MOTIVATION INTERACTION WITH ADOLESCENT SICKLE CELL ANEMIA PATIENTS

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ARMENTHA ELLIOTT HILL, B.S.N., M.S.N.

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The Graduate School

Texas Woman's University

Denton, Texas

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CHAPTER I

INTRODUCTION

The delivery of health care has been ranked as one of the nation's most serious health problems (Spradley, 1975). One major contemporary trend is that for the provision and promotion of primary health care. This prevention of the occurrence of disease known as primary prevention is

> a community concept that involves lowering the incidence of illness in a community by altering the causative factors before they have an opportunity to do harm. It includes health promotion and illness prevention (Stuart & Sundeen, 1979, p. 9).

A contributing force creating this impetus for change is that of social pressure for provision of equal access to quality health care to all segments of society.

As the demand increases for larger numbers of people to have better access to health promotion, the community itself becomes the milieu for this delivery. Spradley (1975) characterizes community nursing as future oriented and seeking in its distributive care to increase the level of health in the community, particularly in the realm of effective prevention.

Archer and Fleshman (1975) propose that community health programs offering primary care through ambulatory facilities that are accessible to the recipient are

becoming a popular way to reach out. Haber (1978) contends that an integral part of mental health promotion is that of primary prevention which acts to prevent the incidence of disease in populations at risk.

Such a population at risk consists of those individuals in the community who are victims of sickle cell anemia. Jackson (1972) called sickle cell disease the most common genetic disorder in the United States and the most neglected major health problem in the nation today. One aspect of the disease, the psychosocial adjustment of sickle cell anemia clients, has increased in complexity in proportion to the rise in the survival rate of sickle cell anemia clients who transcend the proverbial second decade of life. The impact of the chronicity of this disease of genetic etiology is becoming more pervasive.

Kumar (1976) adjures, "It is important that anxiety, self concept and adjustment processes be empirically studied in order that more comprehensive care can be made available to children with sickle cell disease" (p.860). The most dreaded aspect of sickle cell disease is the "sickle cell crisis" which, because of its genetic origin, according to Neel (1973) renders its victims utterly miserable for the duration of their lives.

The delivery of health services to such a population as those with sickle cell anemia is influenced by such factors as philosophy, facilities, delivery systems, and status of

the economy. Pearson (1976) states that for the future, these influences will result in movements of services away from institutions and clinic settings into the community. A prioritized motivational strategy can, in a programmed technological methodology, be used for implementation of maximized nursing intervention techniques. Such nursing intervention will provide options for the profession as it seeks to assume a prominent role in designing and delivering new systems of health care. Pearson (1976) believes

> Rational allocation of needed resources for health mandates a sorting of the criterion into service components such as health promotion as total health, a health maintenance as disease prevention service, and a sick care service (p. 53).

As nurses emerge in expanded roles to provide new services they must discover a new armamentarium of modalities. Block (1973) believes

> the number and variety of treatment methods in the mental health field has increased tremendously in the last two decades. Each major technical innovation reflects a somewhat different view of ... reasonable goals of intervention as well as of the most effective measures for accomplishing these goals (p. 7).

For the mental health nurses who are assuming more public health and urban functions, there exists the challenge to focus on learning the processes by which people think, integrate, and do. The suggested innovations call for leaving the protective custody of a known miniworld

and learning new vocabularies, new cultures, new ways of behavior and combined processes of self-evaluation, and public accountability, according to Garrison (1973).

Clark (1978) notes:

> As a primary practitioner, the community health nurse is in an unusually good position to provide skilled mental health interventions that can prevent future health problems (p. 4).

Today it is mandatory that the energies of the nurse be utilized to care, to teach, to observe, to interpret, to support, to refer, to intervene, and to coordinate efforts of all who are working together to make life more meaningful and less painful for sicklers and their families (Jackson, 1972).

Statement of Problem

The problem investigated was "What is the response of the self concept of adolescents with Sickle Cell Anemia to a Motivating Interaction?"

Justification of Problem

One method of assuring the delivery of health care to a number of clients simultaneously is by way of group process in a community health setting. Group therapy is a response to the societal demand for access to the health care delivery system for larger numbers of people. Because "group therapy is primarily a social and psychological process in which an emotional reeducational and relearning

experience can occur" (Johnson, 1963), it affords the community mental health nurse with a realistic intervention technique in health promotion for chronic populations at risk.

The promotion of primary nursing care requires more than the availability of the community mental health clinician and the accessibility of the promotional health activities to the client. A necessary prerequisite in nursing is that there be a cognitive framework for the nursing practice (Browning & Lewis, 1972). Nursing as a profession is recognizing that the efficiency of any given strategy as a nursing intervention must be based on sound theory, and the strategy itself must be identifiable so that replication is possible. The outcomes of the intervention must be predictable and the nurse clinician must be able to determine whether her "prescription" will be carried out (Scutt, 1972).

A fundamental dynamic in the prescriptive nursing intervention is motivation. A group process incorporating the phenomenon of a Motivation Interaction which has certain identifiable components, recognizable in the interaction is proposed as a teaching-learning intervention. There is a need to determine whether the Motivation Interaction will produce an increased patient response. Patient response is a necessary component in the evaluation of client health care by the clinician. The design for this

study was an interaction process with a group of Sickle Cell Anemia clients. Their response to the intervention affords a basis for use of the framework of the Motivation Interaction as a prescriptive strategy within the community mental health milieu. As an evaluation of the response of the group to this technique, a standardized psychological test, the Tennessee Self Concept Scale, which is administered in questionnaire form, was used.

Theoretical Framework

Motivation

Historically, animal behaviors and inferences about causality prompted a theory of motivation. Pavlov, with salivating dogs, proposed the notion of classical conditioning. Upon this formulation was based Watson's theory of behaviorism which linked human behavior to a reward system of contingencies. Hull related motivation directly to need which is expressed in his drive theory.

Maslow (1970) in his theory of motivation stresses the developmental nature of motivation, with biological necessities being lower on the scale and narrower in scope. Maslow states:

> Motivation consists of a series of stages: first a stimulus triggers a motive, which in turn leads to behavior. If behavior results in goal attainment the motive is satisfied and the chain is complete (p. 38).

When this stimulus (need) is enhanced and focused by

the intervention of another individual, the ensuing process can be defined as a motivating interaction.

Maslow's (1970) need theory has an hierarchial pattern in which gratification of basic physical needs occupies the lowest level. He identified these needs as inherent but differing in all humans. This inner nature of inherent tendencies Maslow labeled "instinctoid." This division was the first of Maslow's two need groups, the D-needs, which are characterized as deficiency needs. These physical needs which include the basic needs such as the need for food and water are followed one step up the hierarchial ladder by the safety needs whose gratification requires a milieu relatively free from threats to life, thereby fostering security. D-needs, as conceived by Maslow, "include behavior aimed at supplying deficiencies." The gratification of these needs depends on other people and external objects (and environmental factors). The thwarting of these needs promotes the development of neurotic needs. On the other hand, satisfaction of these needs fosters growth and mental health.

Other D-needs include belonging and love needs. An illustration is hunger for affectionate and accepting relationships with other persons. Esteem needs are manifested in the desire for respect from others, for recognition, and for prestige.

Superior on the hierarchy to the D-needs are the growth or B-needs. Maslow described the B-needs as "metaneeds." As needs, beyond the D-needs, they "propel the person toward wholeness, uniqueness, and self-fulfillment." The B-needs include impulses for freedom, beauty, goodness, unity, and justice and they are equated with striving toward self-actualization.

Maslow's (1970) theory of self-actualization is taken in part from Goldstein's theory of holistic approach to biology derived from pathological data on man. In Maslow's theoretical framework, all forms of human behavior can be thought of in terms of joint operation of D-needs and B-needs. The particular form of behavior depends on the ratio of regressive to progressive motivation involved. Thus Maslow posits that the impulse for an individual to grow and actualize his potentials is present in the infant at birth, along with the presence of certain basic inherent needs which must be gratified in a somewhat rigid hierarchical manner. Although the expression of these needs differs in persons and societies, they are, themselves, intrinsic and species-wide. When basic needs are thwarted, the neurotic needs which develop are impossible to satisfy and lead to "wasted human potentiality and depletion of human energy" and result in mental illness.

According to Maslow (1970), the need to know can serve primarily as a stimulus to lessening the anxiety of an observer faced with something unknown. Maslow cites this behavior in the first instance as that aimed at threat reduction, a D-need. In a second instance the individual's need to know may transcend the D-need and extend to the B-need realm where the satisfaction derived becomes purposive in terms of education, therapy and life itself.

Self Concept

The self concept as stated in the definition of terms is best defined as the concept of self, and as Rogers (1975) states is an "organized, consistent, conceptual Gestalt composed of the perception of the 'me' or 'I' and the perception of the relationships of this 'I' to the outside world and to others" (p. 1832).

The self concept as a cognitive construct has enjoyed a variable popularity as the development and description of self has waxed and waned in importance in various psychological theories. Pragmatists and interactionists (James, Baldwin, Mead, and Cooley) treated the self extensively in their theoretical works. One of the foremost proponents of self theory is Eric Erikson (1950). Erikson's epigenic theory of ego development has had a major impact in explaining the relationship between the

instinctual libidinal zones postulated by Freud and the development of specific modalities of ego functioning. The psychosocial development of the ego with the switch in focus from the pathological to healthy developmental possibilities was Erikson's contribution. He also extended these relationships on the developmental scale beyond the pregenital stages to the limits of the life cycle.

Erikson placed his emphasis for a healthy personality on the ego, which he perceived to be the tool by which a person "organizes outside information, tests perception, selects memories, governs action adaptively and integrates the capacities of orientation and planning"(Erikson, 1950, p. 193). Accordingly, the ego begins when the baby is able to perceive his body as distinct from the external world. When this occurs the ego becomes concerned with "ordering reality into subjective and objective phenomena and other complex relationships between current apperceptions and memories" (Kaplan, 1975, p. 529).

Erikson's first developmental modality occurs during the oral-respiratory-sensory stage. The oral incorporative mode involves the modality of "taking-in." Included in addition to the taking-in modality are the modalities of getting and getting what is given stage. This entire stage is called basic trust versus mistrust, and from the successful negotiation of this stage arises the ability

to be a giver.

The first appraisals of self are those reflected from significant others. If the quality of mothering received reflects warmth and security, the "good me" self concept develops. Conversely, mothering which is fraught with inconsistency and tension evokes the development of the "bad me" self concept. The third personification of self is the "not me" (not of me) notion. Sullivan inferred the existence of these three personifications in his theory of personality development. In the latter part of infancy Sullivan states there is some evidence that the "good me" and "bad me" become fused or assimilated in a rudimentary fashion into the unitary dynamism of the self system" (Kaplan, 1975, p. 600).

The concept of self becomes better defined as the childhood ego develops and superego development is initiated. During the juvenile and pre-adolescent eras the self-esteem is derived from accomplishment and chumships. Peers and other ego ideals assume a dominant position (Erikson, 1950).

