

SELF-CONCEPT OF ADOLESCENT RENAL  
TRANSPLANT PATIENTS

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## CHAPTER I

### INTRODUCTION

The period of adolescence is a paradox for the individual who is no longer a child but not yet an adult. During the period of adolescence, physical growth is peaking which creates a change in the body's familiar shape. Also at the time of increased physical growth the adolescent is experiencing sexual maturity. This brings changes that may cause the adolescent to feel disturbed.

One of the main goals of the adolescent period is the attainment of independence. The adolescent's strivings for independence and individuality are contrasted by conformity to peer group standards. Friends are of particular importance to the adolescent at this time and they take the place of the adolescent's parents as primary love objects.

The adolescent who has undergone a renal transplant is in a particularly stressful state. At a time when independence is the goal he wishes to achieve, the adolescent who has had a renal transplant must remain

dependent upon parents, nurses, doctors, and medications for survival.

The adolescent with renal disease views a renal transplant as a way to become more like his peers. The renal transplant also provides a false feeling of security and independence, in that the adolescent is no longer dependent on the dialysis machine. Often, though the adolescent and his family have been made aware of the risks and problems accompanying a renal transplant, denial by the adolescent may occur.

Cushingoid facies, acne, the risk of infection, weight gain, and possible continued growth failure are but a few of the problems encountered by the adolescent who has had a renal transplant. Adolescents tend to magnify these differences, worry about them, and in doing so adolescents can develop distortions of the self-concept.

Along with the above problems for the adolescent is the ever-present fear of transplant rejection. If the kidney has been donated by a parent and it is rejected physiologically, then the adolescent has the stress of feeling that he has openly rejected that parent. These are all serious complications that can affect the adolescent's capacity to adapt.

Knowledge of the effect of chronic renal disease on the adolescent's self-concept should enable nurses to be more effective in delineating a therapeutic approach in nursing care of these adolescents and also, to approach each adolescent in a highly individualized manner. This is important to enhance the adolescent's effectiveness in preparation for adult living.

#### Statement of Problem

The problem of this study was to determine if adolescents who have had a renal transplant will have an altered self-concept.

#### Purposes

The purposes of this study were to:

1. Identify the self-concept of the adolescent subjects through utilization of the Tennessee Self-Concept Scale
2. Compare the scores of the subjects with those of the Tennessee Self-Concept Scale norm group

#### Theoretical Framework

Maslow's theory of human motivation was the theory base of this paper. Maslow's theory stated that certain basic needs are experienced by every human. These needs

have a hierarchy which begin with survival, then safety and security needs, affiliation and the need for relationships, esteem, and finally self-actualization. Most members of our society are partially satisfied in all their basic needs, and partially unsatisfied in all their basic needs at the same time (Maslow 1970). If one need is satisfied, then another emerges. This emergence, rather than being rapid, is a gradual progression from nothingness.

All people in our society have a need for a stable, firmly based, usually high evaluation of themselves; for self-respect, self-esteem, and for the esteem of others (Maslow 1970). One's need for self-esteem develops in childhood. Essentially, it seems to depend on the close and frequent association between the reduction of physiological needs and feelings of being valuable (Maslow 1970; Fitts, Adams, Radford, Thomas, Thomas, and Thompson 1971). To feel esteem for self is akin to one's most basic experience of well-being. To be without esteem is symbolic of one's basic anguish in an unpredictable and uncomfortable world (Maslow 1970, Fitts et al. 1971).

The Tennessee Self-Concept Scale developed by Fitts is based on Maslow's theory of human motivation. The scale concerns itself mainly with self-esteem needs

(Fitts et al. 1971). For the adolescent, peers play an important role in meeting self-esteem needs. The peer group offers a comparison group (Kalafatic 1975). The adolescent who has had a renal transplant and who compares himself to the adolescent who has not had a renal transplant is confronted by a major task of adjustment (Viederman 1974). The adolescent with a renal transplant must begin to actualize his own capabilities as opposed to adolescents who have not had a renal transplant. This is a major task for which a stable self-esteem is essential (Viederman 1974).

#### Background and Significance

An adolescent's personality is the sum of his attributes and qualities as a person as well as the way these are integrated into the total way of life. The "center" of his personality, from his point-of-view, consists of all the ideas and attitudes that are embodied in his conception of himself (Jersild 1967). The personality which experiences the perceptions and creates the concepts makes up the self-concept (Schonfeld 1963).

Early social structure theorists, such as Cooley (1902) and Mead (1934), are credited with setting the

stage for research concerned with self-concept. These theorists developed a type of theoretical framework within which man is perceived as a social being who sees himself and the world through others' eyes (Musa and Roach 1973). Cooley's self-concept theory was based on the belief that one's ideas of self are significantly affected by what he imagines others think of him (Gergen 1971). From family members and later from significant other people the individual learns the values which he attaches to his perception of himself (Jersild 1967).

Disturbances in self-concept result not only from disturbances in body perception but also from disturbances of body concept. The adolescent in these circumstances does not see himself as he actually exists because of an inner emotional condition that exaggerates abherration of development or as a result of actual somatic delusions (Schonfeld 1963).

Adolescence is neither a homogeneous nor a precipitous period, but rather an evolving one beginning with the earliest hidden changes in endocrine activities, and continuing until sexual and physical development is relatively complete (Schonfeld 1969). During this period there is not only rapid physical and sexual development, but also social and psychological development. These



changes do not occur unrelated to each other (Josselyn 1952) or to current and past experiences. In many aspects of their lives adolescents are struggling with the past but anxious to break away from it into a new world of independent relationships, a world which they both desire and fear (Waechter and Blake 1976).

Erikson (1963) considered the central crises of adolescence to be the achievement of identity, which has both conscious and unconscious components. Erikson evolved a notion of identity which involves the merging of past identification, future aspirations, and contemporary cultural values (Newman, College, and Newman 1978).

The factors that contribute most to the establishment of a strong ego identity are a positive identification with parents (Heilbrun and Fromme 1965, Medinnis 1965), and an opportunity to participate in the family decision-making process (Elder 1963). The establishment of an ego identity also involves the re-establishment of a body-image/self-concept. In adolescence there is an intensified awareness of one's body, this stems partly from changing physical development, partly from the inflated emphasis assigned to physical traits by schoolmates, and partly

from increasing identification with culturally determined standards (Schonfeld 1963).

The source of one's self-concept is affected by his culture. In females the major source of the self-concept is interpersonal, implying the saliency of their bodies as a stimulus for the attraction of others; while a major source of males' self-concept is individual, implying the importance of their bodies for manifesting instrumental effectiveness. If the adolescent girl accepts and incorporates her society's evaluation of the female role as an inferior one, the girl will value herself less; whereas the male recognizes that the male role is a highly valued one (Erikson 1968, McCandless 1970; Bohan 1973; Lerner, Orlos, and Knapp 1976).

Bohan's (1973) research with fourth-, sixth-, eighth-, and tenth-grade boys and girls revealed significantly ( $p > .01$ ) lower self-concept scores for tenth-grade girls than for any comparison group. This is in conflict with the research done with third through tenth graders by Piers and Harris (1964) which found that the third- and tenth-grade students had a higher self-concept than sixth-grade students. Significance levels for this study were not discussed. However, Bohan's (1973) research does correspond with that of Katz and

Zigler's (1967) findings that eighth- and eleventh-grade students' scores for self-concept were lower than those of the fifth-grade students' scores.

Rosenberg and Gaier (1977), in a study of adolescents with learning disabilities, found that there was a trend toward a weaker and more negative self-concept for the adolescent with learning disabilities as opposed to the adolescent whose academic achievement is average.

Adolescents with end stage renal disease also have problems academically due to their frequent school absences caused by their illness. Some of the gross failures in the rehabilitation of adolescents with end stage renal disease are partially or wholly rooted in psychosocial malfunction (Fine, Korsch, and Stiles 1970).

The surgical implantation of a kidney from one person to another has been performed since 1954, but has been available on a large scale only since the middle 1960s (Waechter and Blake 1976). Renal transplantation is now a frequent and often successful procedure (Zarinsky 1975). There is a two-year graft survival with live related-donor organs of 60 to 70 percent; whereas with cadaver-donor organs the two-year graft survival is about 40 to 50 percent (Kugelmass 1975, Zarinsky 1975, Waechter and Blake 1976). Even with graft survival

rates increasing, there is no way to predict how well a patient will do, and whether or not the kidney will be rejected (Kugelmass 1975).

In a study done by Khan, Herendon, and Ahmadian (1971) of fourteen children, ages six to nineteen, who had a renal transplant, a majority of the children had serious emotional and social difficulties. The psychological reactions to the stress of transplantation and hemodialysis included denial, depression, difficulties in self-concept, irritability, insomnia, hysteria, phobias, compulsions, and psychotic reactions. Girls identified kidney disease to be more of a handicap to social life than boys; none of the girls had regular boyfriends, they dated only occasionally and mostly in groups, and peer relationships were scarce. Bernstein's (1971) study with thirty-six children, ages six to eighteen, who had received a renal transplant showed that significant emotional reactions were found in only four of the thirty-two children who survived. Bernstein (1971) stated that in the remaining twenty-eight, emotional reactions of varying degrees were found. After discharge, it was noted that adolescents continued to have anxiety dreams of helplessness and fears of being overpowered. When there were secondary physical manifestations such

as Cushingoid appearance, or short stature, self-concept and body image problems could be seen.

An alteration in the body, such as a renal transplant, is a disturbance of one's integrity, a threat to one's self (Leonard 1972). When a child or adolescent's self-concept has been threatened or becomes badly damaged, someone has to step in and provide that child with the interest, concern, and positive situational structure which will change his own view of himself and his environment (Yamamoto 1972). Nurses are in a position to provide the necessary care to enhance the adolescent's self-concept, to assist in his adaptation to a changed body image (McCloskey 1976) since the hospital is often the world for a chronically-ill patient (Leonard 1972).

