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**The Shared Experience of Chronic Illness:
A Comparison Study of Adolescents**

Susan Harriet

**A Research Paper
in
The Department
of
Art Education and Art Therapy**

**Presented in Partial Fulfilment of the Requirements
for the Degree of Magisteriate of Arts**

**Concordia University
Montreal, Quebec, Canada**

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ABSTRACT

The Shared Experience of Chronic Illness:

A Comparison Study of Adolescents

Susan Harriet

The general topic of this research paper is the experience of living with a chronic illness. This will be explored through adolescents' perceptions of self and of their lives at different periods of time, as indicated through their images and corresponding words. This research compares images and dialogue from two differing groups. One group whose members are living with Juvenile Diabetes, the other serving as a control group, whose members are not living with any type of chronic illness. The comparison aims to determine whether or not the images and words of the diabetic group exhibit more negative responses (as defined by this study) than do those of the control group. This study's hypothesis is as follows: "Combined checklist results of the control group will contain less negative answers than those of the diabetic group." This hypothesis was confirmed through the study.

The topics of projective techniques, adolescence, and chronic illness - namely diabetes, will be addressed in addition to a thorough description of the study and of its results. Results are described and examined in both a quantitative and qualitative manner. Though Juvenile Diabetes is the target illness of this study, results may apply to other types of chronic illness. Similarly, results may also offer insight on age groups other than adolescence, which is the population studied in this present research.

Everyone who is born holds dual citizenship, in the kingdom of the well and in the kingdom of the sick. Although we all prefer to use only the good passport, sooner or later each of us is obliged, at least for a spell, to identify ourselves as citizens of that other place.

(Sontag, 1977, p. 3)

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This paper was written in memory of

Margaret and Tancrede Chenard and of Melvin Harriet

and is dedicated to Alexandra, Jacob and Benjamin

who are my promises of all the great things that are yet to come

Precedent Framework

The general topic of this research paper is the experience of living with a chronic illness. This will be explored through *adolescents' perceptions of self and of their lives at different periods of time, as indicated through their images and words. More specifically, this research seeks to compare images and dialogue from two different groups of adolescents, one consisting of persons living with diabetes, the other, without any type of chronic illness, serving as a control group. The comparison aims to determine whether or not the images and words of the diabetic group exhibit more negative responses (as defined by this study) than do those of the control group. This study's hypothesis is as follows: Combined checklist results of the control group will contain less negative answers than those of the diabetic group. "Negative answers" refers to certain terms found within the Response Legend to which the study's raters were asked to refer (Appendix A and C).

Within this paper, the topics of projective techniques, adolescence, and chronic illness - namely diabetes, will be addressed briefly in addition to the more thorough description of the study and of its results. The section entitled "Precedent Framework" will serve as an introduction. This author's paper "The Potentials of Using Art Therapy in Helping Adolescents Cope with Chronic Illness" (Harriet, 1997), was written with the intent of serving as a literature review for this present paper. A brief summary will be given

*Note: For the purposes of this paper, the term *adolescent* refers to individuals who are between twelve and eighteen years of age (inclusive).

within the section entitled "Current Literature and Studies". A close look at projective techniques will be taken as well. There will be a section addressing the topic of adolescence within which Erikson and Piaget will serve as primary theoretical references. Several other resources will facilitate comprehension of issues concerning this period of life. Within the subsequent section, a definition of the term *chronic illness* as it applies to this paper, will be given. A description of juvenile diabetes will be offered as well as some associated statistics. A section investigating facets of adolescent life with a chronic illness will also be offered.

The section named "Present Research Study" will focus on describing the study itself. The subject area of study and the statement of purpose will be given as will the study's primary research hypothesis and possible subsidiary research questions. Relevance of the research will be explored, as will assumptions that underlie the study. Finally, the research design and methodology will be described in detail.

A presentation and discussion of results will be offered in the subsequent part of the paper. It will describe the data collected. This section will also describe both in a quantitative and qualitative manner, the analysis of the data derived from the checklists filled out by the two raters. Juvenile diabetes will be the target illness for the study, though it is this author's opinion that the results may apply to other types of chronic illnesses.

Some additional questions will merit consideration within the discussion of results. They would be: Are there common elements and/or qualities in how persons having diabetes perceive themselves? Are the common elements shared by the adolescents

having diabetes evident in their images? Are they evident through their verbal responses? Are these elements less apparent or absent from the images drawn by the comparison group of non-diabetic teens? Will all three images drawn by an individual feature similar traits or will the differing factors in the tasks themselves (whether its of the past, present or future) produce inconsistencies? When looking at one person's series of works, will the image of the future be more negative than the other two, suggesting awareness, or consideration of cumulative effects of chronic illness over time? In the diabetic group, does the number of negative responses positively correlate with the number of years since diagnosis (they both increase or they both decrease)? A critique of the present research will also be given here.

The final concluding part of this paper, will address possible routes of further research, as well as discuss the relevance of the attained results.

Diabetes is a chronic illness. This therefore means that it is an illness for which there is no cure and consequently, will reside within the individual for the rest of his or her life. Participants of the research will be asked to represent themselves in the past, in the present and in the future. This author is interested in seeing, through each individual's series of drawings, how each sees him or herself within different periods of his or her life. A comparison between two groups of adolescents (by means of a frequency count) will serve as the primary tool in identifying factors seen and heard through images and dialogue, uniquely belonging to the diabetic group. These may consequently suggest an influence (at least partially) of the presence of illness in the self of the persons of this one group.

This study also has a secondary aim of promoting the use of art therapy with chronically ill adolescents. If the data from this research proves that through art making and subsequent discussion, certain issues and/or concerns surface, it may serve as witness to the potential of art therapy as a therapeutic modality.

Research on Juvenile Diabetes

The Juvenile Diabetes Foundation (JDF) is a non-profit organization, whose goal is to raise money for diabetes related research. Recent research has included studies on therapies to reduce the risk of blindness, amputations and high blood pressure associated with diabetes; management practices which help maintain tight control of glucose levels with the aim of preventing or delaying complications; and improved understanding of transplantation immunology. There is no question nor doubt that the above-mentioned research is important and necessary. These studies accurately reflect the type of research done on diseases. They are medical and/or biological in nature. They address the physical well-being of the individual. This present study aims to address issues associated with the psychological well-being of the individual. Although there is much less research focused on the psychological aspects associated with diabetes, it is strongly believed by this author that there is a necessity for it.

A Personal Motivation

One of the primary motivational drives behind this author's literature review (Harriet, 1997) and of this present research, is of a personal nature. The questions that led to the development of the inquiry and of its hypothesis grew from this author's own experience of living with diabetes. As this researcher seeks answers through this study, she starts

with the belief that her own perception of self, living with diabetes through adolescence, was particularly significant in its influence throughout her life. Consequently a subsidiary goal of understanding the research participants' experiences, is to further her own understanding of her experience.

Current Literature and Studies

The above-mentioned literature review (Harriet, 1997) served as a review for the topics of adolescence, chronic illness and art therapy as well as of their theoretic and practical inter-relatedness. This author believes that the "normal" concerns and struggles of adolescence are magnified by the presence of a chronic illness. She also believes that this is reciprocated - that the "normal" issues and struggles of living with a chronic illness, are magnified by the fact that one is an adolescent.

The resultant conclusion of the literature review was that there was an extensive amount of literature available on the subject of art therapy and its use with adolescents. Similarly, there was a sufficient amount on the use of art therapy with persons having a chronic illness. However, less was available on the specific population - adolescents having a chronic illness (a combination of both of the above). These conclusions relate to this present paper due to the fact that this study will aim to understand the teen through his or her art images and associated dialogue.

Projective Techniques

Upon further review of the literature for this current study, this author found a fair amount on the history of projective techniques. Through revision of the history of their development and use, both material supporting and critiquing their use was found.

Rubin (1986) is an author who has written about the use of projective techniques, stating that they are commonly used. Citing Lubin et al. (1984) the author offers: "As a matter of fact, as of 1982, five projective methods (Rorschach, TAT, Sentence Completion, House-Tree-Person Test, and the Draw-a-Person Test) were among the top ten most frequently used tests" (p. 9).

A projective technique, developed by this author, was used for this study due to the belief that it would contribute to the understanding of the subjects and of their views on themselves and on their experiences.

According to Elderkin Bell (1948, pp. 3-4) projection means:

To cast forward, which is the action involved in the technique. The subject manifests his personality in them by thrusting it out where it may be inspected. In the throwing, the personality is not grossly modified, it is only externalized in behaviour that is typical of the individual. In this way, the technique acts as a catalyzing agent to bring about the reaction..

Brooke (1996, pp. 3-4) writes that one of the functions of art is to objectify feeling so that one can contemplate and understand it. Believing in this potential and because this researcher hopes to understand emotions associated with the way the participants see themselves and their lives, a projective technique incorporating art was developed. The projective technique from this study requires three drawings of the self, from each participant. In her discussion regarding the purpose and recommended use of the Human Figure Drawing projective technique developed by Elizabeth Koppitz (1968), Brooke (1996, p. 10) shares: "The HFD may serve as a self-portrait, a picture of the client's inner

self and his attitude".

Writing about figure drawings as one type of projective test, Levy (1950, pp. 259-260) gives two basic assumptions: The first is that every aspect of behaviour has some significance. "Gestures, facial expressions and other observed behaviours occurring while the person is drawing, all have meanings". Levy adds: "The clinician however, is interested in the patient, not in the drawing per se. It is therefore entirely reasonable to use whatever data emerge from the experiment which are helpful in describing and understanding". Within this present research, the drawings will be looked at and rated. In addition to this however, dialogue of the participants will have equal, if not more weight when it comes to the analysis of the data. In this regard, the drawn images will not only be seen as means of communication, but will also be considered as a facilitating tool for verbal communication about the self. The second assumption is: that no behaviour is accidental - all behaviour is determined. The determinants however, "are usually multiple and of varying degrees of accessibility, thus complicating the task of analysis". Once again, the words of the participants will be reviewed with the hope that they will offer additional clarification.

Rubin (1986, p. 5) acknowledges Frank as being among the first to use the term *projective methods*. Quoting Frank (1948), the author offers: "the essential feature of a projective technique is that it evokes from the subject what is in various ways expressive of his private world and personality process". As stated above, it is this researcher's hope that this study will enable her to understand certain things about her subjects. It is thought that the use of a projective technique, along with other means of data collection,

would be appropriate and successful.

It has been mentioned above that both the drawings and dialogues of the participants will be considered. It is hoped that together, the use of both will provide opportunity for the most complete information possible, given the context of one single meeting between the subjects and the researcher. Words will add additional meaning to the images and similarly, the "relatively purer authenticity of projection via drawings - a subsemantic channel" (Hammer, 1986, p. 239) will provide additional or complimentary insight.

Projective techniques originated in an era dominated by psychoanalytic theory (Burns, 1987, p. 53). As far back as 1896, Freud offered psychoanalytical roots. Abt and Bellak (as cited in Bellak, 1950, p. 8) share that Freud described projection as a defensive process whereby one's own drives, feelings and sentiments are ascribed to other people or to the outside world. Projection was seen as a defensive process against anxiety. Projective techniques were said to offer some clues about a person's personality. Elderkin Bell (1948, pp. 7-8) wrote of the theoretical foundations underlying this assumption: The first one is that personality is not a static phenomenon but a dynamic process. The second is that the nature of personality is structured: "The structure of the individual is developed by the particular range of physiological, psychological, and physical-social-cultural influences that are brought to bear upon him". The third theoretical foundation is that the personality structure reveals itself in the behaviour of the individual since behaviour is functional:

The individual's behaviour reflects the internal relationship between the demands of the self and the demands of the situation and is an attempt to adapt to these

internal and external demands. Thus, the observable responses of the individual in specific situations are consistent within the personality in that situation.

(pp. 7-8)

The fourth theoretical foundation is that personality is not a surface but a depth phenomenon. Surface manifestations form one stratum while some traits of personality are hidden not only from the outside world but even from the individual him or herself. "Part of the function of projectives is to explore the nature of these unconscious areas" (p. 8).

Elderkin Bell (1948) offers an additional component to the potential functions of projectives, named above (p. 2):

The expression of consciously recognized autobiographical material through projectives confirms that more than psychoanalytical projection is involved. It is also true that the responses to a test may not involve so much a defensive function as an expressive function although these two functions might coexist in the same behaviour item and originate at different levels of the personality. (p. 2)

In his chapter entitled "Drawing, Painting and Other Arts", Elderkin Bell (1948) gives a brief but concise history of the use of art in the field of psychology. He begins in the 1890's with reference to Barnes (1893), Herrick (1893) and Lukens (1896) and continues until dates concurrent with the publication of his book in 1948. He states (p. 356): "In many other cases in the literature of psychiatric treatment, references are made of art as a means of communication between the patient and the therapist". The author also shares (p. 388):

Background studies in art have contributed to the use of art as a projective device.

They consist of four types: art as paralleling chronological growth, art tests for intelligence and special abilities, cultural factors in art, and aesthetic judgements.

Upon these foundations have been built a great variety of experiments into the relationship between personality and art.

Following are some examples of the use of art - more specifically, the drawing of a human figure (like in this present research) - as a projective means. In 1926, Goodenough, whose works were extended by Harris in 1963, investigated normative development of human figure drawings from childhood through adolescence and related drawing maturation to intellectual development (Burns, 1987, pp. 3-4). Using the Goodenough Test which consists simply in the drawing of a man, Des Laurier and Halpern (1947) claimed "that it reflected the individual's interest in his own body" (Elderkin Bell, 1948, p. 356). Elderkin Bell adds that Wolff (1946) assigned special importance as personality indicators to discrepancies in the drawing of a man, and that Oakley (1940), investigated the characteristics of drawing of a man by adolescents, in order to determine the personality traits of his subjects (pp. 356-357). Levy (1950) offers a technique of analysis based on the Drawing Analysis Record Form (1948), which he claims "serves the double purpose of focusing the clinician's attention upon meaningful aspects of the drawing and providing him with uniformly recorded data that facilitate the application of research techniques". On the form, he includes the following: figure sequence, figure description, comparison of figures, size, location, movement, distortions and omissions, and graphology (pp. 263-268). Burns writes of Buck (1948)

and Buck and Hammer (1969) who introduced and evaluated House-Tree-Person drawings both developmentally and projectively; of Hammer (1971) who expanded the clinical applications of projective drawing; of Machover (1949); and of Koppitz (1968) whose developmental projective scoring system and analysis of human figure drawings "are widely used" (1987, p. 4). The House-Tree-Person was introduced by Buck in 1948; the Draw-a-Family was introduced by Hulse in 1951; and Burns and Kaufman introduced the Kinetic-Family-Drawing in 1970 (Burns, 1987, p. xvii). Burns writes of his Kinetic-House-Tree-Person (K-H-T-P) in his book. He asks his subjects to draw a house, a tree and a person on the same page - as opposed to the conventional method of using separate sheets. He also asks that the person in the drawing be doing something. Burns refers to Maslow (his teacher) and acknowledges his aid in making sense of the K-H-T-P data. He prefers Maslow's "open system with its scope and developmental focus", to the "closed, unchanging and reductionistic" Freudian system usually applied (p. xviii).

Murray Krim, in his 1947 unpublished thesis entitled "Diagnostic Personality Testing with Figure Drawings" (as cited in Levy, 1950, p. 262), concluded that drawing interpretation divided itself into three parts: formal, graphological, and psychoanalytic (content analysis). The interpretation of the drawings from this present study will be, to the largest extent, of the latter category. In addition to the drawings, descriptive dialogues from the participants will contribute to the analysis.

Artistic expression has often, without argument, been linked to the expression of emotions. Some researchers have used this connection within the use of projective devices. Elderkin Bell refers to Harns (1940, 1941, 1946) who included aspects of affect

by including words such as *happy* and *depressed* in his lists of stimuli, and upon presentation of a list of words of emotions, asked the child to point to one and paint it (1948, pp. 357-358). The author also refers to Reitman (1939) who used stimuli - facial expressions on drawings of heads - many of which depicted special emotions such as happy and despair (p. 358). Similarly, this present research also incorporates an affect component in its projective test, as well as in its associated questions asked of the subjects.

As previously mentioned, the literature also pointed out criticisms directed towards projective techniques. Elderkin Bell (1948, pp. 496-499) offers a list of the common ones:

- 1- Lack of standardization in individual projective methods - to be expected in the developmental stages of techniques
- 2- The sensitivity of the methods to the interpersonal relationship between the examiner and the subject
- 3 - Failure to describe in detail the characteristics of the group used for experimental studies
- 4 - The semantic difficulty involved in presenting the results of test interpretation - a product of inadequacies in terms used to describe personality characteristics
- 5 - Some have found the bulk of material secured in projective devices a handicap to their use
- 6 - As to administration, scoring and interpretation, a difficulty is encountered in controlling the bias of the examiner

- 7 - Regarding scoring and interpretation, there is a question of reliability. Critics point out at frequently, assumptions about reliability have been made and then treated as though they were scientific evidences
- 8 - The question of validity
- 9 - Results of projective techniques have been freely related to personality (and other theories) which are themselves lacking in validity
- 10 - Novices and untrained or poorly trained workers have discredited the field of psychology by misuse of projective techniques. Proper training is hard, especially as techniques are still being developed...

Most recently, Brooke (1996) has written a book on art therapy assessment tools. In it, she includes an evaluation of each test for desirable and undesirable features. She also includes an overall evaluation that shows, in a clear fashion, exactly what each test can and cannot do.

Machover (1949) observed the power of projective methods in discovering unconscious determinants of self expression that were not apparent in direct verbal communication. Similarly, Langer (1953) found that there was an important part of reality that remains inaccessible to the formative influence of language (Brooke, 1996, p. 3). These two examples, along with the many others found in the literature, lead to the decision of this researcher to develop an art-based projective technique for this present research. It has been written throughout the literature that projectives may be viewed as tests of personality. Referring to art therapy assessments in particular, Brooke agrees (p.4) and provides Anastasi's 1988 definition of personality tests: "measures of such

characteristics as emotional states, interpersonal relations, motivations, interests, and attitudes". When meeting with her research subjects, this author was interested in all of these components and their association with the teens' experience of self and of life.

The validation of this present research's hypothesis, will be based upon whether or not the group of subjects living with diabetes, illicit more negative responses (as defined in Appendix C) than will the control group. Confirmation of this hypothesis may indicate emotional disturbances associated with living with diabetes. In 1991, Naglier, McNeish and Bardos developed the Draw a Person Test: Screening Procedure for Emotional Disturbances. It was designed for an age group of 6 to 17 years and proposed identification of individuals who have problems and are of need of further evaluation (Brooke, 1996, p. 93). The assessment seems to share some components with this present study's device: similar age group and aim to identify emotional disturbance. The authors advocate the use of their test during initial interviews as indicators of the need (or lack of) further evaluation. Similarly, this present study does not claim to show direct evidence for the need of further treatment. It hopes to serve simply as an indicator.

