A COMPARISON OF THE PSYCHOSOCIAL PERCEPTIONS OF CHRONICALLY ILL AND HEALTHY ADOLESCENTS

by

Anastasia Davis

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has been approved

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APPROVED:

[Signatures]

ACCEPTED:

[Signature]
Associate Dean for Graduate Studies
ABSTRACT

The purpose of this study was to determine if a difference exists between the psychosocial perceptions of adolescents with chronic illness and adolescents without chronic illness. Literature was reviewed concerning the increasing numbers of adolescents now living with a chronic illness and how these adolescents perceive themselves in the areas of emotional and social functioning. A discussion of how the public school systems are being affected by these chronically ill adolescents was also addressed.

Two separate groups, consisting of thirty healthy adolescents and thirty adolescents living with a chronic illness, were assessed relative to the domains of social and emotional self concepts. The Multidimensional Self Concept Scales (MSCS) for social and emotional functioning were administered to both groups, and then the results were analyzed to determine if a difference existed in the psychosocial perceptions between the two groups.
The findings demonstrated that among the adolescents studied, those identified as chronically ill experience more social and emotional difficulties than their healthy peers. However, the mean score for both the healthy and chronically ill adolescents fell within the normal standard range for each scale, indicating that although the chronically ill adolescents are experiencing more social and emotional difficulties than their peers, the majority of the chronically ill adolescents are adjusting to these difficulties.
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CHAPTER 1

THE PROBLEM

Introduction

The survival rate and quality of life for the chronically ill child have improved remarkably over that of the child with the same disease twenty to thirty years ago. Burkhart (1993) defines chronic illness as a condition of long term duration for which there is no known cure and or for which some residual features impose limitations on the individual’s functional capacities. Rapid advances in medical technology and procedures have contributed to the increasing number of adolescents now living with chronic health problems. In response to these medical progressions, Federal legislation such as Public Law 94-142 was enacted to guarantee appropriate education in the least restrictive environment, for all individuals with handicaps, including those with chronic illness.

Approximately ten million children including adolescents under eighteen years of age, representing twenty percent of the total population of school age children in the United States have a chronic illness. Many
questions have been raised regarding the impact of chronic illness on the psychological and social development of adolescents, such as are adolescents with chronic illnesses experiencing more emotional and social difficulties than their healthy peers, and if so what impact is that having on their educational and career goals? Does inclusion assist the adolescent with chronic illness to be more successful in achieving their individual goals? Schools around the United States are being challenged to find answers to these questions and provide services that will meet the unique needs of their populations.

Because the adolescent is passing through an important transitional period during which many physical, cognitive, and psychosocial changes take place, this stage of life is generally thought to be filled with stress, and the adolescent is believed to be vulnerable to emotional dysfunction (Silver, Bauman, Coupey, Doctors and Boeck, 1990).

Unquestionably any chronic illness has a significant impact on the overall adaptation of an adolescent. Adaptation is defined as the process by which adolescents cope with the challenges they are confronted with and what support systems they have available to them. This is of particular interest to those working in the educational setting. Specifically, the public
schools are being confronted with creating an environment that fosters the growth of this population (Lehr, 1990).

School personnel, in particular school counselors are faced with the task of trying to address the needs of the chronically ill adolescent. Despite the growing number of chronically ill adolescents, little research exists on the particular psychosocial perceptions of this population. As a result there is a greater need for understanding the psychosocial perceptions of adolescents as they master the normal developmental tasks of childhood while coping with the long term demands and responsibilities associated with chronic illness.

The expected results for this study may suggest that the perceptions of social and emotional functioning of the adolescents with chronic illness would be lower than the perceptions of those adolescents without chronic illness.

**Development of the Problem**

In recent years, advances in health care technology and procedures have resulted in increased survival rates for low birth weight infants, children with chronic illness and congenital anomalies, and survivors of trauma (Nash, 1990). The increased rates of survival seen in this population have led to increases in the number of chronically ill adolescents with a particular
group of psychosocial perceptions. Some of these perceptions include insecurity in social situations related to their appearance, as well as feelings of loneliness that surpass levels felt by their peers who are healthy (Hurtig and Koepke, 1989). Few state guideline exist to help school districts in determining the best methods for providing services for the chronically ill adolescent and relatively few administrators have had any longitudinal experience with this population (Lehr, 1990). Consequently, all educational professionals, including school counselors, are under considerable pressure to meet the needs of this particular population.

The best available estimates indicate that twenty percent of children under eighteen years of age who live in the United States have a chronic medical condition and that about one in ten such children experience limitations in ability to carry out daily activities (Ell and Reardon, 1990). Even children whose diseases are less physiologically severe may have to cope with major changes in their lifestyles secondary to the illness.

These trends indicate that increasing numbers of adolescents and their families need psychosocial services. The impact that chronic illness may have on an adolescent's school attendance, performance and social growth
requires coordinated school interventions that will maximize the adolescent’s success (Lehr, 1990).

Certainly any chronic illness can have a major impact on the overall adaptation of an adolescent. Adolescence is a developmental stage characterized by rapid change and conflicts for the child and the family. A chronic illness superimposes an additional set of potential problems, such as acute and chronic pain, retarded physical growth, and interrupted or reduced opportunities to have peer relationships, peer rejection and an inability to engage in usual social activities (Sexson and Madan-Swain, 1993). In some cases, cooperation with treatment conflicts with the normal adolescent drive for independence.

Inability to engage in age-appropriate activities, restriction of freedom, impaired ability to maintain developmentally appropriate relationships with peers, and concerns about appearance are primary among the problems of adolescents. According to Gotay (1988), an estimated thirty percent of adolescents experience significant distress and problems in coping with serious chronic illness. There is also evidence that severity of illness fails to account for the social and psychological adjustment of many of these adolescents (Hurtig, Koepke, and Park, 1989).
The needs of these adolescents call for special efforts to assist them to cope with problematic life circumstances. Adolescents are often troubled by self-doubt and questions about their self-efficacy. Chronic illness can further weaken or threaten an adolescents’ sense of control over their lives and a belief that they can manage their lives successfully despite their illness.