### Hypothesis

The following null hypothesis was tested in this study: Adolescents who have had a renal transplant will not have an altered self-concept.

### Definition of Terms

Several terms which have specific meaning for this study are:

1. Adolescence--that period beginning with the onset of puberty and continuing until sexual and physical development are complete
2. Adolescent--a person in that stage called adolescence who is between the ages of thirteen and nineteen
3. Body image--the image of our body which is formed in the mind; a sub-system of the self-concept
4. Chronic illness--an impairment of health that requires an extended period of medical attention (Leonard 1972)
5. Identity--the state of being a specific person; a state of individuality
6. Independence--an attitude of self-reliance and self-direction
7. Rejection--histologic changes in the transplanted kidney resulting in deterioration of renal function, which necessitates high doses of immunosuppressives and steroids. This often results in removal of the graft
8. Renal disease--the state of being in renal failure, this includes having a renal transplant
9. Self-concept--a composite mental representation of the self

Limitations

The study was structured in regard to the following limitations:

1. The age of onset for renal disease was not controlled
2. The age of subject at the time of renal transplantation was not controlled
3. The subject's educational background was not controlled
4. Sexual maturity of the subjects was not controlled
5. The subject's family background was not controlled
6. The number of renal transplants the subject has had was not controlled

Delimitations

For the purpose of this study, the following delimitations were identified:

1. All subjects were between the ages of thirteen and nineteen years inclusive
2. All subjects had a renal transplant
3. No subject was in a state of rejection at the time of testing or had been in a state of rejection for at least one month before testing

4. All subjects received a standard written explanation of the study from the investigator

5. All testing was done by the same investigator

### Assumptions

For the purposes of this study, the following assumptions were made:

1. Adolescence is a period of time in an individual's life when numerous body changes occur

2. An individual with a chronic illness often separates himself from others or is separated from others by society

3. All people desire a stable self-esteem and esteem from others

4. A stable self-concept is necessary for a healthy personality

5. An individual's self-concept is affected by stress

6. Psychological processes occurring inside an individual cannot be directly observed, but must be inferred from observable behavior

### Summary

The adolescent is in a unique period of development in which he is striving for independence, a sense of



identity, and an accurate perception of his self-concept. Chronic illness, such as renal disease, poses a threat to the adolescent's completion of his developmental tasks and is, therefore, a threat to his self-concept. This chapter introduced the self-concept of adolescents who have had renal transplants. The problem statement and purposes of the study were identified. Maslow's theory of human motivation was presented as the theoretical base for this study. The background and significance of the problem was presented. The hypothesis, definition of terms, limitations, delimitations, and assumptions were identified.

## CHAPTER II

### REVIEW OF LITERATURE

A review of the literature was performed in order to investigate the following areas: (1) the adolescent experience, (2) adolescents and renal transplantation, and (3) development of self-concept in adolescents. Although considerable information concerning adolescence, the self-concept, and renal transplantation was available, no single study was found that explored all of these variables.

#### The Adolescent Experience

Adolescence is a unique developmental stage. The central theme of adolescence is to find an identity, a sense of self in relation to the world at large. Adolescence is coming to know who one is, what one values and believes in and values, and what one wants to accomplish and get out of life. The adolescent has to come to terms with a new kind of body with new potentialities for feeling and acting and to rearrange his or her self-concept accordingly (Stone and Church 1968). The adolescent period is an opportunity for psychological and social growth which may or may not occur after

puberty (Joint Commission on Mental Health of Children 1973).

"Adolescence is an intense period of self-definition. It is the process through which the self is defined through experience and clarification of experience" (Duran 1972, p. 72). During this process the individual learns to cope with the complexities of society and to adapt to the stresses of life (Miller 1974). As new drives come into prominence, the ego is confronted with new tasks of adjustment and integration (Symonds 1953). Emerging abilities and potentials must be integrated into actual living patterns (Duran 1972).

Adolescence refers to a state of mind, a mode of existence that begins roughly with puberty and ends with full social maturity (Stone and Church 1968). Careful observations have shown that the psychological crises of adolescence do not ordinarily begin until a year or more after the period of most rapid physical change; for some individuals there seems to be virtually no relation between physical changes and typically adolescent behavior (Stuart 1953, Stone and Church 1968, Waechter and Blake 1976). That is, although all young people go through the physical changes of adolescence, only those in particular cultural settings show the behavior identified

to be characteristic of this age. Therefore, adolescence is often viewed as a cultural phenomenon derived from the way people in a particular society interpret physical maturing.

Viewed as a cultural phenomenon, "adolescence is the period in an individual's life when society ceases to regard him as a child but does not yet accord him with full adult status" (Rogers 1972, p. 12). During the twentieth century adolescence became a social reality in the Western world. With the advent of child labor laws and compulsory primary education, adolescence has emerged as a distinct period of maturation. Psychological adolescence is not a necessary corollary of physical adolescence, but a cultural phenomenon produced by a delay in the assumption of adult roles (Stone and Church 1968). The adolescent period provides for a protected environment, prolonged education, freedom from adult responsibilities, and social sanction for limited experimentation. Thus, social sanction lengthens the period of adolescence at least half a dozen years (Keniston 1970). Although this culturally lengthened adolescent period would seem to allow the youth of today a greater opportunity to fully experience adolescence, it does not guarantee optimal experience in this relevant

developmental stage (Joint Commission on Mental Health of Children 1973).

As societies become industrialized, the total period of apprenticeship is lengthened; the taking on of adult roles is deferred; and the interval between sexual maturity and adult status gets longer. The adult world gives the adolescent ambiguous information about his status, reinforcing his own ambiguity about himself (Stone and Church 1968, Fine 1970, Waechter and Blake 1976).

Although the period of adolescence can be considered as a developmental entity with many behaviors continuing throughout these years, it can also be viewed as consisting of several substages (Lidz 1968, Josselyn 1952, Miller 1974, Waechter and Blake 1976). There are differences in developmental tasks and in behavior that correspond roughly to age in this period.

The first phase of adolescence is viewed as early adolescence (Lidz 1968, Miller 1974, Waechter and Blake 1976). During this period young people must cope with the physical changes induced by puberty and with concomitant alterations in self-concept and body image (Waechter and Blake 1976). Changes in physique coincide roughly with the emergence of new intellectual and

cognitive abilities. The adolescent may experience for the first time the magnitude of the tasks ahead (Inhelder and Piaget 1958).

The onset of adolescence does not provide any remarkable shift from the monosexual peer groupings of latency, but, to some extent, the individual is very much absorbed with his own thoughts and feelings (Lidz 1968). In a beginning effort to withdraw interest and emotion from parents, most young adolescents turn to a special friend, who acquires a new significance. However, the majority of these choices are still related to the self-absorption of the young adolescent, since the special friend usually is idealized and possesses some characteristic that is admired and desired by the adolescent. Through such friendships adolescents acquire desired characteristics by proxy, further elaborating their ego ideal (Waechter and Blake 1976). Close attachment to a friend of the same sex assists the individual with examination of self and also supports the adolescent as he begins striving for freedom and independence from parents (Miller 1974). This gradual movement away from childhood dependency constitutes the chief interpersonal tension during this period (Joint Commission on Mental Health of Children 1973).

In the middle stage of adolescence, to a greater degree than in the earlier subperiod, the youth continues his march toward gaining independence from parental supervision. The urge to emancipate self from parents becomes progressively stronger as adolescents move into the middle teen years (Miller 1974, Waechter and Blake 1976). Until the adolescent can resolve reawakened feelings regarding his parents, he is unable to free the conscience of sexual inhibitions, move into more mature heterosexual relationships, or discover that inter-dependent relationships are more satisfying than childhood dependence (Lidz 1968, Stone and Church 1968, Waechter and Blake 1976).

In contrast to the early adolescent's close attachment to a friend of the same sex, the middle adolescent gradually turns to heterosexuality (Lidz 1968). This heterosexual move is progress in emotional development. For the first time, both affectional and sexual strivings are consciously focused upon an individual of the opposite sex who is not a member of his family (Lidz 1968, Stone and Church 1968).

In an effort to achieve personal selfhood, adolescents frequently recapitulate all the issues and conflicts experienced since birth (Erikson 1968). The

issue of trust which is the basic test of the first year of life is again questioned as the adolescent begins to develop closer and more intimate relationships with others. The issue of autonomy is repeated and re-evaluated by adolescents as they struggle for their sense of separateness from parents and family (Stone and Church 1968, Waechter and Blake 1976).

The problems of socialization of early school-age children are repeated and extended in the adolescent's search for peer group identity and self-worth through peer approval and acceptance. Learning to share and cooperate with friends becomes a recurrent issue in mid-adolescence when the individual develops closer social and work relationships (Stone and Church 1968, Waechter and Blake 1976). When optimal conditions prevail, problems encountered with socialization during earlier years are re-evaluated and resolved (Erikson 1968). The problem of identity is the core issue under which all other tasks are subsumed.

Each adolescent comes to the realization that he must formulate his own personality, select the principles on which to base his life, and become an individual who is part of society but who nevertheless is unique (Erikson 1968). The influences that originate within the



self as the physical body changes, mental capabilities increase, and new feelings and drives experienced are often of more significance than influences directed toward the adolescent by society, parents, and peers (Daniels 1970). Nevertheless, the effect of experiences outside the self must not be discounted. Accomplishment of this identity task is far from easy for most adolescents. It is not rare for stress and turmoil to be intermixed with happiness and satisfaction during this pursuit for a real sense of self (Daniels 1970).