Adolescence

Although this paper focuses on the adolescent population, much of the research done for it involved reading about both the adult population and the child population. This is due to the insufficient amount of studies found dealing only with adolescents, and to the fact that in many cases, age-appropriate examples were found within the others. An example of this can be found within Councill's (1993) article on pediatric cancer patients. She includes case material on persons ranging from five to twenty-something years of

age. This author suggests that the experience of living with a chronic illness involves aspects common to all age groups.

During the prolonged and contradictory transitional period of adolescence, a person evolves psychosocially, cognitively and physically in significant ways at this moment in his or her life. A young person will face challenges and new possibilities unlike he or she has ever faced before. This evolution will encompass certain issues, and for the first time, he or she will have acquired the need to face them independently.

Within the next few sections of this paper, Erikson and Piaget will be used as references on the psychosocial and cognitive development of the adolescent population. Associated issues will be briefly mentioned. Further on, other key issues of adolescence (as perceived by this author through review of the literature) will be addressed.

Psychosocial Development: Erikson

Erik Erikson is perhaps the most well-known and most frequently cited psychosocial theorist. The human psychosocial development of which he writes, is made up of stages (or phases), which can be defined as a period of life which is apt to be characterized by the presence of, or concern for, a specific challenge or problem - a *crisis*. Erikson preaches that at each psychosocial stage, one must solve the crisis before preceding to the next. The fifth stage of development is puberty. The crisis finding itself with this stage is *identity versus role confusion*. During this period of time, the adolescent looks for an opportunity to "decide with free ascent on one of the available or unavoidable avenues of duty and service, and at the same time is mortally afraid of being forced into activities in which he would feel exposed to ridicule or self doubt" (Erikson, 1968, p. 129). For a

teenager who has a chronic illness, this may present a paradox. As Erikson suggests, he or she may prefer to act shamelessly in the eyes of elders (parents, doctors) out of free choice, than be forced into activities (treatment regimen or perhaps art therapy) which would be shameful in his or her own eyes, or in those of his peers (p. 129).

The term *identity crisis* describes what Erikson considered to be the major conflict of adolescence. If a person successfully overcomes the identity crisis, he or she will come out of this phase with a strong sense of identity, ready to plan for the future. If the person does not achieve resolution, he or she will sink into confusion.

This is perhaps the appropriate point in this text, to try to face the challenge of giving a definition for the term *identity*. Identity has been defined by many people in many ways. There are perhaps as many definitions as there are people to suggest them. At times, even the same individual will describe it differently, depending on the context. Erikson himself stated:

I have tried out the term identity almost deliberately . . . in many connotations. At one time it seems to refer to a conscious sense of individual uniqueness, at another to an unconscious striving for a continuity of experience, and at a third, as a solidarity with a group's ideals (1968, p. 208)

There are four elements of Erikson's "identity" that distinguish it from related concepts such as self-concept, self-esteem and role. These four elements have been identified by White and Speisman (1977, pp. 40-41):

(a) Identity is a process the core of which is continuity of past and future. (b)

Identity is an attribute of society as well as of the individual, identity crises are

centred on the acceptance by the society and by the adolescent of the choices made by the adolescent. (c) Individuals are usually not conscious of their identity development. (d) The criterion for successful resolution of identity crisis is the achievement of an ethical capacity that allows the individual to take responsibility for the next generation.

Dimond and Jones (1983, p. 166-167) have identified four different types of "self" which make up a person's identity. The *material self* is what they describe as being an obvious component of one's identity "since we are located within a physical body which is uniquely ours". It is the aspect of one's identity that is most easily conceptualized since it is the one which is most visible. It is this easily-conceptualized material self that the participants will be asked to draw for this present study. The *psychological self* is what a person thinks of when he or she thinks of "me". According to the authors, it provides a frame of reference or standard against which all information is judged or interpreted. Each of these being determined by the person's past experience and ideals as to what ought to be. The *cognitive and affective self* "consists of one's own experience of the process of experiencing". These are the selves that may materialize through the art making and subsequent discussion of this author's research. Finally, the *ideal self* is what each individual hopes to be. A person's ideal self may change depending on which stage of life he or she is in, on his or her level of aspiration and goals, and on extenuating circumstances. One of these extenuating circumstances may be the presence of a chronic illness. Different forms of chronic illness have different effects on a person's identity. Similarly, the same chronic illness may have a different impact on a person's identity at

different stages of his or her life (Dimond & Jones, 1983, p. 165).

When writing about identity formation, Erikson seems to stress the elements of continuity and stability over those of growth and change. According to Garai, he regards the entrance into adulthood as impossible if a person has a shattered sense of personhood or identity" (1973, p. 261). The capacity to synthesize successful indentifications into a coherent, consistent, and unique whole is required for the process of identity formation. Contrarily, identity diffusion (or confusion) results if a teenager fails to achieve these (Dimond & Jones, 1983, p. 7). An adolescent who has a chronic illness may suddenly change from one role or identity to another - from healthy to sick, independent to dependent, "same" to "different". - unfortunately, the teen is rarely in control of these changes and they often come at unpredictable or inconvenient times. Consequently, the young person may experience anxiety and feel incapable of making decisions on choosing roles (Salkind & Robinson Ambron, 1987, p. 544).

In Erikson's book entitled *Identity, Youth and Crisis* written in 1968, the development of a self-reliant personality during adolescence, is said to be dependent on several things: a certain degree of choice; a sustained hope for an individual chance and; a firm commitment to the freedom of self realization. "We are speaking here not merely of high priviledges and lofty ideals but of psychological necessities" (p. 133). For an adolescent living with a chronic illness, these psychological necessities are often not available and/or are post-poned. The illness deprives them of the complete freedom sought by most adolescents, and often sets unwanted limitations.

Erikson (1968, p. 50) writes about the perception of self-sameness and continuity of

one's existence in time and space. He also writes of the importance of how one feels others perceive his or her sameness and continuity. He continues: "They are sometimes morbidly, often curiously, preoccupied with what they appear to be in the eyes of others as compared with what they feel they are" (p. 128).

There are four conflicts that an adolescent must overcome in Erikson's *identity versus role confusion* phase. They have been identified by Salkind and Robinson Ambron (1987, p. 543): (1) task identification versus a sense of futility; (2) anticipation of roles versus role inhibitions; (3) will to be oneself versus self-doubt and; (4) mutual recognition versus autistic isolation. The difficulties associated with these conflicts may appear magnified for the adolescent who is facing similar, and additional conflicts linked with chronic illness. Erikson provides an example of one of these additional concerns: "the danger of the patient's choosing of the very role of a patient as the basis of his crystallizing identity, for this role may well prove more meaningful than any potential identity experienced before" (1968, p. 216).

Erikson did not - could not (nor could this author) offer a simple, precise recipe for successful identity formation. There are so many influential things. Each identity can evolve and develop in a multitude of ways. Eric's wife Joan Erikson, an art therapist, reflected on the merits of art materials in reference to their capacity to offer self-integrating experiences (1979, as cited in Franklin, 1992, p. 79).

Cognitive Development: Piaget

The difference between cognitive abilities of childhood and of adolescence is significant. This difference influences the way the teenager views himself, the world and

reality.

The ability to engage in logical and hypothetical thinking begins to develop. Where thinking about oneself is concerned, this ability leads to greater emphasis on logical consistency in the self-image and also the ability to view one's self-image as one of various alternatives: other persons may have another view of me, another course of life or circumstances might have resulted in quite another me . . .

(Van der Werff, 1990, p. 16)

In addition, parallel development of cognitive capabilities such as introspection and abstraction enable the adolescent to "look at" what she or he is feeling (Schneider et al., 1990, p. 135).

The adolescent who is chronically ill can logically hypothesize about how his or her life would be if he or she did not have an illness. Unfortunately, this imagined life often appears more desirable than the real one. On the one hand, the adolescent must avoid complete denial of his or her limitations which would undoubtedly lead to disappointment because his or her aims would be unattainable. On the other hand, the teen must not overstress his or her defects and succumb to a sense of futility and hopelessness.

The adolescent's newly developed intellectual capabilities, especially the capacity for logical thought and abstract reasoning, may either help or hinder him or her in coping with his or her disorder. The teenager is now capable of understanding complex bodily structures and processes, as well as the effects of disease. Considerable physiological information is available to him or her through various media. An adolescent may shield

him or herself from anxiety by taking an intellectual view of his or her illness - knowing may be associated with a feeling of being in charge. The teen may become absorbed in learning about its physiology, treatment, and relevant scientific research. In some cases, however, the teenager's capacity to understand the disorder intellectually is well ahead of his or her readiness or capacity to accept it emotionally. If the youngster seeks, or is exposed to, information he or she is not ready to assimilate, anxiety may be heightened. It is essential therefore, to allow the adolescent to set his or her own pace in seeking information and, to take the initiative in asking questions. It is important to offer assurance that it is alright to ask however, and that there are people who are both willing and qualified to answer.

Other Issues of Adolescence

The preceding paragraphs touched upon certain issues of adolescence. The following paragraphs will focus on others that this author has come across when reviewing the literature and from personal memory.

There is a need for autonomy and the need to develop an identity. One wants to establish interpersonal relationships within which they feel a sense of being normal and a sense of being accepted, while on the other hand, there is also an important need for privacy. Adolescence is a time when one "tests" and "experiments" with new roles and activities. There are physical changes occurring and a person may find him or herself constantly comparing him or herself to peers. As he or she is trying to figure out his or her identity, there is a reliance on certain familiarities such as role within family or peer group, as well as strengths and capacities (Harriet, 1997, p. 10).

The issues more fully explored in the next few paragraphs are those that most highly influenced this author's choice of questions to ask her research participants. The questions asked within the interviews were: 1) How old are you in this image? 2) What is the object you chose to draw and why? 3) What would you like to tell me about this image? 4) What are some of the feelings or emotions you associate with this time in your life? and 5) Describe yourself and/or life in terms of being a physical being, a social being and a family member.

Body-Image

Schneider et al. point out that in the literature there are various terms that are used interchangeably with body-image. These include: self-awareness, self-concept, the self, body-ego, self-identity, and body-schema (1990, p. 134). For the purposes of this paper, the term *body-image* as well as any of the others mentioned above, refers to the representation of the self in the mind. This representation may be determined by the following: 1) subjective perception of appearance and ability to function; 2) internalized psychological factors; 3) sociological factors; and 4) ideal body-image (Schneider et al., 1990, p. 134).

"In dealing with adolescents who are, developmentally, in the continuous process of ego- identity formation - the concept of body-image and its potential disturbance, is of paramount importance" (Schneider et al., 1990, p. 135). Many things and/or events, including chronic illness can bring about changes in body-image.

Whether basic integration and sense of self was weak or strong, disruption of the body-image through surgery or chronic illness seems to be regarded as loss. Loss

of health and normalcy, whether that involves the actual loss of a body part or not, seems to be dealt with in the same manner as other experiences of loss, namely by grief and mourning, accompanied by depression and anxiety.

(Rosner, 1982, p. 18)

Reactions to changes in the body-image are intimately related to previous losses whose patterns of coping were established in early relationships.

When speaking about adolescents with cancer, Blumberg et al. (1984, p. 139) say that "they reported most problems due to treatment, which was perceived as causing general problems and affecting appearance, and thus body-image". They add that these changes which result from the disease and its treatment, often threaten self-esteem.

Independence

A major focus of the adolescent's struggle for independence is control over his or her physical body and over his or her physical activities (McCollum. 1981, p. 141). As will be demonstrated later on within this paper, independence is something that many people having a chronic illness must give up, at least to some degree. "For adolescents, this dependence occurs at a time when they have a need to assert their independence" (Blumberg et al., 1984, p. 149).

The expectation of compliance proposed by professionals "may support a dependency that is not productive for the chronically ill" (Dimond & Jones, 1983, p. 41). Similarly, in specific reference to teenagers, McCollum (1981, p. 141) writes: "Being 'bugged' frequently may arouse resentment if the youngster feels that his capabilities are not respected, his judgement not trusted". A teen may wonder what the use is of trying for

independence, if he or she imagines (rightly or not) that the likelihood of becoming an independent adult is uncertain. "Forced into a dependent state, the adolescent may rebel. It is not uncommon for them to refuse treatment, break hospital rules, miss outpatient appointments, or undertake activities they have been advised against" (Blumberg et al., 1984, p. 143). This researcher is curious to discover whether or not this struggle for independence will be evident through the way the participants draw themselves and/or through the choice of object they decide to include.

Relations with Parents and Family

The nature of the illness is an important variable when considering the effects illness may have on family. The disruption of family members' role relationships is likely to increase in relation to the degree of an illness' complication and longevity. "A chronic illness, therefore, is more detrimental to family functioning than is a short-term, acute illness" (Dimond & Jones, 1983, p. 108).

How a family member plays out the sick role and how the family reacts to him or her may influence not only the treatment process and the patient's recovery, but also the health and general functioning of the family (Dimond & Jones, 1983, p. 94). The family may enter a state of disequilibrium in which a readjustment of power and role relationships takes place while a new equilibrium is established (p. 108).

The relationship between adolescents and their parents is complicated by a number of psychological issues unique to the developmental phase of adolescence. Moore et al. (1969) suggest that although teenagers are striving for independence, they have yet to achieve their goal. "They may vacillate between the desire to be independent from parents

and the need to be dependent, resenting what they may see as overprotective behaviour by their parents at one point and appreciating the support and protection of their parents at another" (Blumberg et al., 1984, p. 145). Things are further complicated by the fact that parents should be learning to let go at this time, but they may see their child as being vulnerable and therefore needing their help and protection. More complicated still, is if the disorder is an inherited one. In such cases, the parent(s) are likely to feel a sense of uneasy responsibility..

Peer Relations

Having a chronic illness during adolescence may be influential in the type and amount of peer relations an individual will have. As a result of a distorted self-image and a resultant sense of being different, and with a peaked level of self-consciousness, adolescents having a chronic illness may isolate themselves. Furthermore, others may force the individual into the sick role, often unnecessarily. Referring to adolescents receiving a diagnosis of cancer, Blumberg et al. write: "an unsettling change in status within the peer group probably occurs, so that regardless of where they were in the social pecking order before, after the diagnosis they are somewhere different" (1984, p. 141). An example may be that an adolescent would no longer be invited to social gatherings for fear that he or she will get ill while there.

Regardless of the teenager's ego strength or self-perception, the disease and its treatment may limit opportunities for socialization needed to maintain peer contacts and accomplish the developmental tasks in which peers play such an important role. Not being able to know about so many accompanying factors of illness often prevents the

individual from planning and engaging in social activities. Resulting from the fact that social activities play a role in the development of a positive self-concept, these types of interactions are especially important to persons having a chronic illness. Blumberg et al. suggest that peers can have the essential (and perhaps unique) power to influence the adolescent to come out of self-imposed isolation (1984, p. 142).

It seems necessary to mention here that when a person is diagnosed as having a chronic illness, he or she automatically assumes a role in groups. This includes membership in groups of people who are "different" in some way, in groups of people who are chronically ill, in groups of people having the same condition and/or who are living with the same kind of consequences. The experience of having a chronic illness is more readily endured if it can be shared. The opportunity to voice questions, concerns, fears, or complaints with others in the same situation can be deeply supportive (McCollum, 1981, p. 165). Viscardi writes about a group who, while discussing, found that others had similar feelings, fears and pains (1994, p. 68). The author continues by pointing out that when these were uncovered, the group members encouraged each other and responded with empathy and compassion. For persons who may have been feeling that no one could understand them or what they were going through, discovering that they are not isolated might prove to be very empowering and comforting. Viscardi also points out that: "Artmaking allowed these adolescents with muscular dystrophy the rare experience of getting outside themselves, outside their wheelchairs, outside their disability, outside feelings of loneliness, alienation, and reluctance to discuss their situation" (p. 68).

The Future

As part of the maturation process, adolescents begin to wonder and plan what their lives will be like in the future. They have the capacity to project thoughts into the future - the ability to think about time beyond the present - and this allows the adolescent to plan future life goals. Chronic illness may provide for them, a sense of uncertainty about the future. They may wonder what possibilities will be open to them and which will be restricted. Some worry about the added stress and burden their illness may have on a future spouse and family. In addition, Stapleton appropriately suggests that prolonged life with a chronic illness involves not only adding to the length of life "but it also involves the matter of the quality and worthwhileness of the life that is prolonged" (1983, p. 137).

Chronic Illness

According to authors Dimond and Jones (1983, p. 3), the experience of disease, illness, and sickness has various levels of meaning from the standpoint of social science. They suggest that disease is a biological concept, illness is a social-psychological concept, and sickness is a social concept (p. 7). Biologically speaking, Juvenile Diabetes is a chronic disease. This paper however, though it does offer a biological description in the following section, will focus on Juvenile Diabetes in terms of being an illness and a sickness, because this author feels that it is to those definitions that art (and art therapy) can best address itself to. The illustration of these two levels of meaning, as offered by Dimond and Jones (1983), will aid in comprehension of the subsequent definition of the term *chronic illness*, as well as serve to place the rest of this paper in context.

Health

Before beginning, perhaps it is best to offer a definition of health. The World Health Organization gives a three-dimensional definition of health. It is: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Dimond & Jones, 1983, p. 10). Twaddle's 1974 definition, as shared by Dimond and Jones (1983, p. 10) is as follows:

From a biological standpoint, perfect health is a state in which all the cells in the body are functioning at optimum capacity and in perfect harmony with each other.

Psychologically, perfect health is a state in which an individual feels that he is in perfect harmony with his environment and capable of meeting any obligations.

Socially, perfect health is a state in which an individual's capacity for task and role performance are optimized.

According to these definitions, due to their biological components, persons having diabetes (or any other disease), can never be healthy. Choosing not to look at the biological element, this author believes that a person having good control over his or her diabetes, can be "healthy". In addition, as pointed out in the above chapter on adolescence, mere presence in this time in life is associated with tasks and trials which could complicate the "in perfect harmony with his environment"; "meeting any obligations"; and/or "capacity for task and role performance are optimized" components of the definitions of health, provided above. In other words, due to the tasks commonly associated with teenagehood, persons in that phase of life may not be healthy, if one was to consider the above definitions as law. In this author's point of view, the above

definitions are ideal. What one would hope or aim for. - and a state which few humans could meet.

Illness

In contrast to the more objective concept of disease, illness is subjective. It denotes phenomena that are apparent to the ill person only. "Illness is an altered state of perception. When a patient is describing the symptoms of his disease (that which he is experiencing because of altered biological processes), he is explaining his feelings of illness" (Dimond & Jones, 1983, p. 5).