The ego identity of the adolescent is influenced by the additional components of social class and the overarching cultural milieu. The positive self concept in Afro-Americans has been posited as difficult to maintain (Poussaint, 1970). The resolution of the problems of self

concept in adolescence can lead to autonomy in adulthood.

The Model

Within the Maslow theoretical framework of motivation with self actualization as the ultimate level of achievement, the phenomenon of a Motivation Interaction was conceptualized and a model representing this phenomenon was constructed (Figure 1). The model shows that the concept of need exists beyond the beginning of the interaction, albeit it is the dynamic force which permeates and energizes the process itself. In a like manner, the goal attainment is beyond the end of the interaction. The interaction ends with Goal Focusing which provides the predictive element to the nurse teaching intervention which is incorporated in the phenomenon itself.

The idea of the four phase interaction is suggested by Boles (1973) in his categories for the analysis of small group interaction. The idea and the characterization of the four phases have been extended and modified by the investigator. The format for the adapted model suggests a four phase interaction in which each unit consists of affective, verbal, and psychomotor behavior for both clinician and client. Each unit has a cognitive component whose constructs are designated in the names of the phases. It is posited that the progression during the interaction is made in an undulating manner with both affect and verbalizations

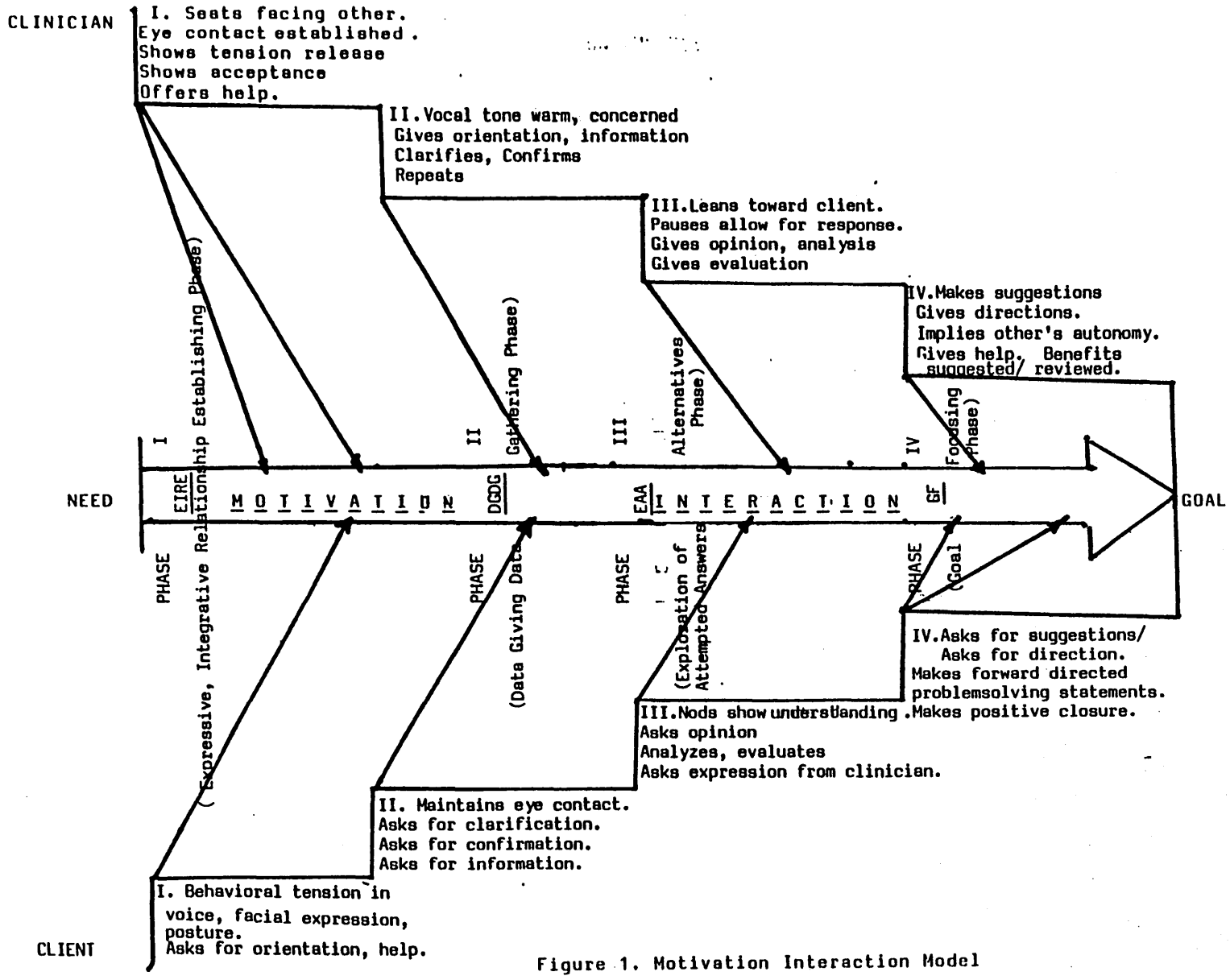


Figure 1. Motivation Interaction Model

flowing back and forth and overlapping at times. However, the phases are recognizable entities with identifiable components which are both quantifiable and qualifiable.

Phase I, the Expressive Integrative Relationship phase draws from Rogers' (1970) use of a social, emotional framework for the establishment of rapport. The Phase is characterized by: (1) acknowledgment of the client that a need exists; (2) acknowledgment that clinician can provide assistance; (3) willingness to accept suggestions and act on them; and (4) awareness that a climate of mutuality (rapport) exists.

Phase II, the Data Giving, Data Gathering phase, is characterized by: (1) establishment of specific agenda need; (2) exchange of pertinent data; (3) provision of information new and specific to agreed-on agenda; (4) explanations; and (5) clarifications.

Phase III, the Exploration of Alternatives and Attempted Answers phase, is characterized by: (1) means-end inductive and deductive reasoning: (2) fluency in listing good consequences of course of action; (3) requests for analysis and evaluation; and (4) provision of opinions and evaluations.

Phase IV, the Goal Focusing phase, is characterized by: (1) readiness to admit preferences for action; (2) statements which are forward directed; (3) statements which are solution providing; (4) recognition of autonomy

of client by clinician; and (5) acceptance of autonomy by client.

Positive closure is indicated by final interaction-terminating statements made by client indicating the decision has been made for action.

Each interaction between the clinician and client will begin with the acknowledgment of a specific need. This need will serve as the antecedent stimulus which initiates the Motivation Interaction. The EIRE Phase serves to set the emotional tone and to provide a common framework from which clinician and client will function.

The serious work begins with the DGDG Phase, and this is one of the most important units in the entity. The quality and quantity of the data given can determine the outcome. Stimulation for the client to ask task-specific data-gathering questions is crucial here.

The equally important phase is the EAA Phase. This is the real problem solving unit and the interaction here will determine if a satisfactory prescriptive state is to be attained. The critical aspect of this phase is that the depth of the problem solving or the extent of the alternatives posed will satisfy the need which energizes the process.

The final GF Phase is the closure unit for the interaction. The specific goal has been identified and the

manner in which it is to be achieved has been set. It is decisive that the client accept his autonomy for effecting goal attainment and can indicate his readiness to terminate the interaction. At this point the clinician can "know" that motivation has been successful.

The model is suggested for use by the nurse clinician in group teaching within the community setting, as a response to the societal demands for expanded primary prevention as a health care modality.

Assumptions

There were three assumptions basic to this study. They were:

1. The individuals in the study will participate until it is concluded.

2. Subjects' responses to the Tennessee Self Concept Scale will be a valid reflection of their self concept levels.

3. The adolescents will respond in a positive manner in group process with their peers.

Hypotheses

1. There will be a significant difference in pre test/post test self concept scores as measured on the Tennessee Self Concept Scale, of a group of adolescents with Sickle Cell Anemia who have received the nursing intervention of Motivation Interaction.

1a. There will be significant difference in pre and post scores on the Physical Self component of the TSCS.

1b. There will be significant difference in pre and post scores on the Moral-Ethical Self component of the TSCS.

1c. There will be significant difference in pre and post scores on the Personal Self component of the TSCS.

1d. There will be significant difference in pre and post scores on the Family Self component of the TSCS.

1e. There will be significant difference in pre and post scores on the Social Self component of the TSCS.

1f. There will be significant difference in pre and post scores on the Identity component of the TSCS.

1g. There will be significant difference in pre and post scores on the Self Acceptance component of the TSCS.

1h. There will be significant difference in pre and post scores on the Behavior component of the TSCS.

2. There will be an occurrence of specific client behavior in each phase of the Motivation Interaction.

3. There will be no significant difference in the interaction between the sessions and within the Phases of the Motivation Interaction.

Definition of Terms

Client. One who engages the services of a health care professional and actively participates in the health

care system (Fromer, 1979)

Community. A group of people, not health professionals, who live in a designated locale and have interests, work, etc., in common (Fromer, 1979).

Interaction. The response of one person stimulated by the action of another. The form may be direct and physical or a sequence of gestures, or it may be verbal (Mach and Young, 1968).

Group Process. The intimate sharing of feelings, ideas, and experiences by a small number of individuals in an atmosphere of mutual respect and understanding which enhances self-respect, deepens self-understanding, and helps them live with others (The Encyclopedia of Human Behavior, 1970).

Motivation. The force or energy that propels an organism to seek a goal and/or to satisfy a need (Hinsie and Campbell, 1974).

Motivation Interaction. The energization of responses, either in general or specifically, and the control of their vigor and efficiency to specific behavioral ends in a cooperative endeavor by client and nurse clinician (Coffer, 1972)

Motivation Agenda. The ordered dynamics of group behavior during group process which promotes the internal forces toward initiating, sustaining and directing the

activities of the group (Adapted from The Encyclopedia of Human Behavior, 1970, p. 833).

Self Concept. Best defined as the concept of self. In the Rogerian context, a self concept is an

> organized, consistent, conceptual Gestalt composed of the perception of the "me" or "I" and the perceptions of the relationships of this "I" to the outside world and to others. It includes the values attatched to these perceptions. It is a fluid, changing Gestalt, but at any given moment, it is an entity . . . It is a constant referent for the individual who acts in terms of it (Rogers, 1975, p. 1832).

Sickle Cell Disease. A unique hemotologic abnormality of genetic origin affecting specific ethnic groups. A disease complex occurring in a carrier state and as a full-blown anemia with many severe complications (Abramson et al., 1973).

Limitations

This study was done on those clients who were discovered via screening clinics of the Ft. Worth Association of Sickle Cell Anemia to have sickle cell anemia. They were taken into the study as they became available via Sickle Cell Anemia Association of Texas at Fort Worth (SCAAT). Only those who gave informed consent were used in the study. The results of the study cannot be generalized beyond the study population.

The time interval in the study was two months. Subjects who entered the study late continued to the

predetermined time for the end of the study. Subjects who requested early termination from the study received the post test at the time of their termination. The arithmetic means from their scores were subjected to the *t* test and the results were reported with a notation concerning the brevity of their interaction in the study.

Subjects who missed sessions because of sickle cell crises were given individual sessions as indicated at different times. These subjects continued in the study until the end of the study.