During late adolescence individuals must consolidate their identity and evaluate interest, ideals, aspirations, strengths, and limitations in order to become secure and prepared for future roles in society (Waechter and Blake 1976). With sufficient liberation from parental and family ties and reasonable comfort with sexual expression, the late adolescent must reflect on a more definitive identity as a person so that ultimately he will reach intimate interdependence with another person (Joint Commission on Mental Health of Children 1973).

Erikson (1959) described the concept of ego identity as being the phase specific achievement of late adolescence. The development of one's own sense of

identity as a person is contingent upon constant reorganization of the self during prior psychosexual developmental phases. Therefore, during adolescence the individual begins to experience self as being separate from others. A sense of ego identity leads to a "sense of knowing where one is going and an inner assuredness of anticipated recognition from those who count" (Erikson 1959, pp. 118-119).

An important part of identity formation is the capacity for intimacy, including intimacy with the opposite sex (Lidz 1968, Joint Commission on Mental Health of Children 1973). Identity precedes intimacy, but especially for most late adolescent girls and for many boys as well, identity development is closely tied to concerns over sexual capacities, to the ability to be close and gain closeness with the opposite sex, and to a growing sense of adequacy, self-assurance, and comfort in one's sex role (Lidz 1968, Stone and Church 1968, Joint Commission on Mental Health of Children 1973). In this sense readiness for intimacy and the actual achievement of intimacy with others closely parallels the development of a sense of personal identity and self-concept.

The process of identity formation is critical in that true engagement with others cannot occur until a person is secure in who he or she is. If identity has not yet been acquired, fusion or deep involvement with another may threaten a shaken self-concept (Erikson 1963, Waechter and Blake 1976).

Indicators of problems during the late adolescent years include persistence of the characteristics of the mid-adolescent years: continued physical and economic dependence on parents, lack of definition of future goals, and persistence of less intimate relationships with peers and friends (Waechter and Blake 1976). However, the vast majority of adolescents find constructive adjustments to the increased pressures of our society.

#### Adolescents and Renal Transplantation

The latest report of the human renal transplant registry verified previous trends, namely,

. . . there is a steady increase in transplants performed, a stability in organ function achieved after an as yet undetermined period and an increasing number of cadaveric organs are being preserved (Lee 1976, p. 220).

The report went on to note that growth retardation and serious psychosocial difficulties are problems peculiar

to transplantation in younger (i.e., pediatric and adolescent) patients with renal failure (Lee 1976).

Renal transplantation is a frequent and often successful procedure. Since 1954 more than five thousand kidney transplants have been performed worldwide. With the use of live or cadaver donors, survival rates of the transplanted kidney can be up to two years or more (Advisory Committee to the Renal Transplant Registry 1972). The bleak outlook for adolescents with chronic renal disease has been modified by the development of hemodialysis and renal transplantation. Yet, adolescents remain particularly vulnerable to the regression and feelings of depersonalization fostered by chronic illness and hospitalization (Showalter and Lord 1971).

One of the primary developmental tasks in adolescence is to attain independence. When an adolescent who has just begun to make decisions for himself is hospitalized, he finds this enforced passivity and loss of autonomy very humiliating (Zarinsky 1975). The greater the degree and the more prolonged the limitation of activity and isolation, the greater the regression toward dependence and primitive emotional response (Kottke 1966). Illness, whether acute or chronic, does not necessarily

stifle the adolescent's quest for independence. An adolescent may feel an increased strength in dealing with his illness if his parents do not expect and accept regressive behavior from him (Zarinsky 1975).

The adolescent who has lost partial or complete function of his kidneys can be kept alive on the artificial kidney machine. This machine usurps the function of the kidney by cleaning the wastes from the blood; people can be maintained on the hemodialysis machine for weeks, months, and even years (Zarinsky 1975). There are many psychological problems involving adolescents whose lives are dependent solely on access to the hemodialysis machine. These adolescents have experienced serious social and emotional difficulties--feelings of social isolation, excessive dependency on parents, and depression are common (Wilson 1968, Zarinsky 1975).

The psychological factors involved in renal transplantation are similar to those of the adolescent who is hemodialyzed. In addition, one must take into account other aspects such as growth retardation, delay in sexual maturation, change in facial appearance, and other side effects of drug therapy (Wilson 1968; Fine, Korsch, and Stiles 1970). Chronic rejection of the kidney with its

concomitant anxiety and fear of death also disturb the kidney transplanted adolescent (Najarian 1971). This can bring about a severe psychological as well as medical setback (Zarinsky 1975).

Findings were assessed on thirty-six kidney transplanted children (Beard 1969); nineteen were adolescents, on the basis of the early, middle, and late post-transplant periods. No quantitative measurements were given for these periods. In the early post-transplant period the major problem was found to be reintegration of the adolescent into the family with either excessive restriction or excessive permissiveness by the parents. The adolescent was not required to follow the usual family rules. These adolescents continued to have fears of assault and mutilation as well as anxiety dreams, and dreams of helplessness through the middle and last post-transplant periods. Return to school was particularly stressful because of appearance which involved identity problems, body image problems, feelings of inferiority, or of being altered or damaged. The late transplant period still involved fears of rejection and oftentimes depression (Beard 1969, Bernstein 1971).

Grushkin, Korsch, and Fine (1973) stated that following the kidney transplant the greatest difficulty develops from an emotional and psychological point-of-view in the adolescent patient. The major factors involved in successful psychological rehabilitation include growth, physical appearance, weight gain, diet, sexual development, educational and vocational consideration and search for identity (Grushkin, Korsch, and Fine 1973).

Self-concept is one of the personality features which may be severely damaged in the adolescent patient with kidney disease. Poor self-concept becomes readily apparent on casual contact and has also been documented with systematic personality testing (Korsch, Gardner, and Negrete 1972).

#### Development of Self-Concept in Adolescents

The adolescent cannot be viewed only in the context of the present; earlier experiences have an impact which continue to affect him. The earlier experiences that were helpful enabled the adolescent to feel good about his body and himself. If he enters adolescence with a negative self-concept, he will find adolescence a

difficult period (Stone and Church 1963, Murray and Zentner 1975).

The personality experiences the perceptions which make up the self-concept (Schonfeld 1963). Thus, the adolescent's early emotional experiences influence his observations and interpretations which are central to the self-concept. The family provides the individual with his earliest experiences with feelings of adequacy or inadequacy, feelings of acceptance or rejection, and opportunities for identification and expectancies concerning acceptable goals (Combs and Snygg 1959). From family members and later from significant others the individual learns the values which he attaches to his perceptions of himself (Combs and Snygg 1959, Schonfeld 1963).

During the transition from childhood to adulthood, the adolescent reaches a stage in his development where he is attaining the capacity to both visually and mentally represent specific relationships, fears, wishes, threats, and injuries as occurring to the self (Musa and Roach 1973). As the adolescent's mental life becomes more complex, he is able to conceive or imagine the functions and actions of his body in addition to desired or feared happenings to his body. Thus, alterations in



bodily function, bodily feeling, and bodily form are believed to have an effect on the adolescent's self-concept (Kaufman and Herscher 1971).

According to Beck (1967), an individual's self-concept is a composite of a cluster of attitudes that the individual develops about the self as a result of interaction with his environment, especially interaction and identification with parents, siblings, and friends. The self-concept has been referred to as a system of one's values, attitudes, desires, and commitments (Bernard 1971). The development of this system is contingent upon the reflected appraisals of others. Schonfeld (1969) explained that the self-concept is a composite of past and current experiences and has both conscious and unconscious aspects. While opinions vary regarding the nature of the development of the self-concept and the age at which the self-concept is fully developed, there seems to be a general consensus that an individual's self-concept influences his inner or subjective world as well as his experiences and adaptations to the world at large (Wylie 1961).

Although most of the essential components of personality become integrated during childhood, their interrelationship is not fully established until late

adolescence (Shonfeld 1969). During childhood the self-concept is largely acquired from limited childhood experiences which involve identification with other people, especially parents. This image of self is likened to a "mirror-like" view. When the individual reaches adolescence, the complexities, changes, and expanded experiences that accompany this period compel the individual to move away from the childhood view of self (Shonfeld 1969, Kalafatich 1975). The individual essentially redefines, reintegrates, refines, and broadens self-perception in adolescence (Joint Commission on Mental Health of Children 1973). "During adolescence the self-image is being crystallized at the same time as it is being revised" (Rogers 1972, p. 56).

The self is a highly important issue for the adolescent. Generally speaking the perception of the self tends to determine what a person experiences and how he experiences it (Gergen 1971, Rogers 1972). The adolescent internalizes the ideas and attitudes expressed by key figures in his life, observing their actions and attitudes, adopting them and expressing them as his own. The adolescent comes to respond to himself and develops self-attitudes consistent with those expressed

by significant others in his world (Mead 1934, Rogers 1972).

Self-concept is also a significant factor in the adolescent's need to achieve (Rogers 1972). An adolescent who feels good about himself will have less difficulty selecting and coping with experiences that bring meaning to his life than an individual who has a low self-regard. The growing autonomy and physical strength of adolescents grants them new-found freedom (Gergen 1971, Rogers 1972). To some adolescents this expanded self is an adjunct to formulating good views of self or a healthy self-concept. For others, a distorted picture of self may evolve and result in a poor self-concept.

Every adolescent has a need for a sense of his own worth and anything that makes him feel inadequate or inferior is apt to be met with some defensive reaction. To the adolescent, being different usually means being inferior (Schonfeld 1963, Dempsey 1972). Adolescent peer groups are particularly sensitive to similarities and differences in an individual's body. The adolescent whose appearance, development, or behavior is not within the peer norms will have more difficulty being accepted;

any physical characteristic may eliminate one from a group (Schonfeld 1963).