Sickness

Sickness is a subjective and social label. A person is treated differently because he or she is sick, and consequently responds to others differently due to their consideration of him or her being sick. "Illness becomes sickness when it becomes a social phenomenon, that is, when it becomes visible to others or is communicated to others. Once the illness becomes social, the social interactions of the ill person and those around him are modified" (Dimond & Jones, 1983, p. 6).

Though illness and sickness are interrelated in the above paragraphs, the experience of each can exist independently of the other. A person's illness is not necessarily communicated socially. This is possible when there is no evident physical evidence - which may be the case for persons living with diabetes. A person may *feel ill* and communicate this to those around him or her, even in the absence of disease. He or she would then be labelled and consequently treated as if he or she occupied that role. In a contrasting example, a person may not *feel ill* but may be observed to be sick and treated

as if he occupied the sick role (Dimond & Jones, 1983, p. 7).

Chronic Illness

The term *chronic illness* refers to an altered health state that will not be cured by a simple surgical procedure or a short course of medical therapy (Fitzgerald Miller, 1983, p. 4). Chronic illness is not a single disease entity. It is an assembly of diseases or illnesses. Each differ in onset, activity, histology, prognosis, treatment, and many other features. The particular nature of additional stresses associated with an illness will also differ with each chronic condition and the perception of it. There are only a few characteristics that are common to all chronic illnesses. Reif has pointed out commonalities or general features of chronic illness:

(1) disease symptoms interfere with many normal activities and routines: (2) the medical regimen is limited in its effectiveness: and (3) treatment, although introduced to mitigate the symptoms and long-range effects of disease, contributes substantially to the disruption of usual patterns of living.

(as cited in Fitzgerald Miller, 1983, p. 4)

She also indicates that there are some common dilemmas affiliated with chronic illnesses.

These dilemmas consequently result in feelings of powerlessness. The problems include: exacerbation of symptoms; failure of therapy; physical deterioration despite adherence to prescribed regimen; side-effects of medication; breakdown in patient's family or significant other support networks; and breakdown in patient's psychological stamina.

This researcher can relate to the feeling of powerlessness and is quite confident in saying that the participants in her study who have diabetes, most likely do too.

Through her literature review (Harriet, 1997, p. 24), this author identified influential characteristics shared by all chronic diseases. She proposes the following which were identified throughout the literature: degenerative complications of disease; restraints or limits set by the disease; added responsibility; modifications to one's way of living; sense of being different; and a sense of dependency and helplessness.

The care of persons living with a chronic disease has become a multidisciplinary endeavour. It is the opinion of this researcher that this is both fortunate and necessary. The needs of this population are both diverse and complex. No single discipline is prepared or able to address all of these needs.

Juvenile Diabetes

Two and a half million Canadians are threatened by diabetes and its complications. Approximately five percent of Canadians can expect to develop diabetes sometime during their lives (Juvenile Diabetes Foundation, 1997, p. 2). Diabetes mellitus is a common illness. If one does not have it, one surely is acquainted with someone who does. The exact cause of diabetes is not presently known. People who are more likely to get diabetes include:

- people who have relatives with diabetes
- identical twins of persons having diabetes
- people in middle or late life
- overweight or obese people

Diabetes is a chronic metabolic disorder that adversely affects the body's ability to manufacture or utilize insulin. Insulin is a hormone necessary for the body to transport

food glucose into cells for energy. There are three different types of diabetes: insulin-dependent diabetes mellitus; non-insulin dependent diabetes (Type II, also known as adult onset diabetes); and gestational diabetes (Juvenile Diabetes Foundation, 1997, p. 2).

The type that this study will focus on is *insulin-dependent diabetes mellitus*. It is also known as *Type I* or *Juvenile diabetes*. Throughout this entire paper, for the sake of brevity, this author will refer to it simply as *diabetes*.

As mentioned above, a diabetic body cannot produce a hormone called insulin. Insulin is an important hormone produced by the pancreas. The pancreas is a gland found behind the stomach. The reason certain people stop making insulin is not known. There are a number of possibilities such as:

- the pancreas does not make enough insulin
- the body somehow destroys the insulin that is made
- the cells, for some reason do not accept the insulin made

Though there is no known cure for diabetes, there are many things a person can manage and control with the aim of living a long and active life with diabetes. Diet is considered to be an essential component in good control of diabetes. People with diabetes have the same nutritional needs as anyone else. The difference is that a diabetic person must have this nutrition in measured amounts at regular, evenly spaced intervals.

Physical activity is also an important element. Done on a regular basis, it not only adds to good health maintenance, it also: 1) lowers the blood sugars to more normal levels by burning them up for use as energy; 2) improves the blood flow which prevents any circulatory problems; 3) decreases high blood pressure; and 4) burns up calories

which leads to weight loss. In insulin dependent diabetics (as are the participants in this study) the blood sugar level will tend to decrease during exercise. When it reaches a low level, it can cause insulin reactions.

Stress is also an influential factor in diabetes control. At the first sign of physical or emotional danger, hormones are secreted. They increase blood pressure and heart rate and release stored glucose causing blood sugar levels to rise.

The onset of infection can also influence diabetes control. When a virus or bacteria invades the body, the immune system is alerted. There is production of hyperglycaemic hormones of glucagon and cortisol to supply the necessary energy to cells to fight the infection. Subsequently, blood glucose levels and ketones in the urine rise. This may necessitate an adjustment in insulin and/or in regimen.

The purpose of including the above information is to give some indication of some of the things an individual having diabetes must keep in his or her mind at all times. When planning his or her day and/or when unexpected events happen or ill health occurs, all factors must be considered.

Persons having insulin-dependent diabetes must take insulin daily. It is therefore also important that they understand how this necessary medication works and how its dosage can be manipulated in consideration of certain situations.

immediate complications.

There are a few immediate complications associated with diabetes. Hyperglycaemia, also known as ketoacidosis, is one type of complication which may occur within the present context of a diabetic individual's life. This occurs when the blood glucose level

is above normal and has not been corrected. This may be due to several things. Among them: not enough insulin; too much food; illness; stress; reduced physical activity; or failure to monitor blood glucose levels. The onset is usually slow. Urine and blood tests will start indicating large amounts of glucose. Ketones may become present in the urine. Although onset is usually gradual, some young and unstable persons living with diabetes may develop a coma within twenty-four hours.

Hypoglycaemia, also known as insulin reaction, is another type of immediate complication. At the complete opposite pole of the above-mentioned complication, this may be due to: too much insulin; not enough food or; more activity than usual. The onset is usually very sudden. It often happens when insulin is at its peak action. Often, when individuals having diabetes are of legal drinking age, their physicians suggest that they carry a card identifying them as being diabetic and that if they are acting strange, medical attention is needed - not to be mistaken by drunk behaviour. This can be particularly dangerous when adolescents experiment with alcohol without the knowledge and/or supervision of their physicians or parents.

long-term complications.

As with any chronic illness, there are long-term complications associated with diabetes. These effects are well known - every person having diabetes will be reminded of them throughout their lives, either through their personal illness histories, their doctors, parents, friends or else through the general vehicles of media, fund-raising and public conversation. Complications associated with diabetes include diseases of the small blood vessels such as retinopathy (diabetic eye disease) and neuropathy (nerve disease); and

diseases of large blood vessels such as arteriosclerosis (narrowing of the arteries).

Diabetes complications do not occur in everyone with diabetes. When changes do occur, it may be only after many years of diabetes. The many things that help prevent or delay diabetic complications are the very same things that promote a long, active and enjoyable life.

Following are some of the facts The Juvenile Diabetes Foundation publicizes through a catalogue available to the public (1997, p. 2):

- Diabetes reduces life expectancy by up to 30% and is the third leading cause of death by disease in North America.
- Twice as many women will die from diabetes as from breast cancer
- Diabetes increases the risk of heart and vascular disease by 200 to 400%
- Diabetes is the leading cause of new adult blindness

Unfortunately, there are no guarantees of a diabetic life free of complications. Some well-controlled diabetics have many, while some uncontrolled have none or relatively few. Although there are no guarantees, taking care and maintaining good control can assure the fostering of the best chances.

informed participants.

The three individuals having diabetes participating in this study are adolescents. They are surely aware of their illness and of its influence in their lives. Some may, for the first time, be taking responsibility in management of their disease. They will be a little more removed from the supervision of their parents, becoming more independent and involved with peers. They will be facing situations with these peers that will require them to make

choices for themselves, while at the same time, taking their illness into consideration.

Some factors associated with their illness will make them feel «different" from their peers at a time when feeling similar may appear favourable. These participants will be involved in their schools, with their peers and in their community and will encounter the world's view, and the media's description of the illness they live with.

Perception of diabetes by society is still highly influenced by an omnipresent lack of understanding. Some think that diabetes is a condition which does not allow for a normal life. Although the picture of diabetes has improved with time, there remains a need to correct it and place it in accurate perspective.

In their pamphlet entitled "Diabetes in Children and Young Adult", the Association Diabète Québec suggests the following as tasks for which an adolescent living with diabetes should be taking responsibility for:

- ability to do all illness related tasks under limited supervision;
- recognition, treatment and prevention of hypoglycaemia;
- ability to contact appropriate resource person for information and advice;
- ability to learn how to face sick days;
- wear proper identification;
- following appropriate dietary habits; and
- adjustment of their diet and diabetes-related regime according to their activity level, height and weight

It would be difficult to disagree with the fact that the above-mentioned responsibilities may feel overbearing for individuals who are, at the same time, facing other tasks and

issues occurring during the adolescent phase of life.

In a pamphlet written by the Juvenile Diabetes Foundation, parents are warned to be prepared in regards to what to expect from their teenagers living with diabetes:

As a parent of a teenager with diabetes, be prepared for the worst. That child who was always so good about diabetes procedures may suddenly rebel against the routine. He or she may refuse to monitor blood sugar levels . . . go on food binges...fudge test results. Your teenager may be grumpy, angry, distant. Even when your child tries to be conscientious, blood sugar levels may swing up and down erratically.

Life of the Chronic Illness

It can be said that there is reciprocal influence between the life of a chronic illness and the life of the person who has it. The term *chronic* means marked by long endurance. Consequently, a person who is diagnosed as having a chronic illness can be assured that his or her condition will manifest itself and influence most (if not all) days of his or her life. This will necessitate adaptation on behalf of the individual. Straus (1975 as cited by Wilson-Barnett, 1979, p. 82) composed a list of the main elements of living with a chronic condition that require continual adaptation. It is as follows:

- 1) Prevention and management of medical crises; 2) Control of symptoms; 3) Carrying out prescribed measurements, 4) Prevention of or living with social isolation; 5) Adjustment to fluctuations in the course of the disease; 6) Attempts at normalizing behaviour and 7) Financing treatment in the face of employment.

The needs of individuals will change as a result of their evolving lives and of their

evolving illnesses. For example, Council, in reference to the differing phases of cancer treatment, states that the earliest phase assaults children's body-image, identity and self-esteem. She continues: "In the middle phase of treatment, intervention is aimed at supporting the patient through the long-term stress of treatment . . . careful attention must be given to helping restore the patient's sense of self." and "During relapse or palliative care, heightened uncertainty replaces the now-familiar routines . . . Anger and isolation may resurface, and communication with family members and staff may break down" (1993, pp. 80-85).

Reactions to Having a Chronic Illness

Chronic illness brings about a reorganized confrontation with reality and requires adaptation. Reactions to having a chronic illness are as varied and diverse as the illnesses and the individuals themselves. The clinically "normal" personality must go through certain psychological changes during illness (Effler & Sestak, 1979, p. 56). "The meaning of a chronic illness to an individual and the way in which that individual comes to define himself once a long-term illness strikes are key elements in the individual's management of his illness" (Dimond & Jones, 1983, p. 36). Many authors suggest certain fundamental factors influencing a person's reaction to illness. The input from the various sources are similar. Following are some of the factors identified: the point in the life cycle at which onset occurs (Dimond & Jones, 1983, p. 36 and Wilson-Barnett, 1979, p. 19); the nature and extent of the limitations (Dimond & Jones, 1983, p. 36 and Wilson-Barnett, 1979, p. 19); the degree of the visibility of the condition and stigma attached (Dimond & Jones, 1983, p. 36); the nature of the onset - either sudden or gradual (Dimond & Jones, 1983,

p. 36); the course, prognosis, symptoms, and treatment involved (Dimond & Jones, 1983, p. 36); the pre-morbid personality of the person (Wilson-Barnett, 1979, p. 19); previous personal experiences (Wilson-Barnett, 1979, p. 19); and the environmental circumstances and social system in which it occurs (Wilson-Barnett, 1979, p. 19).

Wilson-Barnett suggests that many of these factors determine the "illness behaviour" as well as the emotional responses to the illness to a greater extent than the illness itself does (1979, p. 22). "The emotional responses to illness vary in quality, intensity and duration. They both reflect and influence the personal meaning of illness" (Lipowsky 1975, as cited in Wilson-Barnett, 1979, p. 20).

Once the person becomes a patient, he or she is met with an entirely different set of roles, expectations and patterns of behaviour. "The person must temporarily regress from his station of independence, and allow others to care for him and to meet his needs" (Effler & Sestak, 1979, p. 57). As Thomson appropriately phrases it: "The patient must regress adequately in the service of recovery" (1978, p. 4). It is easy to see how such an adjustment would be difficult for anyone. It seems logical to assume that the degree of difficulty would be magnified for an adolescent who is developing a need for independence and autonomy.

"The ego has been weakened by the stress and also the regression required by the hospital for adequate care, the self image has changed, and there is separation from familiar people and surroundings." (Thomson, 1978, p. 2). Similarly, Thomson (p. 4) refers to a basic threat to narcissistic integrity. McNeil Jeppson identifies a sense of feeling one is facing "a destructive process against which they cannot defend themselves

and which seems to destroy them from within" (1983, p. 45). The patient, in attempting to achieve optimal adaptation to his or her clinical state, will employ a variety of defense mechanisms, including denial, regression, projection, rationalization, reaction formation, displacement, aggression, compensation, and sublimation.

Successful adaptation includes the utilization of defense mechanisms; the clinically normal personality will employ a variety of them in an effort to achieve optimal adjustment. However, when these defense mechanisms are employed inappropriately (resulting in distortion of cognitive processes or in impairment of expressive abilities), they may function as warning signals of a maladaptive adjustment reaction to illness and/or to treatment.

(Bruck, 1982, p. 50)

According to Rosner (1982, p. 18) denial is a common defense mechanism utilized in adjustment to chronic illness. Two other reactions which merit mentioning are grief and guilt. Grief is concerned with loss. The grief associated with having a chronic illness is concerned with loss that has already occurred, loss that is immanently expected and loss that is feared in the future (McCollum, 1981, p. 3). Fitzgerald Miller adds: "Perceiving illness as a loss refers to loss of pleasures, role fulfilment, functional abilities, self-esteem, self-satisfaction, love, recognition and normalcy" (1983, p. 17). Opportunities offering outlets for reflection of feelings about loss and self within a supportive environment, can serve as valuable tools, in this context. Wald (1989) focused on the need for these types of art therapy programs in her work with clients having Alzheimer's and other related diseases.

Some people may feel guilty about the extra burden that their illness has brought into their family and peer environment. This feeling may be particularly applicable to adolescents who are at a point in their lives where they want to take on sole responsibility for their lives. A prevalent theme throughout all these reactions is a lack of control.

It seems necessary at this point to briefly mention that there have been some differences found within the literature between the results of some of the studies. Examples of differences became evident to this author through review of the literature but are also directly acknowledged within the resources themselves:

Chronic illness has been found to result in varying emotional reactions. Brown (1950) found indifference and apathy as the main symptoms in chronic illness.

Whereas Starrett (1961) found long term paraplegic patients displayed permanent defense such as denial, hostility and depression.

(Wilson-Barnett, 1979, p. 23)

Living With a Chronic Illness During Adolescence

This author has written about factors associated with adolescence and those associated with chronic illness. The overlap is significant. It is felt that the topic of living with a chronic illness during adolescence, has been addressed through examples cited throughout this present text. This discussion will therefore be brief.

Blumberg et al. (1984, p. 141) quote an adolescent who has cancer: "I hope they understand that they just amputated my leg, they didn't take my heart and soul and personality. I just don't know if they'll ever accept me". The authors describe

adolescence as a relatively short, key transitional period, in which a number of developmental tasks must be accomplished and when significant physical, cognitive, social and emotional changes occur. "The necessity of accomplishing these tasks are no less important for an individual with a chronic illness . . . although an adolescent with a chronic illness confronts emotionally and physically stressful problems that potentiate an atypical course of development" (1984, p. 133). During this life period, there is also strong peer identification and a consequential unwillingness to appear different. There are assertions of independence, the need for control and an acute sense of their bodies (p. 134). For an adolescent living with a chronic illness, this time period may prove to be particularly difficult if the focus of attention is on his or her illness rather than on him or her. For a chronically ill adolescent, the difficulties of achieving the adolescent tasks may be magnified by the manifestations of the illness and its treatments (Blumberg et al., 1984, p. 134).

An adolescent's reaction to his or her illness is not necessarily pathological. They are more likely related to appropriate developmental concerns of their age (Blumberg et al. 1984, p. 136). In addition, these concerns are most likely significantly accurate perceptions of their reality. On a positive note, Blumberg et al. cite a study (Susman & Pizzo, 1977) which revealed that the majority of teenagers thought that they would survive even if the odds were against them (1984, p. 137).

Present Research Study

This research provided opportunity for each participant to think about and express how they view themselves throughout time. It was a chance for them to express

themselves in a pro-active, creative fashion. They were listened to on a one-to-one basis and their productions were used in a constructive way. This could have increased their sense of awareness of themselves, perhaps fostering a positive sense of self-concept and/or esteem. It is this researcher's hope that each participant felt a sense of importance via their participation and their creations.

Considerations of the Present Research Design

Throughout the development of the present research, this author has been aware of the necessity of looking at and applying special considerations, in order to maintain a high level of validity. This section will briefly discuss some of these considerations.

In her chapter addressing ways to minimize bias in art therapy data, Malchiodi (1992, p. 31) writes: "'Before beginning any type of research, it is extremely important to consider exactly how we "know" the things we think we know. In other words, how do we arrive at our assumptions". This author "knows" what she thinks she knows primarily from personal experience. With this knowledge comes the component of tenacity - a necessity and driving force for finding the answer to any difficult and/or personal question. Tenacity can be harmful when one hangs on to a belief or an expectation so strongly, that one misses learning something new. Malchiodi (1992, p. 32) offers the example that when a researcher is looking for a particular characteristic in a series of art products, another characteristic which had not been previously considered, may become evident if the researcher is open to new input. This present research has incorporated the participation of two independent raters. Both were uninformed as to the expected or desired results. In addition, within the checklist / response form that each was asked to

fill in, there is a space provided for inclusion of additional comments or impressions of the images. The research participants were also asked, for each image, what they would like the researcher to know about their image. It is in this fashion that this author has remained open to new input.