Summary

This study has been organized and presented in five chapters. Chapter 1 presented the notion from which the study problem was derived along with the problem and the rationale for its significance.

One solution to the delivery of health care to persons at risk is the use of group process conducted in a primary prevention nursing endeavor. This is the focus of the use of a specified nursing interventionary protocol "The Motivation Interaction". For the purposes of this study a population at risk, Sickle Cell Anemia clients, was selected. Sickle cell anemia clients, on a standardized psychological test in the pilot study, demonstrated a lower self concept (which is a precursor of mental illness)

than did the control group which did not have Sickle Cell Anemia.

CHAPTER 2

REVIEW OF LITERATURE

The literature provides a wealth of material on the theories of motivation. There have also been many studies done in nursing related to personnel and patient motivation.

Motivation

Herzberg (1959) in his landmark study conducted with factory workers developed a two-factor theory dealing with first and second level motivational factors. First level factors were identified as those factors from which the "respondent derived his feelings with the subcategories of (1) factors perceived as a source of feeling of recognition, (2) factors perceived as a source of failure to obtain recognition, and (3) factors perceived as a source of disapproval" (p. 44).

Among the effects Herzberg noted in factory workers was the Hawthorne Effect, a positive effect incurred by control subjects due simply to the fact that interest shown in them was, in itself, a form of recognition. From this result Herzberg proposed a strong prescription for consideration of a positive approach to mental health: "The one most significant thing to be done to raise the

mental health of the majority of our citizens is to increase the potential for motivation in work" (p. 137). Herzberg also examined the concept of participation from the standpoint of goal setting which he believed to be necessary for strong motivational actions.

Nursing studies have investigated motivation as it relates to nurses, student nurses, and patients. White and Maguire (1973), in a study which applied the Herzberg theory to job satisfaction and dissatisfaction among hospital nursing supervisors, examined motivation as expressed in terms of job satisfaction related to such factors as having the opportunity for creating, challenging, and role-appropriate work; by acts of recognition and by a chance to advance. These investigators formed the assumption that the higher level of Maslow's need hierarchy was the desirable level of function for the subjects.

Allen (1975) reported on a study of nursing staff motivation in which the identified components were (1) making each individual feel important via clear communication channels, (2) giving everyone an opportunity to be heard and to be a part of the planning, (3) indicating the need of individuals and justifying the importance and responsibility of their jobs, (4) utilizing continuing education which provides a chance to learn, and (5) providing tangible rewards for a job well done.

Fleming (1975) writes on successful and unsuccessful ploys for motivating a failure-plagued staff. She presents an approach to motivation via "solution seeking for problem solving" of a commonly perceived problem. The initial step was unity in recognition and delineation of the problem. With this achieved, the second step was maintenance of interest via in-service education which provided a solid, common data base. A potent deterrent to sustained motivation which was encountered was an increased work load. Two positive components which expedited motivation were the use of personal contact and intermittent successes.

Kramer and Schmalenber (1977) collaborated on a study which examined the relationship of empathy development to the success in first job satisfaction. Empathy is considered as a basic element of interpersonal process. It is defined as "the recognition and sharing of another's feelings." A perceived requirement by these two researchers was something which they designated as "cue sensitivity which requires the use of all senses to take in stimuli" (p. 14). They proposed that this cue sensitivity is basic in motivating interactions. They further suggested that "listening to feelings comes from subtle inflections, postural and facial cues" (p. 14). The results of this study showed that nurses scored low on the item of interpersonal skill.

In a study of student clinical experience, Fischback (1977) equated motivational philosophy with open-ended student clinical experience. Building on the concept of individual differences as a basis for success and achievement, she lists four important factors: expectations for rate of growth and learning, honest praise, encouragements, and the establishment of challenging measurable goals. These must be utilized by the motivating instructor.

Some of the studies dealt with people and patient motivation. Mager and Pepe in a 1976 study examined motivation and interaction. Their approach to motivation was from the standpoint that punitive "rewards" are mistakenly expected to motivate. They suggest that the solution is a "change in the conditions of consequences" (p. 66).

A study by Muller (1975) in remotivation of the elderly lists five basic steps as essential to remotivation: (1) climate of acceptance, (2) bridge to reality, (3) sharing the world we live in, (4) appreciation of the work of the world, and (5) climate of appreciation.

Snyder and Wilson (1977) delineate a number of concepts in the use of a psychological assessment tool as it is related to aspects of motivation and life style. The hierarchy used as a model is that of Abraham Maslow; however, the accurate assessment of need levels focuses on nursing and the nurse's ability to motivate behavior toward wellness.

A Nursing 77 Grand Rounds Experience recounts a series of interactionary events involved in the care of a young cardiac patient. Each nursing professional who was involved gives her assessment of a specific incident. Motivational interactions overcame the psychological defenses (anxiety and denial) and affected recovery following a period of relapse.

RN (1977) reports a study in which good patient compliance is attributed to the health care delivered by two nurse practitioners to hypertensive patients. Increased patient compliance was measured by the following behaviors: (1) keeping appointments, (2) taking medications, and (3) following dietary directions.

A Scheideman (1976) study observed student nurses as they participated in an interaction with a group of patients in a psychiatric facility. Their positive approach and expectation of responses from old and dysfunctioning old men provoked reasonable, logical, and creative reactions. The author speculated that the positive interactions were promoted by the expectations and actions of the students because they had not read the charts and hence their expectations evoked the unusual social behavior.

Patterson and Zderad (1976) present a phenomenological viewpoint as a basis for phenomenological nursing which they, by definition, call "nurseology." They believe "the

relevance of phenomenological nurseology ranges from the formulation of nursing constructs to the creation of theoretical proposition" (p. 73). Emphasis is on the individual, individual differences, and needs. The nurse as an individual is also the nurse as a researcher, a rigorous disciplinarian.

Self Concept

Regarding the relationship of self concept to physical pathology and mental health, the literature reveals a study as early as 1959 by Gividen in which the relationship of self concept to mental health was studied in paratroopers. The self concept was assessed as a "sensitive index to mental health" and "a predictor of the ability to withstand stress" (p. 31). The successful paratroopers were shown to have significantly more "healthy self concepts."

Schwab, Clemmons, and Hardee (1966) found no relationship between self concept and type of illness, duration of illness, mode of onset, patient familiarity with illness, or the severity of the illness as rated by the physician or the patient. They also found no correlations with age, sex, race, education, religion, or income.

These study findings were in contradiction with others. A study done by Dimaya prior to the Schwab et al. study in 1963 supported the effect of duration of illness and length of hospital treatment for Hansen's disease (leprosy) on

lowering the self concept. Deviant self concepts were found also in a study of adolescent deaf subjects by Randall (1969) and with blind adolescent clients by Meigham in 1969 and 1971. Differences in self concepts were found between the subjects and the control groups. Both groups were institutionalized.

The literature shows that findings have consistently supported the hypothesis that negative self concepts are closely related to society (-.60, Fitts, 1965; -.67, Ornes, 1970; -.65, Miller, 1971).

In a study by Lowery and Ducette (1976), the internal and external locus of control clients were studied to determine locus of control relationship to disease-related learning and control. Their conclusion was that the study supported the prediction that internal subjects are more active seekers of information than external subjects. This is significant because studies (Lefcourt, 1966; Gurin et al., 1969) have shows that black clients are generally determined to perceive themselves as having an external locus of control. Cogent facts emerging from these investigations were the effectiveness of group process, and that the behavioral response of a person with a chronic disease will be "related to cognitive activity and/or compliance will be related to locus of control" (Lowery and DuCette, 1976, p. 59). The participation of the patient in his own

treatment regimen was thus enhanced by his understanding of his disease, which promoted a feeling of control or autonomy. The group process provided both an outlet for frustrations and a sounding board for verbalization of coping behaviors, options, and alternatives.

Sickle Cell Anemia

More than one thousand literature citations listed in the Special Literature Search by the National Library of Medicine deal with the incidence of the various sickling hemoglobinopathies such as "The Distribution of the Sickle Cell Trait in Zambia" (Barclay and Splaine, 1972) or the various pathological conditions and treatment modalities in such instances as "Effect of Maternal Sickle-Cell Trait on Perinatal Mortality" (Platt, 1971) or "Nephrotic-uremic Syndrome in Sickle Cell Disease" (Rivera, Miranda, & Reyes, 1968). They treat the subjects of screening under such titles as "Evaluation of Several Methods Used in the Detection of Sickle Cell Disease" (Schorr and Tischer, 1973) and "The Use of the Cord Blood Sample for the Detection of Sickle-cell Anemia in the Newborn" (Metters, Huntsman, and Yawson, 1970). Other studies deal mainly with specific therapy useful in the treatment of the sickle-cell disease and the sickle-cell crisis. Examples are "Intravenous Urea in Management of Sickle-Cell Crisis" (Nalbandian, 1972) and

"The Critically Ill Child: Sickle Cell Disease Crises and Their Management" (Pearson and Diamond, 1971). Still others deal with management of anomalies produced by the disease in such studies as "Perceptual-Motor Dysfunction in Children with Sickle Cell Trait" (Flick and Duncan, 1973) and "Sickle Cell-Thalassemis Presenting as Arthritis of the Hip" (Hurwitz and Roth, 1970) and "Sickle Cell Trait in a Caucasian Population" (Gelpi, 1971). There are over one thousand such citations.

Another area well covered in the Literature Search by the National Library of Medicine is that of Genetic Counseling. Over three hundred citations are listed through March 1978. These include "Family Counseling in Sickle Cell Anemia" (Nash, 1977), "Hemoglobinopathies and Pregnancy" (Renaud and Dervain, 1977), and "Sickle Cell: The Significance of Screening" (Sullivan, 1977).

Very few of the citations deal with the incidence of problems in the psychosocial area. One study with specific implications was done on "Anxiety, Self-concept, and Personal and Social Adjustments in Children with Sickle Cell Anemia" (Kumar, 1976). A battery of standard psychological tests was used to determine if there was a significant effect from a life-long chronic illness on the self concept, anxiety level, and personal and social adjustment of twenty-nine black sickle cell anemia children. Psychological

tests used were the Sarasen "General Anxiety for Children," the Piers-Harris Children's Self Concept Scale, and the California Test of Personality. Statistical analysis was done on the anxiety scores, the self-concept scores, the twelve subscores of the personal and self-adjustment scores, and the total scores. Results showed a patient mean of 23.55 and standard deviation of 8.64 on the anxiety scale contrasted with the control mesh of 30.54 and 7.30. This was statistically significant with a computed t ratio = 3.25 ($p = 0.005$). On the Piers-Harris, the mean and standard deviation for the patient group were 59.44 and 12.32. The computed t ratio was 4.76 significant ($p = 0.001$). The results revealed that "the youngsters with sickle cell anemia did not differ from a peer group in social, personal, and total adjustment." However, the self-concept scores of the "patient" group were lower than the comparison group. Since the patient mean score for the self-concept was significantly lower than the control group, the investigators recommended that "special measures should be taken to enhance their self-concept. The medical and psychosocial care must include guidance and especially reassurance to strengthen self-confidence" (Kumar, 1976, p. 860).