Schonfeld's (1963) work showed that modification in the actual appearance of the body may cause changes in the self-image or self-concept because the individual does not see his body as it actually exists. This disturbance may be a result of an inner emotional condition that exaggerates defects, or a result of actual somatic delusions. Anxious and disturbed feelings are aroused if internal and external changes occur (Schonfeld 1963, Rosenberg 1965, Gergen 1971). An alteration in the body is a threat to the self-concept (Gergen 1971).

Health problems pose a serious threat to the development of self-concept of infants, children, and adolescents (Riddle 1972). Illness focuses attention on the adolescent's body. This sets him apart from peers and poses a threat to his self-concept (Hammar and Eddy 1966). A physical disability of high obvious visibility and great impact is a factor in determining change in self-concept (Meissner 1967).

Feelings of guilt regarding the illness may cause feelings of mistrust, self-doubt, and inferiority (Marlow 1969). There is also a possibility of the ill adolescent giving up hope of healthy personality

development and resorting to blame and/or punishment of others. The depersonalizing experience of hospitalization accentuates regressive behavior, and is, therefore, especially threatening to the vulnerable adolescent who is striving for independence (Beard 1969).

The child who lacked stability because of prolonged illness, disturbances in parent-child relationships and problems of adjustment often fails to develop a wholesome frame of reference for self-concept as an adolescent (Schonfeld 1963). If the adolescent is given an opportunity to master self and environment within the limits of reality and to become independent, he will probably be successful in his personality development (Marlow 1969, Waechter and Blake 1976).

The chronically-ill adolescent patient experiences greater fear and apprehension regarding the future than does the acutely-ill adolescent patient (Beard 1969). Leonard (1972) described the fears of chronically-ill patients as fear of death, incapacitation, pain, abandonment, loss of self-esteem, and disturbances of interpersonal relationships. Leonard stated that

Chronic illness may or may not be manifestly disabling . . . disability results from impairment of the biologic, physiologic or sociologic efficiency of the person and prevents

him from pursuing his normal or usual activities (1972, pp. 687-688).

Chronic illness is especially tragic in adolescence. Some of the more obvious traits of these adolescents are withdrawal, negativism, hostility, insatiable demands, and denial (Beard 1969). Physical illness may cause a narcissistic blow to the adolescent and result in a damaged self-concept (Schonfeld 1969, Leonard 1972).

The chronically-ill adolescent with a renal transplant is confronted with many special problems--stunted growth and sexual maturation, internalization of a foreign body into one's own, fear of rejection of the kidney, depression due to the immunosuppressive drugs, as well as the ramifications involved in the donor-patient relationship. The renal transplanted adolescent is frequently more disabled by his social than his physical handicap. This is a combination of emotional immaturity, experiential deprivation, cultural isolation, academic deficiency, and vocational ineptitude (Zarinsky 1975). When the disease is under control the adolescent can experience some independence, but long periods of hospitalization isolate him from his peers and limit him

socially (Beard 1969). Throughout this the adolescent must develop and accept his own identity and self-concept.

Adolescents reveal extraordinary sensitiveness about their concept of self. They react with instant responsiveness to what they think of themselves and what others think of them (Schonfeld 1969). Since their image of self is unsteady, they are especially vulnerable to other persons' judgments. The individual adolescent's response to his maturational deviation is largely a reflection of the social reaction to his maturational deviation (Schonfeld 1969, Kugelmass 1975). Yet before the adolescent can begin to become comfortable in an adult world, he must realign the components of his self-concept and create a new equilibrium, a new picture of himself (Schonfeld 1963).

### Summary

A review of the literature presented the following areas: The adolescent experience, adolescents and renal transplantation, and the development of self-concept in adolescence. Adolescence was presented as a unique developmental stage with a central theme of identity formation. During the period of adolescence there are many developmental tasks to accomplish. The adolescent

who is handicapped by a chronic illness often finds it more difficult to accomplish these tasks. The regression and denial that results from the chronic illness, chronic renal disease, affects the development of a healthy self-concept in the adolescent.



## CHAPTER III

### PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

This chapter presents the setting and population for the study. The instrument utilized in the data collection and the method of data collection are discussed. The method of treatment of the data is presented.

#### Setting

The setting for this study on self-concept of adolescents who have had a renal transplant took place in an out-patient clinic. The out-patient clinic is a part of a nine hundred-bed public hospital located in a metropolitan area of greater than one million persons.

The out-patient clinic for this hospital is open five days a week and is open from 8:00 in the morning until 4:00 in the afternoon. Several clinics are in operation simultaneously and during this period several hundred patients are seen in these clinics.

The renal clinic met every Tuesday morning and twenty to thirty-five patients were present during this period. The clinic had four examination rooms and two offices. The clinic was staffed medically by interns,

residents, and fellows from the medical school that is affiliated with the hospital. A nurse clinician was in charge of the coordination of patient care through the renal transplant team, the hospital, the hemodialysis team, and the clinic. Patients who attended this clinic were individuals who have had a renal transplant or who were potential candidates for a transplant. Renal transplant patients attend the clinic at least once a month or more often, depending on their clinical status.

The subjects were approached in the renal clinic. The testing was done in an office, 9 foot by 7 foot, that contained a desk, two chairs, and a bookshelf. The subjects were seated at the desk during the data collection and only the subject and the investigator were in the room at that time. This was done to provide privacy for the subject and for decreased distractions.

#### Population and Sample

The population for this study included eleven adolescents between the ages of thirteen and nineteen who had a renal transplant. The population were those adolescents who attended the renal clinic. The population were not in a state of transplant rejection nor had they been in a state of rejection for at least one month prior to the study.

The patients, who had renal disease that utilized the hospital and the clinic, were also from the outlying areas of the metropolitan area. The clinic was utilized primarily by families from Mexican-American, Black, and Anglo-American backgrounds. The clinic patients utilized in the study were from upper-, middle-, and lower-income groups. These factors rendered the study group a diversified background.

The nine subjects for the study included those adolescents who attended the renal transplant clinic. Selection of the sample was on a convenience basis, that is, they were approached individually by the investigator as they attended the clinic. There was no selection or rejection from the study on the basis of an individual's socioeconomic status, cultural background, sex, or ethnic group.

### Instrument

The instrument selected for use in this study was the Tennessee Self-Concept Scale (Fitts 1965) (appendix A). The scale consisted of one hundred self-descriptive statements which the subject used to portray his own picture of himself. The subject selected one of five responses to the statements. The responses were

completely false, mostly false, partly true and partly false, mostly true, and completely true. Scoring was objective and time required to complete the scale was ten to twenty minutes.

Fitts (1965) began the developmental work on the scale with the Tennessee Department of Mental Health in 1955. The original purpose was to develop a research instrument that might contribute to the difficult criterion problem in mental health research. Since that time the self-concept has become an important means of studying and understanding human behavior. The individual's concept of himself has been demonstrated to be highly influential in much of his behavior and also to be directly related to his general personality and state of mental health (Fitts 1965).

The standardization group from which the norms of the Tennessee Self-Concept Scale were developed was a broad sample of 626 people. The sample included people from various parts of the country, and age ranges from twelve to sixty-eight years. There were approximately equal numbers of both sexes, both black and white subjects, representatives of all social, economic and intellectual levels, and educational levels from sixth grade through a Doctoral program (Fitts 1965).

The reliability estimate of the Tennessee Self-Concept Scale was based on test-retest with sixty college students over a two-week period. These reliability coefficients ranged from .60 to .92. Validity procedures initiated by the researcher were of four kinds: (1) content validity, (2) discrimination between groups, (3) correlation with other personality measures, and (4) personality changes under particular conditions.

The procedure for content validity involved the selection of ninety items from a large pool of self-descriptive statements. The judges were seven psychologists. Items were retained for the scale only if there was unanimous agreement by the judges that it was classified correctly. The remaining ten items came from the Minnesota Multiphasic Personality Inventory and constituted the self-criticism score as identified by Fitts (1965). It was assumed that the categories used in the scale were logically meaningful and publicly communicable.

Validity procedures for discrimination between groups involved a large group (369) of psychiatric patients. Statistical analyses were performed where the psychiatric patients were compared with the 626 non-psychiatric patients of the norm group. These demonstrated

significant differences, at the .001 level, between patients and non-patients for almost every score according to Fitts (1965). The correlational data between scores on the Tennessee Self-Concept Scale and other measures were not specifically reported in the manual.

Certain life experiences have consequences for the way in which a person sees himself. Psychotherapy or other positive experiences would be expected to result in enhancement of the self-concept, while stress or failure would be expected to result in lowered self-esteem. In a study of group therapy done by Fitts (1965) six female patients were administered the scale in order to predict changes through therapy. The scale was administered to each patient before therapy. From the pretest data a number of individual predictions were made with respect to scale changes which should take place. A total of eighty-eight predictions were made. The scale was subsequently readministered after five to eight months. Of the eighty-eight predictions, sixty were correct ( $p < .001$ ). This appears to indicate that a person's self-concept does change as a result of significant experiences.

The Tennessee Self-Concept Scale consists of thirty-two interrelated scores which give a

multidimensional picture of the self-concept. Seventeen of the scales are found to be most descriptive of the self-concept and are applicable to the purposes of this study.

The empirical scales were developed to compare the subjects' self-concepts with that of deviant groups. The scores on these scales are purely empirical. The following groups were involved in the derivation of the analysis of item responses--norm group, psychotic group, neurotic group, personality disorder group, defensive positive group, and the personality integration group. The time score is simply a measure of the time, to the nearest minute, that the subject requires to complete the scale. Only recently has any study of this variable been made, and at this point little is known as to its meaning or significance. The time score and empirical scales were found not to be applicable to this study.

The variables of the self-concept that were represented by the seventeen scores of the Tennessee Self-Concept Scale are self-esteem, self-satisfaction, self-perception, openness, self-conflict, the physical self, and the moral-ethical self. These variables were measured by the seventeen scores of the Tennessee Self-Concept Scale and statistically analyzed. The

investigator also gathered demographic data (appendix B) .