Much of the existing research on the chronically ill child focuses on the elementary age child or on the parent’s perspective of the illness. In one study, Parette and Holder-Brown (1992), established that adolescents having a chronic condition did less well than their peers without chronic conditions on a number of psychological outcomes: emotional well-being, worries and concerns, and body image. The authors recommend that if schools are going to service the needs of these adolescents they must first establish their perceptions of self concept in a variety of domains. However, research is scant in the area of the specific perceptions of the chronically ill adolescent in comparison to the perceptions of the adolescent without chronic illness. Based on the recommendation of other researchers such as Nash (1990) and Lehr (1990), this project will explore those perceptions from the adolescent’s viewpoint.
Need for the Study

As medical science advances into the twenty-first century, the numbers of adolescents living with chronic illness will increase. Medical science has created and developed technologies which have increased the survival rates of infants. The continuing development of new pharmaceuticals which prolong and improve the quality of life for individuals with chronic illness have all contributed to the increasing numbers of adolescents now living with chronic illness.

Legislation and community pressures are promoting inclusion of adolescents with a variety of disabilities including chronic illness into the public schools. Schools are being challenged to not only meet the educational and health care needs of this population, but to also provide psychosocial services as well (Nash, 1990).

Adolescence can be a very turbulent period for young people. They can vacillate between child-like and adult-like feelings and behaviors. These emotional and behavioral fluctuations can be confusing and frustrating. This is an important period in which many adolescents learn to define themselves and discover their own uniqueness. Typically, this is a period of abundant social interaction with peers (Ell and Northern, 1990).
Many adolescents who have chronic illnesses have to combat frequent absenteeism, which can make it difficult for them to establish strong social relationships. Some are challenged with adjustments in their daily routines like dietary regimes, medications, catheterizations and suctioning that set them apart from their peers. Confronting the challenges of coping with a chronic illness while successfully meeting the developmental tasks of adolescence can be encompassing (Nash, 1990).

School counselors, nurses and educators are interested in promoting the psychological and social well being of all adolescents. Determining if there is a difference in psychosocial perceptions between adolescents with and without chronic illness is a significant issue for those involved in the educational setting. Most schools offer some type of support services to assist with meeting the psychosocial challenges of their adolescents. However, these programs are not always tailored to deal with the unique challenges an adolescent with chronic illness may have.

For instance, according to Sexson and Madan-Swain (1993), adolescent peers are more likely to avoid interaction with the student with a chronic illness due to fears of associating with someone who is different. Adolescents with chronic illness experience feelings of loneliness with a
higher frequency than their peers, and that loneliness can be directly associated to their illness (Orr, 1994).

In another study done by Lansky, Lowman, Vata and Gyulay (1993), separation anxiety which is characterized as refusal to attend school, fear of separation from the mother and multiple somatic complaints, was a frequent problem for adolescents with chronic illness. The authors found a ten percent incidence of school phobia in their group with chronic illnesses in comparison to an approximately two percent incidence of school phobia in the general population. Their conclusion was that like separation anxiety disorder in the general population, the cycle perpetuates itself with increasing school absence and culminates in ultimate refusal to attend school at all.

Contrary to school phobia in the general population where the common fear is that of the parent dying or leaving during the separation caused by school attendance, for the child with a chronic illness the underlying fear appears to be the interrelated concern that the child would die if separated from the mother (Lansky et.al., 1993).

Many school districts in the United States choose to make one school a satellite campus where those districts will funnel students with particular health needs. Arguments exist on both sides as to the effectiveness of this
approach. Although this is often considered a cost effective approach it can lead to further stigmatization for the chronically ill adolescent. Conversely, some school counselors feel that it provides the chronically ill adolescent with the opportunity to socialize and have the same opportunities as their healthy peers. The educational system seems to be heading in a more systemic direction of dealing with the needs of this population. Education professionals realize that many of these chronically ill adolescents have multiple psychosocial concerns that must be dealt with before the learning process can take place. This research project may be beneficial for all those personnel involved with creating and implementing programs that affect the adolescent with a chronic illness.

The needs of these adolescents call for special efforts to assist them to cope with problematic life circumstances. Adolescents are often troubled by self-doubt and questions about their self-efficacy. Chronic illness can further weaken or threaten an adolescents' sense of control over their lives and a belief that they can manage their lives successfully despite their illness.
Purpose of the Study

The purpose of this study is to determine if a difference exists between the psychosocial perceptions of adolescents with chronic illness and adolescents without chronic illness.

Research Question

Do differences exist between the psychosocial perceptions of adolescents with chronic illness and adolescents without chronic illness, and if so, what is the nature of those differences?

Definition of Terms

Adolescence: a developmental transition between childhood and adulthood. It is generally considered to begin at about age twelve or thirteen and to end in the late teens (Papalia and Wendkos Olds, 1992).


Cerebral Palsy: a disorder characterized by impaired movement and posture and early onset. It is non-progressive and may be accompanied by intellectual and language difficulties (Whaley and Wong, 1991).
Chronic illness: a condition of long term duration for which there is no known cure and/or for which some residual features impose limitations on the individual’s functional capacities (Burkhart, 1993).

Cystic Fibrosis: the most common serious pulmonary and genetic disease of childhood. A disease characterized by increased thickness of mucus production, an increase in salt production, and a decrease in pancreatic enzymes (Whaley and Wong, 1991).

Diabetes: a chronic disorder of metabolism characterized by deficiency of the hormone insulin (Whaley and Wong, 1991).

Hodgkin disease: a cancer that originates in the lymph system (Whaley and Wong, 1991).

Inclusion: the act of mainstreaming a student with a special need into the least restrictive environment for that student (Sexson and Madan-Swain, 1993).

Leukemia: cancer of the blood forming tissues of the body. The most common form of childhood cancer (Whaley and Wong, 1991).

Muscular Dystrophy: the largest group of muscle diseases of childhood with genetic origin where there is gradual degeneration of muscle fibers causing weakness, increasing disability and deformity (Whaley and Wong, 1991).
Psychosocial: including, pertaining to, or caused by both emotional and social factors (Papalia and Wendkos Olds, 1992).

Seizure Disorder: a sudden recurrent attack of involuntary loss of consciousness, altered motor activity, disturbed feelings, or behavior associated with excessive neuronal discharges (Whaley and Wong, 1991).

Sickle Cell Anemia: a defect in hemoglobin that results in a thickening of the blood. It is manifested as recurrent crises of joint pain, weakness, fever and vomiting (Whaley and Wong, 1991).

Spina Bifida: failure of a portion of the spinal cord to fuse, resulting in disturbance in gait and/or bowel and bladder. Paralysis of the lower extremities is often common (Whaley and Wong, 1991).
CHAPTER 2

LITERATURE REVIEW

Introduction

Chapter 2 contain a review of the pertinent literature on adolescent development and the research that exists on the impact of chronic illness on adolescents. The chapter begins with a description of how adolescents transition and master psychosocial development. Next, the advances in medicine and the impact that those advances have had on chronic illness are discussed. The next section describes the degree that adolescents with chronic illness may be at risk for emotional and social problems. The chapter concludes with a discussion about the increasing number of adolescents living with chronic illness, and the impact of those adolescents on the public school system.

