

This is to certify that the

thesis entitled

THE AFFECTS OF HEALTH STATUS ON THE SCHOOL CHILD'S PERCEIVED SELF COMPETENCE

presented by

Patricia Ann Ward

has been accepted towards fulfillment of the requirements for

Master of Science degree in Nursing

Lackel & Schiffman Major professor

Date 4-7-94

O-7639

MSU is an Affirmative Action/Equal Opportunity Institution



LIBRARY Michigan State University

PLACE IN RETURN BOX to remove this checkout from your record. TO AVOID FINES return on or before date due.

DATE DUE	DATE DUE	DATE DUE
2/6/96		
Tallies.		
- 150 (S 250)	:3	
3.		

MSU is An Affirmative Action/Equal Opportunity Institution ctchridetedus.pm3-p.1

THE AFFECTS OF HEALTH STATUS ON THE SCHOOL AGE CHILD'S PERCEIVED SELF COMPETENCE

Ву

Patricia Ann Ward

A THESIS

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

MASTER OF SCIENCE

College of Nursing

1994

ABSTRACT

THE AFFECTS OF HEALTH STATUS ON THE SCHOOL AGE CHILD'S PERCEIVED SELF COMPETENCE

Ву

Patricia Ann Ward

Although there is research discussing healthy school age children and their perception of self competence, there is less research that discusses chronically ill school age children and their perception of self competence. The purpose of this study was to determine if the health status of school age children affects their perceived self competence. The sample of the secondary analysis consisted of twenty-eight children with a chronic illness and fourteen healthy children. The instrument was Harter's (1985) Self Perception Profile for Children. There were no significant differences in the six domains of perceived self competence between the chronically ill and healthy children. Both groups scores were toward the low end indicating low self competence. The results imply that an accurate self perception of chronically ill/healthy children will guide appropriate nursing interventions.

ACKNOWLEDGEMENTS

I would like to take this opportunity to express my gratitude and appreciation to some of the individuals who helped in my completion of this thesis. First, I would like to thank my committee members. Rachel Schiffman, RN, PhD, for serving as chairperson and a source of continued support. In addition, I want to thank Carla Barnes, PhD, Linda Spence, RN, PhD, and Patty Peek, RN, MSN, for their support and guidance.

I would also like to express my love and appreciation to my parents Pat and Bill Diskin for their support. All my love to my children Michael, Clint, and Teresa for their patience, love, and understanding.

And finally my greatest appreciation and love goes to my husband, Lon for his constant encouragement and belief in me.

TABLE OF CONTENTS

	Page
CHAPTER I: THE PROBLEM	
	1
Introduction	3
Purnose	4
Purpose	4
Definition of Concepts	4
Perceived Self Competence	4
Health Status	
Chronic Illness	6
Healthy	7
School Age Children	,
Overview of the Chapters	,
The tree of the chapters	,
CHAPTER II: CONCEPTUAL FRAMEWORK	
	Ω
Introduction	ο
Personal System	0
Interpersonal Systems	0
Perceptions	
Perceptions	10
Judgment	11
Action	11
Transaction	11
Relationship of King's Model to Perception of Self Competence	11
Self Competence	!!
Summary	15
NUADTED III DENIEN OF THE LITERATURE	
CHAPTER III: REVIEW OF THE LITERATURE	1.0
Introduction	16
Review of the Literature	
Parents' Perception	
Peers' Perception	21
Teachers' Perception	23
Implications for the Present Study	27
Summary	28
CHAPTER IV: METHODS	
Introduction	29
Design	29
lypotheses	29
Operational Definitions	30
Perceived Self Competence	

TABLE OF CONTENTS (continued)

Health Status	•			•	•			31
Sample								31
Data Collection								
Instrumentation								
Instrument Reliability								33
Intercorrelations among Subscales					•			35
Data Analysis								
Assumptions		·	•	•	•	•	•	36
Limitations								
Protection of Human Rights								
Summary								
	•	•	•	•	•	•	•	30
CHAPTER V: RESULTS								
Introduction								37
Results								
Family Member Characteristics								
Group Differences in Perception of Self Competence .	•	•	•	•	•	•	•	3/
Summary	•	•	•	•	•	•	•	41
CHAPTER VI: DISCUSSION AND IMPLICATIONS								
Introduction								42
Introduction	•	•	•	•	•	•	•	42
Summary of Findings								
Comparison to Previous Studies								
Limitations of the Study								
Implications for Nursing Practice			•	•		•		46
Implications for Future Research								50
Conclusion	•	•	•	•	•	•	•	51
REFERENCES	•		•	•	•	•	•	52
APPENDIX			_		_			56

LIST OF TABLES

		P	age
1	Frequency and Percent of Age of Subjects	•	32
2	Reliability Analysis for Harter's Self Competence Scale	•	32
3	Means and Standard Deviation of Subscales Scores of Chronically Ill and Healthy Children	•	39
4	One Way Analysis of Variance for Difference Between Mean Scores of Chronically Ill and Healthy Children and Perception of Self Competence		39

LIST OF FIGURES

										Pa	ıge
1	Process of Human Interactions										13

CHAPTER I

THE PROBLEM

Introduction

Chronic illness in children today is a major health concern. It is estimated that 7.2 to 10.8 million children, between 15 to 20 percent of the American children under the age of 18, have a chronic condition (Gortmaker & Sappenfield, 1984). The survival of children with a variety of chronic diseases has shown considerable change over time. Due to tremendous advances in medical care there is an increase in the number of children with chronic illness who survive to adulthood.

The increase in the number of children with chronic illness raises important issues as chronic illness may significantly interfere with a child's physical and emotional development. A chronically ill child may not be able to engage in routine activities which may alter his/her perception of self competence. This in turn may produce feelings of aggressiveness, withdrawal, and low self esteem (Voorhorst-Smeek, 1977). Since chronic illness is a lifelong condition, a child's self perception in relationship to his/her illness has a profound impact on his/her well-being.

By the time the child reaches school he/she has the ability to verbalize and distinguish self competence in different domains.

Developmental data suggest that children focus on concrete observable aspects of self such as physical attributes and behaviors. Older children describe themselves in terms of labels such as smart and dumb. In defining self, adolescents use thoughts, attitudes, and emotions (Harter, 1987).

Although there is research discussing healthy school age children and self competence there is less research that discusses chronically ill school age children and their self competence. It is important to determine if the health status of a child alters his/her perceptions of self competence.

Studies by Lawler, Nakielny and Wright (1966), McCollum and Gibson (1970), Tropauer, Franz and Dilgard (1970), and Voorhorst-Smeek (1977) found some negative effects that chronic illness has on a child's self esteem. This research indicated children with chronic illness have low self-worth, feelings of inferiority, and frustration (Voorhorst-Smeek, 1977). McCollum and Gibson (1970), concluded that 44 percent of the children with cystic fibrosis had adjustment difficulties during the first year of school and had difficulty in developing peer relationships. Lawler et al. (1966) found that children with cystic fibrosis have increased anxiety and low school achievement.

Many of the surveys, conducted to determine a child's perception of self competence, were assessed by asking a mother's, father's, or teacher's perception of the child, rather than the child himself/herself (Brown, 1986; Gayton, Friedman, Tavormina & Tucker, 1977; Heilveil & Schimmel, 1982; Kashani, Konig, Shepperd, Wilfley, & Morris, 1988; Simmons, Corey, Cowen, Keenan, Robertson & Levison, 1987; Tropauer, 1970). Yet other studies (Droter, Doershuk, Stern, Boat, Boyer & Matthews, 1981; Noll, Leroy, Bukowski, Rogosch & Kulkarni, 1991; Orr, Weller, Satterwhite & Pless, 1984; Stein & Jessop, 1984) suggest that chronically ill children can cope reasonably well with life tasks and that emotional disturbance is not an inevitable consequence of a chronic illness. Noll et al. (1991) explored peer relationships in children

with cancer. This study found children with cancer were equally popular among peers, and did not report a poorer self concept. Still other studies suggest that a child's perception of competence is determined by family relationships (Mattson, 1975); sibling relationships (Gallo, 1988); severity of the ill child's observable symptoms (Healey, McAreavey, Saaz Von Hippel & Jones, 1978); and peer acceptance (Potter & Roberts, 1984).

Statement of the Problem

Much of the research that deals with the self competence of chronically ill school age children resulted in negative findings. Since these children are affected by chronic illness, it has been surmised that chronic illness leads to poor self esteem, poor scholastic performance, and psychological maladjustment. Many of the surveys, conducted to determine a child's perception of self competence, were assessed by asking a mother's, father's, or teacher's perception of the child, rather than the child himself/herself (Brown, 1985; Gayton et al., 1977; Heilveil & Schimmel, 1982; Kashani et al., 1988; Simmons et al., 1987; Tropauer et al., 1970). Few studies have directly surveyed the chronically ill child about his/her perceived competence to determine whether their self perception differs from that of healthy children.

A second problem with this area of research is that self competence is not universally defined. There are multiple definitions of self competence which make interpretation of findings confusing and inconsistent. Some of the self competence measures concentrate on skills and achievements, others tap morality, physical appearance, likability, and acceptance by parents (Harter, 1987). "We cannot always

accept the premise that self esteem is what self esteem scales measure" (Harter, 1987, p.321). Socially desirable answers, multiple factors, and unreliable factorial clusters are other problems associated with self esteem instruments.

Developmental theorists propose that successful development of self competence is a crucial task for the school age child. The research that discusses perceived competence of chronically ill children often only addresses one area of competence, rarely are the children questioned directly, and few studies use healthy children as a control. Since there is scant research that assesses perceived competence of healthy school age children it is incorrect to suggest that chronically ill children differ from healthy children in their perceived competence.

<u>Purpose</u>

The purpose of this study was to determine if health status of school age children affects their perceived health competence. The results of this study will assist in planning appropriate child centered interventions. These interventions will facilitate ways to improve perceived competence or strengthen an already healthy perceived competence.

Research Question

The following question will be addressed: Does health status of school age children influence their perception of self competence?

Definition of Concepts

Perceived Self Competence

Perceived competence is not well defined in literature. The definitions vary from narrow to very broad. Competence is one dimension of self evaluation, a feeling of being able to cope with problems or

meet goals. Children with a sense of competence feel responsible for their own action, have a positive attitude to problem solving and tend to achieve success (Reasoner, 1983).

Self esteem is termed global self worth by Harter (1987). Global self worth is a construct, namely an overall judgment about one's worth as a person. Harter selected perceived self competence because the term emphasizes the child's perception of his/her competence. Global self worth is assessed by its own independent set of questions, whereas perceived competence is assessed by domain specific judgments. By separating domain specific judgments of competence from the more global judgment of one's worth as a person, a view of the relationship between specific competencies and global self worth is provided. Harter developed a model of self evaluation for children which is an integration of both perceived competence of specific domains and an individual's overall sense of self worth.

Harter hypothesized that children age eight and older make discrete judgments about their competence in different domains and have constructed a view of their general self worth as a person. Harter also suggests that judgments about one's self worth are not inferred from the summation of responses to questions tapping a wide range of specific abilities. Instead, judgments are tapped by items which directly inquire into how much the individual likes himself/herself as a person (Harter, 1982). During the development of her scale, Harter struggled with the question of whether to consider self esteem to be a global evaluation or whether to focus on the evaluations in separate domains. The solution was to combine both ideas. The Self-Perception Profile for Children (1985) would be sensitive to domain specific perceptions of

competence and allow for a determination of one's global self esteem over and above one's domain specific perception of competence (Harter, 1982).