### Human Rights

The rights of the subject were protected in the following manner: (1) an objective critique-approval of this study was done by the Human Rights Committee of Texas Woman's University and the University of Texas Health Service Center at Dallas (appendix C), in order to consider the protection of the rights and welfare of the potential subjects; (2) each subject was given the option to volunteer or refuse to participate after receiving a written explanation (appendix D) of the study from the investigator; (3) each potential subject was presented with a consent form (appendix E) to read and sign if in agreement to participate; (4) the agency involved in the study also gave written permission for the study to be performed in its facility (appendix F)--the proposal was given to the administrative officials of the hospital prior to obtaining their written consent to participate; (5) each subject's right to privacy was respected by providing anonymity in presentation of the study's results; and (6) each subject was informed that he could withdraw from the study at any time.



### Method of Data Collection

The investigator collected the data for this study. The investigator administered the Tennessee Self-Concept Scale to adolescents who had a renal transplant.

This descriptive study (Abdellah and Levine 1965) attempted to identify the perception of self-concept in the adolescent who had a renal transplant. The adolescent subjects were attending the out-patient renal clinic of a metropolitan public hospital in the southwestern United States.

When the subject was under the legal age of eighteen, the parent or guardian received a written explanation of the study (appendix D) from the investigator. The explanation of the study was read to the parent or guardian prior to his or her reading the explanation. The parent or guardian was then given time to ask questions for further clarification.

After the parent or guardian signed the consent form, the written explanation of the study was read to the subject. The subject was given time to read the explanation and to ask questions for his or her further clarification. The subject was asked to participate in the study and was asked to sign the consent form (appendix

E). The subject was informed that he could withdraw from the study at any time. The subject was informed that refusal to participate in the study or withdrawal from the study would not affect the care received in the clinic.

When the subject agreed to participate, demographic data were then obtained (appendix B). The subject was then given the instruction contained in the Tennessee Self-Concept Scale booklet (appendix A) and requested to begin the questionnaire (appendix A). When the subject had completed the questionnaire, he was told that the data collection was completed and asked if he had further questions.

#### Treatment of Data

To obtain an objective measure of the self-concept and to report results, the data were treated in the following manner:

1. The score sheets were tallied according to instructions in the Tennessee Self-Concept Manual (Fitts 1965)
2. A table presenting the demographic data was displayed

3. A table depicting the subjects' actual scores on the seventeen scales was compiled and displayed with a discussion of subjects with a number of low scores.

4. The mean and standard deviation for the sample kidney transplanted group was compiled. Bartlett's test was performed to compare the variance from the sample group with the variance from the Tennessee Self-Concept Scale norm group. If the  $p$  value from Bartlett's test was  $> .10$ , then the Kolmogorov-Smirnoff test was applied. The Kolmogorov-Smirnoff test for normality was performed due to the small sample size. Where normality was not rejected, it was assumed that the sample came from a normally distributed population and a two-sample  $t$ -test was used to compare the sample group's mean with the mean from the norm group. Tables were used to display the means from the sample kidney transplanted group and the Tennessee Self-Concept Scale norm group and the results of the  $t$ -tests and  $p$ -value.

Where the Bartlett's test for equal variances was rejected, a modified  $t$ -test was used. Where normality was rejected with the Kolmogorov-Smirnoff test, Wilcoxon's two-sample  $t$ -test was used.

The setting and population from which the subjects were taken was discussed in this chapter. The Tennessee

Self-Concept Scale, the tool utilized in the study, was described and discussed, and the method of data treatment was presented.

## CHAPTER IV

### ANALYSIS OF THE DATA

The data obtained in this study are presented in tables representing the demographic data, the raw scores of each adolescent, and each major score of the Tennessee Self-Concept Scale, with the sample group mean, the norm group mean, and their t-test and probability scores. Each table is discussed, the hypothesis presented, and its relationship to the data discussed.

#### Description of Sample

As shown in table 1, this study included six males and three females with a mean age of 15.33 and 15.66 years, respectively. One hundred percent of the females had secondary sex characteristics in comparison to 66 percent of the males. The male adolescents spent a mean time of 29.33 weeks on dialysis prior to receiving a transplant, the female adolescents spent a mean time of 8.66 weeks. The combined mean time on dialysis was 22.44 weeks. The mean time the male adolescent had his transplanted kidney was 3.4 months and the female 62 months. The combined mean time for male and female adolescents to have retained their transplanted kidney was 43.66 months. The male adolescent

spent a mean time of 8.5 years with chronic renal failure prior to receiving dialysis and transplantation and the female a mean time of 7.86 years, with a total mean for the combined male and female being 8.27 years.

TABLE 1  
DEMOGRAPHIC DATA

	Male	Female	Combined Male and Female
Number	6	3	9
Mean age	15.33 yrs.	15.66 yrs.	15.44 yrs.
Secondary sex characteristics	66%	100%	
Mean time on dialysis	29.33 wks.	8.66 wks.	22.44 wks.
Mean time with trans- planted kidney	34.5 mos.	62.0 mos.	43.66 mos.
Mean time with chronic kidney failure	8.5 yrs.	7.86 yrs.	8.27 yrs.

### Findings

The hypothesis for this study was: the adolescents who have had a renal transplant will not have an altered self-concept. Through the instrument the variables which make up the self-concept were tested. These variables are self-perception, self-criticism,

self-satisfaction, the moral ethical self, self-esteem, self-conflict, openness, and the physical self.

The null hypothesis was accepted for the variables self-satisfaction, self-criticism, self-esteem, self-conflict, openness, and the physical self. In accepting the null hypothesis for these variables, the inference for the sample in this study is that there is no significant difference between the sample group and the Tennessee Self-Concept Scale norm group.

The null hypothesis was rejected for the variables self-perception and the moral ethical self. In rejecting the null hypothesis for these variables, the inference for the samples in this study is that there was a significant difference between the sample group and the Tennessee Self-Concept Scale norm group on the variables of self-perception and the moral ethical self.

The profile of raw scores (appendix G) represent the individual scores of each adolescent to whom the Tennessee Self-Concept Scale was administered. Scores that were lower or higher than the norm score are discussed.

Subjects 1, 2, 4, and 7 scored 60, 60, 58, and 61, respectively, on the Column B score; the norm was between 62 and 88. These scores were not significantly

lower, but subjects 1, 2, 4, and 7 were between thirteen and fifteen years of age. This score describes the self from a moral ethical framework indicating that at their particular age these four adolescents were questioning or unsure of their religious life and were in the process of beginning to re-evaluate their moral self. This is characteristic of the early adolescent period (Waechter and Blake 1976).

Subject 3 scored: -30 on the net conflict score with the norm being -30 to 13; 43 on the Total Conflict score with the norm being 14 to 42; 309 on the Total Positive score with the norm 318 to 421; and 81 on the Row 2 score with the norm 87 to 144. These scores are indicative of several interrelated stress areas in this seventeen-year-old female adolescent. There is defensive distortion which could be exhibited by over denial of negative attributes, an attempt to concentrate on eliminating the negative. The scores indicate a conflict in the adolescent's self-perception, exhibiting doubt over her own worth with little faith or confidence in self, and a low level of self-satisfaction. The exhibition of a high level of denial by this adolescent is an adaptive mechanism, an attempt by the ego to integrate a new experience in such a fashion as to



protect from danger or to gratify internal needs (Viederman 1974).

Subject 4 scored 270 on the Total Positive, below the norm, which is 318 to 421. This thirteen-year-old female scored below the norm on Columns A, B, C, D, and E scores and in the D (distribution) score. These scores indicate the adolescent has a feeling of doubt about her own worth, sees herself as undesirable, and has little faith or confidence in herself. The low column scores are indicative of the adolescent's body and state of health, skills, physical appearance, and sexuality. These scores are also indicative of a low sense of personal worth, a feeling of inadequacy, and low value as a family member and in relation to a close circle of associates. There is also a sense of inadequacy in social interactions with other people. The low scores exhibited by this adolescent may have been due to her being in the early adolescent period. The early adolescent period is a time of transition, a moving from childhood into early adulthood, and the body beginning to change from its familiar childhood form to a less familiar adult form (Waechter and Blake 1976). All these combined with societal pressures and the pressures of the sick role

have created a stressful situation for this thirteen-year-old adolescent.

The Self-Criticism score presented in table 2 is an indicator of an ability or inability to be open and critical of the self in a healthy way. The mean score for the kidney transplanted group was 34.0 with a standard deviation of 6.67; the Tennessee Self-Concept Scale norm group had a mean score of 35.54 with a standard deviation of 6.70. Bartlett's test resulted in  $p > .987$ , thus it was assumed the variances were equal. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. The  $t$ -test resulted in  $t = .68$ , ( $p > .494$ ), thus there was no evidence to indicate that the kidney transplanted group lacked a healthy ability for self-criticism.

TABLE 2  
SELF-CRITICISM

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	34.0	6.67	.68	>.494
Tennessee Self-Concept Scale norm	35.54	6.70		

The True-False Ratio scores presented in table 3 measure response set or response bias and indicate whether the subjects' approach to the task involves any strong tendency to agree or disagree regardless of item content. The mean score for the kidney transplanted group was .981 with a standard deviation of .227; the Tennessee Self-Concept Scale norm group had a mean score of 1.03 with a standard deviation of .29. Bartlett's test resulted in  $p > .377$ , thus it was assumed the variances were equal. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. The  $t$ -test resulted in  $t = .50$ , ( $p > .30$ ), thus there was no evidence to indicate that the kidney transplanted group exhibited response bias.