Adolescent Development

Adolescence is typically the period of development from about age eleven to the late teens. It’s a time when children develop adult physical characteristics, gain a sense of their identity and grow emotionally. According to Piaget, the stage of intellectual development that adolescents’
master is formal operations. In this stage the adolescent develops complex reasoning and problem solving abilities as well as shaping their own beliefs and values (Hostler, 1989).

Erik Erickson, the social-learning theorist, studied development in terms of social reinforcement. According to Erickson, a person's development depends on his or her social interactions at key points in life. The social development task that Erickson believed coincides with adolescence is to resolve the conflict of identity versus role confusion. It is during this stage that the adolescents sexual maturity and questions about identity lead to development of intense social interactions with their peers. If they are unable to master that task it results in an inability to separate from family which leads to adult role confusion (Crittenden, 1990).

In terms of when the adolescent considers himself or herself an adult, some clinicians base that decision on chronological age and others on emotional maturity. Emotional maturity depends on such achievements as discovery of identity, independence from parents, development of a system of values, and ability to form mature relationships of friendship and love (Papalia and Wendkos Olds, 1992).
According to Papalia and Wendkos Olds (1992), most young teenagers are more concerned about their looks than about any other aspect of themselves, and many do not like what they see in the mirror. Teenagers of both sexes worry about their weight, their complexion, and their facial features.

Adolescent girls are more prone to depression than boys, mainly because of worries about their appearance. They feel “ugly”; consider themselves too fat, too short, or too tall; or hate their hair or their complexion. Before puberty, rates for depression are the same in boys and girls; but at about age twelve girls start to have higher rates, and by age fourteen girls’ rates are twice as high as boys’ (Silver et al., 1990).

Adults often dismiss adolescents’ preoccupation with their looks. But in a society in which personality is often judged by appearance, self-image can have long lasting effects on young people’s feelings about themselves (Blumberg, Lewis and Bush, 1985).

The search for identity is lifelong, it comes into focus during adolescence. This effort to make sense of the self and the world is a healthy, vital process that contributes to the ego strength of the adult. Self-identification emerges when young people choose the values and people they
will be loyal to, rather than accepting those of their parents (Papalia and Wendkos Olds, 1992).

Intimacy is another avenue toward identity. By becoming intimate with another person and sharing thoughts and feelings, the adolescent offers up his or her own tentative identity, sees it reflected in the loved one, and is better able to clarify the self (Silver et al., 1990).

An essential aspect of the search for identity is the need to become independent of parents. An important path for this part of the search leads to the peer group. American teenagers spend much of their free time with people of their own age, with whom they feel comfortable and can identify. They have their best times with their friends, with whom they feel free, open, involved, excited and motivated. These are the people they most want to be with (Hurtig, Koepke and Park, 1989).

According to Silver, Bauman and Ireys (1995), many adolescents feel a constant tension between needing to break away from their parents and realizing how dependent they really are on them. They have to give up their old identity and establish their own private identity, while at the same time keeping family ties. An important source of support during this complex transition is an adolescent’s growing involvement with their peers. The peer
group according to Ireys et al. (1993), is a source of affection, sympathy, and understanding, a place for experimentation, and a supportive setting for achieving autonomy and independence from parents.

**Chronic Illness**

An interruption in the ability to transition effectively through adolescence, and successfully master the task of acquiring self-identity can be overwhelming. There are multiple hurdles the adolescent has ahead of himself or herself and superimposing a chronic illness into the typical challenges of adolescent development can add to these difficulties.

Chronic illness comes in many forms; diabetes, asthma, seizure disorders, muscular dystrophy, spina bifida, sickle-cell anemia and the list goes on. Some of the hallmarks of chronic illness are that it is a serious physical illness that is likely to require regular and frequent medical intervention throughout life (Burkhart, 1993).

Statistics regarding chronic illness are at best only estimates of the true incidence of the problem and vary depending on the definitions used, the methods of study, and the population investigated (Gortmaker and Sappenfeld, 1990). Overall, the percentage of children with any chronic disorder ranges from eighteen to twenty-two percent of the entire child
population in the United States. Two thirds of all cases of chronic illness are attributable to asthma and congenital heart defects; however in terms of mortality, congenital heart defects, spina bifida and leukemia are the most lethal (Whaley and Wong, 1991).

While there has been little change in the survival patterns for asthma, cleft lip/palate and muscular dystrophy in recent years, there have been improvements in other diseases. Twenty years ago, children who developed acute lymphocytic leukemia lived an average of three to four months; today sixty-eight percent can expect to survive into adulthood. Children with Hodgkin disease, almost always fatal twenty years ago, can now expect an eighty-eight percent cure rate (American Cancer Society, 1995). The median life expectancy for a child with cystic fibrosis has increased from five years of age in 1955 to thirty-three years today (Cystic Fibrosis Foundation, 1996). The most dramatic progress, however, has occurred in the treatment of spina bifida. In 1955, ninety percent of children born with spina bifida died in infancy; today ninety to ninety-five percent survive infancy and have normal life expectancy if they receive timely and appropriate medical intervention (Spina Bifida Association, 1996).
In addition, technologic advances have increased survival rates of extremely premature infants and full-term low birth weight infants. In the United States in 1960, only three out of ten very low birth weight newborns survived at least one month; by 1990 three times as many have survived (Crittenden, 1990). The resulting progress for these children that were once considered terminal, contributes to the growing number of children with chronic illness. Many of these children require medication, nursing procedures and specialized equipment in order to function at their activities of daily living. Time in the school day must be set aside in order for these tasks to be accomplished. This has resulted in an impact on the educational system in terms of meeting these medical needs as well as the accompanying psychosocial needs.

**Adolescents with Chronic Illness**

There is conflicting evidence in the literature regarding the degree to which adolescents with chronic illness may be at risk for emotional distress and adjustment problems. A number of studies support the position that chronically ill adolescents demonstrate increased rates of psychological maladjustment, behavior problems and psychiatric symptoms and have lower self-esteem (Drotar and Bush, 1985).
In addition, studies of the effects of chronic illness on psychosocial functioning have tended to address emotional states and symptoms such as anxiety or depression. Little attention has been given to psychological development as an ongoing process in adolescence. It is not known whether the presence of a chronic illness in adolescence may be associated with delay or disruption of the psychosocial growth process. Conversely, coping with the demands and experiences of having a serious health condition possibly can enhance psychological maturity in some people.