The primary goals of the Perceived Self Competence Scale are to: (a) provide a profile of the child's perceived competence in the cognitive, social, and physical domains; (b) tap the child's sense of general selfworth; (c) reveal a sound factor structure indicating that these dimensions are psychologically meaningful; and (d) minimize the influence of socially desirable responses (Harter, 1982).

Harter (1984) identified six domains of self competence: (1) scholastic emphasis on academic performance—doing well at school work, being smart; (2) social competence—having lots of friends, being an important member of one's class; (3) physical appearance—looking good and feeling attractive; (4) athletic competence—doing well at sports, learning new outdoor games readily; (5) behavioral conduct—feeling good about the way one acts; and (6) general self—worth—being sure of one's self, being happy with the way one is, thinking one is a good person. For purposes of this study these six domains will define the concept of self competence.

Health Status

Health status is defined as either having a chronic illness or being healthy.

Chronic Illness. Chronic illness is defined as an illness characterized by long duration, a need for specialized health care services, potentially limited life expectancy, and either no known cure or uncertain prognosis (Stein & Jessop, 1984). In this study the

chronic illnesses included asthma, cystic fibrosis, diabetes, and congenital cardiac disorders.

<u>Healthy</u>. Healthy is defined as a condition of physical well being and an absence of disease and developmental disabilities.

School Age Children. A school age child is defined as a child between the age of eight and twelve years. It is during this period that a sense of competence about one's self leads to self esteem and is a crucial task of the school age child. The major task of the school age child is to acquire knowledge and skills that potentiate self-direction, responsibility and self esteem through developing a sense of competence.

Overview of the Chapters

In Chapter I an introduction, background, and statement of the problem is discussed. Also included is the purpose of the study, definition of concepts, and research question. In Chapter II the conceptual framework and how it relates to the problem will be discussed. In Chapter III a review and critique of the literature pertinent to the study will be discussed. Chapter IV includes the methodology. Research findings and data analysis are discussed in Chapter V. Chapter VI contains a summary and interpretation of the results. Also implications for nursing practice will be presented.

CHAPTER II

CONCEPTUAL FRAMEWORK

Introduction

The nurse in advanced practice has the knowledge base to act in many roles such as clinician, patient advocate, change agent, consultant, educator, and resource person. The primary care nurse brings special skills, knowledge, and professional values to provide nursing care to children. In Chapter II, Imogene King's Theory of Goal Attainment will be discussed. Also discussed will be how the conceptual framework utilized in this study assists advanced practice nursing.

Conceptual Framework

The conceptual framework for this study was based on Imogene King's theory of nursing. King's theory was especially applicable because it included concepts of perception, self, body image, growth, and development. King defines nursing as a process of action, reaction, and interaction, whereby nurse and client share information. This information sharing through purposeful communication helps to identify specific goals, problems, or concerns. King's theory of goal attainment is completed when the nurse-client relationship results in achievement of mutually agreed upon goals.

King (1981) identifies three levels in her conceptual framework: personal systems (individuals); interpersonal systems (groups); and social systems (society). Perceptions, goals, needs, and values of the nurse and client, influence the systems' interaction process.

Personal System

The personal system "consists of an individual's perception of self, of body image, of time and space, and influence the way he or she

responds to person's objects, and events in his or her life" (King, 1981, p.19). As individuals grow and develop through the life span, experiences with changes in the function of their bodies over time influence their perceptions of self. This concept has special relevance to the children as they are experiencing physical as well as developmental changes. All school age children, both healthy and chronically ill, develop a perception of self which influences and is influenced by their interpersonal and social systems.

Interpersonal Systems

The interpersonal systems consist of two or more persons interacting in concrete situations. "The process of interactions between two or more individuals represents a sequence of verbal and non-verbal behaviors that are goal directed" (King, 1981, p.60). Each individual brings personal knowledge, needs, goals, expectations, perceptions, and experiences that influence interactions. Both individuals mutually identify goals and the means to achieve them.

Nursing is a process of action, reaction, and interaction whereby the nurse and client share information about the perception of the problem. In order for the nurse to successfully assist the school age child in mutual goal setting she must understand the child's personal system. It is also essential for the nurse to have knowledge of the child's perception of self if the two systems are to mutually achieve goal attainment.

King's theory of goal attainment is based on the open systems framework. Although personal systems and social systems influence the quality of care, the major elements of goal attainment are the

interpersonal systems where the client and nurse work together for the purpose of maintaining health.

King's theory of goal attainment is especially applicable to both chronically ill and healthy school age children because it addresses each child as an individual. This theory describes a standard for nurse-patient interaction where nurses purposefully interact with clients to mutually establish goals and to explore and agree on means to achieve goals. "Mutual goal setting is based on nurse's assessment of client's concerns, problems, and disturbances in health, their perceptions of problems, and their sharing information to move toward goal attainment" (King, 1981, p.142).

In constructing King's theory of goal attainment a definition of nursing was formulated. Nursing is a process of human interaction between nurse and client whereby each perceives the other and the situation; and through communication, they set goals, explore means, and agree on means to achieve goals (King, 1981). The interactions between the nurse and child consist of perceptions, judgments, actions, interactions, and transaction.

<u>Perceptions</u>

"Perception is a process of organizing, interpreting, and transforming information from sense data to memory" (King, 1981, p.24). It gives meaning to one's experience, represents one's image of reality, and influences one's behavior. This research study proposes that school age children have the cognitive capacity for self-perception. In accordance with King's theory, the nurse must have knowledge of the child's perception if they are to assess, interpret, and plan for the child's achievement of goals.

Judgment

Action

The concept "judgment" is not well defined in King's theory of goal attainment. It is not that judgments are "not directly observable".

Judgment is a direct result of the interpretation of perception.

"Human acts are interpreted as actions" (King, 1981, p.59). When two individuals come together for a purpose, such as the nurse an client, they each perceive the other person and the situation, make judgments, then make a decision to act.

Transactions

Transaction is defined as "observable behavior of human beings interacting with their environment" (King, 1981, p.747). Transaction includes both the transfer of information and value between two or more persons. This exchange between two people involves bargaining, negotiating, and social exchange.

Transaction is the last step in King's human interaction theory.

The nurse and the child mutually identify goals and the means to achieve them. When they agree to the means to implement the goals they move toward transaction and goal attainment.

Relationship of King's Model to Perception of Self Competence

King's theory of goal attainment can successfully be applied to both healthy and chronically ill school age children. The concepts of growth, development, self, and body image, are an integral part of body structure and functions. The concepts are important in understanding child development. King's theory of goal attainment can successfully be applied to chronically ill and healthy school age children in developing

or reinforcing positive competence. This study addresses the boxed portion of the model as noted in Figure 1.

The concepts described in King's personal system are the basis for how a healthy or chronically ill school age child will interact in their personal and interpersonal systems. Perceptions and feelings about self competence have a profound effect on one's self esteem. "Self is an integral part of a person's human experiences. If these experiences are positive, the self is enhanced; if negative, the self may need assistance" (King, 1981, p.27).

This study looked at the effects of health status on the school age child's perception of self competence. King's theory was especially applicable to this study as King's human interaction begins with the concept of perception.

Perception is the basis for nursing intervention. Perception is each child's representation of reality. It is each child's subjective world of experience (King, 1981). A healthy or chronically ill school age child begins perceiving his/her self competence in areas such as athletic ability, cognitive, physical appearance, social acceptance, and self worth. A child's perception of his/her self competence is influenced by current needs, interests, role in the family, illness, and goals. Each child perceives his/her self competence differently. The child's perception is the focus of this study.

Likewise the nurse also is perceiving the child's sense of competence based on subjective and objective data in order to obtain perceptual accuracy. An important element in nurse-patient interactions is accurate perceptions of each by the other. This accurate perception is a first step toward exploring means to move toward those goals (King,

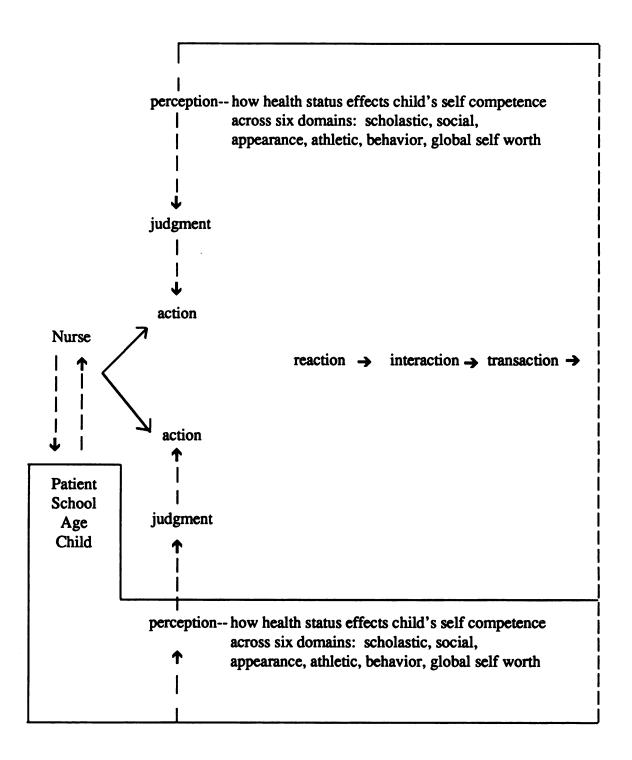


Figure 1. Process of Human Interactions Adapted from King (1981) p. 145.

1981). However, the nurses' perception will not be addressed in this study.

Next, the child makes a judgment based on his/her perception of self competence. The healthy and chronically ill child may have varying degrees of self competence in various domains of his/her life. In turn the child's actions are directly related to his/her self competence.

The nurse has also made a judgment of the child's self competence based on his/her perception of the situation. This judgment provides a basis for the course of action the nurse and client plan for together.

Interaction is a process of communication between nurse and child and is represented by verbal and non-verbal behaviors that are goal directed. During the process the nurse and client mutually identify goals and plan for active participation in implementing the means to achieve them.

Transaction is the last step of the human process. It is achievement of the goal set by the child and nurse. Transaction is the combining efforts of bargaining, negotiating, and social exchange. Together the nurse and child have perceived and communicated for the purpose of mutual goal attainment.

Perceived competence of a chronically ill and healthy child must be assessed on a continuous basis. In order for the transaction to be effective it must operate as an open system which is continuously being re-evaluated. This allows feedback which monitors the right course of action for goal attainment.

King's theory of goal attainment is especially applicable to all children because the school age child should be an active participant in his/her health care. In order for goal attainment to be successful it

must begin with a child's perception of competence in specific areas of his/her life.

Summary

Imogene King's theory of goal attainment was the conceptual framework used for this study. The two levels of the conceptual framework, personal system and interpersonal system, were discussed. The theory of goal attainment in relation to perception was also discussed. A review of the literature will be presented in Chapter III.

CHAPTER III

REVIEW OF THE LITERATURE

Introduction

In this chapter, literature pertinent to the study of the health status of school age children and their perception of self competence is discussed. Much of the literature that addresses self competence of chronically ill and healthy children usually addresses how self competence is affected in one domain or area of a child's life such as scholastic ability or social acceptance. Other studies obtain a child's perception of self competence by asking parents, teachers or peers. How literature addresses self competence of children as viewed from parents, teachers, peers, healthy, and chronically ill children is also presented in the chapter.