TABLE 3  
TRUE/FALSE RATIO

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	.981	.227	.50	>.30
Tennessee Self-Concept Scale norm	1.03	.29		

The Net Conflict score presented in table 4 measures the extent to which an individual's response to positive items differ from or conflict with his responses to negative items in the same area of self-perception. The kidney transplanted group had a mean score of -7.111 with a standard deviation of 14.259, and the Tennessee Self-Concept Scale norm group had a mean score of -4.91 and a standard deviation of 13.01. Bartlett's test resulted in  $p > .713$ , thus it was assumed the variances were equal. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. The  $t$ -test resulted in  $t = .50$ , ( $p > .30$ ), therefore, there was no evidence to indicate that the kidney transplanted group experienced conflict between positive and negative responses.

TABLE 4  
NET CONFLICT

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	-7.111	14.259	.50	> .30
Tennessee Self-Concept Scale norm	-4.91	13.01		

The Total Conflict score as presented in table 5 if high indicates confusion, contraindication, and general conflict in self-perception. Low scores present a subject with an extremely tight and rigid self-description. The kidney transplanted group had a mean score of 29.78 with a standard deviation of 7.362, and the mean score for the Tennessee Self-Concept Scale norm group was 30.10 with a standard deviation of 8.21. Bartlett's test resulted in  $p = .682$ , thus it was assumed the variances were equal. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. The  $t$ -test resulted in  $t = .12$ , ( $p > .45$ ), thus there was no significant evidence to indicate that the kidney transplanted group experienced general conflict in self-perception or a defensively rigid self-description.

TABLE 5  
TOTAL CONFLICT

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	29.78	7.362	.12	>.45
Tennessee Self-Concept Scale norm	30.10	8.21		

The Total Positive score as presented in table 6 reflects the overall level of self-esteem. Subjects with high scores tend to like themselves, feel they are persons of value and worth, and have confidence in themselves. Those with low scores are doubtful of their own worth, see themselves as undesirables, often feel anxious, depressed and unhappy, and have little faith or confidence in themselves. The mean score for the kidney transplanted group was 336.9 with a standard deviation of 40.89, and the mean score of the Tennessee Self-Concept Scale group was 345.57 with a standard deviation of 30.70. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. Bartlett's test resulted in  $p > .219$ , thus it was assumed the variances were equal. The  $t$ -test resulted in  $t = .84$ , ( $p > .20$ ) indicating there was no significant problem with the kidney transplanted group's overall level of self-esteem.

The Row 1 P score presented in table 7 consists of "what I am" items. The subject describes his basic identity; how he sees himself. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. The mean score for the kidney transplanted group was 125.0 with a standard deviation of

TABLE 6

## TOTAL POSITIVE

Group	Mean	Standard Deviation	<u>t</u>	<u>p</u>
Kidney transplanted	336.9	40.89	.84	> .20
Tennessee Self-Concept Scale norm	345.57	30.70		

14.75 and the mean score for the Tennessee Self-Concept Scale norm group was 127.10 with a standard deviation of 9.96. Bartlett's test resulted in  $p > .080$ , thus a modified  $t$ -test was used. The  $t$ -test resulted in  $t = .62$ , ( $p > .27$ ) indicating that the kidney transplanted group had no significant problem in their ability to describe their basic identity.

TABLE 7

## ROW 1

Group	Mean	Standard Deviation	<u>t</u>	<u>p</u>
Kidney transplanted	125.0	14.75	.62	> .27
Tennessee Self-Concept Scale norm	127.10	9.96		

The Row 2 P score presented in table 8 reflects the level of self-satisfaction or self-acceptance about the self the subject perceives. The mean score of the kidney transplanted group was 103.7 with a standard deviation of 17.13; the Tennessee Self-Concept Scale norm group had a mean score of 103.6 with a standard deviation of 13.79. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. Bartlett's test resulted in  $p > .363$ , thus it was assumed the variances were equal. The  $t$ -test resulted in  $t = .000$ , ( $p > .50$ ), thus there was no significant evidence to indicate the kidney transplanted group experiences a low level of self-acceptance.

TABLE 8

ROW 2

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	103.7	17.13	.000	> .50
Tennessee Self-Concept Scale norm	103.6	13.79		

The Row 3 P scores presented in table 9 measure the subject's perception of his own behavior or how he functions. The kidney transplanted group's mean score



was 108.2 with a standard deviation of 13.01, the Tennessee Self-Concept Scale norm group's mean score was 115.01 with a standard deviation of 11.22. Because normality was rejected, the Wilcoxon's non-parametric  $\underline{t}$ -test was used rather than the parametric  $\underline{t}$ -test. The Wilcoxon's  $\underline{t}$ -test resulted in  $\underline{t} = 8$ , ( $\underline{p} < .05$ ), thus the kidney transplanted group scored significantly lower than the Tennessee Self-Concept Scale norm group indicating inadequate perception by the subjects of how they behave or function.

TABLE 9

ROW 3

Group	Mean	Standard Deviation	wT	$\underline{p}$
Kidney transplanted	108.2	13.01	8	<.05
Tennessee Self-Concept Scale norm	115.01	11.22		

The Column A scores presented in table 10 represent the physical self. The subject presents his view of his body, his state of health, his physical appearance, skills, and sexuality. The mean score of the kidney transplanted group was 69.56 with a standard deviation of 10.24; the Tennessee Self-Concept Scale

norm group had a mean score of 71.78 with a standard deviation of 7.67. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. Bartlett's test resulted in  $p > .213$ , thus it was assumed the variances were equal. The  $t$ -test resulted in  $t = .86$ , ( $p > .20$ ) indicating the kidney transplanted adolescent was not significantly different in his view of his body from the Tennessee Self-Concept Scale norm group.

TABLE 10

COLUMN A

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	69.56	10.24	.86	>.20
Tennessee Self-Concept Scale norm	71.78	7.67		

The Column B score presented in table 11 represents the subject's self from a moral, ethical frame of reference. The mean score for the kidney transplanted group was 65.56 with a standard deviation of 8.69; the Tennessee Self-Concept Scale group's mean score was 70.33 with a standard deviation of 8.70. Normality was assumed because the Kolmogorov-Smirnoff test was not

significant at the .10 level. Bartlett's test resulted in  $p > 1.000$ , thus it was assumed the variances were equal. The  $t$ -test resulted in  $t = 1.63$ , ( $p > .103$ ). There was no significant difference between the kidney transplanted group and the Tennessee Self-Concept Scale norm group, but there is an indication of a tendency for the kidney transplanted group to question their moral ethical frame of reference.

TABLE 11

COLUMN B

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	65.56	8.69	1.63	>.103
Tennessee Self-Concept Scale norm	70.33	8.70		

The Column C score presented in table 12 reflects the individual's sense of personal worth, his feeling of adequacy as a person apart from his body or relationships with others. The mean score for the kidney transplanted group was 66.89 with a standard deviation of 8.23; the Tennessee Self-Concept Scale norm group mean score was 64.55 with a standard deviation of 7.41. Normality was assumed because the Kolmogorov-Smirnoff test was not

significant at the .10 level. Bartlett's test resulted in  $p > .669$ , thus it was assumed the variances were equal. The  $t$ -test resulted in  $t = .94$ , ( $p > .18$ ), thus indicating no significant difference between the kidney transplanted group's sense of personal worth and feelings of adequacy as a person and the Tennessee Self-Concept Scale norm group's.

TABLE 12

COLUMN C

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	66.89	8.23	.94	>.18
Tennessee Self-Concept Scale norm	64.55	7.41		

The Column D score as presented in table 13 reflects the individual's feelings of adequacy, worth, and value as a family member. The kidney transplanted group's mean score was 67.89 with a standard deviation of 9.51, and the Tennessee Self-Concept Scale norm's mean score was 70.83 with a standard deviation of 8.43. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. Bartlett's test resulted in  $p > .622$ , thus it was assumed the

variances were equal. The  $t$ -test resulted in  $t = 1.04$ , ( $p > .15$ ), thus indicating no significant difference between the kidney transplanted group and the Tennessee Self-Concept Scale norm group's feelings of adequacy, worth, and value as a family member.

TABLE 13  
COLUMN D

Group	Mean	Standard Deviation	$t$	$p$
Kidney transplanted	67.89	9.51	1.04	>.15
Tennessee Self-Concept Scale norm	70.83	8.43		

The Column E score presented in table 14 depicts another "self in relation to others" and reflects the individual's sense of adequacy and worth in his social relationships. The mean score for the kidney transplanted group was 67.00 with a standard deviation of 8.13; the Tennessee Self-Concept Scale norm group had a mean score of 68.14 with a standard deviation of 7.86. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. Bartlett's test resulted in  $p > .891$ , thus it was assumed the variances were equal. The  $t$ -test resulted in  $t = .43$ ,

( $p > .33$ ). These scores indicated no significant difference in the reflection of the individual's self-worth between the kidney transplanted group and the Tennessee Self-Concept Scale norm group.

TABLE 14

COLUMN E

Group	Mean	Standard Deviation	<u>t</u>	<u>p</u>
Kidney transplanted	67.00	8.13	.43	>.33
Tennessee Self-Concept Scale norm	68.14	7.86		

The Total Variability score presented in table 15 represents the amount of variability or consistence from one area of perception to another for the entire record. The mean score for the kidney transplanted group was 47.44 with a standard deviation of 10.27; the mean score for the Tennessee Self-Concept Scale norm group was 48.53 with a standard deviation of 12.42. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. Bartlett's test resulted in  $p > .486$ , thus it was assumed the variances were equal. The t-test resulted in  $t = .26$ , ( $p > .40$ ), thus

indicating no significant difference in the variability or consistency of scores for the entire record between the kidney transplanted group and the Tennessee Self-Concept Scale norm group.