In a study comparing the scores of 37 black students and 142 white children by Booker (1974), black fourth graders scored higher than their white peers; mean scores

were 61.89 and 57.58, respectively. Other studies showed either no significant difference or black children scoring lower than whites (Coover, 1974). These variable results suggest that race, per se, is not a main determinant of self-concept (Piers, 1969).

Numerous studies have been done using the Piers-Harris scale to determine self concept in children in widely diversified situations. One study (Piers, 1972) which compared the prediction of children's responses on the Piers-Harris by parents of children being seen in clinics with a control group showed the clinic children to have "only slightly, though significantly, lower scores on the scale" (Piers, 1969, p. 17).

A second study by Joan LePontois (1975), a social worker in collaboration with a nurse therapist, Gwin Gary, was conducted in Chicago in 1975. This study, titled "Adolescents with Sickle Cell Anemia Deal with Life and Death," utilized peer group process with female subjects aged fifteen to twenty-four years. It extended over a period of nine months with a group of nine young women.

The investigators posited the belief that "episodic life interruptions characteristic of sickle-cell anemia limited the range of possible identifications for the adolescent and engendered maladaptive behavior" (LePontois. 1975, p. 79). Rationale for use of group was "the

adolescent's self-esteem is enhanced when he finds himself understood by others who have many of the same vulnerabilities."

Negative feelings toward parents, anger, rejection of mothers, and concerns about their own identity were elicited. Sexuality and identity as well as a "depreciated body image" present problems in integrating personalities for mentally healthy adulthood. Additionally, feelings such as envy, rivalry, and anger toward other women also surfaced. Finally the group was able to explore their concerns about death and dying and some integration of feelings was possible. In the last group meetings, there were choices of topics manifested. No statistical analysis of data was performed. Both studies indicate that the adolescent years are a critical period in the adjustment of the sickle cell clients.

Group Process

One method of assuring the delivery of health care to a number of clients simultaneously is by way of therapeutic group process. Because the group provides contact with several clients simultaneously, it is a sensitive response to the societal demand for access to the health care delivery system for larger numbers of people. Because "group therapy is primarily a social and psychological process in which an emotional reeducational and relearning

experience can occur" (Johnson, 1963, p. 1), it affords the community mental health nurse with a realistic intervention technique in health promotion for chronic populations at risk.

Other studies which have utilized the group process in management with chronicity have been conducted with congestive heart failure patients (Rosenberg, 1971) and diabetic clients (Lowery and DuCette, 1976). In both of these studies, one factor elicited was that the participation of the patient in his own treatment regimen was enhanced by his understanding of his disease which promoted a feeling of control or autonomy. A second factor was that the group process provided both an outlet for frustrations and a sounding board for verbalization of coping behaviors, options, and alternatives.

Summary

In this chapter are presented theories of motivation from Herzberg (1959) in his study of factory workers' motivation to work, to Maslow (1970) with his definitive work on motivation build on a hierarchy of needs. Many motivational studies have demonstrated that behavior as predicated on need to achieve self actualization is one of mankind's strongest motives. Studies of the sickle cell anemia population have mainly been directed at detection by screening and diagnosis of the condition and complications,

determining effectiveness of screening techniques, and providing guidelines for genetic counseling. Few have been geared toward the mental health prevention aspect, although several have determined the existence of lowered self concept in this population. A hallmark study dealt with some psychosocial problems and recent literature speaks to the solution of psychosocial problems attendant to sickle cell. One 1980 article clearly states that emotional problems can precipitate the sickle cell crises.

The self concept has been called the index of mental health and studies to support this contention are legion. The health care provider has been cited as being in the best position to "coordinate necessary processes for the formation of the positive (self concept)." The group process in psychotherapy with teenagers has been supported in numerous studies, particularly short term psychotherapy with small groups has great efficacy.

The combination of primary prevention in a group process with a teenage population seems to have a high index for effectiveness. There is also a loud cry among the professionals for studies in group process constructed in such a way that replication becomes a viable reality.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

A quasi-experimental research design was used to conduct what Wandelt (1970) characterizes as a descriptive exploratory investigation for understanding the phenomenon of a prescribed motivating internation. The variables investigated were the nursing intervention of Motivating Interaction and the response of the self concept of subjects as demonstrated on a standardized test of self concept.

Wandelt justifies the use of descriptive exploratory studies in her statement that "scientific process fosters recognition of the broad applicability of the process of research to the search for knowledge . . . and in addition to those concerned with testing hypotheses, . . . it encourages the inclusion of descriptive exploratory studies in the realm of scientific inquiry" (p. xvi).

The quasi-experimental design almost characterizes the sample in that it was a nonrandom one. Dies (1979) contends that the convenience or accidental sampling method is the one most often used in clinical nursing research since the sampling units consist of those obtainable in the time

allotted. According to Krampitz and Pavlovich (1981), the rule of thumb is that the units to be studied meet the stated eligibility criteria for the investigation.

Setting

This investigation was conducted in a metropolitan area of approximately five hundred thousand people.

Population and Sample

When this investigation was undertaken, the SCAAT maintained a list of over five hundred sickle cell anemia clients with the sickle cell trait and the sickle cell anemia disease. Many of the sicklers attend a weekly clinic held for continuing care, health teaching, and genetic counseling. Permission to use teenage subjects culled from the population of sicklers known to the SCAAT was obtained from the executive director. Permission was also given for the investigator to hold the group sessions at the SCAAT office building.

The sample was a convenience sample consisting of those teenagers who were referred through the aegis of SCAAT. Criteria for acceptance into the group was that the subject be a teenager between the ages of thirteen and nineteen years. Both male and female subjects were accepted. The basic criterion was that they be from a population diagnosed through laboratory screening techniques as having sickle cell anemia.

The size of the sample was projected to be that considered suitable for group process and interaction (Wolf, 1965)--approximately five to eight subjects. The group was begun with four subjects whose consent had been obtained and who had taken TSCS, with the fifth possible subject known to the investigator. At that time the group consisted of two males and two females with the age range from thirteen years to sixteen years. The addition to the group of another male subject whose age was sixteen years completed the original group. Later, two more female subjects were added to the group. Their ages were sixteen and eighteen years, respectively. This brought to seven the number of subjects involved in the group process investigation.

Protection of Human Subjects

Responsible consideration was given to the protection of human subjects. The forms in Appendix A were submitted to the Human Subjects Review Committee of the Texas Woman's University at Denton, Texas. Consent was also obtained from the agency under whose aegis the study would be conducted: the Sickle Cell Anemia Association of Texas in Fort Worth, Texas. The director gave permission for use of the agency clients as subjects and also consented to the use of the agency facilities as a meeting site for the group. This consent form from the agency is in Appendix A.

The new guidelines were observed in the protection of subjects in the study. The study was designed in such a way that an explanation of the study and its benefits and lack of risk could be given to the prospective subjects. The subjects were recognized as individual autonomous beings with capabilities and potentials for understanding and responding to the investigation as suggested by Krampitz and Pavlovich (1981). Each subject was given the opportunity to enter into the research voluntarily or to refuse to participate. This right was voiced at the beginning prior to the explanation and at the end of the explanation, so that no one was forced against his/her will to listen to the plea of the investigator.

The purpose of the study and the process by which it would be conducted were carefully explained to both the subject and a parent of the subject since all subjects except one were less than eighteen years of age. The one eighteen-year-old subject had just graduated from high school and possessed the intelligence to make the decision for herself regarding participation. Questions were answered and solicited by the investigator. All other consents were signed by both the subject and a parent. (See sample sheet, Appendix B.)

Subjects were told that they might elect at any time to discontinue the participation and it was explained that

in that case, they would be asked to take the post test at that point. Subjects were assured that failure to participate would not affect in any way their relationship with the SCAAT or result in any other retaliatory action. Subjects were also made aware that there would be no monetary compensation for their participation.

Privacy and confidentiality were assured. No names will be used in the study. Subjects were respected as responsible people in that all meetings were held at the stated times at the stated place. Some transportation was furnished by the investigator when it was needed.

Instrument

Tennessee Self Concept Scale (TSCS)

There was one instrument which was used to measure client responsiveness in this investigation. Two other descriptive measures were used to examine the phenomenon of motivating interaction.

The instrument used to measure the responsiveness of the self concept to the motivating interaction was the Tennessee Self Concept Scale (TSCS). This is a standardized psychological test which has an established reliability and validity. The Tennessee Self Concept Scale is a questionnaire type test administered as a paper and pencil test on which the respondent indicates his answer on a Likert type

scale numbered from one to five. It uses a multiple-point rating which asks how true the given description is of the respondent. The Tennessee Self Concept Scale purports to sample feelings about Physical, Moral-Ethical, Personal, Family, and Social Selves as well as self opinions about Identity, Self Acceptance, and Behavior. These can all be separately computed for individual scores in each of these areas.

The TSCS also provides a profile sheet on which the test scores can be graphically displayed. This profile sheet can be used to portray paired scores of groups or scores for visual evaluation without the use of statistical analysis.

The instrument is in the form of a psychological questionnaire, constructed as a set of verbal evaluations or descriptions about which the respondent indicates the degree of appropriateness to himself. The two mean features are:

1. It is predominantly verbal. The technique is dependent on the verbal aptitude of the individual being tested. Thus the behaviors can be said to be in the form of "elicited verbal self-presentation" (Wells and Marwell, 1976, p. 80).

2. The measurement is rather direct and therefore involves the respondent's own perception of self, behaviors, aspirations, and feelings rather than those which would be

available from objective reporting (Wells and Marwell, 1976, p. 90).

The administration of a tool with multiple components is congruent with the prevailing belief that the self concept is considered as a complex, heterogenous and multi-faceted social process. The TSCS was developed to meet the need for a scale which is simple for the subject, widely applicable, well standardized, and multi-dimensional in its description of the self concept. The scale has been found to be useful in a variety of ways: for counseling, clinical assessment and diagnosis, personnel selection, as well as for research in the behavioral sciences.

There are one hundred items which are self-descriptive statements from which the subject attempts to portray his own picture of himself. It can be administered with individuals or in groups and is useful with subjects age twelve or older who have at least a sixth grade reading level. It can be applied to the whole range of psychological adjustment from healthy, well adjusted people to psychotic patients.

Required time for the administration of the TSCS can vary from ten to thirty minutes. Original test pool items were derived from other self concept measures such as those developed by Balester (1956), Engel (1956), and Taylor (1953). The final items utilized in the scale are those judged by seven clinical psychologists and agreed on unanimously.

The TSCS measure yields reports on the semantic differential scales. The degree of congruence between real self-positives and ideal self-negatives is computed from the responses. It was developed as a response to the need for a research instrument which would contribute to the difficult problem in mental health research beginning about 1955.

Reliability of TSCS

Wells and Harwell (1976) state that "reliability, along with validity, is an inseparable issue within the basic question of the goodness of measures" (p. 149). Reliability may be considered as a problem involving the two issues of equivalence or consistency and stability. There are numerous testing theories which produce a "set of procedures or formulas for estimating . . . reliability" (Wells and Marwell, 1976, p. 149). However, the lack of consensus about the nature of the self concept and its related constructs and the form of its relation to empirical events makes the use of some measurements less reliable.