Malchiodi (1992, p. 32) also writes about the notion of tradition in art therapy research:

It seems to be a tradition in the field of art therapy to ask clients to do certain tasks such as a house-tree-person drawing or a scribble, not only because there is written information on these drawing tasks, but also because early practitioners did it this way.

Though frequently practiced assessments and tasks will be reviewed and considered when looking at the data collected through this research, this author has chosen to break from tradition by developing her own methodology - the rationale of which will be discussed further on in this paper.

This author has remained aware of the merits of quantitative methods. The hypothesis of this present study is as follows: Combined checklist results of the control group will contain less negative (see Appendix C for an operational definition) answers than those of the diabetic group. It is based on quantitative values - a frequency count - that the hypothesis will be proven or disproved. The data analysis of this research will be partially qualitative and partially quantitative. It is felt that this combination will offer the best validity.

Wadeson (1992, p. 85) refers to Arnheim's caution "against over-emphasis on

quantification that can overlook the essence of a work of art by concentrating only on what can be measured". The hypothesis of this present study is based on measurement. It addresses an assumption about which this author is curious. Its confirmation (or lack there of) will serve only to quench this curiosity. The qualitative nature of the art products will also be considered - and will compliment and foster the understanding of the significance of the results, finding these very "essences" that Arnheim warns us not to forget

In further consideration of Arnheim's warning, Wadeson adds: "Unfortunately, measurement of these graphic characteristics may violate Arnheim's caution and move us far from the expressive quality of the art piece as a whole (1992, p. 87)". She does suggest however, that it is possible to set up measurement guidelines. One of these is to incorporate the use of "blind" raters. Individuals rating the graphic characteristics, who are uninformed as to the patient's relationship to the variable the researcher is investigating. This research does do this. The two people who will be evaluating and/or considering the graphic and verbal data will be "blind". Wadeson also suggests that the raters be independent. This author associates two meanings to the employment of the adjective independent. One, that the raters would not benefit in any way by responding one way, as compared to another. Second, that the rater be free of influence from the researcher or from other raters. By this definition, the raters used for this present research were independent.

It is clear that it would be difficult to determine exact meaning or significance of the images created by the participants. In fact, this author would be cautious if anyone did

present "concrete proof". This is magnified by the fact that this research has such a small sample size. In reference to this, Wadeson shares: "The art therapist is on safest ground when the subject identifies the content" (1992, p. 88). Wadeson warns against making assumptions. This author agrees and it is for this reason that questions (which participants were required to answer) were included in the research methodology.

Though it certainly would not qualify as such yet, this research is geared towards what Wadeson identifies as "art tasks designed to elicit specific data" (1992, p. 92): a method in which the art therapist structures the session carefully so that the desired data will emerge. This researcher admits hoping that this would simply happen through this research. However, she realizes that much "groundwork" may have to be done, before this happens. Wadeson (1992, p. 93) shares: "Before structuring the sessions on the experience of schizophrenia, I conducted sessions with this population for six months to determine the most propitious art tasks to elicit the data I sought". Perhaps this present research will be of similar service, providing a baseline or "groundwork", and will direct this researcher to a subsequent goal of precising a method to elicit what she is seeking to find out about the experience of living with diabetes. With respect to what this research has been able to apply in regards to the "art task designed to elicit specific data" modality, it has kept the sequence of tasks, the instructions and the materials constant - an important consideration.

The final consideration this author wishes to address in this section of her paper is time - or lack thereof. In specific reference to Master's students in a two year program and their lack of time, Wadeson (1992, p. 94) identifies the commonly associated

components of small sample sizes, lack of adequate amounts of data and of opportunity to indulge in a trial period of pilot investigations to refine the strategies to be used. As a Master's student in a two year program, this author acknowledges the presence of these realities and consequently chooses to view this present study as a pilot investigation which will hopefully lead to further, more elaborate research in her future. .

Subject Area of Study

The subject area of study for this present research is the experience of living with a chronic illness. This will be explored through the adolescents' perceptions of self and of their lives at different periods of time, as indicated through his or her images and words. A thorough description of the study will be given in this part of the paper. Discussion of its results will follow in the subsequent part.

Statement of Purpose

Using a Group Comparison Study, the intent of this research is to demonstrate that diabetic adolescents share, to some degree, similar qualities in their self-perceptions, due to their common experience of living with a chronic illness. The research aims to illustrate that some of the shared qualities can be seen in the graphic depictions, and in the accompanying descriptive words, that the participants will be asked to produce.

Primary Research Hypothesis

Combined checklist results of the control group will contain less negative answers than those of the diabetic group. For the purposes of this study, "negative answers" refers to certain terms found within the Response Legend the two raters were asked to refer to. These terms are: mistrust; sad; insecure / unsafe; ashamed; angry at internal factors;

angry at external factors; hate; alone; frustrated / stressed or worried; sick; incomplete; disproportional; exaggerated parts; minimized parts; absence of facial expression; absence of detail and; Y (yes) response to illness evidence.

Subsidiary Research Questions

Following are some questions that will merit consideration within the discussion of results. Are there common elements and/or qualities in how persons having diabetes perceive themselves? Are the common elements shared by the adolescents having diabetes evident in their images? Are they evident through their verbal responses? Are these elements less apparent or absent from the images drawn by the comparison group of non-diabetic teens? Will all three images drawn by an individual feature similar traits or will the differing factors in the tasks themselves (whether its of the past, present or future) produce inconsistencies? When looking at one person's series of works, will the image of the future be more negative than the other two, suggesting awareness, or consideration of cumulative effects of chronic illness over time? In the diabetic group, does the number of negative responses positively correlate with the number of years since diagnosis (they both increase or they both decrease)?

Research Design

For the purposes of this research project, art images will be used as tools facilitating communication and self-disclosure. The content of the images and of the verbal communications describing them, are equally important and necessary.

For this present study, the researcher met each participant once. During this meeting, the subject was asked to draw three separate images and to answer questions about them.

The incorporated drawing task was developed by this researcher to be used as a projective device. It is the hope of this researcher that the projective device she developed will offer some indications about the subjects.

Levy (1950) wrote of the potential of using a drawing as a projective means: "The drawing procedure may be regarded as a situational test in which the subject is presented with a problem, and in his efforts to solve it he engages in verbal, expressive, and motor behaviour. This behaviour, as well as the drawing itself, is observed by the clinician, and hypotheses are then tested against other available information." (p. 259). The "other available information" within the context of this present research will be obtained through verbal dialogue from the subjects.

The three images that each subject was asked to draw were self-portraits incorporating the full physical being. One image was to be of the past, an other of the present and a third of the future.

Brooke supports the use of human figure drawings "to illuminate client concerns and self-perceptions" (1996, p. 120). Similarly, Brooke advocates the Draw-a-Person test "especially in cases where a child or adolescent is suspected to suffer from emotional disturbance" (p. 125). Koppitz (1968) interpreted human figure drawings based on the following : (1) the child's approach towards life's problems; (2) attitude towards significant events; and (3) attitude towards self (Brooke, 1996, p. 12). These are the exact type of things that this researcher aimed at getting insight on, from the participants. It is for this reason that she asked them to draw a human figure drawing. The fact that the human figure drawings required were of themselves, had an anticipated potential of

soliciting more self-disclosure and insight. The reader is invited to refer to page twenty-two of this present text, where further rationale regarding the request for drawings of self, is offered.

In the above example offered by Brooke, Koppitz's findings were supported by case studies. Case studies being beyond the scope of this present study, this researcher believes that her questions will serve a similar purpose - to support or contribute to the information gotten from the images.

Data collection for this present study involved asking specific questions of the subjects regarding their productions. These questions were incorporated because it was felt that analysis of the images alone, could not clearly offer enough information. Elderkin Bell wrote that a trait-sign approach "is valueless" in interpretation of drawings "since signs may be personal or typical of a class, positive in one context, negative in another, consciously symbolic in one case, unconsciously meaningful in another" (1948, pp. 360-361).

The incorporation of questions within the research had specific intent. In reference to L. K. Frank (1939), Elderkin Bell wrote that he divided projective tests into four groups, based on responses. He defined the Interpretive category as: "when a subject gives meaning to a stimulus situation" He continues by calling it cathartic, "as when a release of affect is accomplished in the behaviour process involved in the responses" (1948, p. xv). It is felt that by asking questions of the subjects and thereby providing the opportunity for them to give meaning both graphically and verbally, the potential of a cathartic experience - a release of affect - would be provided. Referring to Buck (1948)

Burns writes: "He indicated how important it was to ask the drawer what was significant rather than imposing meaning from some theory or interpretation. Buck also emphasized that symbols may have idiosyncratic meanings known only to the drawer" (1987, p. 143).

This researcher strongly accepts this point of view. It is for this reason that she incorporated a set of questions, to be asked of each subject, within her methodology.

Upon completion of his or her three drawings, the same set of questions was asked of each image. In the section below, each question will be written, accompanied by a brief and concise rationale for its inclusion.

The first question asked was: *How old are you in this image?* The primary reason for including this question is clarity. This researcher wants to know the exact age of the figure, leaving no room for incorrect assumptions or perceptions.. Knowing the age of diagnosis for instance, this researcher wanted to know if the figure in the "past" image was representational of that period in his or her life. An exact answer regarding age also enabled the raters and the researcher to verify if the image was realistic or not of a person of that age. A need for further exploration might be indicated if there were any contradictory impressions (i.e.: If an adult figure resembles a child). The second question asked was: *What is the object you chose to draw and why?* The literature showed that the needs of individuals will change as a result of their evolving lives and of their evolving illnesses (Councill, 1993, pp. 80-85). Although no link was suggested in the literature, this researcher felt that an object, chosen by the subject, might serve as an indication of the type of need he or she was experiencing, or perceives to have been experiencing at that point in their lives. The third question asked was: *What would you*

like to tell me about this image? Reif (as cited in Fitzgerald Miller, 1983, p. 4) has pointed out commonalities or general features of chronic illness. Among them is the "disruption of usual patterns of living". The objective associated with this third question is to see whether any verbal affirmation of disruption would be offered as a response. Another reason for including this open-ended question is to allow for the opportunity of disclosing additional information felt to be important for the subject, yet not addressed by the other questions.. The fourth question was: *What are some of the feelings or emotions you associate with this time in your life?* According to Schneider et al., who wrote about Piaget's theory, parallel development of cognitive capabilities such as introspection and abstraction enable the adolescent to "look at" what she or he is feeling (1990, p. 135). This question also serves as a verification of the individual's emotional experience. Is it all negative? Do his or her words contradict what is seen in the images? Can he or she talk of emotions? The fifth question was: *Describe yourself and/or life in terms of being a physical being.* A chronic illness is due to a dysfunction within the physical being. This researcher wanted to see whether or not this was addressed in the responses. The same question was asked but seeking a description as *a social being*. Finally, again but this time *as a family member*. It is believed that some people may feel guilty about the extra burden their illness has brought into their family and peer environment. Naming problems associated with living with a chronic illness, Reif includes breakdown in patient's family or significant-other support networks (Fitzgerald Miller, 1983, p. 4). The inclusion of questions regarding their perception of themselves as a social being, and then as a family member serve to allow opportunity for responses relating to breakdown within his or her

network systems. By definition, a chronic illness, when diagnosed, remains within the individual for his or her lifetime. Dimond and Jones have written that the presence of a chronic illness has effects on a person's identity. They add (1983, p. 165): "the same chronic illness may have a different impact on a person's identity at different stages of his or her life". Because this study aims to understand the individual's experience of living with a chronic illness - and that changing effects of illness influence the important adolescent task of identity formation - this author ensured that different time periods (past, present and future) were addressed. When writing about identity formation, Erikson stressed the element of continuity. "The capacity to synthesize successful identifications into a coherent, consistent, and unique whole is required for the process of identity formation" (Dimond & Jones, 1983, p. 7). Perhaps the requirement of portraying oneself in three different time frames will allow for some type of synthesis to occur and/or for a sense of continuity (of self) to be felt by the adolescent participants of this study. Referring to loss associated with having a chronic illness, McCollum (1981, p. 3) writes of loss that has already occurred, loss that is immanently expected and loss that is feared in the future. This is an additional reason for asking the subjects to depict themselves in the past, the present and in the future. The subjects were also asked to include an object within each image.

Abt and Bellak point out a "less elaborated upon" Freudian assumption about projectives (1950, p. 10): "Freud's main assumption is that memories of percepts influence perception of contemporary stimuli". With this in mind, this author believes that the subjects' memories of the past will come through and influence his or her image

depicting the past and similarly of the present and the future. In other words, the participant's memories and experiences of the past, will demonstrate his or her experience of self and of life, within a contemporary context.

Within this present research design both quantitative and qualitative qualities of the images and words will be considered. Though it is the quantitative values (frequency counts) that will ultimately support the hypothesis (or not), it is felt that qualitative aspects will contribute a rich array of additional insight. When addressing the qualitative nature of drawings (as opposed to the quantitative), not only will the presence or absence of a component be considered, so too will the way it was drawn. For instance, when looking at the arms of a figure drawing, not only would one consider their presence or lack of, but one would also look at the quality of the line and perhaps at their positioning. Arms drawn along side of the body with a faint line speak differently than do arms drawn crossing the chest, with a bold line.

Recruitment

Recruitment of participants was done through advertisements posted in the diabetic clinic at a children's hospital (Appendix E1 and E2), and through word of mouth (the researcher's, physician's, and others').

Subjects

Throughout this present paper, the term *adolescent* refers to individuals who are between twelve and eighteen years of age (inclusive). The sample included male and females, who came from varying socio-economic and cultural backgrounds. The group under study consisted of three adolescents having diabetes and three adolescents who did

not have any type of chronic illness and who therefore served as the control group. Of the three adolescents having diabetes, two of them were directly approached by their physician. The third, a seventeen year old male, was approached by a non-medical contact. The three control group participants were also enlisted through non-medical contacts.

The sample under study consisted of two boys and four girls Table one shows the differences in regards to age and gender, between the two groups.

Table 1

Ages and Gender According to Group Membership

Group	Ages and (Gender)		
Have diabetes	14 (female)	17 (male)	18 (female)
Have no diabetes (control)	12 (male)	13 (female)	17 (female)

The subjects participated voluntarily in the study. Three of the interviews were conducted in English and three were conducted in French.

Summary of General Information

General information was asked of each participant, at the beginning of the interview. The information asked were: first name; sex; age: date of birth (year and month); whether or not they had diabetes and if yes, since when; whether or not they knew of anyone else who had diabetes and if yes, who.

Of the three teens who had diabetes:

Table 2

Age at Diagnosis and Years Since

Age at diagnosis	Years since
2	12
2	16
9	8

Of the six participants, four knew of another person who had diabetes. Three of these four were diabetic themselves. Two known persons were family members and two were friends and/or acquaintances.

Set up

The documentation as well as the persons soliciting participation, provided the phone number of the researcher. In some cases, the participants contacted the researcher. In other cases, the individual's name was forwarded to the researcher who in turn, initiated contact. On the phone, a brief description of the study was given to the interested teenager, as well as to his or her parent or guardian, if requested or required (under age fourteen). A date of convenience was then determined and the location was identified.

Required Commitment

Each participant met individually with the researcher on at least one occasion. A optional second meeting facilitated the return of the images, if wanted.

Duration and Location

The initial meetings, ranging in length from fifty minutes to one hour and twenty

minutes, took place within the same office at Concordia University.

Materials

The same materials were made available to each participant. They consisted of: 72 pencil crayons; 48 chalk pastels; 36 oil pastels; 24 felt pens; a pencil sharpener and three sheets of 18" x 12" white paper. Consent (Appendix D1 and D2) and General Information forms, a pen, a tape recorder and an audio-cassette were also used for each. Both the researcher and the participant were seated at a round table. The materials were laid out on the table, in front of the participant.

The Assignment - Collection of Data

Data collection consisted of the production and gathering of images as well as the tape-recording and subsequent transcription of verbal communications. The participant was informed that he or she would be required to draw three separate images and that there would subsequently be five questions asked about each. He or she was also informed that the question / answer part of the interview would be tape-recorded for the purpose of facilitating the writing of accurate transcripts. Each person was given the following instructions:

You are to draw three different images on three separate sheets of paper. The order in which you draw these images is your choice. In each, please draw a self-portrait which incorporates your full physical being. In each image, you are also asked to include an object. One of the drawings will be of the past, one will be of the present and the third will be of the future.

When the three images were complete, the same five questions were asked of each

image. The five questions were as follows:

- 1) How old are you in this image?
- 2) What is the object you chose to draw and why?
- 3) What would you like to tell me about this image?
- 4) What are some of the feelings or emotions you associate with this time in your life?
- 5) Describe yourself and/or life in terms of: being - a physical being
 - a social being
 - a family member

Each drawing was identified on the back, by name, date and as to whether it was done first, second or third. The drawings were kept and subsequently photographed by the researcher, who then returned them at a time and place agreed upon with each participant. If the participant did not wish to retrieve his or her images, he or she was asked what he or she wanted to be done with them.

Methods of Data Analysis

Each participant was assigned an identification number (from one to six) which was placed by the researcher on the front, lower left-hand corner of each of his or her three images. Also added to that corner on the page was a symbol indicating whether it was of the past, the present or the future. These identifying numbers and symbols are related to and will facilitate completion of, the evaluation checklist (Appendices B1 and B2).

Two independent raters were used to do a partial analysis of the data via completion of a checklist. Both raters were female and are professional art therapists. Each was also bilingual, understanding both English and French. Both were uninformed regarding the

hypothesis of the research and of its desired results.

Using the transcribed words and images as references, the two raters were asked to fill in responses on the checklist (Appendices A and B). The questions and checklist themselves were developed by this author. After a thorough review of the literature and a focusing on the type of information desired from the images and words of the participants, their design was developed with the aim of soliciting appropriate, accurate and/or sufficient information. Of particular interest to this researcher, are feelings and emotions of the participants. This is due to their association to the psychological well-being of the person - an omnipresent consideration in all art therapy intervention.

Responses from both checklists were combined and given a numerical value which would either prove or disprove the research hypothesis. The researcher herself did not complete a checklist. This was decided with the goal of limiting personal influence or bias. This researcher was active however, in the more subjective discussion of results - those which addressed the subsidiary questions. The researcher addressed these subsidiary questions by referring to the literature as well as by giving her personal impression.

In the interest of obtaining an additional impression from each rater, one more task was asked of them. Placing all the images in groups of either "past", "present" or "future", the researcher and each of the raters identified similarities and differences found within the images of each group. The two raters, who were uninformed as to which images were created by individuals having diabetes and those which were not, were asked to divide each set of images (past, present and future), into two groups. The interest in

this procedure lay in seeing whether or not their two groups accurately reflected the real groups (diabetic and non-diabetic).