Review of the Literature

In assessing children's self perception of competence Noll et al. (1991) and Spirito, Stark, Cobiella, Drigan, Androkites, and Hewett (1990) were able to combine three essential components in their studies of children's perception of competence. These included a healthy control group, a self report instrument, and assessing competence in specific areas rather than a general area using Harter's Perceived Competence Scale for Children (1985). Noll et al. (1991) explored peer relationships in children with cancer. Comparisons were made between children with cancer and matched healthy comparison children on dimensions of social reputation, interpersonal acceptance, self perception of competence and feelings of self worth, and number of child's mutual friendships. This study was conducted in two phases and used the following five questionnaires: (1) Revised Class Play (RCP);

(2) Sociometric Questionnaire; (3) Liking Rating Scale; (4) Loneliness Scale; and (5) Harter's Perceived Competence Scale for Children/Adolescents. The Self-Perception Profile for Children/Adolescents was completed by each child with cancer and his/her matched control peer group. The peer group was not asked to rate cancer patients, but to rate their own perception of self competence using Harter's six domains.

The findings as related to self competence indicate there were no significant differences found on the six subscale scores of Harter's Self Perception Profile Scale. Therefore children with cancer and their healthy peers perceived themselves in like ways on self competence.

A study by Spirito et al. (1990) investigated the social development of children as perceived by parents, teachers, and children themselves. The children were between the ages of five and twelve years, and included a healthy control group and a group of children completing cancer treatment. The children in the Spirito et al. (1990) study completed two instruments: Harter's Perceived Competence Scale for Children and the Social Skills Questionnaire. A MANOVA using the six subscales of the Perceived Competence Scale for Children did not reveal a significant difference between cancer patients and healthy children on their perception of self competence.

Simmons et al. (1987) explored how cystic fibrosis children coped, as reflected by their behavior. This study included 126 cystic fibrosis children ages six through eleven years, their parents, and siblings. Each patient was asked to complete a Piers-Harris Children's Self Concept Scale and the Children's Health Locus of Control. The siblings were asked to complete the Piers-Harris Children's Self Concept Scale.

The parents were asked to complete the Achenback Children's Behavioral Checklist and the Family Assessment Measure.

In the Simmons et al. (1987) study, children from six to eleven years with cystic fibrosis showed the stress of having a physical disorder by increased behavioral problems which was more marked in males than females, as compared to their non-cystic fibrosis sibling age mates. The behavioral problems are of an internalizing nature such as depression, social withdrawal, and aggressiveness. This tendency toward internalizing behavior suggests that children with a chronic illness worry about the future even though they may deny such concerns. "This denial allows them to function, as shown by the normal social competence scores" (Simmons et al., 1987, p.299). However, the good self concept scores indicate that the six through eleven year old cystic fibrosis children successfully adapt to preserve a normal self-image. The discussion of both the self concept scores and behavior problems of these children gave the impression of an internal struggle they encounter to continue to function in daily life.

A study by Thompson et al. (1990), utilized three groups: children with cystic fibrosis and comparison groups of psychiatrically referred (children who were psychiatric clinic outpatients/inpatients, not psychotic), and non-referred children (healthy school age children). The age of the participants was six to seventeen years old. An interview was conducted using the Child Assessment Schedule (1982). The answers were self-reported from the child. The results of this study revealed that the cystic fibrosis group did not differ significantly from non-referred group in terms of total scores in the content area of friends, family, worries, mood, somatic concerns, and expression of

anger. It was only in terms of the internalizing symptom of worries, self-image, and anxiety, particularly separation anxiety, that the children with cystic fibrosis demonstrated symptom levels comparable to that of psychiatrically disturbed children.

Gayton et al. (1977) studied families of children with cystic fibrosis. The subjects were drawn from forty-three families which included parents, healthy siblings and children with cystic fibrosis. The patients and siblings between the ages of five and thirteen years were tested with the Piers-Harris Self Concept Scale, Missouri Children's Picture Series, and Holtzman Inkblot Test.

The test results for patients and siblings were analyzed by comparing these two groups with each other. No significant differences were found between the means of the young patients and siblings on either the Piers-Harris Self Concept Scale or the Missouri Children's Picture Series. Gayton was confident in suggesting that the overwhelming majority of children with cystic fibrosis did not present themselves as emotionally disturbed on either instrument.

Heilveil and Schimmel (1982) hypothesized that children with asthma would score lower than a normative sample on an objective measure of self esteem. The sample consisted of thirty-six children ranging in age from eight to eighteen years. All the subjects were administered the Piers-Harris Self Concept Scale. The asthmatics did not differ significantly from normal children in overall self concept.

Three groups of children with asthma were studied by Panides and Ziller (1981) to determine the differential effects of the disease on perception of self. All subjects in the study were administered the Self-Other Schema (SOS), a Self-Complexity Index (SCI) and a Problem

Behavior Checklist (PBC) Inventory. The study found that children with asthma/enuresis appear to be at a higher risk for low levels of self esteem, feel less preferred by their parents than siblings, lower levels of perceived satisfaction which may lead to psychosocial consequences for these children. However, children with mild asthma had better self esteem, were less dependent upon their mothers than the severe asthmatics, and were equally preferred by their parents when compared to their siblings (Panides, 1981). This study suggested that the severity of asthma was correlated to perception of self esteem. The greater the severity, the less self esteem.

Gayton et al. (1977) and Simmons et al. (1987) utilized the "family" approach in their investigation. They questioned parents, healthy siblings, and chronically ill children. There were no same age control group in these studies. Panides and Ziller (1981) studied children with various degrees of severity of asthma to determine perception of self esteem. Again there were no same age healthy comparison group. Thompson et al. (1990) utilized three groups of children including a healthy and chronically ill children in their studies. They also used a self report instrument that measures perception of self competence in six specific domains of a child's life.

Parents' Perception

Many studies addressing self competence of chronically ill and healthy school age children have been based on reports from parents (Drotar et al., 1984; Gayton et al., 1977; Hazzard & Angert, 1986; Kashani et al., 1988; Mulhem, Wasserman, Friedman, & Fairclough, 1989; Sawyer, Crettendon, & Toogood, 1986; Simmons et al., 1987; Tropauer et al., 1970; Noll et al., 1991), from teachers (Drotar et al., 1984;

Spirito et al., 1990), and from peers (Healey et al., 1978; Noll et al., 1991; Potter, 1984). Parent responses in the studies by Kashani et al. (1988) and Tropauer et al. (1977), indicated that parents saw their children at greater risk for lower self esteem. Kashani et al's. (1988) study also found that the asthmatic children had a greater number of psychiatric symptoms. Tropauer et al. (1970) found that parents described cystic fibrosis children as exhibiting behavioral difficulties that include excessive dependence, disciplinary problems, over sensitivity and shame regarding the disease. Simmons et al. (1987) found that twenty-three percent of the children with cystic fibrosis were reported by their parents to have behavioral adjustment problems. Sawyer et al. (1986) reported that parents rated children with leukemia as less socially competent than controls and their siblings. Mulhern et al. (1989) studied 183 patients, age seven to fifteen years old, who were diagnosed with leukemia. Parents of these children rated their children's social functioning using the Social Competency Scale of the Child Behavior Checklist (CBCL). The social scale of the Social Competency Scale was abnormally low in twenty-five percent of the children.

Peers' Perception

Peer responses as studied by Drotar et al. (1981) demonstrated that children with cancer were equally popular among peers, although the children with cancer may have slightly fewer reciprocated friends. These children were perceived as more socially isolated and withdrawn, but they were liked and accepted by peers and experience themselves as competent.

Healey et al. (1978), Potter and Roberts (1984) studied peer acceptance of chronically ill children. Healey et al. (1978) suggested that peer acceptance of chronically ill children in the school is a function of the severity of the ill child's observable symptoms and the degree to which the child's health impairment interferes with daily participation in class activities.

Potter and Roberts (1984) considered the acceptance of chronically ill children by their peers. Their study examined the effects of: (a) type of disease based on the observability of symptoms (epilepsy vs. diabetes), (b) cognitive development of the subject (preoperational vs. concrete operational functioning), and (c) the amount of information provided about an illness (description vs. explanation). The procedure involved a group of 112 students between the ages of five to nine years of age. Subjects in each of the two developmental groupings (preoperational vs. concrete) were assigned to one of four conditions of: (a) epilepsy description, (b) epilepsy explanation, (c) diabetes description, or (d) diabetes explanation. The procedure involved the presentation of one of our vignettes to each subjects. The vignette presented a brief description of an imaginary child with the disease, based only on observable symptoms and behaviors associated with the disease. After the experimenter read aloud one of the four vignettes to the child then the child was asked to respond to each of the twelve questions asked. The results of the Potter and Roberts study indicated that children's comprehension of the illness was affected by the type of information presented as well as the cognitive stage of the child. The results also indicated that descriptions of illness observability do

influence perception of attractiveness with the more observable illness symptoms of epilepsy being perceived as significantly less attractive.

Teachers' Perception

Teacher responses in the study by Drotar et al. (1981) indicated that adjustment of children with cystic fibrosis as rated by teachers is not different from that of healthy school age children. Spirito et al. (1990) reported that teachers of cancer survivors rated these children as more interested in school than healthy children. They also reported that only a small percentage of these children had any problems across all social and academic areas, while the teachers of healthy children reported approximately half the children had some social or academic problems.

Gutstadt, Gillette, Mrazek, Fukuhara, LaBreeque, and Strunk (1989) studied school performance in children with chronic asthma. The purpose of this study was to determine the relationship between asthma and school performance, including relationships between academic performance, school attendance, emotional and behavioral problems, and medications used to treat asthma. This study included ninety-nine patients between the ages of nine to seventeen years (mean age 12.7 years). These patients had moderately severe to severe asthma that had been present many years. Standardized tests of academic performance, emotional and behavioral problems and scales to determine the family's socioeconomic status were administered. Scores on the standardized tests for academic performance were average or slightly above average. The IQ scales were also average to above average and correlated with the mathematics and reading scores (Gutstadt et al., 1989).

Several studies have tried to obtain a child's perception of self competence through various methods of data collection such as obtaining information from parents, teachers, peers, and chronically ill and healthy children. The weaknesses of many of these studies include no healthy comparison group, not specifically addressing a chronically ill child, not using a self report instrument, nor using an instrument assessing a child in various domains of his/her life.

In assessing children's self perception of competence, it would appear logical to directly ask the child his/her feelings via a self report instrument. However, only a small number of studies (Gayton et al., 1977; Heilveil & Schimmel, 1982; Noll et al., 1991; Simmons et al., 1987; Spirito et al., 1990; Thompson, Hodges & Hamlett, 1990) used self report instruments. The three instruments used most often were the Piers-Harris Children's Self Concept Scale, the Children's Health Locus of Control and the Coopersmith Scale. Although utilizing self report instruments may be an appropriate measure of a child's feelings, these instruments are general in perspective. They do not allow for distinctions in various domains of a child's life.

There were several type of instruments used to determine self perception. One of the most widely used instruments to measure children's feelings about themselves was the Piers-Harris Children's Self Concept Scale (Piers & Harris, 1969). Gayton et al. (1977), Heilveil and Schimmel (1982), Kashani et al. (1988), and Simmons et al. (1987) all used the Pier-Harris instrument in their studies. This scale measures self concept as it is addressed through children's evaluations of their behavior, intellectual and school status, physical appearance, anxiety, popularity, and satisfaction. This test consists of a series

of eighty declarative statements which describe successful or unsuccessful functioning in each of these areas (Cosden, 1986). The child responds yes or no to the statement that describes them "most" of the time. This test is designed so that the interpretation of the child's self-concept is a function of the objectively obtained cumulative and cluster scores (Cosden, 1986).