One study by Blumberg, Lewis and Susman (1984), compared ego development among healthy adolescents to that of a group of adolescents having a chronic illness, diabetes. The study found that adolescents with diabetes were significantly lower in ego development when compared to a group of high school students without diabetes.

In another study done by Ireys et al. (1994), their results suggest that perception of the impact of a chronic illness is an especially critical factor because it may influence how condition characteristics (such as functional severity) affect mental health status. For example, in this particular study, some adolescents with a chronic illness viewed their disorder as negatively affecting most aspects of their lives and may have therefore reported higher
levels of psychological symptomology; others, with similar conditions, may view their condition in a less burdensome light. From this conceptual vantage point, perceived impact is seen as a type of cognitive appraisal and serves as one potential pathway through which chronic illness influences mental health.

According to Seigel et al. (1990), the severity of illness is negatively related to mental health in adolescents with chronic illness. Still other studies by Ireys et al. (1993), found that children with conditions that produce marginal impairment have more psychological problems, than their severely disabled peers. Many inconsistencies exist and much of those inconsistencies have been attributed to the evolving course of symptoms. The effect of uncertainty regarding symptoms or prognosis may be especially pronounced in the transition period, when many question naturally arise in relation to career choice, living arrangements and autonomy (Sexson and Madan-Swain, 1993).

It's not known what impact the overprotectiveness of the parents of these adolescents with chronic illness has on the transition process. Much speculation has occurred, suggesting that for majority of adolescents with chronic illness the transition is delayed and prolonged. In most of the studies
that have been conducted on children with chronic illness, family functioning has emerged as the most powerful predictor of psychological functioning in the chronically ill adolescent (Hamlett, Pellegrini and Katz, 1992).

The quality of relationships within the family appears to exert an important effect on the management of the illness and the psychological outcome of the adolescent. The unique characteristics and strengths of the family are likely to strongly influence the adolescent’s and family’s appraisals of the stressors associated with illness, and as a result, shape the coping response of the child and family. The competencies and resiliency of a family may serve as a protective factor, defending the child from the disruptions and crises connected to the chronic illness (Orr, 1994).

A plethora of research exists concerning around the family’s perspective of the adolescent’s chronic illness. The need now exists to measure the individual adolescent’s perceptions on their chronic illness. Drotar (1981) argued that when interpreting group differences on behavior rating of chronically ill and healthy children, the unique circumstances posed for the individual by the chronic illness should be considered. With the management of chronic illness, there is a lifelong process of adaptation as
illness-related stressors and developmental stages and tasks give rise to corresponding changes to the child's needs in coping with chronic illness.

The numbers of adolescents with chronic conditions alone suggest that a comprehensive, multidisciplinary approach is necessary to meet the needs of this population. How chronic illness impacts the psychosocial needs of the adolescent is not clear yet. Keeping in mind some of the developmental tasks of adolescence, the impact of illness or disability can be most detrimental, during adolescence. Before this age, the child's self-image, self-esteem and basic adjustment to life were primarily dependent on his or her relationship with the parents. A young child with chronic illness reared in a home with loving parents who are sensitive to the child's needs generally copes well with the illness. However, adolescence is different, even with all the benefits of parental love, the adolescent is striving for an independence away from parents and in many ways must deal with the impact of the illness alone (Orr, 1994).

The major task for adolescents is to establish an identity of their own. Pubertal changes must be integrated into the self-image while the adolescent is gaining control and mastery over increased physical capabilities and sexuality. During early adolescence this takes place primarily within the peer
group. Illness at this time interferes with teenagers’ sense of mastery and control over a changing body (Whaley and Wong, 1992). They are at a stage of development when being different is unacceptable to the peer group, who may view an illness in one member as a threat to the established uniformity by which all are measured. At no time of life is an individual so vulnerable to the emotional stress of biological impairment (Hostler, 1989). Appearance, skills, and abilities are highly valued by peers; and adolescent who is limited in any of these qualities is subject to rejection by this important group.

These teenagers are faced with the task of incorporating their illness into their changing self-concept. The child who develops the illness or acquires the disability during crucial adolescent years may have more difficulty accomplishing this task than does the teenager who has been affected since childhood. According to Crittenden (1990), that the earlier the onset of a chronic condition, the better the individual is able to adapt to it. The adolescent may feel rejected because of personal appearance or an inability to engage in activities expected of a healthy adolescent.

Adolescence is a time for achieving independence from the family and planning for future goals and responsibilities. In a study done by Orr (1994),
adolescents with long term chronic illness tended to be less future directed and less independent than healthy peers. Enforced dependency from physical impairment can exacerbate the parent-child conflicts surrounding independence. Lack of understanding from both parties can result in bitter feelings and intrafamilial turmoil.

Adolescents’ innate and learned coping mechanisms are very important in their ability to deal with their illness. Some of the individual characteristics that influence an adolescents’ ability to cope are, sense of self-esteem, social skills and ability to express emotions (Hostler, 1989). In addition to these variables, the social support afforded these children is critically important. Therefore the better the family copes, the better the child is able to deal with the stressors imposed by the illness.

Because it is often easier to recognize children who cope poorly with illness or disability it is helpful to describe those behaviors typical of well-adjusted adolescents. Those that were well adjusted gradually learned to accept their physical limitations but found achievement in a variety of compensatory motor and intellectual pursuits. They have an understanding of their illness that allows them to accept their limitations, assume responsibility
for care, and assist in treatment and rehabilitation regimes (Sexson and Madan-Swain, 1993).

The well adjusted adolescents express appropriate emotions, such as sadness, anxiety, and anger at times of exacerbations but confidence and guarded optimism during periods of clinical stability. They are able to identify with other similarly affected individuals, promoting positive self-images and displaying pride and self-confidence in their ability to master a productive, successful life despite their illness (Sexson and Madan-Swain 1993).

**Schools and the Chronically Ill Adolescent**

As a result of legislation and public pressure, public schools are filling the void for many adolescents who seek to be integrated with their peers. School counselors are challenged to assist these chronically ill students transition effectively through the developmental stages of adolescence. Chronically ill adolescents are faced with a number of serious ethical dilemmas as they enter adulthood.

For example, should chronically ill adolescents share the truth of their condition with dating partners, prospective spouses, or potential employers? Should they seek a job with good health insurance rather than pursue a career
with less employee benefits? Should they have the right to refuse further treatment, especially when the prospects for a cure or even palliation are minimal? Whose wishes should be upheld when a conflict exists between the parents and the young person?