TABLE 15  
TOTAL VARIABILITY

Group	Mean	Standard Deviation	<u>t</u>	<u>p</u>
Kidney transplanted	47.44	10.27	.26	>.40
Tennessee Self-Concept Scale norm	48.53	12.42		

The Column Variability score presented in table 16 measures and summarizes the variation within the columns. The kidney transplanted group had a mean score of 31.22 with a standard deviation of 9.14; the Tennessee Self-Concept Scale norm group had a mean score of 29.03 with a standard deviation of 9.12. Normality was assumed because the Kolmogorov-Smirnoff test was not significant at the .10 level. Bartlett's test resulted in  $p > .992$ , thus it was assumed the variances were equal. The t-test resulted in  $t = .72$ , ( $p > .44$ ). This indicates that there was no significant variability

between the column scores for the kidney transplanted group when compared with the Tennessee Self-Concept Scale norm group.

TABLE 16  
COLUMN VARIABILITY

Group	Mean	Standard Deviation	<u>t</u>	<u>p</u>
Kidney transplanted	31.22	9.14	.72	> .44
Tennessee Self-Concept Scale norm	29.03	9.12		

The Row Variability scores presented in table 17 indicate a sum of variations across the rows. High scores indicate a variable self-perception while low scores indicate low variability which may approach rigidity. The mean score for the kidney transplanted group was 11.22 with a standard deviation of 3.80; the Tennessee Self-Concept Scale norm group had a mean score of 19.60 with a standard deviation of 5.76. Normality was rejected for the score with the Kolmogorov-Smirnoff test; therefore, Wilcoxon's (non parametric t-test) was used. The t-test resulted in t = 1.75; (p > .04), thus the kidney transplanted group scored significantly lower than did the Tennessee Self-Concept



Scale norm group indicating a low variability of self-perception tending toward rigidity.

TABLE 17  
ROW VARIABILITY

Group	Mean	Standard Deviation	<u>t</u>	<u>p</u>
Kidney transplanted	11.22	3.80	1.75	> .04
Tennessee Self-Concept Scale norm	19.60	5.76		

The D score (distribution score) is a summary score and can be interpreted as a measure of another aspect of self-perception, certainty about the way one sees himself. High scores indicate that the subject is very definite and certain in what he says about himself while low scores mean the opposite. The kidney transplanted group had a mean score of 110.7 with a standard deviation of 38.61 while the Tennessee Self-Concept Scale norm group had a mean score of 120.44 with a standard deviation of 24.19. Bartlett's test resulted in  $p > .032$ , thus a modified  $t$ -test was used. The  $t$ -test resulted in  $t = .75$ , ( $p > .23$ ), indicating no significant difference between the D score of the kidney transplanted group and the Tennessee Self-Concept Scale norm group.

TABLE 18

## D SCORES

Group	Mean	Standard Deviation	<u>t</u>	<u>p</u>
Kidney transplanted	110.7	38.61	.75	> .23
Tennessee Self-Concept Scale norm	120.44	24.19		

Summary

There were no significant findings obtained from the examination of the demographic data. Upon examination of individual scores, two female adolescents exhibited lower raw scores than the norm group and lower than any of the other adolescent subjects. The two female subjects' raw scores indicated the adolescents had doubt about their self-worth, and little confidence or faith in themselves. One of the adolescents, seventeen years of age, was in the late stage of adolescence; the other, thirteen years of age, was in the early stage of adolescence. Each stage of adolescence has its own particular stresses for the adolescent to cope with. The thirteen-year-old through her scores on the Tennessee Self-Concept Scale was demonstrating the stresses she felt while moving from childhood into early adulthood.

This transition, along with the pressures of the sick role, had created stresses for which the thirteen-year-old had few coping mechanisms.

The other adolescent, the seventeen-year-old, exhibited a high level of denial in order to cope with the stress of the late adolescent period. During late adolescence the primary task is the establishment of self as separate from the family (Waechter and Blake 1976). This adolescent may have been having a more difficult time establishing independence due to the chronic nature of her disease. The family of the renal transplant patient has a particularly difficult time letting go, and there is a tendency to be overprotective toward the adolescent (Zarinsky 1975).

Based on the data collected and analyzed, the findings of this study indicated that the adolescent subjects showed self-concepts similar to those of the Tennessee Self-Concept Scale norm group. One aspect of the self-concept, self-perception, was shown to be significantly different in the adolescent subjects. The subjects showed a low variability in their self-perception with a tendency toward rigidity (Daniels 1972; Kahn, Herendon, and Ahmadian 1971; Dempsey 1972; Newman, College, and Newman 1978). Schonfeld (1963) stated that the

adolescent who has disturbances in body perception, does not see himself as he actually exists because of an inner emotional condition that exaggerates any aberration in development lending security in a rigid self-perception.

Based on the findings it can be stated that the subjects involved in the study demonstrated self-concepts comparable to the Tennessee Self-Concept Scale norm group. There was no significance between the study group and the norm group.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary of this research study. Conclusions based on the findings are discussed, and recommendations for further research are suggested.

#### Summary

This study utilized the descriptive survey method. The problem of this study was to determine if the adolescent who has had a renal transplant has an altered self-concept.

The sample consisted of nine adolescents who were thirteen to nineteen years of age. There were three females and six males. All the adolescents had had a renal transplant and were not in a state of rejection.

The test instrument used in this study was the Tennessee Self-Concept Scale. Seventeen scores of the Scale were used to assess the self-concept. The seventeen scores represented several variables which comprise the self-concept--self-perception, self-satisfaction, self-criticism, self-conflict, self-esteem, openness, the moral ethical self, and the physical self.

Demographic data were also obtained from each of the subjects.

The null hypothesis was accepted for the variables self-satisfaction, self-criticism, self-esteem, self-conflict, openness, and the physical self, indicating no significant difference between the sample subjects and the Tennessee Self-Concept Scale norm group.

The null hypothesis was rejected for the variables self-perception and the moral ethical self. Therefore, there was a significant difference between the sample subjects and the Tennessee Self-Concept Scale norm group on these variables.

### Conclusions

Based on the findings it can be concluded that for this study the adolescents showed self-concepts that were not significantly different from the self-concepts of the Tennessee Self-Concept Scale norm group. These data are contrary to current literature regarding self-concepts, based on the findings of Beard (1969), Zarinsky (1975), Fine, Korsch, and Stiles (1970), and Bernstein (1971). The adolescent has a psychologically stressful time due to dependency on the family and physical appearance.

The adolescent subjects involved in this study had their transplanted kidney for a mean time of 43.66 months. Since the subjects had their transplanted kidney for such a long period, it is possible that they had begun to adapt to their new appearance and way of life.

### Recommendations

Several recommendations for further research are suggested as follows. Replication of this study utilizing:

1. A larger sample size
2. Adolescents who are on hemodialysis as the comparison group for the adolescents with a renal transplant
3. All thirty interrelated scores of the Tennessee Self-Concept Scale, in order to obtain a multi-dimensional view of the self-concept
4. Two sub-groups for comparison, adolescents who are on hemodialysis and adolescents who have no history of chronic illness

## APPENDIX A



## TENNESSEE SELF-CONCEPT SCALE

Instructions

Please circle the number which represents your response according to the following:

- 1--Completely false
- 2--Mostly false
- 3--Partly false and partly true
- 4--Mostly true
- 5--Completely true

The statements in this questionnaire are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully; then select one of the five responses listed.

Remember, put a circle around the response number you have chosen for each statement.

Completely False	Mostly False	Partly False, Partly True	Mostly True	Completely True
---------------------	-----------------	------------------------------------	----------------	--------------------

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. I have a healthy body.                         | 1 | 2 | 3 | 4 | 5 |
| 2. I like to look nice and neat all the time.     | 1 | 2 | 3 | 4 | 5 |
| 3. I am an attractive person.                     | 1 | 2 | 3 | 4 | 5 |
| 4. I am full of aches and pains.                  | 1 | 2 | 3 | 4 | 5 |
| 5. I consider myself a sloppy person.             | 1 | 2 | 3 | 4 | 5 |
| 6. I am a sick person.                            | 1 | 2 | 3 | 4 | 5 |
| 7. I am neither too fat nor too thin.             | 1 | 2 | 3 | 4 | 5 |
| 8. I am neither too tall nor too short.           | 1 | 2 | 3 | 4 | 5 |
| 9. I like my looks just the way they are.         | 1 | 2 | 3 | 4 | 5 |
| 10. I don't feel as well as I should.             | 1 | 2 | 3 | 4 | 5 |
| 11. I would like to change some parts of my body. | 1 | 2 | 3 | 4 | 5 |
| 12. I should have more sex appeal.                | 1 | 2 | 3 | 4 | 5 |
| 13. I take good care of myself physically.        | 1 | 2 | 3 | 4 | 5 |
| 14. I feel good most of the time.                 | 1 | 2 | 3 | 4 | 5 |
| 15. I try to be careful about my appearance.      | 1 | 2 | 3 | 4 | 5 |

	Completely False	Mostly False	Partly False, Partly True	Mostly True	Completely True
16. I do poorly in sports and games.	1	2	3	4	5
17. I often act like I am "all thumbs."	1	2	3	4	5
18. I am a poor sleeper.	1	2	3	4	5
19. I am a decent sort of person.	1	2	3	4	5
20. I am a religious person.	1	2	3	4	5
21. I am an honest person.	1	2	3	4	5
22. I am a moral failure.	1	2	3	4	5
23. I am a bad person.	1	2	3	4	5
24. I am a morally weak person.	1	2	3	4	5
25. I am satisfied with my moral behavior.	1	2	3	4	5
26. I am as religious as I want to be.	1	2	3	4	5
27. I am satisfied with my relationship with God.	1	2	3	4	5
28. I wish I could be more trustworthy.	1	2	3	4	5
29. I ought to go to church more.	1	2	3	4	5
30. I shouldn't tell so many lies.	1	2	3	4	5
31. I am true to my religion in my everyday life.	1	2	3	4	5

Completely False	Mostly False	Partly False, Partly True	Mostly True	Completely True
---------------------	-----------------	------------------------------------	----------------	--------------------