Traditionally reliability techniques involve the use of alternate forms, split-half tests, the internal consistency process of treating single items to test-retest measures, and the test-retest measure itself. In instances such as the present study when the study makes the assumption that the self concept is not highly stable during adolescence where it is treated as a situational

manipulatable process, the stability coefficient is negated to some extent. However, reliability for the TSCS has been established through repeated measures of the same individuals over long periods of time. There has been a consistency in the similarity of profile patterns in these cases and others for periods exceeding a year. Wells and Marwell (1976) cite a Congdom study with psychiatric patients which obtained a reliability coefficient of .88 for the Total Positive Score.

Bentler in Buros (1972) states that "the internal consistency coefficients would be quite high considering the large correlations obtained between scale scores and other measures such as MMPI scales" (p. 366). Bentler also mentions the major subscores in the twenty-nine variable intercorrelation matrix where some correlations are up to .91.

Validity of TSCS

There are no simple answers to the question of which tests best measure the self concept, and in the final analysis reliability and validity must be considered concurrently, for according to Wells and Marwell (1976),

> reliability places limits upon the validity a measure can have, since vali-variance is a subset of systematic variance. At the limit, if all score variance is valid, validity is equal to the square root of the reliability (p. 149).

Criterion validity in measuring self concept is dependent upon descriptions of properties by the individual while, according to Wells and Harwell (1976), the

> essential level of reality or causality is unobservable. No exhaustive class of behavior exists, so no exclusive criteria can be set. "Criterion-related" validation is perhaps the optimum which can be obtained (p. 153).

Content validity can be achieved in the measurement of self concept since responses can measure a segment of behavior being identified. Construct validity, the most important of the three, is the most basic and inclusive category of scientific validation and emphasizes interpreting or explaining responses by reference to a conceptual framework.

Validation of the Tennessee Self Concept procedures were performed for four kinds of validity:

(1) Content validity was determined by retaining only those items in the test for which there was unanimous agreement by the expert judges in their classification of it.

(2) Discrimination between groups by the scales was determined by the discrimination made between such groups as psychiatric patients and non-patients, between delinquents and non-delinquents, between the average person and a psychologically integrated person. A discrimination between patients and non-patients was also shown by the means and standard deviations computed on the scores of

these groups. A wider spread of scores was almost consistently shown by the patient group. Buros (1975) contends, "In summary, the TSCS ranks among the better measures combining group discrimination with self concept information" (p. 151).

Data Collection

Pilot Study

Data collection for this investigation began with the pilot study, conducted in 1978, in which the investigator sought to determine whether the instrument would delineate the lowered self concept in the sickle cell population. A sample of fifteen sicklers and fifteen normal teenage subjects was tested with the prospective instrument, the Tennessee Self Concept Scale, and another standardized test, the Piers Harris Self Concept test. The Piers Harris had been utilized in a previous study to identify the lowered self concept in a sickle cell population in California (Kuman, 1973).

Results of the pilot indicated that the Tennessee Self Concept test did delineate a lowered self concept as did the Piers Harris. These findings were significant on a *t* test of the mean scores of the participants at the alpha .05 level. The TSCS was then deemed a suitable instrument for this study.

Main Study

Data collection for this quasi-experimental study was continued in group sessions held for one and one-half hour (ninety minutes) intervals for six group sessions over a period of two months at the offices of the SCAAT in Fort Worth, Texas. Prior to the first session, the explanations, consent signing, and administration of the TSCS as a pre-test had been done. At the beginning of the first session, a Data Sheet was filled out by each subject (see Appendix E). This activity was utilized as an icebreaker and a get-acquainted strategy. The exchange of some data items as the sheets were filled out by the subjects served to initiate the first discussion, because some of the questions inquired into the number of crises and the age at which the Sickle Cell Anemia had been first diagnosed. Since the sessions were to be taped, this was cleared with the clients at this time.

Session 1. The group format was observed with the subjects seated on two sofas placed at right angles to each other in the director's office at the SCAAT Agency.

Formulated protocol for the phenomenon, Motivation Interaction, was followed. Goals for the first session were the orientation to reality and realistic choices (Wolf, 1965). Content for this session: the first part of the session was occupied with the completion of Data Sheets

(Appendix C). These sheets initiated the EIRE Phase of "establishing the social relationships in the group" (Yalom, 1975, p. 303).

The subjects were prepared for the slide presentation (Narrow, 1979) on Sickle Cell Anemia which had been produced by the investigator. The subjects were encouraged to verbalize "I didn't know that!" at any point during the slide presentation when facts with which they were unfamiliar were presented. This was highly effective in eliciting some unexpected gaps in knowledge about the genetic etiology of sickle cell anemia.

The EIRE Phase of the Motivation Interaction consumed the major portion of this session with the DGDG Phase consuming most of the remainder with the slide presentation on Sickle Cell Anemia. The EAA Phase was a response to the "I Didn't Know That" expressions. The GF Phase dealt with the content for the next session.

Session 2. The ambience of the first meeting transferred into the second session in that the "search for similarities" (Yalom, 1975, p. 305) was incorporated into the goal of combating feelings of loneliness and isolation (Wolf, 1965) through the predetermined need to work with the application of similar physical problems and outcomes.

The strategy utilized was the introduction of use of personal and family myth (Feinstein, 1979) regarding Sickle

Cell Anemia. Yalom (1975) touts the value of "early family scripts which are reenacted in group" (p. 98). Personal myths are defined as follows:

> . . . complex cognitive structures that organize specific classes of information and influence decisions . . . and provide a foundation for internal dialogue that governs understanding and behavior (Feinstein, 1979, p. 204).
>
> Personal myths affect daily decisions by mediating perception, motivation and behavior (Feinstein, 1979, p. 199).

Gardner's (1971) technique of understanding personal mythology through story telling with stories which must have a beginning, a middle, an end, and a moral was utilized as a specific instigator for identifying and sharing the commonalities of sickle cell shared by group members. The morals at the end of the stories were the most revealing aspect.

The character in this session was mainly in the EIRE Phase although the myths provided some DGDG aspects, particularly in providing a direction for the Data Giving component. The EAA Phase was directed at exploration of the morals of the stories. The GF Phase followed with resolution of myths through a recognition of commonalities in solutions.

Session 3. Goals were directed toward the third stage of group: the development of cohesiveness (Yalom, 1975) and the achievement of better interpersonal relationships (Wolf,

1965). The content was designed to explore some of the problems common to all adolescents in the area of physiological and psychological growth and development. According to Narrow (1979), "the patient can participate more fully in his own treatment regime if he is knowledgeable about his body and its functioning" (p. 43).

Narrow (1979) cautions against an assumption at the beginning of a nurse teaching intervention that a knowledge about body and body functions exists. The greater proportion of this session was devoted to the DGDG Phase with a somewhat structured didactic framework extant during most of the session.

The entrance of a new group member necessitated the repetition of the slide presentation and this effectively created a cohesion and group focus which had not been anticipated. The EIRE component of the session had some aspects of the initial session, but it was short lived. The DGDG Phase was well integrated with the new members confessing "I didn't know that." The awareness of peer "group-age" emerged. Identity occurred. Group cohesiveness, which according to Yalom (1975) "enhances the development of other important phenomena" (p. 47), was apparent. The GF Phase concerned the expressions of group cohesiveness and future group work.

Session 4. In this session the goal for the group was the growth of mutual empathy and the acceptance of others (Wolf, 1965). Defense mechanisms and mutuality in group support (Yalom, 1975) were encouraged. In essence this session became Phase III, the Exploration of Alternatives and Answers through emphasis on a problem solving format. Expressions of problems which emanated from sickle cell anemia specifics in growth, in social problems encountered in the home and family and at school were encouraged. Stress management was introduced. Psychodrama in the management of a real current critical incident in the management of anger as an alternate manner to going into sickle cell crisis was utilized. The expressed capability for handling future anger by the subject who was involved in the incident was the content of the GF Phase.

Session 5. Goals for this group session were the development of more socialized personalities and the strengthening of defenses, growth of interpersonal relationships and reinforcement of mutual empathy and acceptance (Wolf, 1965); Yalom, 1975). The concept of self actualization was introduced with Maslow's interpretation of personal myths being the outcome of certain universal human values such as truth, goodness, and beauty which are the potential for all human beings. That these myths can influence choices in the direction of actiontaking was

emphasized. The structure and the verbalization of new personal myths in a personal mythology utilizing appropriate defense mechanisms were encouraged, as an index of increasing mental health. The resolution of cognitive dissonance between existing personal myths and the new input in the data exchange in the sessions was promoted as an evidence that learning had occurred.

This session had a balance, or an integration on the components of the first three phases of the Motivating Interaction. Goal Focusing occurred with group concurrence on myth outcomes.

Session 6. Goals for the termination session had been elucidated at the end of the previous session. In preparation for termination, the specific goals were expansion of goals from prior sessions with verbalizations of self autonomy as validation for closure of the Motivating Interaction. Subjects had been informed from the beginning about the number of sessions and had been reminded during Session 5.

Expressed goals were for improved self image through feedback from peers and the authority figure (Wolf, 1965), a reduction of feelings of loneliness and isolation, increased socialization and a mutual empathy expressed in the termination process. In addition to the termination behaviors, the closure aspect was enhanced by the

administration of the post Tennessee Self Concept Scale as the final activity of the group.

As had been anticipated, this session was unique in that the greater proportion of time was spent in the Goal Focusing Phase of the interaction.

Summary. The sessions were taped to gather data for the Content Analysis research component and to provide data for the statistical analysis of variance. The tapes were then replayed by the researcher and the units identified and coded for programming into the computer. The list of anticipated behaviors is found in Appendix E.

Taped copies of content from the sessions were also excerpted for use by the independent observer who was to determine if the four phases of the phenomenon occurred during each session. These taped scripts were also utilized for computing the frequency and central tendency measures of the units of verbalizations to the phases of the interaction. The prepared list of expected verbal behaviors was checked against those recorded.

Treatment of the Data

In the treatment of the data, the investigator sought to examine the Motivating Interaction from both a qualitative and a quantitative standpoint. The subjects were examined in a parametric testing situation since their data were presented in an integer form.

Measures of central tendency, a frequency count and non-parametric quantitative measures, were used to determine the interaction in each phase of the interaction in each session. This was validated by ANOVA for phases and sessions. The utilization of Content Analysis determined the qualitative frequency of behavioral expressions designated by criteria lists of behaviors to be expected in each phase of the phenomenon. The effectiveness of the treatment on the subjects was measured by the use of pre and post tests on their self concept measured by their scores on the standardized test for self concept.

Description of the Sample

Information from the Data Sheet profiles was tabulated for each subject. The results were compiled and are reported in Chapter 4.

Testing of the Hypotheses

A parametric test, the Student *t*, was deemed appropriate for the treatment of the Self Concept data scores on the pre and post scores of the Tennessee Self Concept Scale with each component score for each subject subjected to the ttest. The Student *t* is appropriate when the number of subjects is small.