Many high schools offer life management courses that intend to help adolescents develop problem solving abilities to effectively cope with the challenges of life. Adolescents with chronic illness have challenges that are unique to them as a result of their illness (Hostler, 1989).

Such questions have no clear-cut answers. Adolescents should be encouraged to weigh decisions, investigate alternatives, and choose their own solutions. Consent and confidentiality are frequent dilemmas in providing care to any minor adolescent and are often made more complex by the teenager's health problems (Orr, 1994). For example, do these adolescents have a right to request health care without parents' knowledge or permission? If they are engaging in potentially hazardous activities, such as the teenager with cystic fibrosis who begins to smoke or the young person who has hemophilia who engages in sports or test HIV positive and becomes sexually active, should parents be informed?
Clearly, assessing the perceptions of chronically ill adolescents have, is a way to begin to develop a counseling approach that would be effective in helping these adolescents reach their personal goals. Increasingly, schools are being used as the avenue to develop and implement programs for a variety of chronically ill populations. Some of these programs include peer counseling, in which the goal is to provide children with interpersonal contact to help them with their illness and with role models to assure them that it is possible to cope effectively with their illness. However, little research exists specific to the adolescent population with chronic illness. Often, students with chronic illnesses are paired in classrooms with cognitively impaired students, both groups being classified as special needs populations, however, with distinctly separate needs. School counselors who seldom have any medical background are challenged to assist these students with a variety of problems, that are unique to them because of their illness. Researching the needs of adolescents with chronic illness can assist all education personnel working with them.

**Summary**

As medical science advances into the twenty-first century, the number of adolescents living with chronic illness will increase, and so will their need
for psychosocial services. The needs of these adolescents call for special
efforts to assist them to cope with difficult life circumstances. Adolescents
are often distressed by self-doubt and questions about their self-efficacy.
Chronic illness can further minimize or endanger adolescents’ sense of
control over their lives and belief that they can manage their lives
successfully despite their illness. If differences in psychosocial perceptions
exist between adolescents with chronic illness and adolescents without
chronic illness, the identification of those differences can help establish a
framework for counseling approaches that will assist these adolescents with
reaching their fullest potential.
CHAPTER 3

METHODOLOGY

Introduction

The purpose of this study is to determine if a difference exists between the psychosocial perceptions of adolescents with chronic illness and adolescents without chronic illness. The research question is, do differences exist between the psychosocial perceptions of adolescents with and without chronic illness, and if so, what is the nature of those differences.

Research Design

A causal/comparative descriptive research design was utilized in this study. The central focus of descriptive research is to examine the facts about people, their opinions and attitudes (Merriam and Simpson, 1995). A descriptive design is appropriate when little is known about a given subject.

The descriptive design itself provides advantages, such as the data can be collected without the intensity and quantity of work involved in an experimental design. In addition, the study is conducted in a real life situation, not an artificial, experimental situation. The purpose of the
descriptive design is to draw attention to the degree two phenomena are related (Merriam and Simpson, 1995).

As a form of descriptive research, the causal/comparative approach attempts to explain phenomena that have already occurred. These designs seek results which would indicate that relationships may point to cause (Merriam and Simpson, 1995). For the purposes of this study, this researcher is attempting to gain an understanding of how chronic illness impacts the psychosocial perceptions of adolescents.

The instrument used to measure social and emotional self perceptions of adolescents was the Multidimensional Self Concept Scale (MSCS). The MSCS was designed to assess the social-emotional adjustment of children ages nine to nineteen and to assist the researcher and or clinician to study the developmental nature of self concept in six context based dimensions: social, competence, affect, academic, family and physical. The test can be used as an overall assessment of self concept or as an individual measure of any of six scaled dimensions of self concept. For the purposes of this research design, two separate measures, the social and affective scales, were administered (Bracken, 1992).
Sample and Population

A non-random method was used to select the sample for this study. However, the researcher did select the sample in such a way that the age range, gender, and grade level of the respondents represented the chronically ill and healthy populations of the High School as a whole. There were two sample groups of thirty respondents each, with a response rate of one hundred percent. The chronically ill sample represents 24% of the total population of chronically ill students at the High School.

One sample group consisted of thirty High School adolescents between the ages of fifteen and nineteen representing ninth through twelfth grade who did not have a chronic illness, see Table 1 on page 34 for a description of these respondents. This sample group was chosen from a life management class on a High School campus at which this class is a requirement for all students prior to graduation. The class is designed to include a mixture of all four high school grade levels. There were fifteen female and fifteen male respondents. Participation in the study was completely voluntary.

The second sample group consisted of thirty adolescents between the ages of fifteen and nineteen from the same High School also representing
## TABLE 1

**DESCRIPTION OF HEALTHY RESPONDENTS**

Mean Age.........................................................16.5 years

Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>50.0%</td>
</tr>
<tr>
<td>Females</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

Percentage of Grade Distribution

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>26.6%</td>
</tr>
<tr>
<td>10th</td>
<td>23.3%</td>
</tr>
<tr>
<td>11th</td>
<td>23.3%</td>
</tr>
<tr>
<td>12th</td>
<td>26.6%</td>
</tr>
</tbody>
</table>
grades nine through twelve, see Table 2 on page 36 for a breakdown of these respondents. However, this group consisted of adolescents who had one chronic illness. Some studies on chronically ill adolescents focus on specific conditions, such as diabetes, cerebral palsy and spina bifida, others have grouped all those with chronic illness. The latter method represents a noncategorical orientation toward chronic illness. In the noncategorical view, different conditions share common attributes that affect peoples' lives, such as whether the condition is incapacitating, whether its onset was acute or gradual, and whether it is visible or invisible (Burkhart, 1993).