Presentation of Results

Quantitative Results

This study's primary research hypothesis is as follows: Combined checklist results of the control group will contain less negative answers than those of the diabetic group.

When reviewing checklist results, rater one's responses were combined with rater two's in order to acquire a combined frequency value.

The primary research hypothesis was confirmed - proven by the results shown in table 3.

Table 3

Negative Response Frequencies

Group	Rater one	Rater two	
Diabetic			
Participant 2	27	16	
Participant 5	7	5	
Participant 6	11	1	
Total:	45	22	Grand total: 67

Non-diabetic (control)

Participant 1	7	9
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Table 3 (continued)

Negative Response Frequencies

Group	Rater one	Rater two
Non-diabetic (control)		
Participant 3	3	2
Participant 4	21	13
Total:	31	24
		Grand total: 55

The group comprised of adolescents having diabetes was assigned a combined total of 67 negative responses (rater one: 47 and rater two: 22). The control group was assigned a combined total of 55 negative responses (rater one: 31 and rater two: 24). The combined checklist results of the control group did indeed contain less negative responses than those of the diabetic group.

Following the affirmation of the research hypothesis, other quantitative details of the results warrant mention.

When comparing frequency of positive responses assigned, to frequency of negative responses assigned, more positive responses were assigned to the diabetic group (97 positive, 76 negative) and to the control group (165 positive, 56 negative).

Tables 4 and 5 shown below, provide the breakdown of positive and negative responses assigned to each image. When creating tables to show results, the components of Object and of Time were placed within the same table due to the fact that their answers deal primarily with affect. Person and Illness components were placed within the same

table because their answers are more reflective of graphic traits.

Table 4

Raters' Checklist Responses to Time and Object (Combined) Components

Image	Rater one		Rater two	
	(+)	(-)	(+)	(-)
1 (present)	0	4	5	0
1 (future)	6	0	2	2
1 (past)	6	0	0	4
Total	12	4	7	6
<hr/>				
2 (present)	2	2	6	0
2 (future)	0	6	3	0
2 (past)	0	6	0	9
Total	2	14	9	9
<hr/>				
3 (present)	9	0	7	0
3 (future)	3	2	4	2
3 (past)	3	1	7	0
Total	15	3	18	2
<hr/>				
4 (present)	2	1	4	2
4 (future)	3	4	6	0

Table 4 (continued)

Raters' Checklist Responses to Time and Object (Combined) Components

Image	Rater one		Rater two	
	(+)	(-)	(+)	(-)
4 (past)	0	5	6	1
Total	5	10	16	3
<hr/>				
5 (present)	1	2	6	0
5 (future)	0	3	4	3
5 (past)	3	2	7	0
Total	4	7	17	3
<hr/>				
6 (present)	1	3	7	0
6 (future)	1	5	7	0
6 (past)	2	3	9	0
Total	4	11	23	0
<hr/>				

Note: (+) = positive responses; (-) = negative responses (see Appendix C)

Table 5

Raters' Checklist Responses to Person and Illness (Combined) Components

Image	Rater one		Rater two	
	(+)	(-)	(+)	(-)
1 (present)	1	3	5	1
1 (future)	5	0	5	0
1 (past)	5	0	1	2
Total	11	3	11	3
<hr/>				
2 (present)	2	3	2	2
2 (future)	0	6	5	0
2 (past)	3	4	1	5
Total	5	13	8	7
<hr/>				
3 (present)	5	0	4	0
3 (future)	5	0	5	0
3 (past)	5	0	5	0
Total	15	0	14	0
<hr/>				
4 (present)	2	2	2	3
4 (future)	0	6	1	4
4 (past)	2	3	2	3

Table 5 (continued)

Raters' Checklist Responses to Person and Illness (Combined) Components

Image	Rater one		Rater two	
	(+)	(-)	(+)	(-)
Total	4	11	5	10
<hr/>				
5 (present)	5	0	4	1
5 (future)	5	0	4	1
5 (past)	5	0	5	0
Total	15	0	13	2
<hr/>				
6 (present)	5	0	5	0
6 (future)	5	0	4	1
6 (past)	5	0	5	0
Total	15	0	14	1
<hr/>				

Note:: (+) = positive responses; (-) = negative responses (see Appendix C)

When reviewing the results from rater one's checklist and from rater two's checklist, this researcher noticed significant differences between what one rater considered positive or negative and what the other rater considered positive or negative. Tables 6 and 7 show these differences.

Table 6

Differences Between Raters' Attribution of Positive and of Negative Responses to Object and Time (Combined) Components

Rater	Participants' images (all three)											
	1		2		3		4		5		6	
	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
One	12	4	2	14	15	3	5	10	4	7	4	11
Two	7	6	*9	9	18	2	16	4	17	3	23	0

Note. Each numeric column heading (1 to 6) represents a participant's full series of drawings; (+) = positive response; (-) = negative response (see Appendix C); Higher numeric values (of + or of -) are in bold; * Equal numeric value but all nine negative responses are attributed to image of the past.

As can be seen in the numeric values of Table 6, rater one attributed more negative (-) responses to four participants, and more positive (+) responses to two. Rater two attributed more positive responses to five of the six participants. For the sixth participant, rater two attributed equal numeric responses (9 positive; 9 negative) to each.

Table 7

Differences Between Raters' Attribution of Positive and of Negative Responses to Person and Illness (Combined) Components

Rater	Participants' images (all three)											
	1		2		3		4		5		6	
	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
One	11	3	5	13	15	0	4	11	15	0	15	0
Two	11	3	8	7	14	0	5	10	13	2	14	1

Note. Each numeric column heading (1 to 6) represents a participant's full series of drawings; (+) = positive response; (-) = negative response (see Appendix C); Higher numeric values (of + or of -) are in bold.

The numeric values in Table 7 show that rater one attributed more negative (-) responses to two participants, and more positive (+) responses to four. Rater two attributed more negative responses to one participant, and more positive responses to five. When completing their response checklists, each rater was asked to refer to Appendix C when assigning responses. This appendix contains a full range of adjectives with which they were to match to the images and words of the participants. Table 8 offers the most popular checklist responses assigned to each group. A combined (both groups) value was also calculated.

Table 8

Most Common Checklist Responses

Group	Object	Components		
		Time	Person	Illness
Diabetic	Happy & Healthy (8)	Happy (12)	Presence of details (16)	No (12)
Non-diabetic	Happy (9)	Happy (15)	Presence of facial expression (14)	No (12)
Combined	Happy (14)	Happy (27)	Presence of facial expression (28)	No (26)

Note. Frequencies of responses are indicated with the parentheses ().

In Table 8, it is evident that the "happy" (C in Appendix C) response was the most popular by far. It was chosen eighty-five times by the raters and was most frequent in all possible component categories.

This researcher was also curious to see which tense (past, present or future) acquired

more negative responses. Within the group of adolescents having diabetes, two out of three participants had more negative responses attributed to their images of the future. Similarly, the control group also indicated two out of the three participants as having more negative responses matched with their images of the future. The section of this paper addressing issues of adolescence, identifies the future as being a preoccupying concern within the thoughts of adolescent minds. The data found within Table 8 clearly supports this reality.

This author will end this part of her paper by offering data on one of the additional tasks she asked the raters to do. Before viewing the transcripts, the raters were asked to do two things. First, they were asked to look at all the images done for each time tense (past, present and future), and asked to indicate any evident similarities and differences they perceived. The results of these perceptions will be addressed later on in this paper. The raters were then asked to divide the images into two groups - one of images they perceived to have been made by persons having diabetes and the other group, of images they thought had been done by the control group. The actual group memberships are compared to the perceived group memberships in Table 9.

Table 9

Actual Group Membership Compared to Raters' Perception of Groups

	Diabetic	Non-diabetic	Correct
Actual group	2, 5, 6	1, 3, 4	six out of six

Table 9 (continued)

Actual Group Membership Compared to Raters' Perception of Groups

	Diabetic	Non-diabetic	Correct
Rater one	2, 4, 5	1, 3, 6	four out of six
Rater two	1, 2, 4	3, 5, 6	two out of six

Note. Each arabic number represents a participant.

There is potentially much more quantitative information that can be produced from the data collected. The following section will address the qualitative characteristics of the research results.

Qualitative Results: Possible Interpretations

This researcher has been pleasantly surprised by the wealth of the data acquired through the images and words of the participants of this study. Possible interpretations could be innumerable. The difficulty lays in the fact that the researcher gathered the data through one meeting with each participant. The impression one can get from another person is significantly limited if they have spent such little time together. Furthermore, the three images created by each participant were done in response to precise directives. They will therefore also be limited in range of possible impressions or interpretation.

Within this section of the text, qualitative results are addressed. This author does not directly answer the subsidiary questions per se, but rather, has kept them in mind as she reflected on more personal and subjective impressions she had obtained from the data.

Bennett (1966, p. 196) writes:

One of the problems in teaching interpretations of figure drawings is the difficulty in spelling out the process of weaving together implications of various characteristics of the drawings to produce a meaningful interpretation.

It has indeed been challenging looking at the characteristics of the images done by the subjects, with the aim of discerning meaning. The verbal interview component of the study helped answer a few precise questions. The type and depth of responses varied however. In addition, sometimes a person's words were inconsistent with the content of the images - each leaving the raters and the researcher with differing impressions.

Bennett also states (1966, p. 192) that within past investigations attempting to address assumptions that graphic traits can be indicative of the drawer's personality, data have been subjectively interpreted. This researcher agrees, based on what she has reviewed in the literature. As a result of the lack of "formal criteria" (measurable or precise), the qualitative impressions of the results of this present study, are highly subjective. The high quality of subjectivity finds itself well within the projective modality..

The first characteristic this researcher looked at was the placement of the images on the page. Nuvoli et al. (1989, p. 88) cite researchers Abraham (1968) and Passi Tognazzo (1975) who suggested that placement of a drawn figure in the middle of the page, indicates a "well-balanced and adaptable attitude". Most images by both groups were central. The exception to this is an image of the past, drawn by participant 4 (see figure 19). This image, by a member of the control group, is drawn over on the left-hand side. Based on the small sample size and limited data, it seems as if the placement of the

images of the teens having diabetes, indicated well-balanced and adaptable characteristics.

Nuvoli et al, (1989, p. 88), also suggest that the drawing size is indicative of children's adaptation "from small size of healthy person . . .". Once again, size was consistent across both groups. The two largest series of images were done by participants 1 (control group) and 6 (diabetic group). In all three of the images made by each of these girls, the size is equally large. Due to the fact that each group has a member who drew bigger than the others, there is no indicated evidence of difference between teens having diabetes and teens not having it. Furthermore, because of the small sample size, such characteristics may solely be reflective of individual drawing style, rather than due to a specific variable.

Levy (1950, p. 270) writes: "More important than the absolute size is the impression conveyed by the relationship between the figure and the surrounding space". The author suggests that this relationship parallels the dynamic relationship between the subject and his or her environment, or between the subject and parent figures. "If the drawing is a projection of self-concept, then the size is suggestive of the way the subject is responding to the environmental press" (p. 270). The figures drawn by the subjects having diabetes, all appear comfortable in the space outlined by the paper. Participant 2's (from diabetic group) figures are relatively small. Levy (1950, p. 270) would suggest that perhaps this indicates that "the subject feels small (inadequate) and that he is responding to the demands of the environment with feelings of inferiority". Participant 4's (from the control group) image of the future (see figure 17) however does not convey a relationship of comfort.

Neither traits examined in the above paragraphs indicate a significant difference between groups. As abovementioned, this may be due to insufficient sample size. This may also be due to something else however. This researcher had assumed that the graphic traits found within the images drawn by teens having diabetes, would indicate characteristics such as disequilibrium, unbalance, and an inability to adapt. Perhaps the data indicated the opposite - that due to their experiences of living with a chronic illness, these individuals have had to become adaptable or balanced, more so than if they had remained illness-free - or at least perceive themselves as being such. Bennett reminds her readers: "a small drawing alone does not automatically warrant a cookbook assumption that the drawer has feelings of inadequacy" (1966, p. 192). An impression is just an impression. The best the raw data could offer this researcher - especially in its small amount, was an impression.

Having said this, this researcher did notice something present in two of the diabetic adolescents' images - a characteristic not seen in the images of the control group. Bennett (1966, p. 195) suggests that children having a low self-concept "may exaggerate in their drawings the offending body part". Levy (1950, pp. 276-277) would agree: "A distortion or omission of any part of the figure suggests that conflict may be related to the part so treated". He adds: "Remarks, erasures, shading and reinforcement are all in the same direction as distortions and omissions and should be explored for possible relationships to conflict areas". Participant 2 drew what this researcher perceives to be exaggerated hands in all of his images. Perhaps the enlarged hands indicate a sense of lack of control. Participant 5 drew, in two of her three images, an enlarged body (which she tried to

rectify by redrawing contours). As noted in the section on Juvenile Diabetes, the illness affects many parts of the body. The graphic traits found in participant 5's images may indicate her awareness of this fact. It is felt however, that additional "evidence" would be required before stating that either of these individuals has a low self-concept.

Hammer (1986, p. 254) discusses consideration given to comparison of figures. He looks at which figure was drawn first and evaluates their differences, if any are evident. The participants in this present study were given the choice of order in which to draw the three images (past, present and future). Looking at the choice order of participants 2 and 5, both from the diabetic group, this researcher found that they drew the image of future last. In both instances, the figures are drawn differently than their other figures.

Regarding participant 2, his figure of the future (see figure 2) appears to be too small for his clothes, suggesting some type of discomfort. Regarding participant 5 (see figure 5), the lines contouring the shoulders and the face were redrawn for readjustment. This could also uneasiness or uncertainty - also types of discomfort. Perhaps these examples are indicative of feelings that these two adolescents have regarding their futures with the presence of a chronic illness.

In reference to Early Recollections, Adlerian theory suggests that what a person chooses to retell of his or her past, is important. Mosak (1977, p. 61) states: "Of the manifold experiences of childhood one only retained at the level of consciousness, those few experiences which expressed one's approach to life". Looking solely at the group comprised of adolescents having diabetes, this researcher saw the following. Subject 2 drew and spoke about himself at age "eight or nine" (see figure 3)- the age at which he

was diagnosed. In reference to the past, his words: "quand je suis dans l'hôpital, . . . tu te demande pourquoi ça change", and his image which includes an advertisement for "sugar pie", offer clear clues as to why he chose to depict this time in his life. It was a time that changed his life - a time which had been, and as Mosak would suggest, remains to this day, influential. It was the time when he became diabetic.

Participants 5 and 6 did not draw themselves at age of diagnosis. Instead they drew themselves in a way one would consider "absolutely normal". One drew herself with a pet, the other as playing a sport. These normal activities are also evident in these girls' drawings of the present and of the future. If Mosak is accurate, the images of the past reflect the person's approach to life. Their images would suggest that these girls approach life in a relatively normal way. This may be an accurate description or it may indicate an issue associated both with adolescence and with chronic illness - the desire to fit in, to not be "different". Mosak (1977, p. 62) would most likely agree: "All memories contain omissions and distortions. The individual colours and distorts, emphasizes and omits, exaggerates and minimizes, in accordance to his inner needs". Within participant 2's verbal discussions alone, there were four separate instances where he mentions "being the same" and/or "accepting those who are different".

Though participants 5 and 6 drew themselves in "normal" circumstances, some other elements of the interviews with them, offer interesting potential insights. Here are a few. Participant 6 describes freedom as "without having to worry". She implied perception of having something wrong with herself now, as an adolescent, when she stated "I didn't notice anything wrong with me then". In reference to her future, she also indicated a

perception of being "different" when she speaks of her peers rather than herself : "friends you grow up with all go away . . . and end up in different places". The fact that she described her peer's future rather than her own, may indicate a difficulty envisioning one's future, if one has a chronic illness. The future she chose to depict is only a few years away (high school graduation). This can also be indicative of not being able to envision oneself in the far future, due to an awareness or concern about potential long-term complications. Throughout participant 5's verbal description of her images, she regularly employs words such as "active" , "healthy", and "physically fit". The frequent use of these words indicated to this researcher that she may need to perceive and/or portray herself as being in such optimum condition, as a defense against the reality of being a chronically ill person. In reference to adolescents, Hammer (1986) states that "within the normal range", their drawings tend to be "depictions indicative of their own wishes about themselves. They put into the picture a promise of that reality which they desire" (p. 243). Referring to a "too perfect performance", Hammer adds (p. 255): "reflects the effort of these patients to hold themselves together against the threat of eminent disorganization . . . implies the presence of a relatively weak ego, so afraid of acting out a breakthrough of forbidden impulses that it dares not relax". Art making may offer opportunity for expression, for individuals who may not be willing, ready or able to communicate in other ways. In support of this notion, both raters commented on the fact that in several instances the images and words were inconsistent in regards to the emotional context. For example, some images communicated a "truth" differing from the truth offered through words.

This author is grateful for having taken measures to reduce bias in the study of the quantitative data. She had assumed that the images made, and words used by the adolescents having diabetes would be filled with "negatives" or at least contain more than those of the control group. The hypothesis of this study aimed to support this assumption. The hypothesis was confirmed by the quantitative data analysis of the checklist results. The researcher did not fill out a checklist. If she had filled out a checklist herself, this author's responses would have most likely been directed towards this assumption - which may have been inaccurate.. Blumberg et al.(1984) have written: "An adolescent's reaction to illness is not necessarily pathological. They are more likely related to appropriate developmental concerns of their age" (p. 136). This statement was supported by the fact that images from both groups did not differ in significant ways from each other, suggesting that all six participants were merely "relating to appropriate developmental concerns of their age" (p. 136).

Three persons having diabetes participated in this study. There does not seem to be significant similarities among their images - none at least that are absent from the images made by the control group. In the section of this paper addressing reactions to having a chronic illness, several authors are used as references stating the types of things that could influence an individual's reaction. These include: the point in the life cycle that onset occurred; the nature and extent of limitations; the pre-morbid personality of the person; and the environmental and social circumstances the person finds him or herself in. It is suggested that these factors determine "illness behaviour" as well as the emotional responses "to a greater extent than the illness itself does" (Wilson-Barnett,

1979, p. 22). Perhaps membership in the diabetic group - as a variable on its own - was not adequate for identification of causality. Abt and Bellak (1950, p. 4) define the word *hypothesis*. Within their definition, they write: "may turn out to be consistent with a substantial body of relevant evidence". Though the hypothesis of this present research was quantitatively confirmed, it would be hard to say that, taking everything into consideration, it was supported by a substantial body of evidence. In discussion of the emotional indicators the Human Figure Drawing Test purports to measure, Brooke (1996, p. 10) lists criteria that had to be met: (1) it must have clinical validity - being able to differentiate between two groups; (2) it must be unusual and occur infrequently in the control group (Koppitz required a frequency of less than 15%) and: must not be related to age and maturation. The images drawn by the three individual living with diabetes do not contain elements that would meet these three criteria.

