and its methodology: A brief introduction and consideration. New York: American Educational Research Association. (ERIC Document Reproduction Service No. ED 060-040).
- Templer, D.F. (1981). The construction of a pet attitude scale. Psychological Record, 31, 343-348.
- Thornburg, H.D. (1980). Early adolescents: Their developmental characteristics. The High School Journal, 63, 215-221.
- Thornburg, H.D. (Ed.). (1974). Preadolescent development. Tucson: University of Arizona Press.
- Tuan, Y.F. (1984). Dominance and affection. New Haven, CONN: Yale University.
- Turner, J. (1980). Reckoning with the beast: Animals, pain, and humanity in the Victorian mind. Baltimore: Johns Hopkins University,

- Van Leeuwen, J. (1981). A child psychiatrist's perspective on children and their companion animals. In B. Fogel (Ed.), Interrelations between people and pets (pp. 175-194). Springfield, IL: C.C. Thomas.
- Veevers, J.E. (1985). The social meaning of pets: Alternative roles for companion animals. In M.B. Sussman (Ed.), Pets and the family (pp. 11-26). New York: Haworth.
- Voith, V.L. (1983, June). Behaviors, attitudes, and interactions of families and their dogs. Paper presented at the Conferences on the Human-Animal Bond, Irvine, CA and Minneapolis, MINN.
- Waltz, C., & Bausell, R.B. (1981). Nursing research: Design, statistics, and computer analysis. Philadelphia: F.A. Davis.
- Waters, E., Garber, J., Cornal, M., & Vaughn, B.E. (1983). Q-sort correlates of visual regard among preschool peers: Validation of a behavioral index of social competence. Developmental Psychology, 19, 550-560.
- Webster's New World Dictionary. (1984). New York: Simon & Schuster.
- Wessman, A., & Ricks, D.F. (1966). Mood and personality. New York: Holt, Rinehart, & Winston.
- Whaley, L.F., & Wong, D.L. (1979). Nursing care of infants and children. St. Louis: C.V. Mosby.
- Williams, J.W., & Stith, M. (1974). Middle childhood: Behavior and development. New York: Macmillan.

- Williams, R.L., & Workman, E.A. (1978). Development of a behavioral self-concept scale. Behavior Therapy, 9, 680-681.
- Willie, R.L. (1982). A study of the relationship between pet ownership and health status. Proceedings of the 5th Annual Research Conference, VA Medical District #17, 1, 14.
- Wolfe, J. (1977). The use of pets as transitional objects in adolescent interpersonal function. Dissertation Abstracts International, 38, 239B. (University Microfilms No. 7724135).
- Wylie, R.C. (1974). The self-concept (Vol. 1). Lincoln: University of Nebraska Press.
- Youniss, J. (1980). Parents and peers in social development. Chicago: University of Chicago Press.

APPENDIX A

Parents' Cover Letter

Dear Parent(s),

I am currently completing my doctorate in Educational Psychology at Loyola University. I would like permission for your child to participate in a study of children's relationships with their family dog. Your child is being asked to participate because he or she is 10- to 12- years of age and attends middle school. Since little is known about children's relationships with pets, your participation will be very valuable.

Your child will be asked to complete a short questionnaire to identify age, sex, number of siblings, type of dog owned, and things the child does with the dog. Two self-concept measures will also be used. A dog care checklist asks for which family member assumes responsibility for taking care of feeding, grooming, etc. The last activity is a card sort exercise where the child places statement cards into groups pertaining to his or her affective relationship with the dog.

You are free at anytime to withdraw permission for your child to participate in the study. Additionally, your child may withdraw from the study if he or she expresses the desire to do so. Withdrawing of consent will not affect the child's treatment in school. The three one hour sessions will be scheduled so that they do not interfere with classroom activities. There will be no measures of the child's intelligence or achievement.

No identifying information will be included in this study. Children's responses will be coded to ensure confidentiality. The study has been approved in full by the Graduate School, Loyola University of Chicago.

I will be glad to answer any questions about the study at (312) 943-0113.

If you grant permission for your child to participate, his or her permission will also be obtained. Children, age 7 and above, are considered of age to give assent in conjunction with their parent(s). A copy of the child's letter is attached. Please ask your child to sign his or her form. The parent is also asked to sign both forms. The attached forms should be returned to the child's teacher at your earliest convenience.

Thank you for your help.

Janet H. Davis

Child's Cover Letter

Dear Student,

Your parent(s) have said that you can help me in my study. I would like to know what children of your age think about the dog you have at home. You can help me by answering some questions about being a student, what you do with the dog, and what you think about the dog.

If you would like to help me, please sign the attached form. Your parent(s) will also sign this form.

Return the signed form to your teacher.

Thank you.

Sincerely,

Janet H. Davis

Parent/Child Informed Consent

Project Title: Children's Relationships with the Family
Dog

I, the parent or guardian of _____, a
minor, _____ years of age, consent to his/her participation
in a program of research being conducted by Janet H. Davis.

I understand that no risk is involved and that I may
withdraw my child from participation at any time without
prejudice.

(Signature of Parent)

Date _____

I agree to help in the study.

(Signature of Child)

(Signature of Parent)

APPENDIX B

Rosenberg's Perceived Self-Concept Indicators

CIRCLE ONE answer to each of the following questions.
This is not a test and there are no right or wrong answers.