Nonparametric tests were deemed appropriate for the treatment of the data gathered on the Motivating Interaction.

Siegel (1956) stated that such tests are appropriate when the assumptions for parametric tests cannot be met. Non-parametric tests offer an advantage for easy applicability to nominal or ordinal data. The underlying distribution of data from the investigation was not comparable with any other such data as none are available, since no such comparable studies were found in the literature search.

The parametric ANOVA was also used.

Hypothesis 1. This hypothesis was tested by using the Student *t* parametric test. This test is appropriate for data for which quantitative data which can be ranked on an ordinal scale of measurement for related samples are available.

Subject scores in the categories of Physical Self, Moral-Ethical Self, Family Self, Personal Self, Social Self, Self Criticism, Identity, Behavior, and Self-Acceptance on both pre and post tests were tabulated.

Computer programs were run to obtain the Student *t* values for each subject in each of the categories. The *p* values were compared to an alpha level of .05. If all of these values were equal to or less than .05, this allowed the null hypotheses to be rejected. If total rejection of the hypotheses of no significant difference for any subject scores occurred, this indicated that there were significant differences between the pre and post scores of

the subjects on the TSCS. Examination of the separate category scores according to the sub-hypotheses was also done.

Hypothesis 2. This hypothesis was tested by using content analysis. Berelson (1954) states:

> The single characteristic (for content analysis) on which all definitions agree is . . . the requirement of quantification. Of primary importance in content analysis is the extent to which the analytic categories appear in the content. . . . Sometimes it takes the form of quantitative words like "more" or "always" or "increase" or "often" (p. 17).
>
> Content analysis is a research technique for the objective, systematic, and quantitative description of the manifest content of communication (p. 18).

There are three general assumptions for the use of content analysis (Berelson, 1954):

> 1. Content analysis assumes that inferences about the relationship between intent and content or between content and effect can validly be made, or the actual relationships established. Content analysis is often done to reveal the purposes, motives, and other characteristics of the communicators as they are (presumably) "reflected" in the content: or to identify the (presumable) effects of the content upon the attention, attitudes, or acts of readers and listeners (pp. 18-19).
>
> 2. Content analysis assumes that study of the manifest content is meaningful. . . . That is, the content analyst assumes that the "meanings" which he ascribes to the content by assigning it to certain categories correspond to the "meanings" intended by the communicator . . . the assumption is that there is a common universe of discourse among the relevant parties, so that the manifest content can be taken as a valid unit of study (p. 19).
>
> 3. Content analysis assumes that the quantitative description of communication content is meaningful.

> This assumption implies that the frequency of occurrence of various characteristics of the content is itself an important factor in the communication process under specific conditions. It does apply only when the content units have a more or less equal weight, for the purpose of the analysis (p. 20).

Berelson (1954) recommends that content analysis be undertaken only when relative frequencies of content categories are relevant to the problem at hand.

Kerlinger (1973) equates content analysis with "observing and measuring variables" (p. 526). He considers its major advantage to lie in its "general applicability." As required by Berelson (1954), the general category for analysis, the Motivation Interaction, is contained in the hypothesis and it, in turn, is "translated into the concrete specific indicators for purposes of the actual analysis" (p. 164). The U, the universe of content to be analyzed, as stated, is the Motivation Interaction. Thus in the format suggested by Kerlinger (1973, pp. 528-531), Step I: Define "U" the universe of content to be analyzed. "U" = the motivating interaction with the four phases as defined in the study.

Each phase represented a category (partitioning of "U") with behavior intervals juxtapositioned according to chronology of occurrence. Step II: List the major units of analysis.

The word = the smallest unit. Underlying the word are

those word specifics for the four phases of the interaction. Phase I: The Expressive, Integrative Relationship Establishing Phase (EIRE) with "helping" words, social emotional, "support words" and forward going words. Phase II: The Data Giving, Data Gathering Phase (DGDG) with data giving words/phrases and data gathering words/sentences/questions. Phase III: The Exploration of Alternatives; Attempted Answers (EAA) phase with problem solving words, analyzing words/phrases and forward going words. Phase IV: The Goal Focusing (GF) phase with resolution words/phrases, autonomous words/phrases, and closure words.

The source = the client or subjects. Each subject verbalization is the equivalent of a unit for analysis.

The theme = a sentence or proposition about the phase content. Sets of themes represent positive self references or negative self references.

Item unit = one complete session with the group: a whole production.

Step III: Quantification. Kerlinger (1973) suggests that all materials are potentially quantifiable. A nominal measurement was used. The number of units in each category were counted after they were assigned to the appropriate category. Ranking and rating were not used since the variability of any weighting of units would depend on its use in a specific item unit. Finally there was a computer

analysis of the content as suggested by Kerlinger (1973). The computer printed out the analysis and on the basis of the rules built into it arrived at an overall assessment.

A prepared list of appropriate behaviors for each phase was utilized in determining the rate of appearance of the given behavior verbalizations in each phase of an item unit. Each phase was treated as an individual cell and the statements were counted as presence of expected behaviors. Analysis of variance between phases and sessions was run.

The non-parametric frequency count and measures of central tendency were used as the descriptive statistic for analyzing the characteristics of the content of the Motivating Interaction sessions. This analysis described the data surrounding the Motivation Interaction and cannot be generalized beyond it.

Hypothesis 3. With one variable, the one way ANOVA was used. This is a useful parametric test when there is at least interval measurement of the variables involved (Siegel, 1956). The significance of interaction within the phases and the sessions was computed using the F ratio with an alpha level of 0.05. The significance of phase by session interaction was also computed. If all these values were equal to or less than 0.05, the null hypothesis would be rejected and the hypothesis of significance of difference would be accepted.

Summary

In this chapter both the parametric and non-parametric statistics which were utilized for data treatment are presented. The *t* test was deemed appropriate for use with client mean score totals from the Tennessee Self Concept Scale. Non-parametric measures of frequency and central tendency, Means, Mode, and the Median were used to ascribe certain attributes of the Phases within the sessions.

CHAPTER 4

ANALYSIS OF THE DATA

In this chapter a description of the subjects in the sample, evaluation of the process of the nursing intervention, and the statistical results of the parametric and nonparametric tests used for the hypotheses are presented.

Analysis of the Motivation Interaction

The Motivation Interaction sessions were held at the offices of SCAAT over a total period of two months. Total number of sessions held with group were six. Time for each session was one and one-half hours. The format was somewhat didactic with guidance being given by the investigator and movement from one phase of the interaction to the next positively instigated. Denial surfaced rapidly following the signing of the consent sheet and the administration of the TSCS, prior to attendance at the first session. The incidence of sickling crises presented a very real problem particularly following several weekends of constant rain. For those two weeks, all the sicklers missed, or had hospital trips and trips to the doctor. One client was hospitalized so close to graduation that she feared she would not finish school. Another was hospitalized at the end of school for one week.

Within the group sessions, rapport was established and self disclosures were made. Group support emerged and was manifested mainly in positive ways. There were very few critical or sharp remarks. Mainly anecdotal material emerged with identificational comments among the group members. Because of the didactic format, the interactional aspect did not develop to its fullest potential. Each session progressed through all four phases of the investigative phenomenon.

As anticipated for proportionate length of the phase of Motivation Interaction, the initial session had the longest proportion of time devoted to the Expressive, Integrative Relationship Establishing (EIRE) phase. The building of trust was paramount, but was not totally established during the EIRE phase at this session.

The second phase, the Data Giving, Data Gathering (DGDG) phase of the interaction was second longest and began with a slide presentation on Sickle Cell Anemia prepared by the investigator. This was unexpectedly well received; the subjects identified with numerous aspects of the slides, particularly a section dealing with a sickle cell screening clinic. A game creatively called "I Didn't Know That" was instituted prior to the slide presentation. Subjects were to yell out "I didn't know that!" whenever a fact new to them was presented. This was highly successful

and served to garner data or identification of areas of no or misinformation without the usual self-consciousness of self disclosure. These topics served as content for later DGDG sessions.

The Exploration of Alternatives and Attempted Answers EAA) phase encompassed discussion of some of the "I Didn't Know Thats" and had good input from the subjects because all did not share the same informational gaps, and so an exchange of facts about their commonly shared disease entity ensued.

This first Goal Focusing (GF) phase was devoted to a summation of new information received from the slide presentation and the discussion of facts revealed about sickle cell anemia. One area of universal lack of knowledge was that of the genetic requirement that there be two parents with sickle cell trait in order for an offspring to be born with sickle cell anemia. Closure was effected as a direct progression from the summary in which the participation was good, with subject vying for the opportunity to be the first to state a new fact learned.

The second session saw the emergence of some group resistance which persisted for the next several sessions. However, subsequent sessions proceeded according to protocol except that transitions into the various phases required some prodding by the investigator. Two sessions utilized a Family Myth format. A third session had some elements

and allusions to myths incorporated into it also. The use of family reenactment through the use of "Family Myths" proved a most useful strategy in that it removed from the sicklers the burden of placing guilt for certain behaviors directly on their own family members and made the necessary impersonal-personal revelations possible. Yalom (1975) supports this in the belief that "the primary family group of each member is an omnipresent specter which haunts . . . the room: . . . determines the nature of its parataxis distortions" (p. 98). Yalom states further that the use of myths makes it possible for early family scripts to be reenacted in the group. From time to time a reluctance to participate on a specific occasion was attributed to the typical acting out teenager behavior.

Description of the Sample

In this quasi-experimental study the subjects were limited in number initially by the commonly accepted group size (Yalom, 1975) for effective group interaction and finally by self limitation by the number of suitable subjects encountered within the time frame allocated by the researcher. Total number of subjects encountered and from whom consent, both subject and parent, was obtained was seven. All seven subjects were also given the TSCS pre test. All seven met the criteria stipulated for

participation in the investigation. However, the total number who met in group session was six.

One of the subjects missed two sessions due to sickle cell crises before verbalizing a desire to withdraw from the study. A second subject participated in one session and then was prevented due to sickle cell crises from further participation. Both subjects were given the post test when they indicated withdrawal from the investigation. These two members were lost and two additional members were picked up after the initial contacts. The last two subjects who came into the group were present at the last three group sessions. The other subjects participated in the group sessions for a total of six sessions with the exception of one subject who went out of town prior to the last two sessions.

Of the seven participating subjects, there were four females and three male subjects. Their age range was from thirteen to eighteen years with an age span of five years and a median age of fifteen years. The mode was also fifteen with four of the subjects fifteen years old. One subject was thirteen; one was sixteen, and one was eighteen years old. The following table (Table 1) gives genetic and pathological information taken from the data sheet compiled on each subject.