It is important to state here, that the findings of this present study are descriptive only of the experiences of the participants. They cannot be generalized to a larger population.

This segment of the paper which focuses on the qualitative characteristics of the results, will conclude with a brief description of the similarities and differences found between all images. First of all, all self representations are standing and facing forward, with the exception of one (figure 17). None of the images have environments incorporated within them. Only one (figure 9) has a baseline - all other figures seem to be "floating". None of the figures have ears but all are wearing shoes. Although there was a wide range of materials available to each subject, all images were drawn either in pencil crayon or in felt marker. There are many differences among the images. They

mostly relate to use of colour, to presence or lack of facial expression or detail, and to the nature of the object drawn (these are reflected in the checklist responses of the raters). There were no significantly evident differences between the images of the diabetic group and those of the control group.

Critique of This Research

This researcher is content with this study for many reasons. This is not to say however, that there was no room for improvement or for change. The following paragraphs will briefly identify the weaker aspects of the research.

Although it seemed highly appropriate to refrain from filling in a checklist herself, this author would not, if the occasion presented itself again, use two raters in any kind of research. Rather, it is strongly recommended that an odd number of raters be used. This would prevent "50/50" distribution of results. For example, if the researcher was interested in whether or not an image was detailed or not, and one rater said "yes", the other "no", the responses cancelled each other. If an odd number of raters was used, there would most likely have been more direction (less cancellations) in the responses.

In further reference to the use of raters, this researcher has come to understand the importance of interrater and intrarater reliability. A pretest providing similar data, could have served in determining this.

In developing her study, this researcher assumed that offering transcripts of the interviews would facilitate the raters' task. It was important for the researcher that the raters heard (saw) the exact words of each participant. Both raters however, shared that the (forty pages of) transcripts were overwhelming and demanded a great deal of

concentration and energy. They both suggested that listening to the tapes would have been easier. In addition, listening to the tapes themselves would have offered the added benefit of hearing pauses and changes in voice.

As mentioned above in the discussion of results, sometimes the words used by a participant gave an impression differing from the impression gotten from the accompanying image. This would necessitate making a difficult choice between reporting an essence based on what was said, or based on what one saw in the image. How would one know when his or her true impression was lacking objectivity, or contrarily, how would one know that it was correct but that it was the creator him or herself, who was unable to see or share the true meaning? This author does not see a "recipe" or solution to this. When meeting with teenagers on one occasion, perhaps the researcher must just accept and/or acknowledge that the potential of discerning a true meaning can be limited. This was an evident drawback in choosing to meet only once with the subjects.

One of the most surprising outcomes of this research was the wealth of information and of impressions it acquired. Some participants offered more information than this researcher had expected from five questions. Also, this researcher had assumed that the raters would most often match one, maybe two responses, with the images and words. More often than not, each offered five or six. While adding a whole other range of possibilities, this amount of input also complicated analysis of the data. A future research methodology would have to consider adequate accommodation for all of the results. Having not predicted the abundant results, this research did not (could not) give ample

consideration to all of it.

Last but not least, this researcher feels that a larger sample, randomly picked, would have provided more accurate results, more free of bias and of influence of external factors. Speaking of projective techniques, Elderkin Bell (1948, p. xiii) wrote:

If these are to attain the promise, which they apparently hold of providing us with significant tools . . . for gaining insight into psychological processes, they must be experimented with, used with large numbers of subjects and with many clinical groups. They must be refined by controlling the conditions under which they are administered, by improving the administrative procedures, by revising and elaborating upon the interpretive schemes, and by proving their validity and reliability.

It has been mentioned earlier on in this present text that this research can be considered to be a pilot study. Therefore, due to its very nature, improvements, refinements and all of the above mentioned by Elderkin Bell (1948), are applicable. Once again speaking of projective techniques, he wrote (p. xii): "Few have received the systematic refinement of technique that would make them valid and reliable instruments" He adds that some "have received no more than a preliminary application in diagnosis, more by nature of developing their method than of testing their value". This present study is indeed preliminary - it is in the process of development. This author does not believe however, that "preliminary application" and "test of their value" are mutually exclusive. In doing a preliminary application, value is tested and subsequent adjustments can therefore be made.

Projective techniques have reached the point of development where it is obvious that no single one of their methods will ever provide the perfect instrument of diagnosis, although some of the earlier studies seem to have been motivated by the goal of finding such . . . (Elderkin Bell, 1948, p. xi)

Personally speaking, this author would prefer never to see a "perfect instrument of diagnosis" choosing instead to believe that people and their health, strengths and/or dysfunctions can not be categorized so simply. She will not deny however, being motivated by the idea of developing such a means.

Conclusion

Further Research

There is most definitely a need for any type of further research on the psychological maintenance and well-being of chronically ill persons. The psychological effects merit and require as much attention as the medical ones: "the way in which that individual comes to define himself once a long-term illness strikes is a key element in the individual's management of his illness" (Dimond & Jones, 1983, p. 36). Furthermore, it is believed that a holistic approach, addressing the person as a whole, would promote pure, all encompassing health.

It is felt that a more intimate, more indepth sharing of experiences would foster a truer understanding. Perhaps several in-depth case studies would have provided a stronger opportunity to hear, learn and understand what the teenager is living through.

Almost to the other extreme, a larger sample (not changing the type of contact) may also provide a more significant understanding of the phenomenon of living with a chronic

illness. Small differences would disappear and generalizations could be made.

Ideas about further research are innumerable. One thing is clear. This research is a beginning of something. It would only become more powerful in the company of further research, even if the subsequent research findings differ or challenge its results.

On a personal note, the further investigation which most intrigues this researcher is a follow-up with the participants. This researcher would like to continue on a longitudinal basis. It would be very interesting to ask these same subjects to do the same thing, and to follow the similarities and differences - and aim to "weave" it all together, producing a clearer essence.

Relevance of Results

The final section of this paper will briefly explore and identify how the results of this present study, as well as the findings from the associated literature review, lend themselves to the fields of art assessment tools and art therapy, as they relate to adolescent psychology, and to medical management of chronically ill persons.

Vincent Van Gogh observed: "real artists paint things not as they are, but as they feel them". According to Hammer (1986), so too, do two other groups: children and, second only to them, adolescents (p. 240). This researcher believes that art can be an effective means to facilitate and foster personal communication with adolescents. She also believes that if adolescents living with a chronic illness develop psychological issues and concerns, art therapy is a viable treatment tool. Her thorough literature review (Harriet, 1997) serves as a basis for this belief. Having written this, it seems necessary to point out that this author is in no way suggesting that all adolescents having a chronic illness will

require therapy of any kind. In fact, what this present research has proven without a doubt, is that mere membership in either group of participants in this study, was not positively correlated with the need for therapy.

It was the hope of this researcher that the results of her study would demonstrate that through the process of art making and subsequent discussion, certain issues and/or concerns would surface, therefore serving as witness to the potential of art therapy as a therapeutic modality for work with chronically ill adolescents. Though the results of this study did confirm the research hypothesis, they did not identify the presence of issues and concerns associated with living with a chronic illness, as strongly as she had anticipated. In retrospect, this researcher has become aware that perhaps it is due to the research methodology, that clearer evidence was not attained. Production of three images (with assigned themes), done within one meeting may not have allowed nor fostered the emergence of issues and concerns. It is also possible that issues and concerns may have come through in the art work and discussion, but that this researcher (and the raters) was not familiar enough with the individuals nor their work or words, to be able to identify them.

The aim of this section is to point out that if need be, the art therapy modality has its many merits. This author has come across many testimonials to the viable use of art therapy with adolescents and with the chronically ill. It is for this reason that this section will focus on the potential use of art therapy, as it relates to the population addressed within this study.

The topics of chronic illness, adolescence and of art therapy each encompass many

diverse factors. Through this author's literature review (Harriet, 1997) done previously, many associated elements became evident. This author postulates that many, if not all of these elements are relevant to the art therapy profession and practice as well as to the growing interest in incorporating a holistic approach to medical management.

Art therapy can be an appropriate choice of modality for aiding adolescents along their developmental path. This paper's chapter on adolescence identified many factors associated with this phase of life. Many of these elements will be touched upon within these next few paragraphs which address the use of art therapy with adolescents.

In reference to Joan Erikson, an art therapist, Franklin states: "Erikson (1979) has reflected on the therapeutic merits of art materials and how they offer self-integrating experiences" (1992, p. 79). Langer, Jung, May and Moustakas similarly stress the importance of individuation and identity formation resulting from the involvement in the creative process (Garai, 1987, p. 195). Garai (1973, p. 261) also adds:

The reflection of the self-image in the process and production of art therapy can provide valuable insights into the process of identity formation, the struggles and crises related to the search for identity and meaning, and the relative importance of a stable and consistent identity.

An art and/or other creative process (such as that used in this present study) can help the adolescent perceive realistic and unrealistic views of self and of life circumstances. This was clearly solicited from the research participants, through the directives given to them. Strengths and weaknesses can potentially be identified as can associated feelings. Art materials provide media with which an adolescent can actively explore. "The

metaphoric and symbolic qualities of art provide a safe realm in which the participants can begin to cognitively, tangibly and emotionally work-through distortions, anxieties, confusion and conflictual issues related to their own body images and identity" (Schneider et al., 1990, p. 135).

Schneider et al. (1990, p. 135) point out the benefits of using art therapy with people coping with changes in body-image: "Even though the artwork is, in many ways, perceived as an extension of self, it nonetheless provides a less threatening transitional medium for communication and feedback on the subject of self and body image". Art therapy can be an appropriate alternate means of communication for those who do not wish to, or are unable to use words. According to Knight Gabriels (1988, p. 67), art therapy allows verbally defended adolescents to reveal serious concerns and problems unconsciously through their drawings.

In reference to the adolescent need to express one's individuality, Garai (citing Moustakas) states that creativity requires the expression of each person's uniqueness, individuality, and particular ways of expressing authentic feelings. The author adds: "Each individual has his or her unique style of creative expression, which resembles a fingerprint, characteristic only of that person" (1987, p. 195).

Many more examples can be taken from the literature regarding the merits of using art therapy with adolescents. For the sake of brevity, this author will only add that art therapy can help a person recognize and use inner resources:.

Creative art activity enables the adolescent to discover and utilize structuring mechanisms that arise from within the self, rather than being enforced from the

outside. The adolescent takes hold of inner feelings, impulses and turmoil - that which cannot usually be articulated, let alone contained - and through his or her own resources gives this inner material aesthetic shape and form. The process of creation thereby strengthens the adolescent ego.

(Emunah, 1990, p. 104)

In more specific regards to the population addressed in the study of this present paper - adolescents living with a chronic illness - this author will now briefly look at the use of art therapy with the chronically ill. Blumberg et al. (1984, p. 133) appropriately acknowledge:

Adolescence is a key transitional period in an individual's growth, a relatively short period in which a number of developmental tasks must be accomplished at the same time that rapid physical changes occur. The necessity of accomplishing these tasks is no less important for an individual with a chronic illness than for one who is healthy, although an adolescent with a chronic illness confronts emotionally and physically stressful problems that potentiate an atypical course of development, normal development processes do occur.

There are four conflicts that an adolescent must overcome in Erikson's *identity versus role confusion* phase. They have been identified by Salkind and Robinson Ambron (1987, p. 543): (1) task identification versus a sense of futility; (2) anticipation of roles versus role inhibitions; (3) will to be oneself versus self-doubt and; (4) mutual recognition versus autistic isolation. The difficulties associated with these conflicts may appear magnified for the adolescent who is facing similar, and additional conflicts linked

with chronic illness.

Art therapy, with its unique qualities, can be a fruitful addition to an interdisciplinary approach of management for individuals living with an illness. McNeil Jeppson in reference to cancer patients, states that they present a unique set of psychosocial issues to the field of art therapy.. According to that author, they are generally faced with the following tasks: 1) Coping with illness and its attendant problems, such as pain. 2) Coping with life as it is altered by the illness. 3) Preserving a reasonable emotional balance. 4) Preserving a satisfying self-image. 5) Preserving relationships with family and friends. 6) Preparing for an uncertain future (1983, p. 45) Adding to medical professionals' focus on the medical well-being of the person, the art therapist can address associated psychological issues.

Referring to the study of the use of art therapy as an adjunct in the medical management of cancer, Wolf (1982, p. 47) writes: "The results of this pilot project study can be used as a springboard integrating art therapy into the psychosocial interventions for medical management, an area which is rapidly becoming the emphasis of medical research". This author is certain that there is an important and necessary role, as Wolf suggests, for art therapy in medical management. Art making - an integral aspect of this present study, has been shown in the literature and through this study, to be an effective, non-threatening modality for expressing how one has experienced living with diabetes. Though in varying degrees, each diabetic research participant was able to self-disclose in regards to his or her experience of illness.

Many authors have written about art therapy with adolescents and many have written

about art therapy used with persons who are ill. Edwards (1993) writes about the drawings done by patients shortly after diagnosis. Bruck (1982) shares with her readers, common themes that she observed emerging from the artwork of renal disease patients. Knight Gabriels' (1988) article provides an introduction to an art therapy technique designed to assess the perceptions asthmatic children have of their illness. Knight Gabriels also provides precise steps an art therapist should go through in assessing a patient's coping skills. Virginia Bennett ((1966) did a study to determine, if possible, what measurable graphic traits, and what combination of such traits, found in a child's figure drawing, might be demonstrated to be related to the drawer's self-concept. In a study conducted by Nuvoli et al. (1989), juvenile diabetics' drawings of people were compared to their drawings of sick people. In Schneider et al.'s (1990) study, the concept of self and body-image is reviewed with a focus on the developmental phase of adolescence. Segal (1981), Councill (1993), Garai (1973, 1987), Fitzgerald Miller (1983) and Thomson (1978) are also authors who touched upon relevant areas within their work (Harriet, 1997, pp. 74-75).

Through review of the literature, this author noted that there were articles written on the use of art therapy with persons having a specific chronic illness. Similarly, there were articles dealing with all chronic illnesses as a group having common characteristics and therefore, similar associated needs and concerns. Most of these however, addressed the chronically ill individual in the hospital, either just after diagnosis, or subsequent to some type of crisis or complication. There was a lack of exploration into the use of art therapy with the chronically ill person whose disease is stable, or who is living with a disease,

without major interference or complication (Harriet, 1997, p. 75). This present study's target population is comprised of non-hospitalized youth. The three participants living with diabetes were not recently diagnosed (see Table 3). The results of this study, as well as the future research it may encourage, will be a much needed contribution to the literature addressing chronically ill adolescents. The fact is, art therapy can function clinically as a projective base, a diagnostic tool and as a mode of communication and of treatment.

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APPENDIX A
RESPONSE LEGEND

OBJECT / TIME is related to the feeling(s) of . . .

(A) trust (B) mistrust (C) happy (D) sad (E) secure / safe (F) insecure / unsafe
(G) proud (H) ashamed (I) angry at internal factor (self) (J) angry at external factor
(other) (K) love (L) hate (M) accompanied (N) alone (O) frustrated / stressed
or worried (P) relaxed / calm (Q) healthy (R) sick (S) other (specify)

NATURE OF OBJECT:

(i) food (ii) amusement (iii) tool (iv) animal (v) plant (vi) person (vii) medical
(viii) work / school related (ix) other (specify)

PERSON:

(1) complete (no disconnected lines or parts) (2) incomplete (disconnected lines or
parts) (3) exaggerated part(s) (4) minimized part(s) (5) proportional
(6) disproportional (7) presence of facial expression (8) absence of facial expression
(9) presence of details (10) absence of details

ILLNESS Is there any evident reference to it?

(Y) yes (N) no

ADDITIONAL COMMENTS:

In one or two words, identify subject of any additional comments you may have regarding
the image.

*Please note: If more than one response is warranted, please place a number above each,
indicating which is strongest (1) and which is weaker (2, 3 ...).

APPENDIX B1

EVALUATION CHECKLIST

Picture /	Object /	Time /	Nature of /	Person /	Illness /	Subject of Additional
			Object			Comments
1 O	DF	DF	ix (home)	2, 8, 10	N	
1 Δ	ACP	ACP	ii	1, 5, 7, 9	N	
1 □	SE	ACGO	iii	1, 5, 7, 9	N	S = Knowledge
2 O	O	C, F, H	ii	1, 6, 3, 9	Y	
2 Δ	DJ	R, F, H	ix	2, 3, 4, 6, 8	Y	ic = advertisement
2 □	F, O, N	F, J, N	ii (124679)		Y	
3 O	CEGO	ACE, K	iv	1, 5, 7, 9	N	
3 Δ	LPO	CE	iv	1, 5, 7, 9	N	
3 □	FO	C, M, O	iv	1, 5, 7, 9	N	
4 O	O	CM	iii	2, 5, 7	Y	
4 Δ	D, F, O, R	CEG	iii	2, 3, 6, 3	Y	image inconsistent w/ description
4 □	EN	REN	ix	1, 3, 6, 7	Y	
5 O	O	C, F	ii	1, 5, 7, 9	N	
5 Δ	FO	F	iii	1, 5, 7, 9	N	
5 □	B, N	ACE	iv	1, 5, 7, 9	N	" inconsistent "
6 O	O, O	FO	viii	1, 5, 7, 9	N	
6 Δ	B, F, G, N	FO	vi	1, 4, 5, 7, 9	N	
6 □	CG	CFO	ii	1, 5, 7, 9	N	Image inconsistent
7 O						
7 Δ						
7 □						
8 O						
8 Δ						
8 □						
9 O						
9 Δ						
9 □						
10 O						
10 Δ						
10 □						

APPENDIX B2

EVALUATION CHECKLIST

Picture / Object	Time	Nature of Object	Person	Illness	Subject of Additional Comments
1 ○	C, P	(ix) ticket	1, 5, 7, 9, 10	N	dynamic, hopeful, a little doubtful
1 △	F, (S) ambly	(viii)	1, 5, 7, 9	N	ambivalence, incongruently
1 □	(S) ambly, D, F, J	(ix) house	8, 10	N	confused, hesitant, unclear
2 ○	C, K, Q	(ii)	1, 5, 8, 9	Y	excited, hopeful
2 △	C, Q	(ii)	1, 5, 7, 9	N	hopeful, normal
2 □	D, I, O, J	D, I, J, R, O (i)	1, 3, 6, 8, 10	Y	fear, disempowerment, loss of control
3 ○	A, C, G, K	C, P, Q (iv)	1, 5, 7, 9	N	autonomous, in control
3 △	C, O, Q	C, O, Q (iv)	1, 5, 7, 9	N	anxious, burdened
3 □	C, E, G, K	C, P, Q (iv)	1, 5, 7, 9	N	normal,
4 ○	C, G, M, F	C, F (viii)	2, 5, 7, 10	Y	impoverishment, feeling insubstantial and out of control
4 △	C, E, G, Q	C, Q (ix) car	2, 6, 8, 10	N	impoverishment, reluctance, closed
4 □	E, N, P, Q	C, E, Q (ix) blanket	2, 6, 7, 10	N	impoverishment, containment,
5 ○	C, G, Q	C, M, Q (iii)	2, 5, 7, 9	N	self-assured, society, strong, sociable
5 △	C, F, Q	C, F, M, O (ix) camera	2, 5, 7, 9	N	hopeful, uncertain, anxious
5 □	C, E, K, M	C, M, Q (iv)	1, 5, 7, 9	N	social, helpful, secure
6 ○	C, G, M, G	C, M, G (ii)	1, 5, 7, 9	N	learning, comfortable
6 △	C, E, G, Q	C, M, G (viii)	1, 5, 7, 9	Y	normal, excited, a little frustrated
6 □	C, G, K, M, Q	C, G, K, Q (viii)	1, 5, 7, 9	N	social, popular, family support
7 ○					
7 △					
7 □					
8 ○					
8 △					
8 □					
9 ○					
9 △					
9 □					
10 ○					
10 △					
10 □					

APPENDIX C

Operational Definitions of "Negative " and "Positive" Responses

Negative responses include the following terms found within the Response Legend, as well as other similar terms:

mistrust; sad; insecure / unsafe; ashamed; angry at internal factors; angry at external factors; hate; alone; frustrated / stressed or worried; sick; incomplete; disproportional; exaggerated parts; minimized parts; disproportional; absence of facial expression and absence of detail and; Y (yes) response to illness evidence

Positive responses include the following terms found within the Response Legend, as well as other similar terms:

trust; happy; secure / safe; proud; love; accompanied; relaxed / calm; healthy; complete; proportional; presence of facial expression; and presence of details and; N (no) response to evidence of illness.