This study applied a noncategorical approach to chronic illness, investigating whether adolescents with and without chronic illness differed in their psychosocial perceptions. In this second group there were fifteen females and fifteen males, who reported having one of the following chronic illnesses: diabetes, seizure disorders, spina bifida, cerebral palsy, cystic fibrosis and asthma. See Table 3 on page 37 for a breakdown of chronic illness by number of respondents and gender.
### TABLE 2

**DESCRIPTION OF CHRONICALLY ILL ADOLESCENTS**

Mean Age.......................... 16.9 years

**Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>50.0%</td>
</tr>
<tr>
<td>Females</td>
<td>50.0%</td>
</tr>
</tbody>
</table>

**Percentage of Grade Distribution**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th</td>
<td>16.6%</td>
</tr>
<tr>
<td>10th</td>
<td>16.6%</td>
</tr>
<tr>
<td>11th</td>
<td>36.6%</td>
</tr>
<tr>
<td>12th</td>
<td>30.0%</td>
</tr>
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</table>
TABLE 3
DESCRIPTION OF RESPONDENTS WITH CHRONIC ILLNESSES

<table>
<thead>
<tr>
<th>Condition</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Seizure Disorder</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Spina Bifida</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Cerebral Palsy</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Cystic Fibrosis</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asthma</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Assumptions and Limitations

A possible limitation of this study was the influence of other extraneous variables such as, birth order, single or two parent family status, and ethnic background of the respondents which were not accounted for in this study. Therefore, it is not known what effect they may have had on the findings. Another limitation is that the sample did not include adolescents that reported having more than one chronic illness. Because adolescents with multiple chronic illnesses were not included, the sample may not be an accurate representation of the total population of chronically ill adolescents at this High School. Also, the small sample size makes it difficult to make generalizations to the larger population. Additionally, the chronic illnesses that were studied were limited to the available population at one specific High School. This sample cannot be generalized to the chronically ill population of adolescents in all public school settings.

Instrumentation

As explained by Papalia and Wendkos Olds (1992), psychosocial needs are created by both emotional and social perceptions. Determining adolescents self perceptions of their social and affective functioning is the foundation for understanding their needs. The Multidimensional Self
Concept Scale (MSCS) was used to assess two domains of self concept, social and affective. Adolescents interact socially with other people in all sorts of settings. Those "other people" include everyone with whom the adolescents have any contact, but family members, teachers, peers and neighbors comprise the majority of individuals with whom most adolescents interact regularly. Adolescent's social self concepts are affected by the reactions of other people, the extent to which the adolescents are approached in positive ways, and their ability to achieve their goals and objectives through successful social interactions. The MSCS measures the adolescents' social perceptions in relation to these contacts (Bracken, 1992).

Adolescent's affective reactions differ as their previous behaviors are differentially reinforced, extinguished, and punished, or as they react to personal and environmental evaluations of their behavior. As their affective behavior patterns develop and become more consistent with age, adolescents are able to recognize, evaluate, monitor, describe, and discuss their affective behaviors. Affective behaviors occur in advance of, simultaneously with, and in response to all situations in which the adolescent is involved. The MSCS measures the adolescents' affective perceptions in relation to these situations (Bracken, 1992).
Both the affective and social scales consisted of twenty-five statements that are either positive or negative in nature. The items were constructed using a four-point Likert-type scale, with no neutral option. The items are presented in a graduated forced-choice item format. The instrument itself is written at a third-grade reading level. See Appendix A for a copy of the social and affective scales.

The MSCS represents an extension to the long history of self-concept study. It clearly defines self-concept as a multidimensional and context-dependent learned behavioral pattern, which reflects on an individual’s evaluation of past behaviors and experiences, influences on an individual’s current behaviors, and predicts an individual’s future behaviors. The scale was standardized and normed on a national sample of children from the age of nine to nineteen inclusive of grades five through twelve. The MSCS was group administered at seventeen sites, in each of the major regions of the United States, and the sample included children of both genders and all major ethnic heritages (Bracken, 1992).

The level of internal consistency for the MSCS was .98. This level of internal consistency suggests that examiners can expect examinee item responses to be quite constant within scales. Also, these findings suggest
approximately 97-99% of Total Scale score variance to be reliable or true, and only 1-3% due to error. The standard error of measurement for the social scale of the MSCS is 4.74 and the standard error of measurement for the affective scale of MSCS is 3.97 (Bracken, 1992).

Several concurrent validity studies were conducted as part of the MSCS development and standardization. These studies were designed to explore the degree to which the MSCS shares abilities with other self concept instruments, the comparability of each instrument’s mean scores, and the extent to which support exits for the MSCS six independent scales.

It was shown that the MSCS Total Scale score correlated .73 with the Coopersmith and .85 with the Piers-Harris total test scores. This level of correlation is substantial and illustrates that between 50 and 70% of the variance generated by these instruments is held in common with the MSCS. Two additional validity studies were conducted to compare two newer instruments with the greatest degree of theoretical overlap with the MSCS, the SDQ-I and the SDQ-II. The two instruments were developed from a similar theoretical model as the MSCS. These two instruments produced total test scores that are moderately correlated (r=.69) and similar in magnitude. (Bracken, 1992, p.48)

Procedure

The data were collected in February of 1996 at a High School in Arizona. The MSCS was administered during a life management class to
adolescents without chronic illnesses. Students were verbally informed of the purpose for the study and they were asked to volunteer for participation. Once thirty respondents were established, they were instructed to only fill out their age, gender and grade level on the booklet cover. They were further instructed to read the instruction paragraph on the bottom of booklet cover and to only respond to pages two and four, the social and affective domains, respectively. Students were also told that if they did not understand any of the words in the test, they could ask the researcher and they would be explained to them. No time limit for completing the scales was enforced.

The second group of adolescents' with chronic illness were approached for participation in the nurse's office during their daily visits for maintenance of illness related care. Again, the purpose for the study was explained, their participation was voluntary, and the identical set of instructions was administered to this group, with one adjustment, they were asked to include the name of their chronic illness on the booklet cover.

**Method of Analysis**

The MSCS is easily scored, given one simple adjustment. Because the scale has both positive and negative items, differential scoring procedures are necessary for the two item types. Positively worded items are scored as
follows: SA=4, A=3, D=2, SD=1. Items with negative connotations are scored in reverse order: SA=1, A=2, D=3, SD=4. The scores are summed and a raw score is established for each individual scale.

These raw scores were then converted to standard scores through use of an Appendix in the MSCS examiner’s manual. The normal range for each scale is between standard scores of 85-115. A standard score above 115 indicates that this domain is a particular strength for this individual. A standard score below 85 indicates that the individual has a particular weakness in this domain, in comparison to their peer group. A standard score in the clinical range on the social scale would indicate that the individual is having adjustment difficulties in the area of social interaction. A standard score in the clinical range on the affective scale would indicate that the individual is experiencing emotional difficulties (Bracken, 1992).