1. Would you say your mother thinks you are:

- A wonderful person
- A pretty nice person
- A little bit of a nice person
- Not such a nice person

2. Would you say your father thinks you are:

- A wonderful person
- A pretty nice person
- A little bit of a nice person
- Not such a nice person

3. Would you say your teachers think you are:

- A wonderful person
- A pretty nice person
- A little bit of a nice person
- Not such a nice person

4. Would you say kids in your class think you are:

- A wonderful person
- A pretty nice person
- A little bit of a nice person
- Not such a nice person

5. Would you say your family dog thinks you are:

- A wonderful person
- A pretty nice person
- A little bit of a nice person
- Not such a nice person

6. How much do boys like you?

Very much Pretty much Not very much Not at all

7. How much do girls like you?

Very much Pretty much Not very much Not at all

8. How much does your family dog like you?

Very much Pretty much Not very much Not at all

Perceived Self-Concept Scoring Criteria

Questions 1 - 8:

Questions 9 - 12:

Positive ResponsesA wonderful person
Very muchAll positive or
positive and
neutral commentsNeutral ResponsesA pretty nice person
Pretty much
Not very muchPositive,
negative,
and neutral
commentsNegative ResponsesA little bit of a nice person
Not such a nice person
Not at allAll negative or
negative and
neutral comments

APPENDIX C

Dog Ownership History Questionnaire

1. Your Age _____
2. Your Birthdate _____
(Month, Day, Year)
3. Your Sex: Male ___ Female ___
4. Put a CHECK by the family members that You live with:
 - Father ___
 - Mother ___
 - Brother(s) _____ Their ages: _____
 - Sister(s) _____ Their ages: _____
 - Others _____
5. How long has your family had this dog?
CHECK ONE: Under 1 year ___ Over 1 year ___
6. Type/Breed of dog: _____
7. Dog's Sex: Male ___ Female ___
CIRCLE ONE
8. How important is the family dog in your life?
Very Important
Important
Unsure
Unimportant
Very Unimportant
9. How much like a person is this dog to you ?
Very Much
Some
Unsure
A Little
None

CHECK ONE ANSWER TO THE FOLLOWING

10. Do you keep a picture of the dog? Yes ___ No ___
11. Do you celebrate the dog's birthday? Yes ___ No ___
12. Do you give the dog presents on holidays? Yes ___ No ___
13. Do you sleep with the dog?
Yes, in my bed ___ Yes, in my room ___ No ___
14. Who in your family most wanted to get a dog?
Me ___ Father ___ Mother ___ Brother/Sister ___
15. Why did this person want to get the dog?

16. Who named the dog?
Me ___ Father ___ Mother ___ Brother/Sister ___
Nobody, it had a name when we got it ___

APPENDIX D

Dog Care Responsibility Inventory

Who do you think each of these statements is most true of?
 For each of these, put an "X" in the box under one of the
 answers - Me, Mom, Dad, Brother/Sister

WHO DOES THESE THINGS?	ME	MOM	DAD	BROTHER/ SISTER
1. First notices when dog is hungry/thirsty				
2. First notices when dog is sick				
3. First notices when dog wants to go out				
4. Usually brushes dog				
5. Usually cleans up after dog				
6. Usually fixes dog's meals				
7. Usually gives dog medicine/vitamins				
8. Usually gives dog "treats"				
9. Usually goes to the vet with dog				
10. Usually looks for dog when it's lost				
11. Usually makes dog behave				
12. Usually plays with dog				
13. Usually takes care of dog				
14. Usually takes dog along when going outside				
15. Usually teaches dog new things				
16. Usually walks dog				
17. Usually washes dog				
18. Usually watches out for dog				

APPENDIX E

Pet/Friend Q-Sort Statements

1. I believe you help me feel better when I'm lonely
2. I believe you help me feel better when I'm sad
3. I believe you help me feel better when my feelings are hurt
4. I believe you help me feel better when people are mad at me
5. I can act crazy with you
6. I can be myself with you
7. I can depend on you
8. I can feel sorry for you
9. I can make you feel angry
10. I can make you feel happy
11. I can make you feel liked
12. I can make you feel loved
13. I can make you feel needed
14. I can make you feel safe
15. I can make you feel special
16. I can make you feel wanted
17. I can make you smile inside
18. I can take care of you
19. I can talk to you about real personal things
20. I can trust you
21. I care about how you feel
22. I daydream about you
23. I depend on you
24. I do things with you even when I don't really want to
25. I dream about you

26. I feel happy when you do
27. I feel relaxed with you
28. I feel responsible for you
29. I feel sad when you do
30. I feel understood by you
31. I feel you give me something to care about
32. I feel warm towards you
33. I forgive you if you hurt me
34. I go to you when I'm bored
35. I go to you when I'm lonely
36. I go to you when I mess up
37. I have secrets with you
38. I know what you need
39. I know what you want
40. I like to play with you
41. I like to spend time with you
42. I like you just the way you are
43. I like you more than anyone else
44. I love you
45. I love you more than anyone else
46. I miss you when you are away from me
47. I protect you
48. I show you how to behave
49. I teach you how to be kind
50. I teach you how to be nice
51. I teach you how to be patient
52. I teach you how to love people

53. I teach you what I like
54. I think you are entertaining
55. I think you are funny
56. I think you are interesting to be around
57. I think you are smart
58. I understand how you feel
59. I understand what you tell me
60. I worry about you

APPROVAL SHEET

The dissertation submitted by Janet Haggerty Davis has been read and approved by the following committee:

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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree Doctor of Philosophy.

9/24/86

Date

Anne M. Juhasz

Director's Signature