One of the weaknesses of the Piers-Harris Scale is the unreliability of its factorial clusters. The initial factor analysis of the scale revealed six interpretable factors: behavior, intellectual status, physical appearance, anxiety, popularity, and happiness. Other studies (Michael, Smith & Michael, 1975; Platten & Williams, 1979; Rich, Barcikowski & Witmer, 1979) have found that these factorial structures are relatively unstable, even when the instrument was given to the same group twice (Cosden, 1986). A threat to the reliability and internal consistency of test scores is the use of inappropriate normative data in interpreting results. The demographic characteristics of the normative sample for the Piers-Harris Scale are not clearly delineated (Cosden, 1986). With this in mind, studies using this scale need to be cautious in interpreting scores relative to the norms and in possibly using this test to screen deviant scores for further assessment (Cosden, 1986). The second threat to validity is the potential for socially desirable answers. The child can "fake" responses in a manner to "look good" or "look bad". The Coopersmith Self-Esteem Inventory (Coopersmith, 1959) instrument is designed to measure an "individuals evaluative attitudes toward the self" (Adair, 1986).

Coopersmith identified four potential domains across which self evaluations may differ: school, peers, parents, and general references

to the self (Harter, 1983). On the basis of responses of 56 children, 10 to 12 years old, he concluded that children of this age do not make differentiations among these domains. Therefore items scored from the Coopersmith Self-Esteem Scale are given equal weight, and it is assumed that the total score resulting from such combinations reflects an individual's sense of self across the various aspects of his/her life (Harter, 1988).

Another study (Simmons et al., 1987) used the Children's Health Locus of Control. This instrument assesses the feelings of control that children believe they have over their own health. Harter's Perceived Self Competence Scale is a self report evaluation for children which is an integration of perceived competence of specific domains and an individuals' overall sense of self worth.

This literature review reflects the various facets of how a child's perception of competence is obtained. A major area of literature assessing a child's self perception are responses from peers, teachers, and parents. Although this information addressed a child's perception of self competence it did not directly ask the chronically ill/healthy child. Many of the parent reports noted that chronically ill children were more socially isolated. The social defect is the parent's perception and parent's expectation of social competence. Peers were also asked to assess competence of chronically ill children. Again peer perception is not the perception of the ill child. Teacher responses were also favorable when comparing social and academic performance of healthy and chronically ill children. Although teachers have insight in these areas, the teachers' perception of competence is not as important as asking the chronically ill or healthy child.

It is imperative to determine an accurate perception of a child's self competence. This self report perception enhances and facilitates appropriate nurse/patient interaction and mutual goal attainment.

Implications for the Present Study

More comprehensive and accurate investigation into perceived competence of school age children needs to include assessing both chronically ill school age children and healthy school age children in the same study. Having both groups in the study gives a basis for comparison. How is one to assess if chronically ill school age children do or do not perceive themselves as competent as their peers if both groups are not studied?

This literature review reflects the various facets of how chronic illness effects a child's self competence. The research that assesses self competence in school age children is fragmented. The literature is limited and generalizations to school age populations are difficult to make. Some of the studies surveyed parents, teachers, and peers, to obtain information that identifies children's feelings of perceived competence. Only a few studies directly questioned chronically ill children. In addition only a few studies used healthy children as a control group. Other studies concluded a child's self esteem is directly correlated to the caregiver's self esteem. Some studies state that family relationships affect a positive or negative self competence. Only two studies (Noll et al., 1991; Spirito et al., 1990) assessed self competence in various areas such as peer relationships, scholastic, behavior, and psychosocial. In order to compare perceived self competence of chronically ill and healthy school age children both groups need to be studied. Direct responses from the child along with

assessing various domains of their life is a more accurate indication of their feelings.

Summary

In summary, this literature review addressed various purposes, instruments, methods, and procedures used to study how a school age child's perception of self competence is affected by a chronic illness. Many of the studies have conflicting results which do not lend to a solid knowledge based concerning this issue.

CHAPTER IV

METHODS

Introduction

A discussion of methods including sample, data collection, instrument, human rights protection procedures, and statistical analysis are presented in this chapter.

Design

The design was a secondary analysis of a larger (primary) study. The present study was the investigation of how health status affects the school age child's perception of self competence. A description of the primary study including data collection, sample, and protection of human rights is presented in the Appendix. The present research project examined the mean differences between healthy and chronically ill school age children on the six subscales (domains) of Harter's Self perception Profile for Children. The dependent variable was perceived competence using the six domains of Harter's Self Perception Profile for Children. The independent variable was the health status of school age children.

Hypotheses

The following hypotheses were tested in this study:

- 1. There is no difference between healthy and chronically ill school age children on the mean scholastic competence subscale scores.
- 2. There is no difference between healthy and chronically ill school age children on the mean social acceptance subscale scores.
- 3. There is no difference between healthy and chronically ill school age children on the mean athletic competence subscale scores.
- 4. There is no difference between healthy and chronically ill school age children on the mean physical appearance subscale scores.

- 5. There is no difference between healthy and chronically ill school age children on the mean behavior conduct subscale scores.
- 6. There is no difference between healthy and chronically ill school age children on the mean general self worth subscale scores.

Operational Definitions

Perceived Self Competence

Perceived self competence is an integration of self evaluative judgments and overall sense of self worth. In this study perceived self competence was operationalized by the six subscales of the Harter Self Perception Profile for Children as follows (see Appendix for instrument):

- Scholastic competence—the child's perception of competence or ability within the realm of scholastic performance. It was measured by items #1, 7, 13, 19, 25, and 31.
- Social acceptance—the degree to which the child has friends, feels he/she is important, and feels liked by most kids. It was measured by items #2, 8, 14, 20, 26, and 32.
- 3. Athletic competence—the child's perception of doing well in sports.

 It was measured by items #3, 9, 15, 21, 27, and 33.
- 4. Physical appearance—the degree to which the child is happy with the way he/she looks. It was measured by items #4, 10, 16, 22, 28, and 34.
- 5. Behavioral conduct—the degree to which the child likes the way he/she behaves, does the right thing, acts the way he/she is supposed to. It was measured by items #5, 11, 17, 23, 29, and 35.
- 6. Global Self Worth--the extent to which the child likes one's self as a person. It was measured by items #6, 12, 18, 24, 30, and 36.

Health Status

Health status was divided into two categories, healthy and chronic illness, as follows:

- Healthy is a condition of physical well-being and absence of disease and developmental disability. Healthy was determined by family self report and family physician referral.
- 2. Chronic illness is illness characterized by long duration, need for specialized health care services, potentially limited life expectancy, and either no known cure or uncertain prognosis (Stein, 1983). In this study the child's health care provider identified the child's chronic illness which included asthma, cystic fibrosis, diabetes, and congenital cardiac disorders. Chronic illness was determined by family self report, medical records, and physician referral.

Sample

The sample consisted of 42 school age children. The age range of the subjects was seven through twelve years. The mean age for both groups was 9.3 years. Distribution of subjects according to age is summarized in Table 1.

Twenty-eight of the children had a chronic illness, were between the ages of seven and twelve years, and had been diagnosed for at least one year. Of these children 13 were females (46%) and 15 were males (54%). The healthy comparison group consisted of 14 children also between the ages of seven and twelve years. Of these children eight were females (57%) and six were males (42%). The chronically ill and healthy children were matched for the primary study on age, sex, birth

Table 1. Frequency and Percent of Age of Subjects

	Chronically Ill n=28		Health n=14	У
Age	# of subjects	%	# of subjects	%
7	1	3.6	1	7.1
8	7	25.0	2	14.3
9	<u>8</u>	28.6	3	21.4
10	7	25.0	6	42.9
11	2	7.1	0	0.0
12	3	10.7	2	14.3

Table 2. Reliability Analysis for Harter's Self Competence Scale (n=42)

Subscales	Alpha
Scholastic	.69
Social	.64
Athletic	.78
Physical Appearance	.68
Behavioral Conduct	.73
Global Self Worth	.69

order, number of parents in the home, approximate family size, and income.

Data Collection

The data were located on a computer disk. The primary data was collected from children during home visits (See Appendix for details of data collection).

Instrumentation

The instrument selected for this study was the Self-Perception

Profile for Children (Harter, 1985). This scale contains 36 forced

choice items divided into six subscales (See Appendix). The child was

asked to decide which kind of kid he or she is most like--the kid

described on the right or the left. The following is a sample question:

Some kids feel they are

Other kids worry about

very good at their

BUT

whether they can do the

school work

School work assigned to them

Once having made the right/left decision, the child then selects whether

the description is sort of true or really true for him or her.

Each item was scored from 1 to 4, where a score of 1 indicated low perceived competence and a score of 4 reflected high perceived competence. Scores for each subscale were summed and then averaged for each subscale, resulting in six separate subscale means. This type of questionnaire legitimizes either choice. The option of checking either "sort of true for me" or "really true for me" broadens the range of choice without involving the response "false".

Instrument Reliability

Harter calculated internal consistency reliabilities from three samples of healthy male and female school age children from Colorado

(Harter, 1985). One sample consisted of 748 children, in the sixth and seventh grades. The second consisted of 390 children, in the sixth through eighth grades and the third sample consisted of 227 children, in the third through fifth grade. Cronbach's alpha coefficients calculated for the three samples for the subscales ranged as follows: Scholastic (.80 to .85); Social acceptance (.75 to .80); Athletic competence (.80 to .86); Physical appearance (.76 to .82); Behavioral conduct (.71 to .77); Global self worth (.78 to .84). Reliability coefficients calculated for the entire sample of the primary study were: Scholastic .75; Social acceptance .79; Athletic .64; Physical appearance .76; Behavioral conduct .78; and Global self worth .92.

Cronbach's Alpha was utilized to determine the reliability of the six subscales of Harter's Self Concept Scale for the present study.

These areas include the six items measured in each subscale and include: Scholastic, Social, Athletic, Physical Appearance, Behavior and Global Self Worth. Table 2 summarizes the reliability analysis.

Cronbach's Alpha ranged from .64 to .78. The reliabilities are fairly consistent with other reported studies. The reliabilities for this study are lower than the reliabilities from the three samples of school age children from Colorado (Harter, 1985) which ranged from .69 to .90. The inconsistency may be due to the small sample size in this study (N=42).

The factor pattern across Harter's three samples (Harter, 1985) of healthy children in grades five through eight was similar. In each sample the same six factors representing the six domains were derived. The factor loadings for each subscale are substantial and there are no

cross-loadings greater than .18. The average cross-loading across factors was between .04 and .08.

Intercorrelations among Subscales

There was a tendency for the subscales to demonstrate patters of intercorrelation for Harter's (1985) three samples. Scholastic competence tended to be related to behavioral conduct, indicating that children who feel they are good at school work report that they are well behaved. There was also a cluster involving social acceptance, athletic competence and physical appearance subscales in that all three subscales were moderately related to one another. This suggests that physical attractiveness and athletic competence may lead to greater acceptance among peers (Harter, 1985). Physical appearance was consistently related to self worth. The other four subscales (Scholastic competence, Athletic competence, Social acceptance, and Behavioral conduct) bear moderate relationships to self worth, with higher correlations among younger students (Harter, 1985).