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 32. I do what is right most of the time.                         | 1 | 2 | 3 | 4 | 5 |
| 33. I try to change when I know I'm doing things that are wrong. | 1 | 2 | 3 | 4 | 5 |
| 34. I sometimes use unfair means to get ahead.                   | 1 | 2 | 3 | 4 | 5 |
| 35. I sometimes do very bad things.                              | 1 | 2 | 3 | 4 | 5 |
| 36. I have trouble doing the things that are right.              | 1 | 2 | 3 | 4 | 5 |
| 37. I am a cheerful person.                                      | 1 | 2 | 3 | 4 | 5 |
| 38. I have a lot of self-control.                                | 1 | 2 | 3 | 4 | 5 |
| 39. I am a calm and easy going person.                           | 1 | 2 | 3 | 4 | 5 |
| 40. I am a hateful person.                                       | 1 | 2 | 3 | 4 | 5 |
| 41. I am a nobody.   | 1 | 2 | 3 | 4 | 5 |
| 42. I am losing my mind.   | 1 | 2 | 3 | 4 | 5 |
| 43. I am satisfied to be just what I am.                         | 1 | 2 | 3 | 4 | 5 |
| 44. I am as smart as I want to be.                               | 1 | 2 | 3 | 4 | 5 |
| 45. I am just as nice as I should be.                            | 1 | 2 | 3 | 4 | 5 |
| 46. I am not the person I would like to be.                      | 1 | 2 | 3 | 4 | 5 |
| 47. I despise myself.  | 1 | 2 | 3 | 4 | 5 |

Completely False	Mostly False	Partly False, Partly True	Mostly True	Completely True
---------------------	-----------------	------------------------------------	----------------	--------------------

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 48. I wish I didn't give up as easily as I do.                        | 1 | 2 | 3 | 4 | 5 |
| 49. I can always take care of myself in any situation.                | 1 | 2 | 3 | 4 | 5 |
| 50. I solve my problems quite easily.                                 | 1 | 2 | 3 | 4 | 5 |
| 51. I take the blame for things without getting mad.                  | 1 | 2 | 3 | 4 | 5 |
| 52. I change my mind a lot.   | 1 | 2 | 3 | 4 | 5 |
| 53. I do things without thinking about them.                          | 1 | 2 | 3 | 4 | 5 |
| 54. I try to run away from my problems.                               | 1 | 2 | 3 | 4 | 5 |
| 55. I have a family that would always help me in any kind of trouble. | 1 | 2 | 3 | 4 | 5 |
| 56. I am an important person to my friends and family.                | 1 | 2 | 3 | 4 | 5 |
| 57. I am a member of a happy family.                                  | 1 | 2 | 3 | 4 | 5 |
| 58. I am not loved by my family.                                      | 1 | 2 | 3 | 4 | 5 |
| 59. My friends have no confidence in me.                              | 1 | 2 | 3 | 4 | 5 |
| 60. I feel that my family doesn't trust me.                           | 1 | 2 | 3 | 4 | 5 |

Completely False	Mostly False	Partly False, Partly True	Mostly True	Completely True
---------------------	-----------------	------------------------------------	----------------	--------------------

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 61. I am satisfied with my family relationships.                                       | 1 | 2 | 3 | 4 | 5 |
| 62. I treat my parents as well as I should (use past tense if parents are not living). | 1 | 2 | 3 | 4 | 5 |
| 63. I understand my family as well as I should.  | 1 | 2 | 3 | 4 | 5 |
| 64. I am too sensitive to things my family say.  | 1 | 2 | 3 | 4 | 5 |
| 65. I should trust my family more.   | 1 | 2 | 3 | 4 | 5 |
| 66. I should love my family more.  | 1 | 2 | 3 | 4 | 5 |
| 67. I try to play fair with my friends and family.                                     | 1 | 2 | 3 | 4 | 5 |
| 68. I do my share of work at home.   | 1 | 2 | 3 | 4 | 5 |
| 69. I take a real interest in my family.   | 1 | 2 | 3 | 4 | 5 |
| 70. I quarrel with my family.  | 1 | 2 | 3 | 4 | 5 |
| 71. I give in to my parents.<br>(Use past tense if parents are not living.)            | 1 | 2 | 3 | 4 | 5 |
| 72. I do not act like my family thinks I should.                                       | 1 | 2 | 3 | 4 | 5 |
| 73. I am a friendly person.  | 1 | 2 | 3 | 4 | 5 |
| 74. I am popular with women.   | 1 | 2 | 3 | 4 | 5 |

Completely False	Mostly False	Partly False, Partly True	Mostly True	Completely True
---------------------	-----------------	------------------------------------	----------------	--------------------

75. I am popular with men.	1	2	3	4	5
76. I am mad at the whole world.	1	2	3	4	5
77. I am not interested in what other people do.	1	2	3	4	5
78. I am hard to be friendly with.	1	2	3	4	5
79. I am as sociable as I want to be.	1	2	3	4	5
80. I am satisfied with the way I treat other people.	1	2	3	4	5
81. I try to please others, but I don't overdo it.	1	2	3	4	5
82. I should be more polite to others.	1	2	3	4	5
83. I am no good at all from a social standpoint.	1	2	3	4	5
84. I ought to get along better with other people.	1	2	3	4	5
85. I try to understand the other fellow's point of view.	1	2	3	4	5
86. I see good points in all the people I meet.	1	2	3	4	5
87. I get along well with other people.	1	2	3	4	5
88. I do not feel at ease with other people.	1	2	3	4	5



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## APPENDIX B

## SUBJECT INFORMATION

Date\_\_\_\_\_

Scale Number\_\_\_\_\_

Age\_\_\_\_\_

Date of Birth\_\_\_\_\_

Sex: Female\_\_\_\_\_

Male\_\_\_\_\_

## Renal Disease:

Date of onset\_\_\_\_\_

Date started on hemodialysis\_\_\_\_\_

Number of years on hemodialysis\_\_\_\_\_

Date of renal transplant\_\_\_\_\_

Date of last rejection\_\_\_\_\_

## APPENDIX C

## APPENDIX D

## EXPLANATION OF STUDY

The purpose of this study is to find out how teenagers who have had a kidney transplant feel about themselves. If you choose to participate in this study, you will be given a questionnaire with one hundred statements on it. This questionnaire is being administered in an attempt to improve nursing care through increased knowledge of the adolescent with a kidney transplant. After you read each statement you will decide how it applies to you and mark your response on the score sheet. The scale takes ten to twenty minutes to complete. Your name will not be used, you will remain anonymous.

In signing the consent to participate in this study I (or my child) understand that participation is voluntary, that I (or my child) may withdraw at any time, and that whether or not I (or my child) participate in this study will not affect the care that is received in this agency.

---

Signature of Subject

---

Date

---

Signature of parent/guardian  
(if subject under 18)

---

Date

---

Witness

---

Date

## APPENDIX E

## TEXAS WOMAN'S UNIVERSITY

Consent to Act as a Subject for Research and Investigation:

1. I hereby authorize Linda S. Dillion to perform the following investigation:

The administration of the Tennessee Self-Concept Scale, a 100 statement questionnaire concerning perception of self-concept by adolescents. This questionnaire will take approximately 10 to 20 minutes to complete. The subject need only write his or her age on the score sheet to assure anonymity.

2. The procedure of investigation listed in Paragraph 1 has been explained to me by \_\_\_\_\_.  
(Name)

3. I understand that the investigation described in Paragraph 1 involves the following risks or discomforts:

The adolescent may become cognizant of thoughts and feelings he was not aware of before.

4. I understand that the procedures and investigations described in Paragraph 1 have the following potential benefits to myself and/or others:

The findings of the study will provide no immediate benefits but it is felt that through increased knowledge of the perception of adolescent's self-concept, nursing care can be improved to better meet the patient's needs.

5. An offer to answer all of my questions regarding the study has been made. I understand that I may terminate my participation in the study at any time.

\_\_\_\_\_  
Subject's signature

\_\_\_\_\_  
Date

(If the subject is a minor, or otherwise unable to sign, complete the following.)

Subject is a minor (age \_\_\_\_), or is unable to sign because:

\_\_\_\_\_  
Father

\_\_\_\_\_  
Date

\_\_\_\_\_  
Mother

\_\_\_\_\_  
Date

\_\_\_\_\_  
Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

## APPENDIX F



## APPENDIX G

TABLE 19  
PROFILE OF RAW SCORES

	Self- Criticism	True/ False	Net Conflict	Total Conflict	Total Positive	Row 1	Row 2	Row 3	Column A	Column B	Column C	Column D	Column E	Total Variability	Column Variability	Row Variability	Difference
Norm	27- 48	.58- 1.34	-30- 13	14- 42	318- 421	117- 147	87- 144	102- 140	68- 88	62- 88	56- 81	62- 88	59- 86	21- 65	10- 42	9- 26	87- 170
#1	47	1.08	- 3	35	323	121	96	106	76	60	62	63	62	57	35	22	122
#2	30	.74	-23	31	319	118	95	106	65	60	64	64	66	59	41	18	85
#3	41	.68	-31	43	309	124	81	104	59	64	60	63	63	58	43	15	122
#4	32	.82	- 4	18	270	93	87	90	51	58	54	51	56	31	17	14	44
#5	24	1.07	5	23	417	140	139	138	83	84	82	84	84	42	25	17	183
#6	31	.89	-10	28	336	124	107	105	71	65	66	73	61	35	22	13	93
#7	33	1.19	- 3	25	357	132	116	109	81	61	72	72	71	49	27	22	112
#8	36	1.39	17	31	365	144	106	115	68	76	73	76	72	53	40	13	139
#9	32	.97	-12	34	336	129	106	101	72	62	69	65	68	43	31	12	96

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