After the raw score was converted to a standard score, the mean standard score was then established for each scale for each group. A T-test of means was then performed between each group for both the social and affective scales to establish whether or not there was a significant difference between the means of each group.
The data was also analyzed by computing percentages of adolescents in each group who fell into the normal range and the clinical range. A z-test of proportions was then conducted between the healthy and chronically ill adolescents that fell into the clinical range to determine whether or not there was a significant difference between the two groups. Additionally, the adolescents that fell into the clinical range were then examined by gender, to determine if a difference existed.
CHAPTER 4

PRESENTATION AND ANALYSIS OF THE DATA

A raw score was totaled for each individual respondent on the affective and social scales of the MSCS. These individual raw scores were then converted to standard scores. The normative range for the standard scores is from 85 to 115. A standard score above 115 indicates that this domain is a particular strength for the individual. A standard score below 85, a clinical score, indicates that the individual has a weakness in that domain in comparison to his/her peers. A score in the clinical range also indicates that the individual is having adjustment difficulties in that particular domain.

A mean score was established for each group, the healthy adolescents and the chronically ill adolescents, for the affective and social scales. It can be seen on Table 4 on page 47 that the mean score on the social scale for the healthy adolescents was 105.23 and that the mean score for the chronically ill adolescents was lower, 94.67. Although this mean score was lower than the normal range of 85 to 115 for each group for the social and affective scales, it should be noted that the chronically ill adolescents’ mean score fell within the normal range, indicating that the majority of these adolescents were not experiencing social adjustment difficulties.
It can also be seen on Table 4, that the mean score on the affective scale for the healthy group was 101.0 and for the chronically ill group it was 89.33. Again, the chronically ill adolescent group’s mean score was lower than the healthy group. However, this score also was within the normal range, indicating that the majority of these adolescents were not experiencing emotional adjustment difficulties.

After the mean and standard deviation were calculated a T-test of means was calculated to determine if there was a significant difference between the group means. The T score for the difference between means on the social scale was 3.23 with 58 degrees of freedom. The p-value was 0.0020 at the 95% confidence interval, a significant result.

The T score for the affective scale was 3.91 with 58 degrees of freedom. The p-value was 0.0002 at the 95% confidence interval, also a significant result.

Additionally, the standard scores were analyzed to determine the percentage of respondents that fell in the clinical range (below the normal range of 85-115) for each group for the social and affective scales. It

**TABLE 4**

**GROUP MEAN AND STANDARD DEVIATION SCORES**
Social Scale

Healthy Adolescents

Mean ........................................... 105.23
Standard Deviation .......................... 13.19

Chronically Ill Adolescents

Mean ........................................... 94.67
Standard Deviation .......................... 12.13

Affective Scale

Healthy Adolescents

Mean ........................................... 101.0
Standard Deviation .......................... 13.10

Chronically Ill Adolescents

Mean ........................................... 89.33
Standard Deviation .......................... 9.80

can be seen by Table 5 page 49 that on the social scale, 100% of the healthy adolescents fell into the normal range. For the chronically ill adolescent
group 86.7% fell into the normal range and 13.3% fell into the clinical range on the social scale.

Table 5 also shows that on the affective scale, 90% of the healthy adolescents fell into the normal range, whereas 10% fell into the clinical range. For the chronically ill adolescent group, 70% fell into the normal range and 30% fell into the clinical range.

A z-test of proportions was done to determine if there was a significant difference between the percentage of healthy and chronically ill adolescents that fell into the clinical range on the affective scale. While there were more adolescents that scored in the clinical range in the chronically ill group than in the healthy group, this difference was not significant. A z-test of proportions was also calculated on the percentage of healthy and chronically ill adolescents that fell into the clinical range on the social scale but it also was not significant.

The individuals that fell within the clinical range were then examined by gender. It can be seen by Table 6 page 51 that on the social scale, 75% (3) of the four chronically ill adolescents that fell into the clinical range were

TABLE 5

BREAKDOWN OF ADOLESCENTS WHO FELL INTO NORMAL
AND CLINICAL RANGES

Social Scale

Healthy Adolescents

Percentage in normal range ...................... 100%

Percentage in clinical range ...................... 0%

Chronically Ill Adolescents

Percentage in normal range ...................... 86.7%

Percentage in clinical range ...................... 13.3%

Affective Scale

Healthy Adolescents

Percentage in normal range ...................... 90%

Percentage in clinical range ...................... 10%

Chronically Ill Adolescents

Percentage in normal range ...................... 70%

Percentage in clinical range ...................... 30%

female. It can also be seen that on the affective scale on Table 6, that of the three healthy adolescents that fell into the clinical range in the healthy group, 100% were female. Of the nine chronically ill adolescents that fell into the
clinical range, 66.6% were female and 33.3% were male. Females fell into the clinical range more often than their male peers on both the social and affective scales.
### TABLE 6

**BREAKDOWN BY GENDER OF ADOLESCENTS WHO FELL INTO CLINICAL RANGE**

#### Social Scale

**Healthy Adolescents**

All fell within the normal range

**Chronically Ill Adolescents**-4 adolescents fell into clinical range

- Percentage of females in clinical range: 75%
- Percentage of males in clinical range: 25%

#### Affective Scale

**Healthy Adolescents**-3 adolescents fell into the clinical range

- Percentage of females in clinical range: 100%
- Percentage of males in clinical range: 0%

**Chronically Ill Adolescents**-9 adolescents fell into the clinical range

- Percentage of females in clinical range: 66.6%
- Percentage of males in clinical range: 33.3%
CHAPTER 5
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of this study was to determine if a difference exists between the psychosocial perceptions of adolescents with chronic illness and adolescents without chronic illness. Research literature and journal articles were reviewed concerning the increasing numbers of adolescents now living with a chronic illness and how these adolescents perceive themselves in the areas of emotional and social functioning. A discussion of how the public school systems are being affected by chronically ill adolescents was also addressed.

Two separate groups, consisting of thirty healthy adolescents and thirty adolescents living with a chronic illness, were assessed relative to the domains of social and emotional self concepts. The Multidimensional Self Concept Scales (MSCS) for social and emotional functioning were administered to both groups, and then the results were analyzed to determine if a difference existed in the psychosocial perceptions between the two groups.
The findings demonstrated that among the adolescents studied, those identified as chronically ill experience more social and emotional difficulties than their peers. However, the mean score for both the healthy and chronically ill adolescents fell within the normal standard range of 85 to 115 for each scale, indicating that although the chronically ill adolescents are experiencing more social and emotional difficulties than their peers, the majority of adolescents with chronic illnesses are adjusting to these difficulties.

Conclusions

Past research is scant with regard to determining if a difference exists between the psychosocial perceptions of chronically ill adolescents and their healthy peers. There have been studies done on younger children that indicated that differences do exist. These studies, like the one done by Orr (1994), suggest that chronically ill children have more social and emotional difficulties than their healthy peers. However, there have also been contrasting studies that suggest that there are no differences in psychosocial perceptions between chronically ill children and healthy children. The findings of this study show that there is a statistically significant differences
in psychosocial perceptions between chronically ill and healthy adolescents as determined by the MSCS.