Data Analysis

Frequencies, percentages, ranges, means, and standard deviations were calculated for demographic data and each subscale of the Harter's Self Perception Profile for Children. The six hypotheses were tested using one way analysis of variance. Analysis of variance separates the total variability of a set of data into two components. The first component measures the variation between the sample means and the second component of ANOVA measures variability within each category of the sample. The relationship between the two sources of variation is compared forming the F ratio. By utilizing the F ratio, an overall

comparison can reveal whether there was a significant difference between the means of the groups.

Assumptions

- 1. Children completed the instrument accurately.
- 2. Children age eight through twelve years of age have the cognitive ability to complete the Self Perception Profile for Children scale.

Limitations

- 1. The sample size was small and non-random.
- 2. Other factors such as family values and gender which could influence the child's self competence were not addressed.
- 3. Harter's Self Perception Profile for Children instrument for children has not been widely used with chronically ill children.

Protection of Human Rights

The data were provided by subject code only, and the investigator did not have access to subjects' identity. Results were reported in aggregate form only. Approval for secondary analysis was obtained from Michigan State University Committee on Research Involving Human Subjects (UCRIHS) (See Appendix for approval letter).

Summary

A discussion of methods utilized in this study were presented in Chapter IV. The questionnaire, sample, data collection, and data analysis procedure were outlined. In Chapter V the analysis of data will be discussed.

CHAPTER V

RESULTS

Introduction

Chapter V includes the presentation, family characteristics, and results of the statistical procedures related to the hypotheses.

Results

Family Member Characteristics

Sixty-four percent of the healthy comparison group came from two parent families, while seventy-eight percent of the chronically ill children came from two parent families. The family income was fairly well matched between both groups. Fifty percent of the healthy children had a family annual income of \$30,000 or less and fifty-three percent of the chronically ill children had a family annual income of \$35,000 or less.

There was little difference in father's employment status between both groups. Twelve fathers (100%) of the healthy comparison group worked full time. Twenty-one of the fathers (91%) of chronically ill children worked full time with one father working part-time.

There was more variation in the employment status of the mothers.

Of the chronically ill children, ten mothers (37%) worked full time,
eight mothers (30%) worked part time and nine mothers (33%) did not
worked outside the home. Of the healthy comparison group twelve mothers
(70%) work full time, three mothers (18%) worked part time and two
mothers (12%) did not work outside of the home. These numbers suggest
that many of the mothers of chronically ill children may stay home to
care for their ill children.

Group Differences in Perception of Self Competence

One way analysis of variance were computed to determine differences between the group means of chronically ill and healthy children and their perception of self competence.

The discussion of the results of this study will be divided into the six subscale areas: scholastic, social, athletic, appearance, behavior, and global self worth. The scale means and standard deviations are presented in Table 3 while the results of the ANOVA are found in Table 4. The means for individual items by group are in the Appendix.

Scholastic. The following hypothesis was tested in this study. There is no difference between healthy and chronically ill school age children on the mean scholastic subscale score. The results of the ANOVA (Table 4) indicated that both chronically ill and healthy school age children felt equally competent in scholastic abilities, therefore the null hypothesis is accepted. As noted in Table 3, the chronically ill and healthy comparison group had similar mean scores. Both groups exhibited average scholastic self competence scores at the low competence end of the scale.

Social. The following hypothesis was tested in this study. There is no difference between healthy and chronically ill school age children on the mean social acceptance subscale scores. The results of the ANOVA (Table 4) indicated that both chronically ill and healthy school age children feel equally competent in the area of social acceptance, therefore the null hypothesis is accepted. As noted in Table 3, the chronically ill and healthy comparison groups had similar mean scores. Both groups exhibited average social acceptance scores at the low competence end of the scale.

Table 3. Means and Standard Deviation of Subscale Scores of Chronically Ill and Healthy Children

Subscale	Group	Mean	Std Dev	Cases
Scholastic	chronically ill	1.98	.59	26
-	healthy	1.93	.63	13
Social	chronically ill	1.88	.62	27
	healthy	1.73	.58	14
Athletic	chronically ill	2.24	.68	27
	healthy	1.94	.77	14
Appearance	chronically ill	1.87	.67	26
	healthy	1.78	.58	14
Behavior	chronically ill	1.92	.64	25
	healthy	1.77	.62	14
Global Self Worth	chronically ill	1.68	.68	25
2.002. 00.1 Wordin	healthy	1.64	.43	14

Table 4. One Way Analysis of Variance for Difference Between Mean Scores of Chronically Ill and Healthy Children and Perception of Self Competence

Subscale	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	Significance
Scholastic					
Between groups	.02	1	.02	.06	.81
Within groups	13.64	37	.37		
Social					
Between groups	.21	1	.21	. 56	.46
Within groups	14.48	39	.37		7.0
Athletic					
Between groups	.87	1	.87	1.70	.20
Within groups	19.83	39	.51	1.70	.20
within groups	19.63	33	.51		
Appearance					
Between groups	.07	1	.07	.16	. 69
Within groups	15.82	38	.42		
Behavior					
Between groups	.19	1	.19	.48	. 49
Within groups	14.87	1 37	.40	. 40	. 73
within groups	14.07	37	.40		
Global Self Worth					
Between groups	.02	1	.02	. 05	.83
Within groups	13.90	37	.38		

Athletic. The following hypothesis was tested in this study: There is no difference between healthy and chronically ill school age children on the mean athletic competence subscale scores. The results of the ANOVA (Table 4) indicated that both chronically ill and healthy school age children felt equally competent in the athletic abilities, therefore the null hypothesis is accepted. As noted in Table 3, the chronically ill and healthy comparison groups' mean scores were similar and at the middle to low end of the scale.

Appearance. The following hypothesis was tested in this study:
There is no difference between healthy and chronically ill school age
children on the mean physical appearance subscale scores. The results
of the ANOVA (Table 4) indicated that both chronically ill and healthy
school age children felt equally competent in physical appearance,
therefore the null hypothesis is accepted. As noted in Table 3, the
chronically ill and healthy comparison groups had similar mean scores.
Both groups exhibited physical appearance scores at the low end of the
scale.

Behavior. The following hypothesis was tested in this study: There is no difference between healthy and chronically ill school age children on the mean behavior conduct subscale scores. The results of the ANOVA (Table 4) indicated that both chronically ill and healthy school age children felt equally competent in their behavior conduct, therefore the null hypothesis is accepted. As noted in Table 3, the chronically ill and healthy comparison groups had similar mean scores. Both groups exhibited behavior conduct self competence scores at the low end of the scale.

Global Self Worth. The following hypothesis was tested in this study: There is no difference between healthy and chronically ill school age children on the mean global self worth subscale scores. The results of the ANOVA (Table 4) indicated that both chronically ill and healthy school age children felt equally competent in global self worth, therefore the null hypothesis is accepted. As noted in Table 3, the chronically ill and healthy comparison groups had similar mean scores. Both groups exhibited global self worth scores at the low end of the scale.

Summary

The results of this study in relation to self competence of the chronically ill and healthy school age child was presented. Six null hypotheses were tested and all six were accepted. There was no difference between chronically ill and healthy school age children and their perception of self competence across the six subscales which included: Scholastic, Social, Athletic, Physical Appearance, Behavior, and Global Self Worth. A discussion of the study findings and the implications for nursing practice will be presented in Chapter VI.

CHAPTER VI

DISCUSSION AND IMPLICATIONS

Introduction

In Chapter VI the results of the study are discussed. The similarities and differences to other studies and implications for nursing practice and research are presented.

Summary of Findings

The purpose of this study was to determine if health status of the school age child affected perceived self competence. This information was secondary data which was obtained from a primary study that directly asked school age children to make distinct judgements about his/her self competence in six areas. The results of this study indicate that the perceived self competence of the chronically ill child is no different than that of the healthy child comparison group in all six domains. The scores were in the mid to low range for all subscales.

In the area of social acceptance and appearance the mid to low range scale scores may be due in part to mastering social developmental tasks required for all school age children. School age children regardless of health status may have questions, concerns and doubts about specific areas of their development. These concerns are not unique to chronically ill children, they are an expectation of all children.

Both groups shared the same perception of self competence in athletic ability. Actually the chronically ill children scored slightly higher than the healthy children but both groups scale scores were mid to low range. This may be attributed to the fact that school age children may not have participated in sports activities and do not feel competent in this area.

The chronically ill and healthy school age children were consistent in their perception of behavior. Again, both groups scale scores were mid to low range with the chronically ill scores slightly higher than the healthy children. One's perception of behavior is also reflected in family values which was not part of the study. Both groups also shared the same perception of global self worth which were low range scale scores. Generally overall scale scores for this study were mid to low range. These scores reflected the answers of both chronically ill and healthy children, therefore perceived self competence of the chronically ill child is no different than the healthy comparison group with both groups scoring medium to low on perceived self competence.

Comparison to Previous Studies

This study has shown that chronically ill children have the same perceived self competence as healthy children. The results of the present study have similarities and differences as compared to studies by Drotar et al. (1984), Gudstadt et al. (1989), Noll et al. (1991), and Spirito et al. (1990). Noll et al's. (1991) study examined peer relationship in children with cancer. Noll et al's (1991) results were consistent with the present study. Noll et al's. (1991) findings as related to self competence indicate there were no significant differences between children with cancer and healthy peers using Harter's Self Perception Profile Scale. Spirito et al's. (1990) results were consistent with the present study. Spirito et al's. (1990) findings did not reveal a significant difference between cancer patients and healthy children and their perception of self competence. Gudstadt et al. (1989) found children with asthma scored average or slightly above average on standardized tests for academic performance. Although

this present study didn't assess academic test scores, it did reveal that chronically ill children did perceive themselves to be as competent in scholastic abilities as the healthy children, although both groups exhibited low competence in this area. Drotar et al. (1980) found that children with cystic fibrosis are able to cope and adjust to life's tasks which is inconsistent with the present study if one considers high perceived self competence as coping. Other studies that are consistent with the present findings, but only studied ill children are: McCollum & Gibson (1970) concluded children with cystic fibrosis had difficulty in developing peer relationships; Lawler et al. (1966) noted children with cystic fibrosis had significant depression and feelings of inadequacy; Healey et al. (1978), Potter and Roberts (1984) suggest that peer acceptance of the chronically ill child is due to observable symptoms of the child's illness and how much the illness interferes with participation in class activities; and Panides and Ziller (1981) suggested that children with asthma are at higher risk for low self esteem. All of these studies only looked at ill children and did not use a healthy control group in their investigation. Therefore, these studies did not compare perceived self competence between healthy and chronically ill children. The present study did find chronically ill children have the same perceived self competence as healthy children. This present study is unique in the sense that it directly questions children, assesses self competence in several areas and it includes a healthy control group. This combination has resulted in a more specific interpretation of children's feeling of self competence.

Limitations of the Study

Although this study was a fair and accurate representation of children's views of perceived self competence there are some limitations.

The first limitation was the sample size was small and non-random.

A random sample would provide a sample representation of the entire population.

The second limitation was the instrument used in this study has not been used widely for chronically ill children. Only a few studies (Noll et al., 1991; Spirito et al., 1990) have used Harter's Perceived Competence Scale for Children. With repeated use involving both chronically ill and healthy children, this scale may reveal unique subscale correlations that may raise the possibility that perceived self competence may be viewed differently by specific groups of children or strengthen the fact that chronically ill and healthy children have the same perceived self competence.

The third limitation of this study is that other factors such as family dynamics, family values, and the child's gender which could influence the child's perception of self competence were not included. Family dynamics and values play a major role in a child's development. The child may model what is important to the family such as athletic prowess, instead of what is important to himself/herself. Also family dynamics such as parent/child interactions, stresses, support systems, and coping skills all have an impact on a child's perception of self competence.