APPENDIX D

Drawings of Diabetic Group

Participant 2

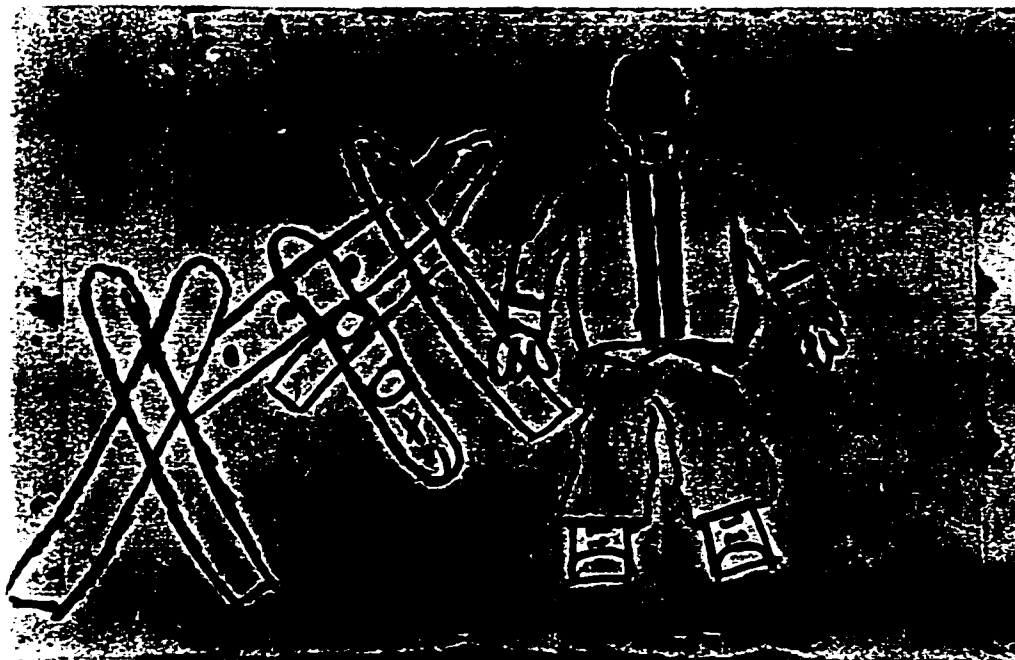


Fig. 1 Present (○)



Fig. 2 Future (△)

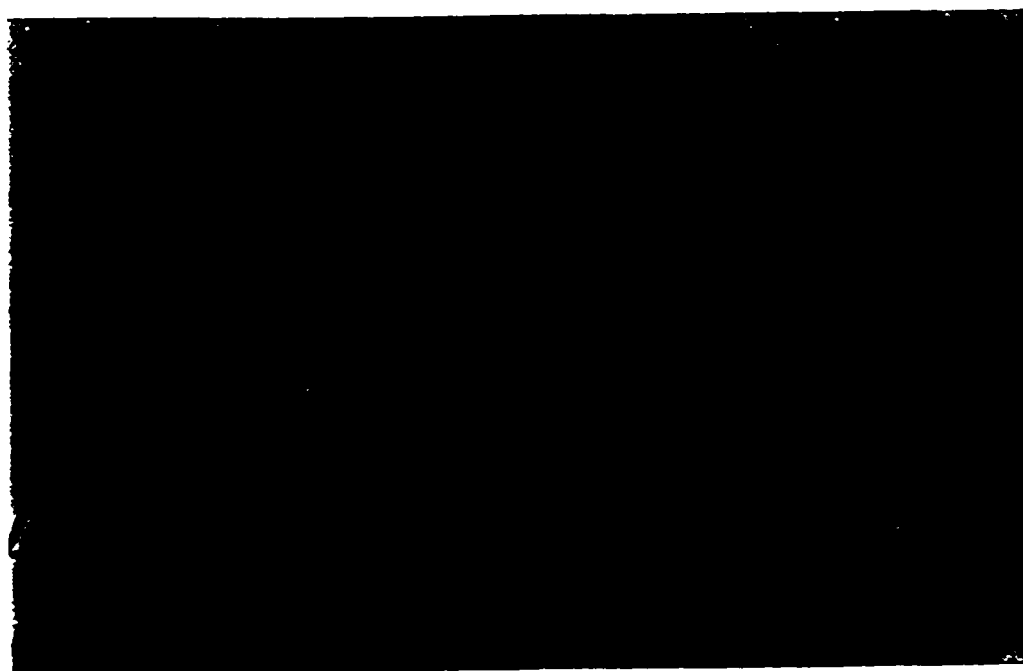


Fig. 3 Past (□)

APPENDIX D (continued)
Drawings of Diabetic Group
Participant 5

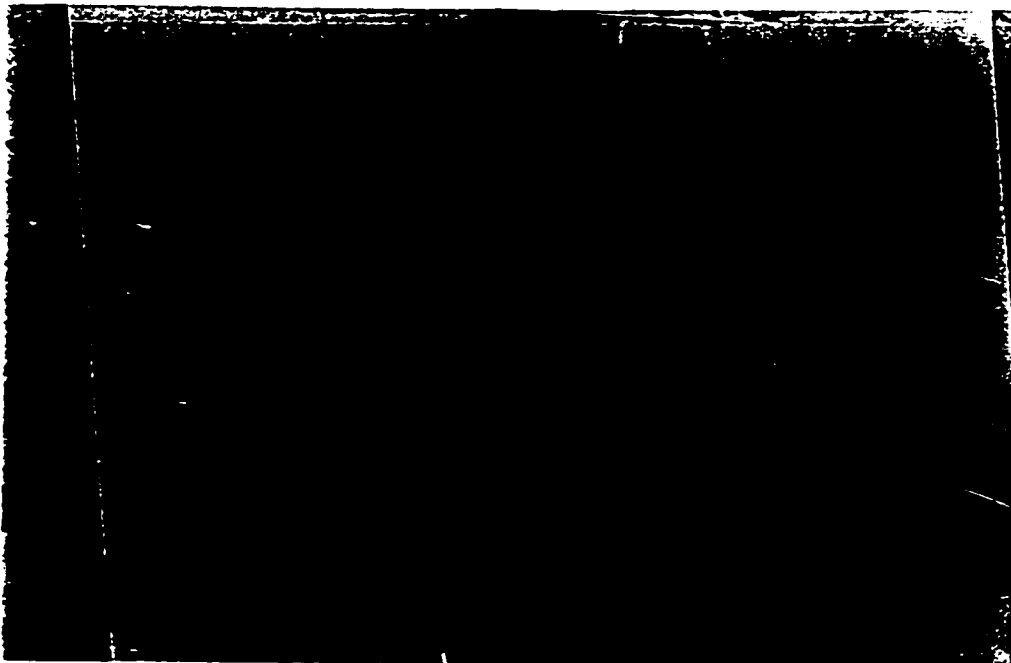


Fig. 4 Present (○)

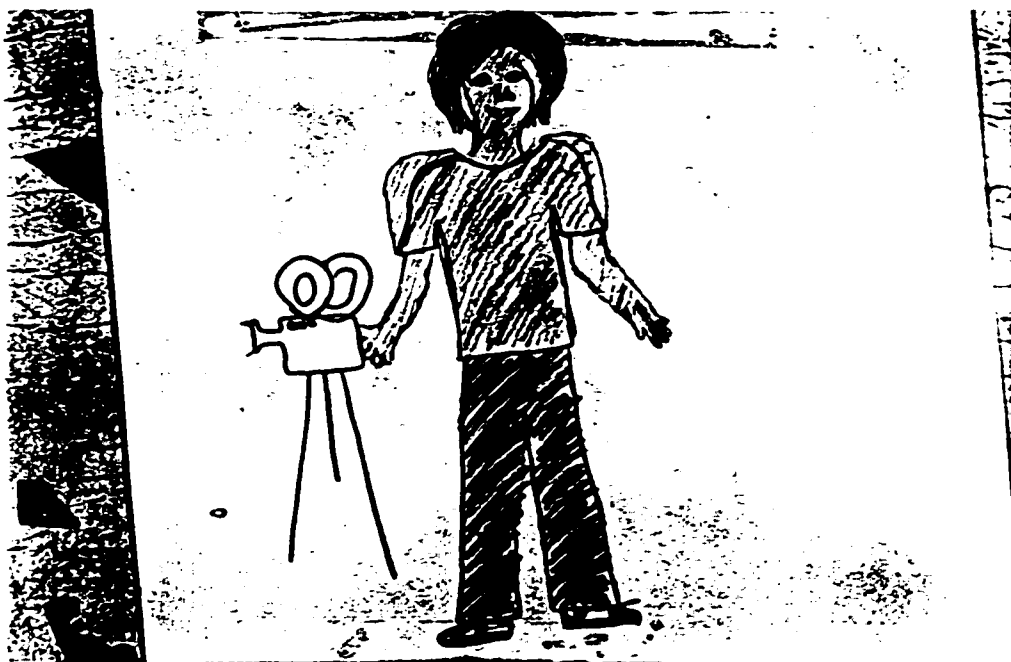


Fig. 5 Future (△)



Fig. 6 Past (□)

APPENDIX D (continued)

Drawings of Diabetic Group

Participant 6

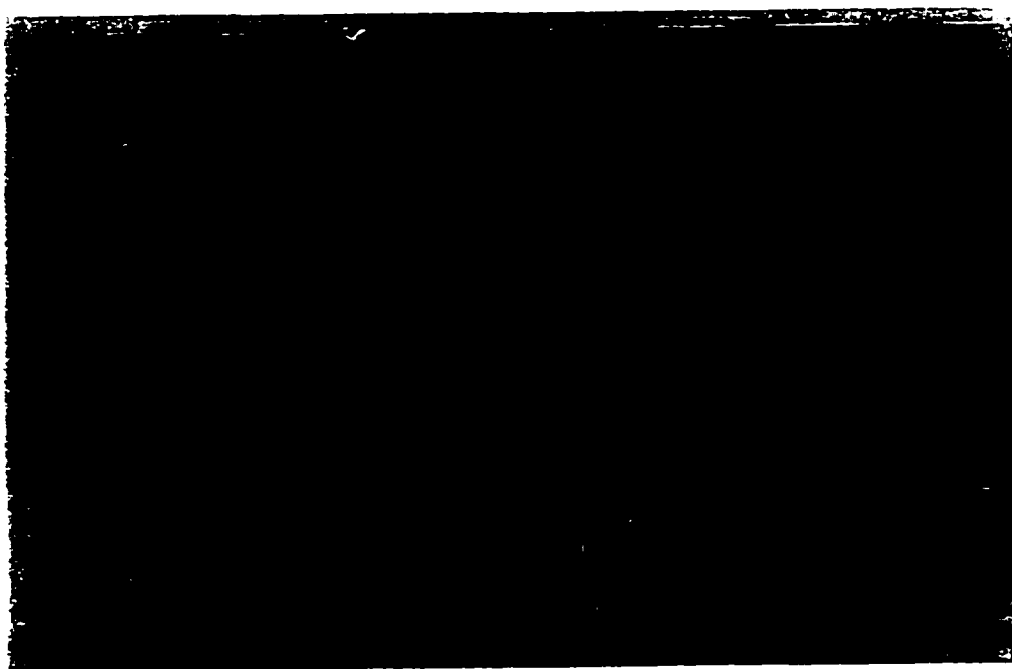


Fig. 7 Present (○)

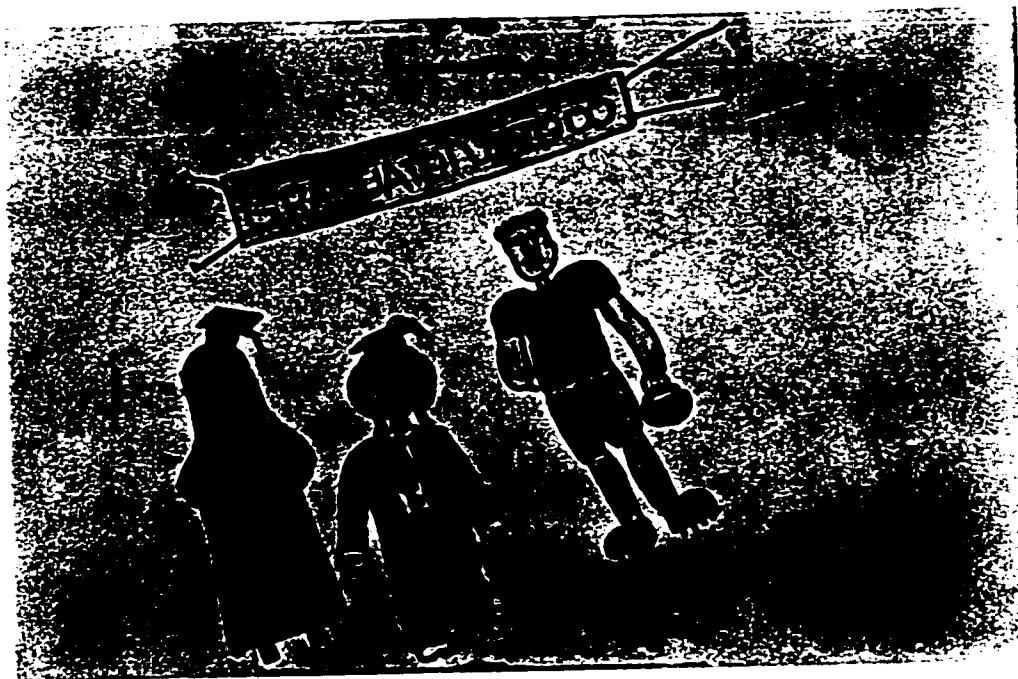


Fig. 8 Future (△)

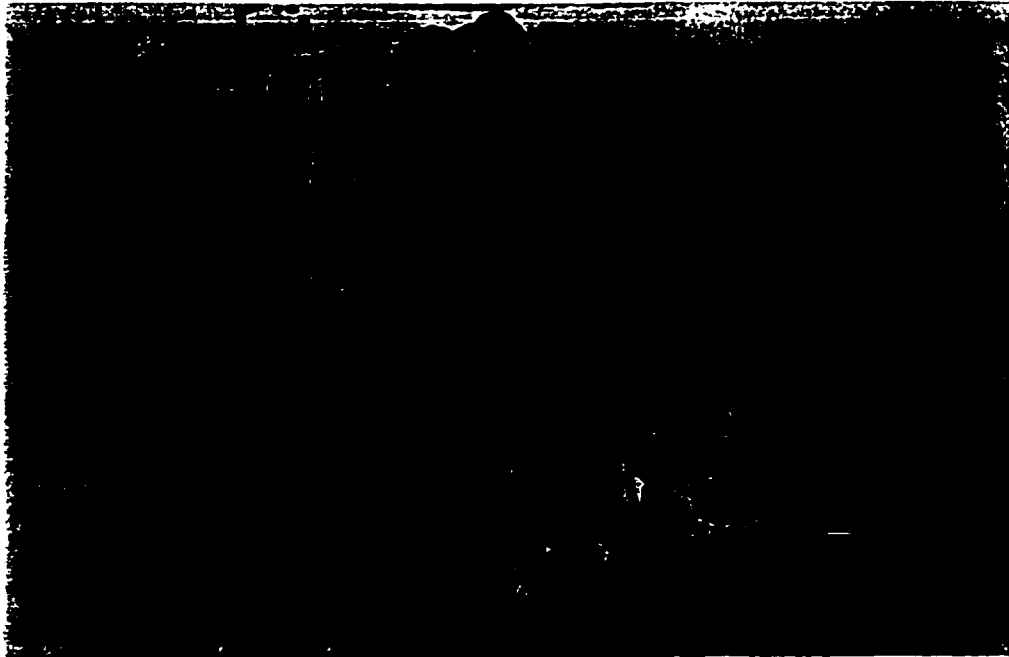


Fig. 9 Past (□)

APPENDIX E
Drawings of Control Group
Participant 1



Fig. 10 Present (O)



Fig. 11 Future (Δ)