Adolescents are often troubled by self-doubt and questions about their self-efficacy. Chronic illness can further weaken or threaten an adolescents' sense of control over their lives and a belief that they can manage their lives successfully despite their illness.

In a study done by Parette and Holder-Brown in 1992, their findings indicated that adolescents with chronic conditions did less well than their peers without chronic conditions on a number of psychological outcomes: emotional well-being, worries and concerns and body image. Parette and Holder-Brown recommended that if schools are going to service the needs of these adolescents they must first establish the adolescents perceptions of self concept in a variety of domains.

The findings of this study did show a significant difference between the mean scores of the adolescents with and without chronic illnesses at one High School campus. The chronically ill adolescents’ mean scores were lower that their healthy peers on the social and affective scales of the MSCS. A possible explanation for this is that all of the adolescents with chronic illnesses who responded to the MSCS were adolescents who frequented the
health center at this particular High School for daily nursing care. This group
of chronically ill adolescents, tended to require more daily maintenance with
regard to their illness than some of their peers who also had a chronic
condition.

Also, studies have been done by Nash (1990) and Lehr (1990), that
suggest that adolescents between the ages of seventeen through nineteen,
grades eleven and twelve, who are getting ready to make the transition to
college or living on their own, experience more feelings of depression and
anxiety than their peers.

In this study, 66.6% of the chronically ill respondents were in either
eleventh or twelfth grade, with the mean age for these two grades being 17.9
years. As adolescents' prepare themselves for the transition into young
adulthood and more autonomy, many of them experience mixed emotions.
As a result of this transition, many of the adolescents with chronic illnesses
will be making major adjustments to their daily health maintenance routines.
The security of being on a High School campus and the familiarity of health
maintenance routine will all change as they transition out of adolescence into
young adulthood.
It is also important to note that although the mean findings between the adolescents with and without chronic illnesses were significantly different, the mean scores of the adolescents with chronic illnesses fell within the normal range. The majority of the chronically ill adolescents psychosocial perceptions are within the normal range. This suggests that most of these adolescents are coping well with their illness. For most of the chronically ill adolescents in this sample, their illness is not having a negative effect on their psychosocial perceptions as they transition through adolescence. It is also important to report that there were also healthy individuals as well as chronically ill individuals who fell below the normal range on the affective scale.

In this study, the female chronically ill adolescents scored lower on both the social and affective scales of the MSCS than their male counterparts. According to Silver et al. (1990), adolescent girls are more prone to depression than boys, mainly because of worries about their appearance. In this particular sample there were ten females who had visible indications of their illness in comparison to six males.

In this study the researcher was unable to match individual scores to those respondents that had visible indications of their illness. A possible
reason for the female chronically ill adolescents scoring lower than their male counterparts is related to the visibility of their illness and it’s emotional and social impact on them. The potential impact that the visibility of illness has on psychosocial perceptions was not addressed in this study.

**Recommendations**

The findings of this study suggest that these chronically ill adolescents are experiencing social and emotional difficulties more often than their healthy peers. Chronically ill adolescents would benefit by working with counselors to develop problem solving skills so they can master the tasks of adolescent development while coping with their chronic illness. Designing interventions that will assist them to foster peer relationships and participate in group activities to enhance individual and group skills in social competence is paramount.

Chronically ill adolescents would also benefit from peer support groups which would establish a forum for discussion of emotions and difficulties that are unique to the individual as well as the group. A mentoring program that would pair individual adolescents with chronically ill young adults who had successfully transitioned out of High School could help decrease anxiety for many of them. Counselors could work individually
with chronically ill adolescents to identify specific concerns. Together, the
counselors and adolescents can create a plan that will help the adolescent
achieve a sense of control over his or her life and illness.

A recommendation for future study would be to use a larger sample to
test the reliability and validity of these findings. A sample that would use a
random selection process may also help to determine if even a larger
percentage of chronically ill adolescents would fall into the clinical range.
Also, including adolescents that had multiple chronic illnesses would insure a
more accurate representation of the population of chronically ill adolescents.

In addition, the psychosocial perceptions of the chronically ill
adolescents two years after high school in comparison to their perceptions
during high school would be an area for future research. Determining if their
perceptions changed or remained similar after this transition could lead to
important information for counselors working with chronically ill adolescents
in high school settings.

If the chronically ill adolescents scored closer to their healthy peers two
years after completing high school, counselors could use some of these
former students to mentor and discuss some of the transitional challenges
associated with leaving high school, and how they overcame them. If their
scores decreased or remained similar to their original scores, high school counselors could work with chronically ill adolescents to ease the transition. Counselors could work with students to set realistic goals for themselves and to assist adolescents with chronic illnesses to have as much autonomy as possible in their daily health maintenance. High school counselors can help the chronically ill adolescents identify areas in their lives where they feel a lack of control. They can then work with these adolescents to create a plan to achieve an increased sense of control over their lives and a belief that they can manage their lives successfully despite their illness.

Another recommendation would be for adolescents with chronic illnesses to be separated into two groups, those with visible features of their illness and those without. It is not known what effect that variable had on the findings of this study, however in future studies this would be an important variable to consider. If there is a positive correlation between visibility of illness and the number of chronically ill adolescents who score in the clinical range, then high school counselors could determine which types of programs (i.e., peer support, mentoring) would facilitate the best social and emotional support for these adolescents.
In this study, many extraneous variables such as birth order, ethnicity, and single or two parent family status were not controlled for. Although, socioeconomic level was somewhat controlled for by nature of all the adolescents attending the same high school, there still could be discrepancies in income levels that were not accounted for in this study. A recommendation for future research would be to control for these variables by measuring each characteristic and matching the chronically ill sample with the healthy sample on these variables. The recommendation of this researcher for this High School would be that this study be replicated to include a larger sample with a randomized selection process.

Having knowledge of the psychosocial perceptions of this chronically ill adolescent population can assist counselors to meet the needs of these students. If their perceptions are unique to them because of their illness, then so should the counseling approach be unique for them. Assessing the psychosocial perceptions of adolescents with chronic illness will be an ongoing challenge as medical science moves into the twenty-first century. As medical technology and procedures change, so do the needs of the chronically ill populations that they service. Public schools will find it in their interests
to determine the perceptions of these chronically ill adolescents so that they can successfully provide psychosocial support for them.