TABLE 1

DEMOGRAPHIC DATA

Sample	Age (Years)	Sex	Grade	Sickle Cell Pathology			Birth Position
				AA	SA	SS	
Subject 1	13	M	7	S	M, F	s	Youngest
Subject 2	15	F	9	3B	M, F	s	Youngest
Subject 3	16	F	10	2S	M, F	s	Youngest from this marriage
Subject 4	15	M	10		M, F, B	s	Younger
Subject 5	15	F	10	2B	M, F	s	Oldest
Subject 6	15	M	10	S	M, F	3B, s	Youngest
Subject 7	18	F	12	B, S	M, F, B, S	s	Middle child

AA = no sickle cell hemoglobin

SA = Sickle cell trait

SS = Sickle cell anemia

Hypothesis 1

These hypotheses tested whether there were significant differences between the scores of the subjects on the pre TSCS and the scores of the subjects following treatment on the post TSCS. The TSCS yielded separate scores for the Physical Self, the Moral-Ethical Self, the Personal Self, the Family Self, the Social Self, Identity, Self Acceptance, and Behavior. The scores for each of these categories were computed for each subject for both the pre and post tests (Table 2). The Profile Sheets were plotted so that a visual

Table 2

Analysis on the Basis of Individual Category Scores, Pre and Post TSCS

Category	Percentage of Change in Scores by Number of Subjects		
	Increased	Remained Same	Decreased
Physical Self	71.0	14.5	14.5
Moral-Ethical Self	56.5	14.5	29.0
Personal Self	56.5	14.5	29.0
Family Self	56.5	14.5	29.0
Social Self	85.5		14.5
Identity	85.5		14.5
Self Acceptance	56.5	14.5	29.0
Behavior	85.5		14.5

picture of the subject's self concept was portrayed against the established mean and standard deviation score norms. Special attention was directed to the characteristic "dip" or "notch" on the Physical Self which had appeared on all the pre test profiles of the subjects. This "notch" seemed to demonstrate most sensitivity to change. An increase in scores in the categories of Social Self, Identity, and Behavior was shown by 85.5 percent of the subjects, and 71 percent of the subjects increased their scores on Physical Self. Fifty-six and one-half percent of the subjects showed increased scores in the categories of Moral-Ethical Self, Personal Self, Family Self, and Self Acceptance.

Fourteen and five-tenth percent of the subjects remained unchanged in their scores in the categories of Physical Self, Moral-Ethical Self, Personal Self, Family Self, and Self Acceptance. Twenty-nine percent of the subjects showed decreased scores in the areas of Moral-Ethical Self, Personal Self, Family Self, and Self Acceptance; 14.5 percent decreased scores in Physical Self, Social Self, Identity, and Behavior.

More subjects changed in the areas of Social Self, Identity, and Behavior than did the subjects change in Physical Self, the category in which the "notch" was noted. However, a look at Table 3 shows that the degree of change in a positive direction was greatest for Physical Self with

Table 3

Degree of Change: Gain/Loss on Category Scores by Subject

	S 1	S 2	S 3	S 4	S 5	S 6	S 7	Gain/Loss
Physical Self	+11	-1	+14	+7	+8	+2	0	+31
Moral-Ethical Self	+3	+7	-2	0	+1	+1	+1	+11
Personal Self	+1	-2	-1	+1	0	0	+6	+5
Family Self	+4	-1	-9	+2	+3	0	+4	+3
Social Self	+8	+2	-8	+6	+4	0	+2	+14
Identity	+5	+5	-5	+7	+6	+1	+5	+22
Self Acceptance	+1	+1	-11	+5	+2	0	-1	-3
Behavior	-19	-3	+10	+4	+2	+1	+9	+6

an overall subject gain of 31 points. The next highest overall point gain of 22 was in the category of Identity, with Social Self having the third highest gain of 14 points. The other two-digit gain was shown in the Moral-Ethical Self, with the only overall loss being the -3 in the category of Self Acceptance.

Thus the most dramatic changes on the profile show in the category of Physical Self with increased scores in the category of Identity correlating with the score increase in Identity by 85.5 percent of the subjects. The Physical Self gain is congruent with the 71 percent number of subjects showing score increases in this category.

The Self Acceptance score loss of -3 is congruent with the 56.5 percent subject score increase, the 14.5 percent subject score remaining constant, and the 29 percent subject score decrease in this category.

The categories with high score gains and a major number of subject score increases suggest that the didactic format which dealt with the understanding of the physiological aspects of the sickle cell anemia and the group format may have had some effect. The use of peer groups has been acknowledged as one effective milieu for many chronic conditions. The high scores on Social Self categories on both tables support this theory as well.

It is noteworthy that the "low" scoring categories of

Personal Self, Family Self, Self Acceptance, and Moral-Ethical Self are identical in the score increase and remained the same in score decrease percentages. They also had gains of +5, +3, -3, and +5, respectively, in overall gain/loss points.

Scores from the t test run on the pre and post scores of the clients on the Tennessee Self Concept Scale are shown in Table 4. It can be noted that there is no significance at the alpha level of 0.05 for Pre and Post Totals at 0.121; Pre and Post Moral Self at 0.890; Pre and Post Personal at 0.466; Pre and Post Family at 0.813; Pre and Post Social at 0.379; Pre and Post Satisfaction and .829; Pre and Post Identity at 0.065; and Pre and Post Behavior at 0.073.

Significant difference at alpha = 0.05 level was yielded for Pre and Post Physical Self at 0.041.

Hypothesis 2

This hypothesis examined the occurrence of specific client behaviors in each phase of Motivation Interaction and the interactionary aspects of the sessions as units on content analysis. The frequency of interactional behavior in each of the phases in each of the six sessions can be seen in Table 5. Discussion of this frequency count is continued on the following pages.

Table 4. t-test on TSCS Means.

T - T E S T

Variable	Number of Cases	Mean	Standard Deviation	Standard Error	(Difference) Mean	Standard Deviation	Standard Error	2-tail Corr.	2-tail Prob.	T Value	Degrees of Freedom	2-tail Prob.
POSTOT	7	331.4286	31.978	12.087	8.1429	11.936	4.512	0.942	0.002	1.80	6	0.121
PRETOT		323.2857	35.307	13.345								
POSPHY	7	66.2857	8.655	3.271	5.7143	5.823	2.201	0.744	0.055	2.60	6	0.041
PREPHY		60.5714	7.138	2.698								
POSHOR	7	66.2857	9.604	3.630	-0.1429	2.610	0.986	0.963	0.000	-0.14	6	0.890
PREHOR		66.4286	9.693	3.664								
POSPER	7	67.1429	4.140	1.565	0.8571	2.911	1.100	0.934	0.002	0.78	6	0.46
PREPER		66.2857	6.370	2.407								
POSFAM	7	68.2857	7.566	2.860	0.4286	4.577	1.730	0.866	0.012	0.25	6	0.813
PREFAM		67.8571	9.118	3.446								
POSSOC	7	65.8571	7.734	2.923	1.8571	5.178	1.957	0.848	0.016	0.95	6	0.379
PRESOC		64.0000	9.713	3.671								
POSSEC	7	35.0000	5.260	1.989	4.7143	5.823	2.201	0.363	0.423	2.14	6	0.076
PRESEC		30.2857	5.057	1.911								
POSIDN	7	120.5714	14.998	5.669	3.7143	4.348	1.643	0.961	0.001	2.26	6	0.065
PREIDN		116.8571	15.805	5.974								
POSSAT	7	101.8571	12.615	4.768	-0.4286	5.028	1.901	0.939	0.002	-0.23	6	0.829
PRESAT		102.2857	11.201	4.234								

TABLE 5

CELL MEANS FOR CONTENT ANALYSIS FREQUENCY COUNT

Sessions	Phases	Means
1	I	4.00000
	II	14.75000
	III	5.25000
	IV	1.50000
2	I	5.25000
	II	14.50000
	III	6.50000
	IV	1.00000
3	I	2.25000
	II	11.00000
	III	10.00000
	IV	1.75000
4	I	3.00000
	II	7.00000
	III	10.50000
	IV	5.75000
5	I	3.00000
	II	8.00000
	III	13.25000
	IV	4.25000
6	I	6.00000
	II	10.25000
	III	4.00000
	IV	8.75000

Phase I, the Expressive, Integrative Relationship Establishing (EIRE) Phase, was appropriately low key in all sessions. The social emotional aspect, though present, is never overriding, nor does it supercede the "working" units in any of the six sessions. Its overall mean is the lowest of all phases. Means according to sessions are:

Session 1	4.00000
Session 2	5.25000
Session 3	2.25000
Session 4	3.00000
Session 5	3.00000
Session 6	6.00000
Its mean:	4.83000
Its mode:	3.00000
Its median	3.50000

Phase II, the Data Giving, Data Gathering (DGDG) Phase, as the first "working" phase can be seen as the dominant phase in frequency of content occurrence in sessions 1, 2, and 3. For sessions 4 and 5 the DGDG Phase is superceded only by Phase III. Phase II reaches its lowest point in session 4 and rises to become the dominant Phase again in the final session. Means according to sessions are:

Session 1	14.75000
Session 2	15.50000
Session 3	11.00000

Session 4	7.00000
Session 5	8.00000
Session 6	10.00000
Overall mean:	10.95000
Its mode:	14.75000
Its median:	10.62500

Phase III, Exploration of Alternatives and Attempted Answers (EAA) Phase, is also a "working" phase, somewhat dependent on the input data from Phase II. On the graph it can be visualized as closely allied with Phase II during sessions 3, 4, and 5. Means by sessions are:

Session 1	5.25000
Session 2	6.50000
Session 3	10.00000
Session 4	10.50000
Session 5	13.25000
Session 6	4.00000
Overall mean:	8.25000
Its mode:	10.00± (rough approximation, no real mode.)
Its median:	8.45000

Phase IV shows an almost constant rise on the graph as the client's group skills in expressing autonomy increase throughout the sessions. The cell means for the sessions were:

Session 1	1.50000
Session 2	1.00000
Session 3	1.75000
Session 4	5.75000
Session 5	4.25000
Session 6	8.75000
Overall mean:	4.16600
Its mode:	1.00± (three values at 1.00 or less than 2.00)
Its median:	3.00000

Graphs depicting composite means, modes, and medians show Phase II (DGDG) to have been the dominant phase in all three measures of central tendency. This can be attributed to the didactic format of a teaching intervention (see Figures 2, 3, and 4).

A better visualization of the interactional process of the phases in each session and of the progression of the Motivation Interaction from session 1 through session 6 can be seen in Figure 5.

From the cell means of content in the phases of Motivation Interaction during the six sessions, it can be discerned that good interaction among the phases occurred in all the sessions. It is also apparent that all four phases occurred in each of the sessions. Measures of central tendency validate this also.