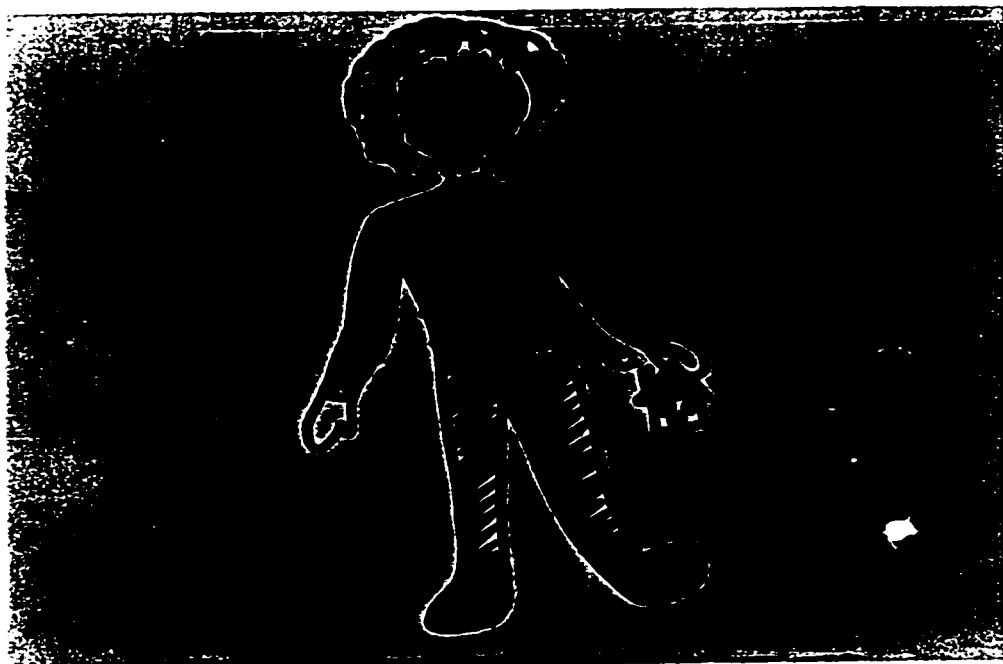


Fig. 12 Past (□)

APPENDIX E (continued)
Drawings of Control Group
Participant 4

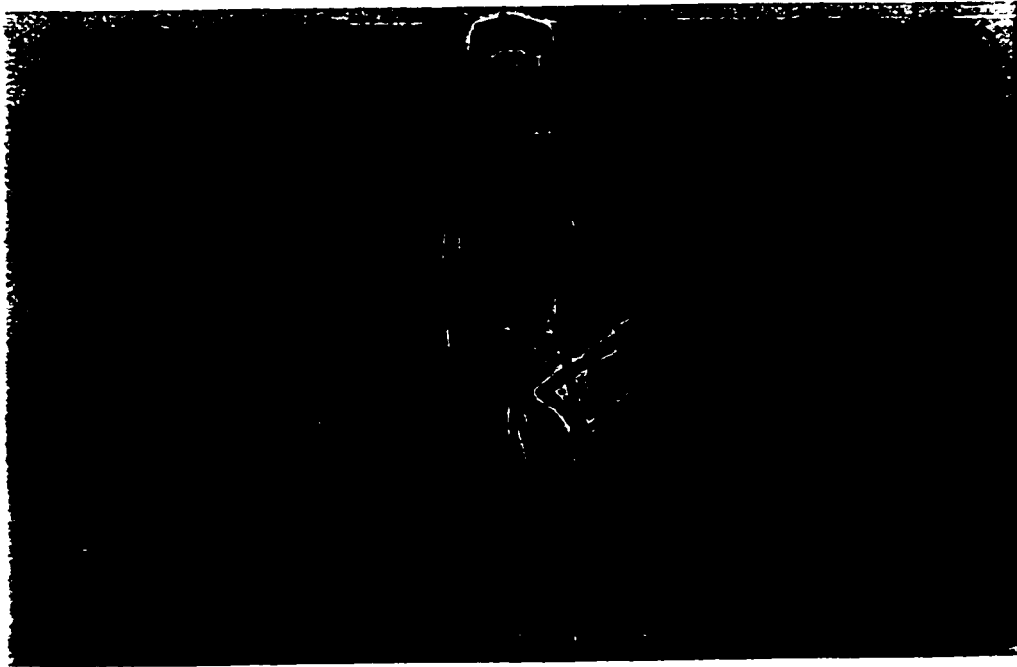


Fig. 16 Present (○)

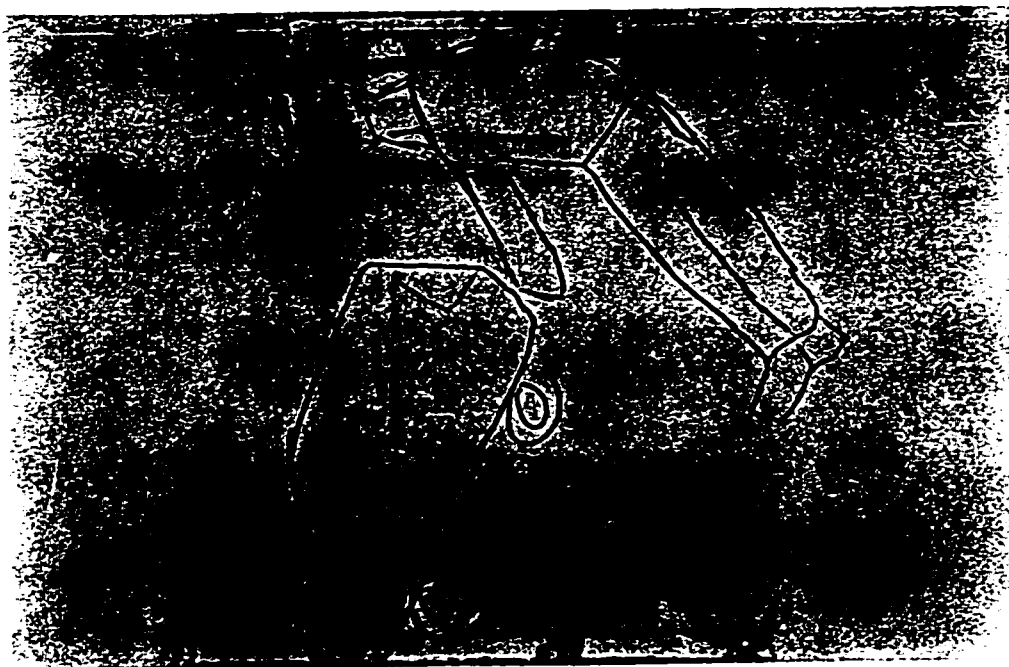


Fig. 17 Future (△)

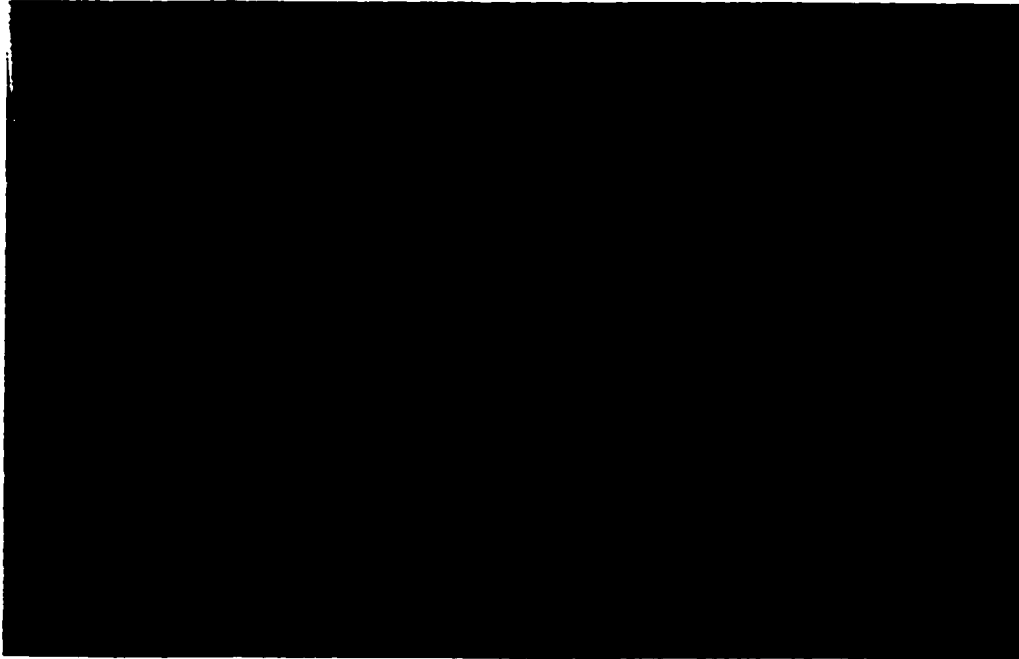


Fig. 18 Past (□)

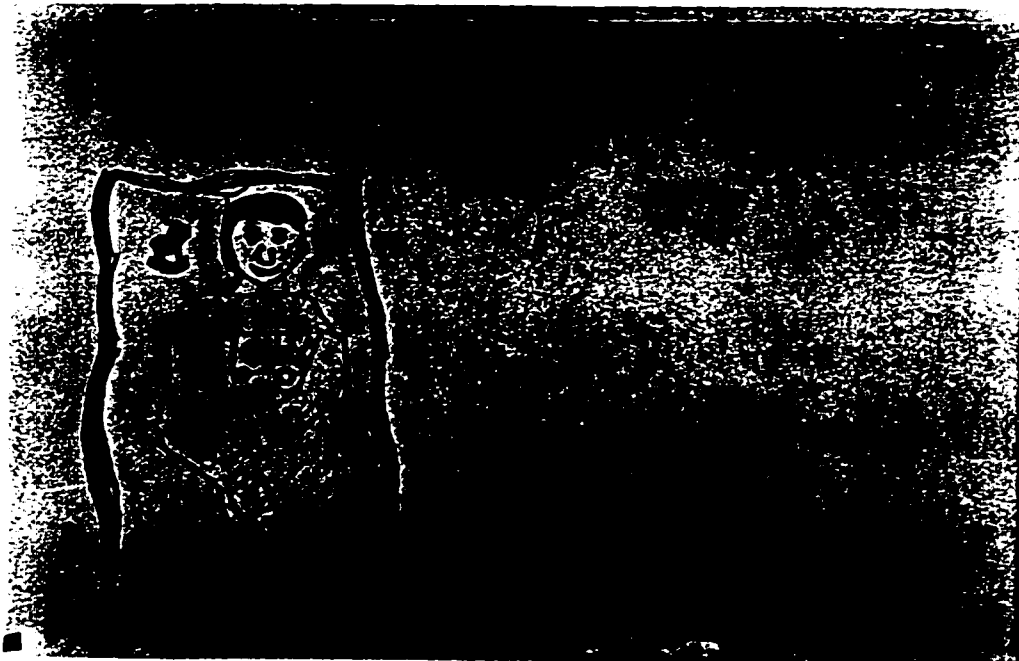


Fig. 19 Past (□)

APPENDIX E (continued)

Drawings of Control Group

Participant 3

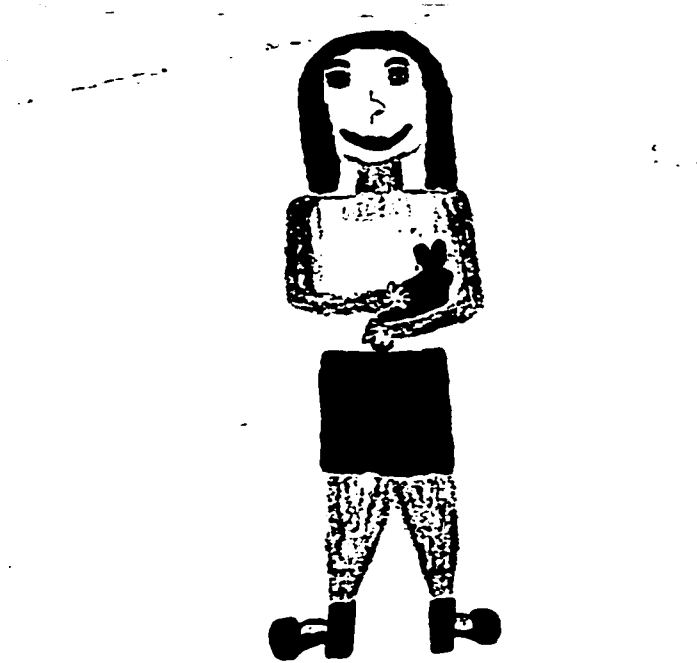


Fig. 13 Present (○)

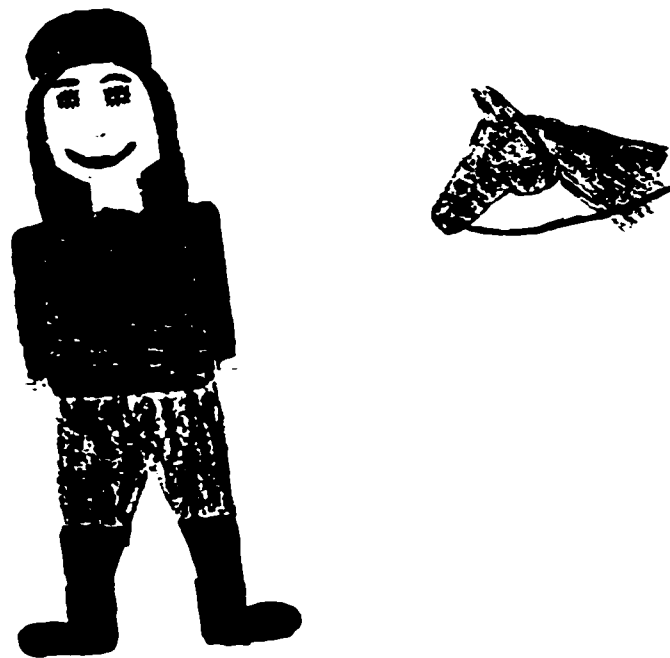


Fig. 14 Future (△)

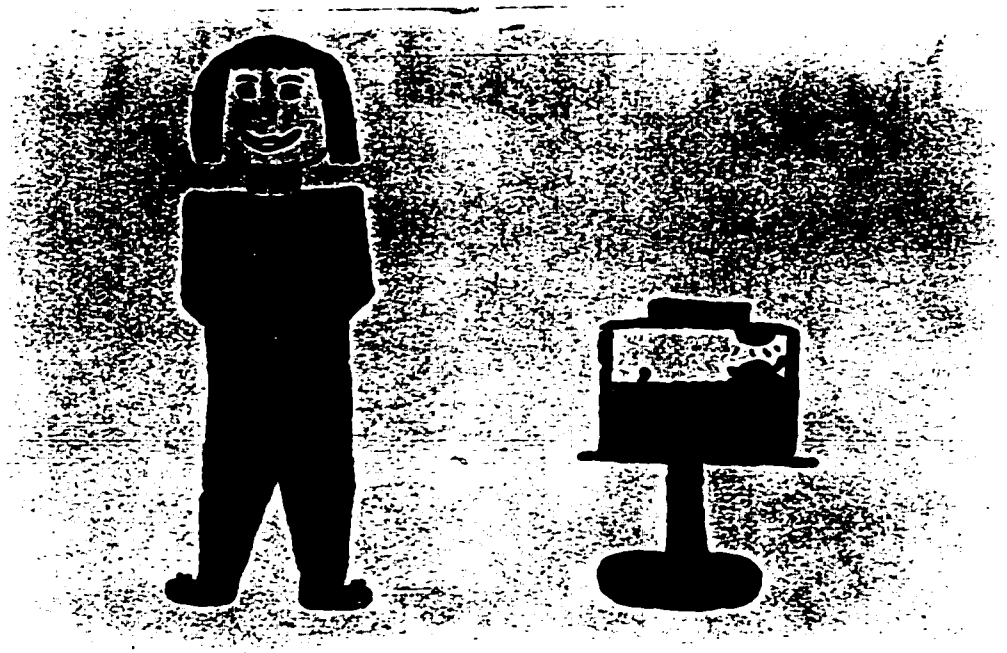


Fig. 15

Past (□)

APPENDIX F

Participant Consent Form

I _____, agree to participate in the research study of **Susan Harriet** entitled **The Shared Experience of Chronic Illness: A Comparison Study of Adolescents**. I understand the purpose and nature of this study, as verbally described by Ms. Harriet, and am participating voluntarily. I grant permission for the raw data to be used in the process of completing a _____ **research component** in a **Master's degree in Art Therapy** and _____ any future publications or professional presentations. I understand that my name and other demographic information which might identify me, will not be used.

I understand that my images will be kept and photographed after the first interview, and will be made available to me at the second one. I also grant permission for the tape recording of the interview(s). I place the following restrictions in regards to my participation in this study:

Participant

Researcher

Legal Guardian

Date

APPENDIX F1
AUTORISATION

Je, soussigné(e), _____ accepte de participer dans la recherche de **Susan Harriet** intitulée **The Shared Experience of Chronic Illness: A Comparison Study of Adolescents**. Je comprends la raison et la nature de cette recherche, ayant été verbalement décrite par Mme. Harriet et je participe volontairement. Je permets l'utilisation de mes travaux d'art et/ou autres informations obtenus en séance _____ dans le but de compléter l'élément de recherche dans le programme universitaire **Master's Degree in Art Therapy**, et _____ pour les présenter aux conférences professionnelles ou publications à des fins médicales, scientifiques et/ou éducatives. Je comprends que des précautions seront prises pour que l'anonymat et la confidentialité soient conservés. Mon identité ne peut, en aucun cas, être révélée.

Je comprends que mes dessins seront gardés et photographiés suite à la première rencontre, et qu'ils seront à ma disposition à la deuxième. Je donne aussi l'autorisation pour l'enregistrement (auditif) d'une partie de l'entrevue. Je mets les restrictions suivantes:

Participant(e)

Recherchiste

Parent ou Gardien

Date

APPENDIX G
RECRUITMENT ADVERTISEMENT

I Need A Couple Hours Of Your Time...

I am looking for five volunteers to participate in research on adolescents with diabetes. This research will be the final component of my Master's Degree in Art Therapy. All that would be required of you is a couple hours of your time to complete a few drawing tasks and to answer a couple of related questions. You will be kept informed regarding all aspects of this research.

If you are between the ages of thirteen and eighteen, would like to participate or would like further information, please sign the list or give me a call. You can leave a message on my machine and I will return your call during the week of May 11, 1998.

Why Not?

Susan Harriet 745-1884
Art Therapy Graduate Student
Concordia University

RECRUITMENT ADVERTISEMENT

J'ai Besoins De Vous ...

Je cherche cinq individus pour participer dans une recherche sur les adolescents ayant le diabète. Cette recherche sera le dernier aspect de ma Maîtrise en Art Thérapie. Tout ce qui sera demandé de vous est une couple d'heures de votre temps pour compléter quelques dessins ainsi que pour répondre à des questions reliées. Les détails vous seront fournis lors d'une rencontre.

Si vous avez entre treize et dix-huit ans, aimeriez participer ou d'avoir plus d'informations, mettez votre nom sur la liste ou contactez-moi. Vous pouvez laisser un message sur mon répondeur et je vous rappellerai pendant la semaine du 11 mai, 1998.

POURQUOI PAS ?

SUSAN HARRIET
ÉTUDIANTE EN ART THÉRAPIE
UNIVERSITÉ CONCORDIA