Implications for Nursing Practice

In Chapter II the conceptual model from which this study is based was presented. Imogene King's theory of goal attainment can be successfully applied to chronically ill and healthy school age children in developing or reinforcing positive self competence. The accepted hypothesis is that chronically ill children perceive themselves as competent as healthy children but that both groups see themselves as only moderate or minimally competent. The results of this study are particularly relevant for advanced nursing practice.

According to King (1981) nursing is a process of interaction, whereby nurse and client share information. This information sharing helps identify patient goals, problems, and concerns. Goal attainment is achieved when the nurse and client identify and work together on mutually agreed upon goals.

The clinical nurse specialist has many roles but one of the most important roles when working with children, both healthy and ill, is that of facilitator using King's major concepts of personal systems, the CNS and child are able to work toward enhancing health or whatever the mutual goals are. The interpersonal systems consist of two or more persons interacting. Each individual brings their own personal knowledge, needs, goals, expectations, and perceptions that influence interactions. The results of this study indicate that chronically ill children perceive themselves as competent as healthy children but both see themselves low on competence. In order for the clinical nurse specialist to be a facilitator he/she must assess the child's perception of self in all areas of the child's life. These areas include physical appearance, social, scholastic, behavior, athletic, and global self

worth. The clinical nurse specialist perception of the ill child and ill child's perception of self must be mutual in order to proceed with goal attainment. The clinical nurse specialist needs to facilitate this interactive process between the nurse and child by creating a non-judgmental atmosphere and a non-stressful interaction by using appropriate assessment tools (survey/verbal communication) in order to obtain accurate information.

The nurse needs to provide a comfortable environment in which interactions can take place. The child should feel secure in being open about his/her self perception. The accuracy of both the child's self perception and the nurse's perception is the foundation for the human interaction. If the nurse and child mutually identify a problem that has a negative impact on the child, they may work together toward resolving this problem.

It is the responsibility of the nurse to be aware of perceived threats to the child's self competence, to develop goals with the child and plan for active participation in implementing the means to achieve the goals. It is important for the nurse to help the healthy and chronically ill child maintain self esteem and interact in ways that give the child opportunity to make choices and exert some control over his/her life.

It is through perception that an individual knows self (King, 1981). The primary care nurse can assist the ill/healthy child in discussing his/her perception of self competence by:

 Encourage and facilitate the child to be verbal in his perception of self competence in many areas such as scholastic, appearance, social, behavioral, athletic, and global self worth.

- 2. Explore past experiences that have shaped present perceptions of self competence.
- 3. Explore with the child any misconceptions he/she may have about normal/abnormal growth and development concerns.

King's (1981) theory was especially applicable to this study as King's Process of Human Interactions begin with the concept of perception. An accurate perception of self competence facilitates the nurse/child relationship which leads to mutual goal attainment. The mean scores demonstrate that chronically ill children have the same perceives self competence as healthy children. The clinical nurse specialist needs to do a thorough assessment of all areas of a child's life in order to determine an accurate self perception. By using King's model, the clinical nurse specialist is able to do a more in-depth assessment of a child's perception in all domains. In the area of scholastic ability the clinical nurse specialist may facilitate interventions such as teacher assistance to help in this area. In the area of social competence, the clinical nurse specialist has the opportunity to specifically address the child's perception. If the child does indeed wish to increase the number of friends, the CNS and child together may explore ways for this to happen. In the area of athletic competence the clinical nurse specialist would again be very specific in assessing this area. In the present study the chronically ill and healthy children were comparable in the scores of athletic competence. If the child was interested in sports, the clinical nurse specialist may suggest and facilitate a sport that may be more appropriate or less demanding on the chronically ill/healthy child. Or the clinical nurse specialist may encourage school activities that are

equally challenging for the child. In the area of appearance the clinical nurse specialist is the in position to assess if physical appearance may be improved by nutrition, mechanical equipment or facilitation resource persons for the healthy/ill child. In the area of behavior the clinical nurse specialist is in the position to explore the child's behavior and distinguish between normal and abnormal behavior. The clinical nurse specialist would encourage expression of feelings through non-judgmental discussion.

Just as it is important to assess all areas of a child's life it is especially important to determine an adequate perception of the child's general self worth. The area of general self worth is not the total of all other areas discussed. The clinical nurse specialist must be aware that children are able to make meaningful differentiations between specific areas of their life. Like the other five areas, the clinical nurse specialist can assist the chronically ill/healthy child in discussion of his/her perception of general self worth. From this information the nurse and chronically ill/healthy child may begin the process of human interaction which leads to goal attainment.

In each area of Harter's self competence scale both chronically ill and healthy children had negative feelings of self competence. The clinical nurse specialist must be aware of normal growth and development in order not to misinterpret normal feelings from abnormal feelings school age children may have about themselves. Both chronically ill and healthy children may not be happy with certain aspects of their appearance. These feelings may originate from normal feelings of growth and development or may be a result of a chronic illness. The clinical nurse specialist can assist the chronically ill child in working through

his/her feelings, but must not "save" the child from dealing with these feelings.

Implications for Future Research

There are three implications for nursing research derived from this study. The first implication for future research is to replicate the same study with a larger sample population. This would add support to the present study.

The second implication is doing a longitudinal study over time comparing perception of self competence of healthy and chronically ill school age children as they progress through adolescence. This study may give information leading to periods of high and low self competence during a child's development. It would also determine if there were any differences or similarities in perception of self competence throughout adolescence.

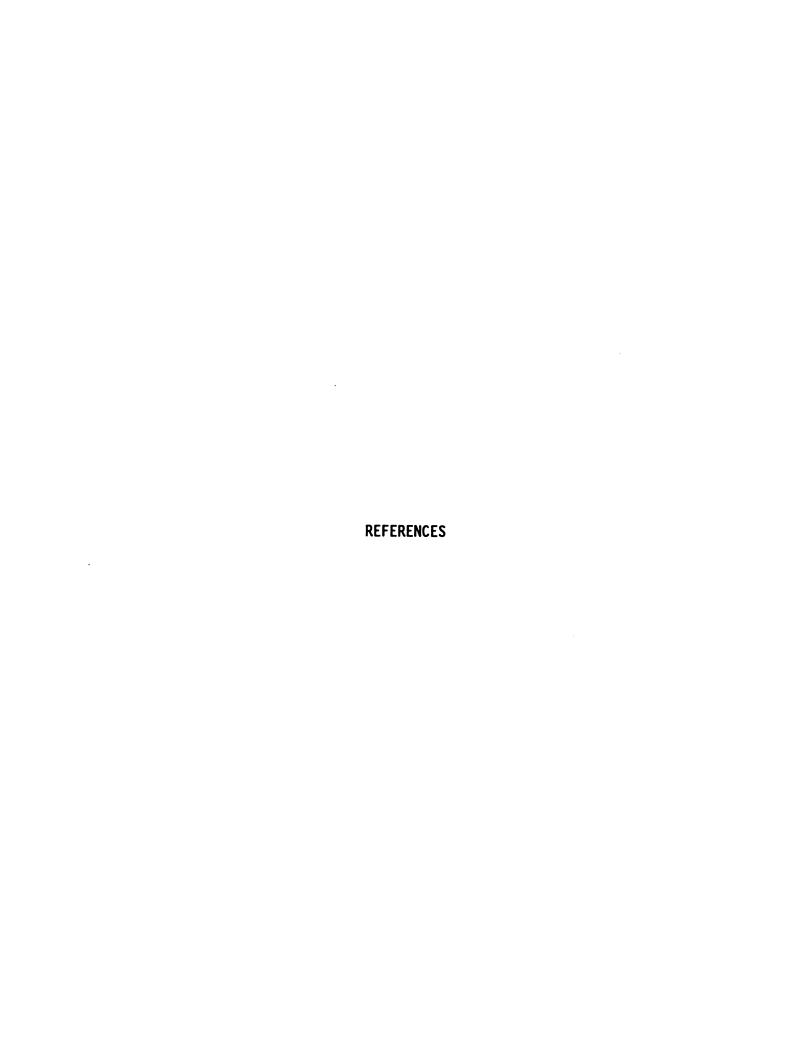
The third implication is additional research to compare the perception of self competence of chronically ill children who have continued case management by a clinical nurse specialist as compared to those who do not choose case management services. This would also afford incorporating King's Theory of Human Interaction in care plans and case management plans.

The fourth implication for additional research is to determine if family values has an impact on the chronically ill/healthy child's perception of self competence. It would be of interest to determine if family values (i.e., athletic prowess) influences a child's perception of self competence in athletic ability.

Conclusion

King's Process of Human Interaction begins with perception. This first step in the "Process" lays the ground work for the interaction to take place. If the nurse and chronically ill/healthy child do not have the same perception of how health status effects the child then the rest of the interactions would be inaccurate which would lead to inappropriate interventions from the clinical nurse specialist. Accurate perception of the chronically ill/healthy child's self competence is the first step in goal attainment. From these judgment, action, interaction, and transaction proceed to a specific goal and better health for the child.

In Chapter VI a summary of the results of the study, similarities and differences to other studies, and implication for future research were presented.



REFERENCES

- Adair, F. (1986). <u>Coopersmith Self-esteem Inventories</u>. Williamsburg, VA. College of William and Mary, School of Education.
- Brown A. (1986). School age children with diabetes: Knowledge and management of the disease, and adequacy of self-concept. <u>Maternal Child Nursing Journal</u>, 47-60.
- Coopersmith, S. (1959). <u>Coopersmith Self-esteem Inventories</u>. Palo Alto, CA: Consulting Psychologists Press, Inc.
- Cosden, M. (1986). <u>Piers-Harris Children's Self Concept Scale</u>. Santa Barbara: University of California, Department of Special Education.
- Droter, D., Doershuk, C., Stern, R., Boat, T., Boyer, W., & Matthews, L. (1981). Psychosocial functioning of children with cystic fibrosis. Pediatrics, 67, 338-342.
- Gallo, A. (1988). The special sibling relationship in chronic illness and disability: Parental communication with well siblings.

 Holistic Nursing Practice, 2, 28-37.
- Gayton, W., Friedman, S., Tavormina, J., & Tucker, F. (1977). Children with cystic fibrosis: Psychological test findings of parents, siblings, and patients. <u>Pediatrics</u>, <u>59</u>, 888-894.
- Gortmaker, S., & Sappenfield, W. (1984). Chronic childhood disorders: Prevalence and impact. <u>Pediatrics Clinics of North America</u>, <u>31</u>, 3-17.
- Gutstadt, L., Gillette, J., Mrazek, D., Fukuhara, J., LaBreeque, F., & Strunk, R. (1989). Determinants of school performance in children with chronic asthma. <u>American Journal of Disease of Children</u>, 143, 471-475.
- Harter, S. (1982). The perceived competence scale for children. Child Development, 53, 87-97.
- Harter, S. (1983). Developmental perspectives on the self system. In M. Hetheringon (Ed.), <u>Handbook of Childhood Psychology</u> (v. 4), Socialization, personality, and social development. New York, NY: Wiley.

- Harter, S., & Pike, R. (1984). The pictorial scale of perceived competence and social acceptance for young children. <u>Child Development</u>, <u>55</u>, 1969-1982.
- Harter, S. (1985). Manual for the self-perception profile for children. Denver, CO: University of Denver.
- Harter, S. (1987). The determinants and mediational role of global self-worth in children. In N. Eisenberg (Ed.), <u>Contemporary issues in developmental psychology</u>, p.219-242. New York, NY: Wiley.
- Hazzard, A., & Angert, L. (1986). Knowledge, attitudes, and behavior in children with asthma. <u>Journal of Asthma</u>, 23, 61-67.
- Healey, A., McAreavey, P., Saaz Von Hippel, C., & Jones, F. (1978). Mainstreaming preschoolers: Children with health impairments. Washington, D.C.: U.S. Department of Health, Education, and Welfare.
- Heilveil, I., & Schimmel, B. (1982). Self esteem in asthmatic children. Journal of Asthma, 19, 253-254.
- Kashani, J., Konig, P., Shepperd, J., Wilfley, D., & Morris, D. (1988).

 <u>Journal of Pediatric Psychology</u>, <u>15</u>, 509-519.
- King, I. (1981). A theory for nursing. New York: Wiley.
- Lawler, R., Nakielny, W., & Wright, N. (1966). Psychological implications of cystic fibrosis. <u>Journal of Canadian Medical Association</u>, 94, 1043-1046.
- Mattsson, A. (1975). Psychologic aspects of childhood asthma. Pediatric Clinics of North America, 22, 77-88.
- McCollum, A. & Gibson, L. (1970). Family adaptation to the child with cystic fibrosis. <u>Journal of Pediatrics</u>, <u>77</u>, 571-578.
- Michael, W., Smith, R., & Michael, J. (1975). The factorial validity of the Piers-Harris Children's Self Concept Scale for each of the three samples of elementary, junior high, and senior high students in a large metropolitan high school district. Educational and Psychological Measurement, 35, 405-414.
- Mulhern, R., Wasserman, A., Friedman, A., & Fairclough, D. (1989).
 Social acceptance and behavioral adjustment of children who are long term survivors of cancer. <u>Pediatrics</u>, <u>83</u>, 18-25.
- Noll, R., LeRoy, S., Bukowski, W., Rogosch, F., & Kulkarni, R. (1991). Peer relationships and adjustment in children with cancer. <u>Journal of Pediatric Psychology</u>, 16, 307-326.

- Orr, D., Weller, S., Satterwhite, B., & Pless, I. (1984). Psychosocial implications of chronic illness in adolescence. <u>Journal of Pediatrics</u>, 104, 152-157.
- Panides, W., & Ziller, R. (1981). The self perception of children with asthma and asthma/enuresis. <u>Journal of Psychosomatic Research</u>, 25, 51-56.
- Piers, E., & Harris, D. (1969). <u>Piers-Harris Children's Self Concept Scale</u>. Los Angeles, CA: Western Psychological Services.
- Platten, M., & Williams, L. (1979). A comparative analysis of the factorial structures of two administrations of the Piers-Harris Children's Self-Concept Scale to one group of elementary school children. Educational and Psychological Measurement, 39, 471-478.
- Potter, P., & Roberts, M. (1984). Children's perceptions of chronic illness: The roles of disease symptoms, cognitive development, and information. Society of Pediatric Psychology, 13-25.
- Reasoner, R. (1983). Enhancement of self-esteem in children and adolescents. Family and Community Health, 6, 51-64.
- Rich, C., Barcikowski, R., & Witmer, J. (1979). The factorial validity of the Piers-Harris Children's Self-Concept Scale for a sample of intermediate-level ERM students enrolled in elementary school. Educational and Psychological Measurement, 41, 453-461.
- Sawyer, M., Crettenden, A., & Toogood, I. (1986). Psychological adjustments of families of children and adolescents treated for Leukemia. <u>American Journal of Pediatric Hematology/Oncology</u>, 8, 200-207.
- Simmons, R., Corey, M., Cowen, L., Keenan, N., Robertson, J., & Levison, H. (1987). Behavioral adjustment of latency age children with cystic fibrosis. <u>Psychosomatic Medicine</u>, 49, 291-300.
- Spirito, A., Stark, L., Cobiella, C., Drigan, R., Androkites, A., & Hewett, K. (1990). Social adjustment of children successfully treated for cancer. <u>Journal of Pediatric Psychology</u>, <u>15</u>, 359-371.
- Stein, R., & Jessop, D. (1984). Relationships between health status and psychological adjustments among children with chronic conditions. <u>Pediatrics</u>, <u>73</u>, 169-174.
- Thompson, R., Hodges, K., & Hamlett, K. (1989). A matched comparison of adjustment in children with cystic fibrosis and psychiatrically referred and non-referred children. <u>Journal of Pediatric</u> Psychology, 15, 745-759.
- Tropauer, A., Franz, M., & Dilgard, V. (1970). Psychological aspects of the care of children with cystic fibrosis. <u>American Journal of Diseases of Children</u>, 119, 424-432.

- Turk, J. (1964). Impact of cystic fibrosis on family functioning. <u>Pediatrics</u>, <u>34</u>, 67-71.
- Voorhorst-Smeek, R. (1977). Psychological effects of illness in adolescents. Impact of illness in adolescents--critical issues and coping styles. <u>Journal of Pediatrics</u>, <u>97</u>, 132-138.



Data Collection Procedure

All procedures were the same for target and comparison families. Families meeting criteria received a letter explaining the study and inviting their participation. The letter with a return postcard indicating interest in participation was distributed to families in the MSU Clinical Center and the Regional Cystic Fibrosis Clinic and well child setting. Families who returned the postcard received a follow up phone call from one of the investigators to answer any questions and schedule an appointment for a home visit with the entire family. At least two home visits were made for data collection during this study. Two data collections (6 months apart) were made during this study and two home visits were made during each collection of data. No less than two home visits were made.

At the first home visit the study was explained to the entire family, questions were addressed, and informed consent obtained.

Sociodemographic and illness demographic information were obtained from the parents by interview. Family members were asked to complete questionnaires including Harter's Self-Perception-Profile. Within two weeks, a second home visit was scheduled for completion of other questionnaires relevant to the overall study. For this study, data came from the initial home visit.

Primary Study Sample

The sample population consisted of 28 families with a child eight to twelve years of age, with a chronic illness, who had been diagnosed for at least one year, and seventeen matched comparison families.

Family were defined as the parent(s) (biological, adoptive, or stepparents), and siblings and the target school age child age eight to twelve years currently living at home. Families whose children have no physical abnormalities or developmental deficits were recruited from well child settings and served as the comparison group. The comparison families were matched with the families whose children have a chronic illness on: age, sex, and birth order of the target child; number of parents in the home, approximate family size, and income. The children with a chronic illness were recruited from the pediatric subspecialty clinics in the Department of Pediatrics and Human Development, College of Human Medicine, Michigan State University, and the Greater Lansing Regional Cystic Fibrosis Center.

Protection of Human Rights for Primary Study

All participants in this study received an explanation of the purpose, the number of home visits and the amount of time per visit, and the number of questionnaires that needed to be filled out.

Confidentiality and anonymity were maintained by the use of number coded questionnaires. The participants were informed they could withdraw any time from the study and in no way would their medical care be influenced by their participation/non-participation in this study. A consent form was signed by each adult and adolescent participant and assent was obtained from all children participating. Subjects were also assured confidentiality.

This study was approved by Michigan State University's Committee on Research Involving Human Subjects (UCRIHS), and the Ingham Medical Center Research Review Committee.

Consent Form (Primary Study)

We are currently conducting a research project on situations that may influence family functioning. Our purpose is to develop ways for health care providers to work more effectively with families who have chronically ill members. We are, therefore, studying families both with and without chronically ill children.

- 1. I have freely consented to have my family participate in a scientific study on situations that may influence family functioning being conducted by Carla L. Barnes, PhD, ACSW, Linda J. Spence, MS, RN, and Patricia L. Peek, MS, RN, Professors in the College of Nursing at Michigan State University.
- 2. I understand that I may contact the researchers (phone 355-6526) at any time about the research project, my rights as a subject, or in the event of a research related injury.
- 3. The study has been explained to me and I understand the explanation that has been given and what my family's participation will involve. I understand that we will be asked to complete two packets of questionnaires over a six month period and that one of the researchers will make two home visits per packet.
- 4. I understand that the answers to the questionnaires are confidential and will not be shared with anyone, including family members, and that there are five questions about the use of drugs and alcohol.
- 5. I have been given the opportunity to ask questions and I understand that I may ask questions at any time during the study.
- 6. I understand that the researchers will be obtaining information from the medical record of my child with asthma.
- 7. I understand that this study will not affect the care my family is now receiving.
- 8. I understand that the anonymity of my family is assured and that the results of the study will be treated in strict confidence. Within these restrictions, results of the study will be made available to me at my request, however, findings will not be available until the completion of the study.
- 9. I understand that my family's participation in this study is voluntary and that we may withdraw from the study without penalty. There are no anticipated circumstances under which the researchers will terminate our participation before the project is completed.

P	a	q	e	2

	participation in this study does not all results to my family.
Signatures:	
Mother/Guardian Signature	Father/Guardian Signature
Date	Date

OFFICE OF VICE PRESIDENT FOR RESEARCH AND DEAN OF THE GRADUATE SCHOOL

EAST LANSENG . MICHIGAN . 48824-1046

March 19, 1993

TO: Ms. Patricia A. Ward

4312 East Rolston Road Linden, MI 48451

RE:

IRB #:

93-126

TITLE:

THE EFFECTS OF HEALTH STATUS ON THE SCHOOL-AGE

CHILD'S PERCEIVED SELF COMPETENCE

REVISION REQUESTED:

N/A

CATEGORY:

1-E

APPROVAL DATE:

03/15/1993

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project including any revision listed above.

UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must seek updated certification. Request for renewed approval must be accompanied by all four of the following mandatory assurances.

- 1. The human subjects protocol is the same as in previous studies.
- 2. There have been no ill effects suffered by the subjects due to their participation in the study.
- There have been no complaints by the subjects or their representatives related to their participation in the study.
- 4. There has not been a change in the research environment nor new information which would indicate greater risk to human subjects than that assumed when the protocol was initially reviewed and approved.

There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. Investigators must notify UCRIHS promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

If we can be of any future help, please do not hesitate to contact us at (517) 355-2180 or FAX (517) 336-1171.

Sincerely,

David E. Wright, Ph.D.

UCRIHS Chair

DEW:pjm

œ:

Dr. Rachel Schiffman

Mean Scale Scores from Harter's Self-Perception Profile for Children (Maximum score 4.00)

		CI	Healthy
1.	Feels good about school work; others worry about school assignments	2.04	1.85
2.	hard to make friends; easy to make friends	3.14	3.42
3.	do well at sports; not good at sports	2.10	1.78
4.	happy with looks; not happy with looks	1.77	1.78
5.	does not behave; does behave	3.14	3.28
6.	unhappy with self; pleased with self	3.57	3.50
7.	just as smart as others; wonder if smart	1.53	1.85
8.	have lots of friends; don't have many friends	1.53	1.50
9.	wish they could be better at sports; good enough at sports	2.78	3.14
10.	Happy with height and weight; wish height and weight were different	1.82	1.78
11.	usually do the right thing; don't do the right thing	2.28	1.78
12.	don't like the way leading life; do like the way leading life	3.42	3.07
13.	slow in finishing school work; does school work quickly	2.89	3.28
14.	would like more friends; have many friends	2.96	3.14
15.	does well at new sports; doesn't do well at new sports	2.28	2.14

	CI	Healthy
16. wish body was different; like their body	2.78	3.21
17. act the way they are suppose to; don't act the way they are suppose to	1.67	1.57
18. happy with self as person; not happy with self	1.50	1.57
<pre>19. forget what they learn; remember easily</pre>	2.89	3.00
20. do things with lots of kids; usually do things by themselves	1.85	1.76
<pre>21. better than others at sports; don't play as well</pre>	2.71	2.00
22. wish physical appearance was different; like physical appearance	3.64	3.21
23. usually gets in trouble; doesn't get into trouble	3.35	3.21
24. likes kind of person they are; wish they were someone else	2.00	1.71
<pre>25. does very well at classwork; doesn't do well at classwork</pre>	1.78	1.57
26. wish more people like them; most people do like them	3.35	3.21
27. usually watches, not play, games and sports usually plays games and sports	3.03	3.28
28. wish face and hair look different; like face and hair	3.21	3.21
29. do things they shouldn't do; hardly ever do things should do	3.67	2.92
30. happy the way they are; wish they were different	2.00	1.57
31. trouble figuring out answers; usually figures out answers	3.03	3.07
32. popular with others their age; not very popular	2.42	1.92

·	CI	Healthy
33. doesn't do well at new outdoor games; good at new games	3.14	2.85
34. think they are good looking; think they are not very good looking	2.10	1.78
35. behave themselves very well; hard to behave themselves	2.25	1.71
36. not happy with the way they do things; the way they do things is fine	3.57	3.42

CI=Chronically Ill

Administration and instructions

The scale may be administered in groups as well as individually. After filling out the information at the top of the scale, children are instructed as to how to answer the questions, given below. We have found it best to read the items outloud for 3rd and 4th graders, whereas for 5th graders and older, they can read the items for themselves, after you explain the sample item. Typically, we introduce the scale as a *survey* and, if time, ask the children to give examples of what a survey is. They usually generate examples involving two kinds of toothpaste, peanut butter, cereal, etc. to which you can respond that in a survey, there are no right or wrong answers, its just what you think, your opinion.

In explaining the question format, it is essential that you make it clear that for any given item they only check *one box* on either side of the sentence. They do not check both sides. (Invariably there will be one or two children who will check both sides initially and thus you will want to have someone monitor each child's sheet at the onset to make certain that they understand that they are only to check one box per item.)

INSTRUCTIONS TO THE CHILD:

We have some sentences here and, as you can see from the top of your sheet where it says "What I am like," we are interested in what each of you is like, what kind of a person you are like. This is a survey, not a test. There are no right or wrong answers. Since kids are very different from one another, each of you will be putting down something different.

First let me explain how these questions work. There is a sample question at the top, marked (a). I'll read it outloud and you follow along with me. (Examiner reads sample question.) This question talks about two kinds of kids, and we want to know which kids are most like you.

- (1) So, what I want you to decide first is whether you are more like the kids on the left side who would rather play outdoors, or whether you are more like the kids on the right side who would rather watch T.V. Don't mark anything yet, but first decide which kind of kid is most like you, and go to that side of the sentence.
- (2) Now, the second thing I want you to think about, now that you have decided which kind of kids are most like you, is to decide whether that is only sort of true for you, or really true for you. If it's only sort of true, then put an X in the box under sort of true; if it's really true for you, then put an X in that box, under really true.
- (3) For each sentence you only check <u>one</u> box. Sometimes it will be on one side of the page, another time it will be on the other side of the page, but you can only check <u>one</u> box for each sentence. You <u>don't</u> check both sides, just the <u>one</u> side most like you.
- (4) OK, that one was just for practice. Now we have some more sentences which I'm going to read out loud. For each one, just check one box, the one that goes with what is true for you, what you are most like.

Scoring

A scoring key is included in the Appendix. Items are scored either 4, 3, 2, or 1, where 4 represents the most adequate self-judgment and 1 represents the least adequate self-judgment. Items within each subscale are counter-balanced such that three items are worded with the most adequate statement on the left and three items are worded with the most adequate statement on the right. Thus, the item scores for those with the most adequate description on the left are scored 4, 3, 2, 1 (from left to right) whereas the item scores for those with the most adequate description on the right are scored 1, 2, 3, 4 (from left to right). A data coding sheet is included in the Appendix. Scores from the child's protocol can be transferred to this sheet where all items for a given subscale are grouped together to facilitate the calculation of the mean for each subscale. Scoring, thus, will result in a total of six subscale means which will define a given child's profile.

Teacher Rating Scale

There is a teacher rating scale which parallels the self-perception profile for children. For each of the five specific domains, the teacher rates the child's actual behavior in each area (not how he/she thinks the child would answer). That is, we want the teacher's independent judgment of the child's adequacy in each domain. From past experience with teachers' ratings, we have learned that we need only three items per subscale to obtain highly reliable judgments. (Teachers only rate the five specific domains, since the global self-worth items do not translate into attributes which an objective observer can rate.) Thus, the teacher's rating scale contains 15 items, three per domain. They are listed in the same order as on the child's form. As can be seen on the copy of the teacher rating scale enclosed in the Appendix, the format is basically the same as on the child's version. Items are counterbalanced and the scoring key provides the direction in which items are scored. Domain scores can be calculated as the mean of three items. Thus, these scores can be compared directly to the child's scores which are calculated on the same basis, although the child's scores are based on a total of six items per subscale.

In certain cases, there may be other adults whom you may wish to have rate the child's competence or adequacy, for example, counselors, therapists, parents, etc. These same items may be used for this purpose.

You may want to consider the possibility that the adult rater does not use these rating scales in the same fashion as your child subjects. For example, the mean, range, and standard deviation of the scores may be different. Thus, you may want to convert the ratings of both child subjects and adult raters to standardized scores (e.g., z scores) for the purpose of direct comparison.

Samples to which revision has been administered

Findings from four separate samples were presented in this manual. The number of boys and girls at each grade for the four samples is presented in Table 1 on the following page. All four samples were drawn from Colorado. These samples draw from neighborhoods ranging primarily from lower middle class to upper middle class. Approximately 90% of the subjects are Caucasian.

Psychometric Properties

Internal Consistency Reliability

The internal consistency reliabilities for all six subscales, for each of the four samples, are presented in Table 2. These reliabilities were based on Cronbach's Alpha. There it can be seen that the reliabilities are quite acceptable. The Behavioral Conduct scale shows somewhat lower reliabilities. One Behavioral Conduct item (#35, kinder to others) consistently attenuated the reliability across subscales. Therefore it has been replaced by a new item specifically focusing on behavior. In addition, one Social Acceptance item (#14), hard to like) and one Global Self-Worth item (#6, mad at self) have been revised to improve reliability.

What I Am Like

SCORING KEY

SELF-PERCEPTION PROFILE FOR CHILDREN

(Revision of the Perceived Competence Scale for Children

Susan Harter, Ph.D., University of Denver, 1985

TTTI:			A control of the cont	. بدختمانی	Control of the Contro		
1.	4	3	Some kids feel that they are very <i>good</i> at their school work	BUT	Other kids worry about whether they can do the school work assigned to them.	2	1
2.	1	2	Some kids find it <i>hard</i> to make friends	BUT	Other kids find it's pretty easy to make friends.	3	4
3.	4	3	Some kids do very well at all kinds of sports	BUT	Other kids don't feel that they are very good when it comes to sports.	2	1
4.	4	3	Some kids are happy with the way they look	BUT	Other kids are <i>not</i> happy with the way they look.	2	1
5.	1	2	Some kids often do not like the way they behave	BUT	Other kids usually <i>like</i> the way they behave.	3	4
6.	1	2	Some kids are often unhappy with themselves	BUT	Other kids are pretty pleased with themselves.	3	4
7.	4	3	Some kids feel like they are just as smart as as other kids their age	BUT	Other kids aren't so sure and wonder if they are as smart.	2	1
8.	4	3	Some kids have alot of friends	BUT	Other kids don't have very many friends.	2	1

	Really True for me	Sort of True for me				Sort of True for me	Really True for me
9.	1	2	Some kids wish they could be alot better at sports	BUT	Other kids feel they are good enough at sports.	3	4
10.	4	3	Some kids are <i>happy</i> with their height and weight	BUT	Other kids wish their height or weight were different.	2	1
11.	4	3	Some kids usually do the <i>right</i> thing	BUT	Other kids often don't do the right thing.	2	1
12.	1	2	Some kids don't like the way they are leading their life	BUT	Other kids do like the way they are leading their life.	3	4
13.	1	2	Some kids are pretty slow in finishing their school work	BUT	Other kids can do their school work <i>quickly</i> .	3	4
14.	1	2	Some kids would like to have alot more friends	BUT	Other kids have as many friends as they want.	3	4
15.	4	3	Some kids think they could do well at just about any new sports activity they haven't tried before	BUT	Other kids are afraid they might <i>not</i> do well at sports they haven't ever tried.	2	1
16.	1	2	Some kids wish their body was different	BUT	Other kids <i>like</i> their body the way it is.	3	4
17.	4	3	Some kids usually act the way they know they are supposed to	BUT	Other kids often don't act the way they are supposed to.	2	1
18.	4	3	Some kids are happy with themselves as a person	BUT	Other kids are often <i>not</i> happy with themselves.	2	1
19.	1	2	Some kids often forget what they learn	BUT	Other kids can remember things easily.	3	4
20.	4	3	Some kids are always doing things with <i>alot</i> of kids	BUT	Other kids usually do things by themselves.	2	1

	Really True for me	Sort of True for me				Sort of True for me	Really True for me
21.	4	3	Some kids feel that they are better than others their age at sports	BUT	Other kids don't feel they can play as well.	2	1
22 .	1	2	Some kids wish their physical appearance (how they look) was different	BUT	Other kids <i>like</i> their physical appearance the way it is.	3	4
23.	1	2	Some kids usually get in <i>trouble</i> because of things they do	BUT	Other kids usually don't do things that get them in trouble.	3	4
24.	4	3	Some kids like the kind of person they are	BUT	Other kids often wish they were someone else.	2	1
25 .	4	3	Some kids do <i>very well</i> at their classwork	BUT	Other kids don't do very well at their classwork.	2	1
26 .	1	2	Some kids wish that more people their age liked them	BUT	Other kids feel that most people their age do like them.	3	4
27.	1	2	In games and sports some kids usually watch instead of play	BUT	Other kids usually <i>play</i> rather than just watch.	3	4
28.	1	2	Some kids wish something about their face or hair looked different	BUT	Other kids <i>like</i> their face and hair the way they are.	3	4
29.	1	2	Some kids do things they know they shouldn't do	BUT	Other kids <i>hardly ever</i> do things they know they shouldn't do.	3	4
30.	4	3	Some kids are very happy being the way they are	BUT	Other kids wish they were different.	2	1
31.	1	2	Some kids have trouble figuring out the answers in school	вит	Other kids almost always can figure out the answers.	3	4
32 .	4	3	Some kids are popular with others their age	BUT	Other kids are <i>not</i> very popular.	2	1

	Really True for me	Sort of True for me				Sort of True for me	Really True for me
33.	1	2	Some kids don't do well at new outdoor games	BUT	Other kids are <i>good</i> at new games right away.	3	4
34.	4	3	Some kids think that they are good looking	BUT	Other kids think that they are not very good looking.	2	1
35 .	4	3	Some kids behave themselves very well	BUT	Other kids often find it hard to behave themselves.	2	1
36 .	1	2	Some kids <i>are</i> not very happy with the way they do alot of things	BUT	Other kids think the way they do things is <i>fine</i> .	3	4