Figure 2. Composite Mean of Content Frequency in Phases of Sessions

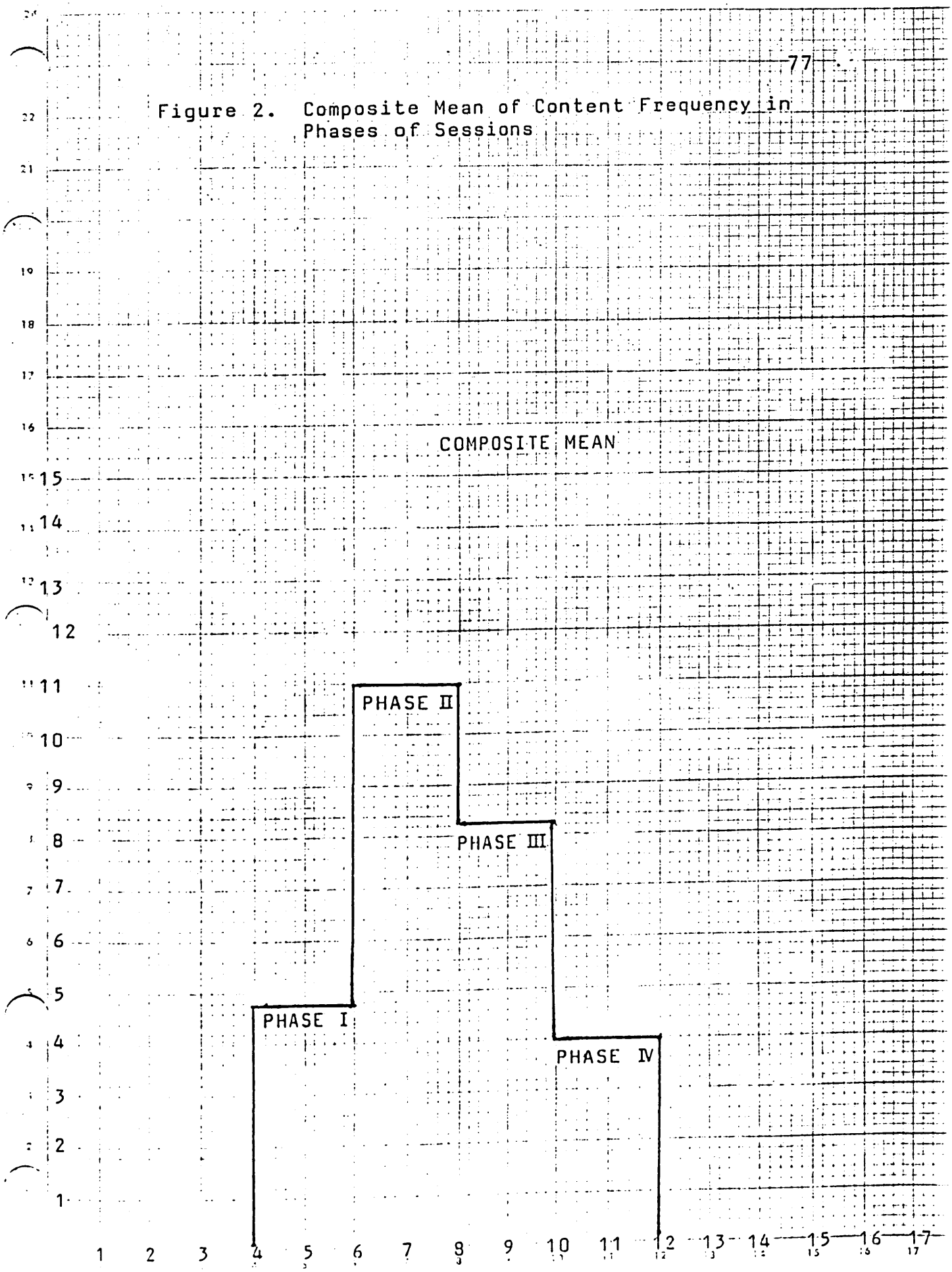


Figure 3. Composite Median of Content Frequency in Phases of Sessions

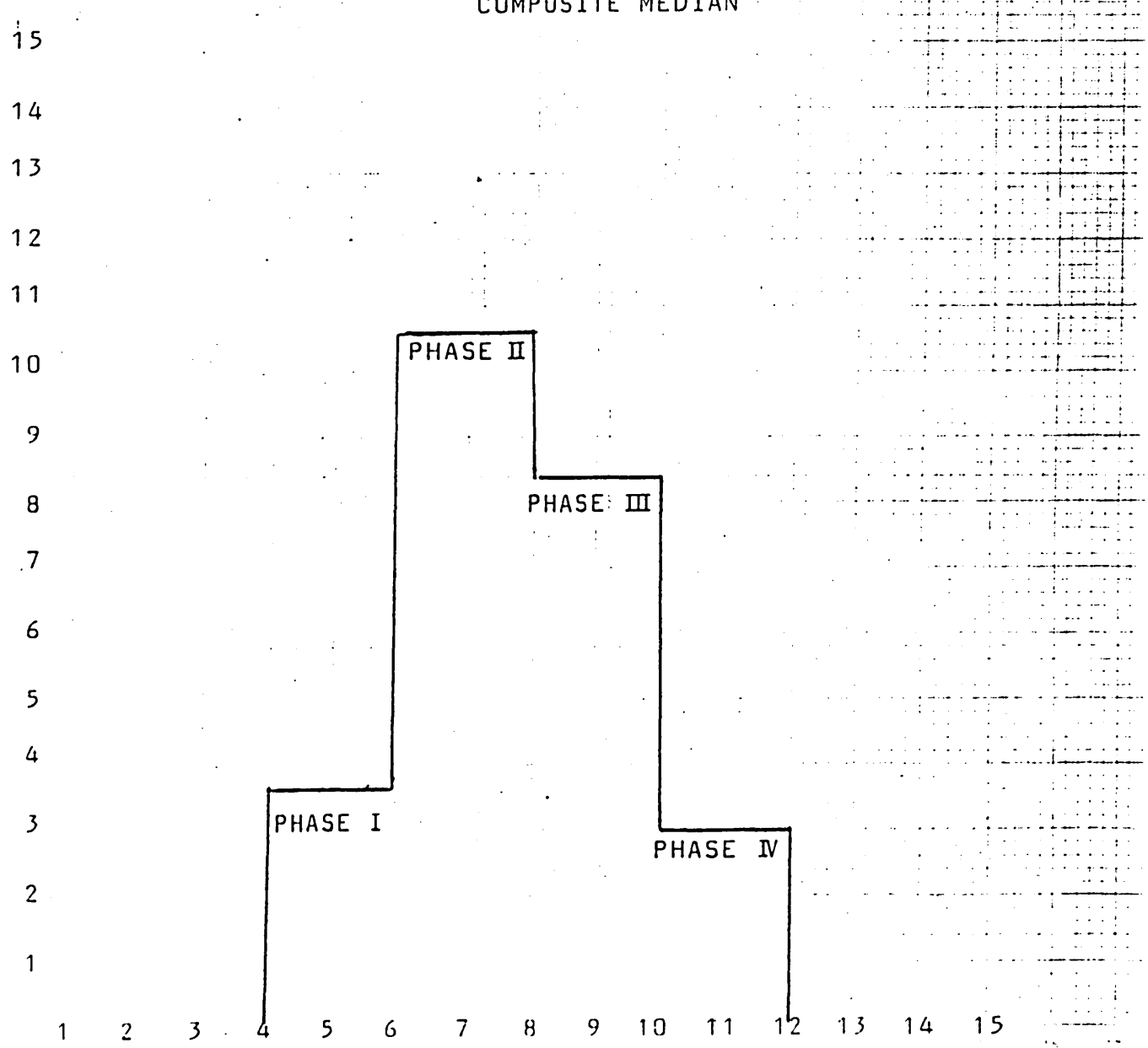


Figure 4. Composite Mode of Content Frequency in Phases of Sessions

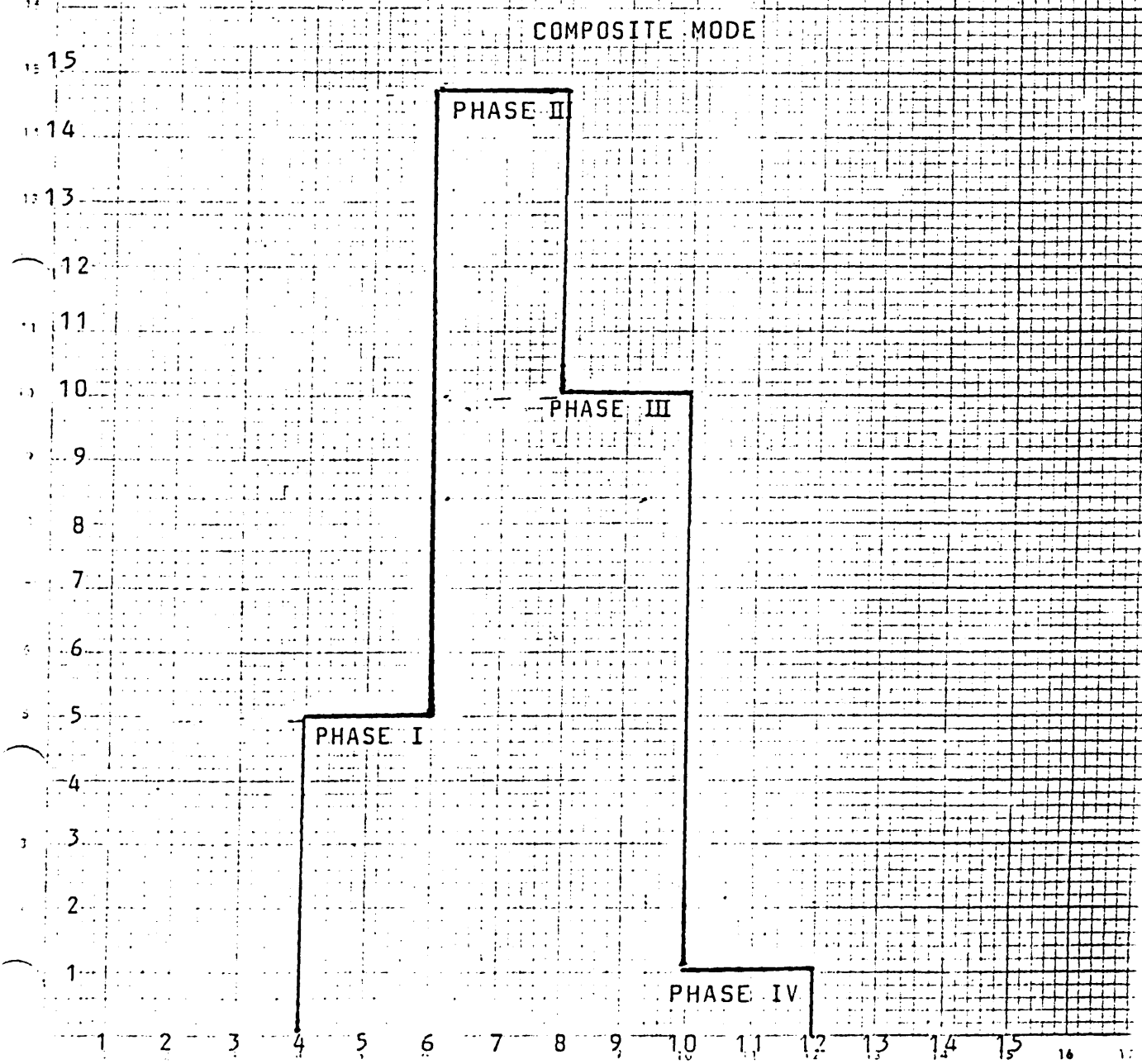
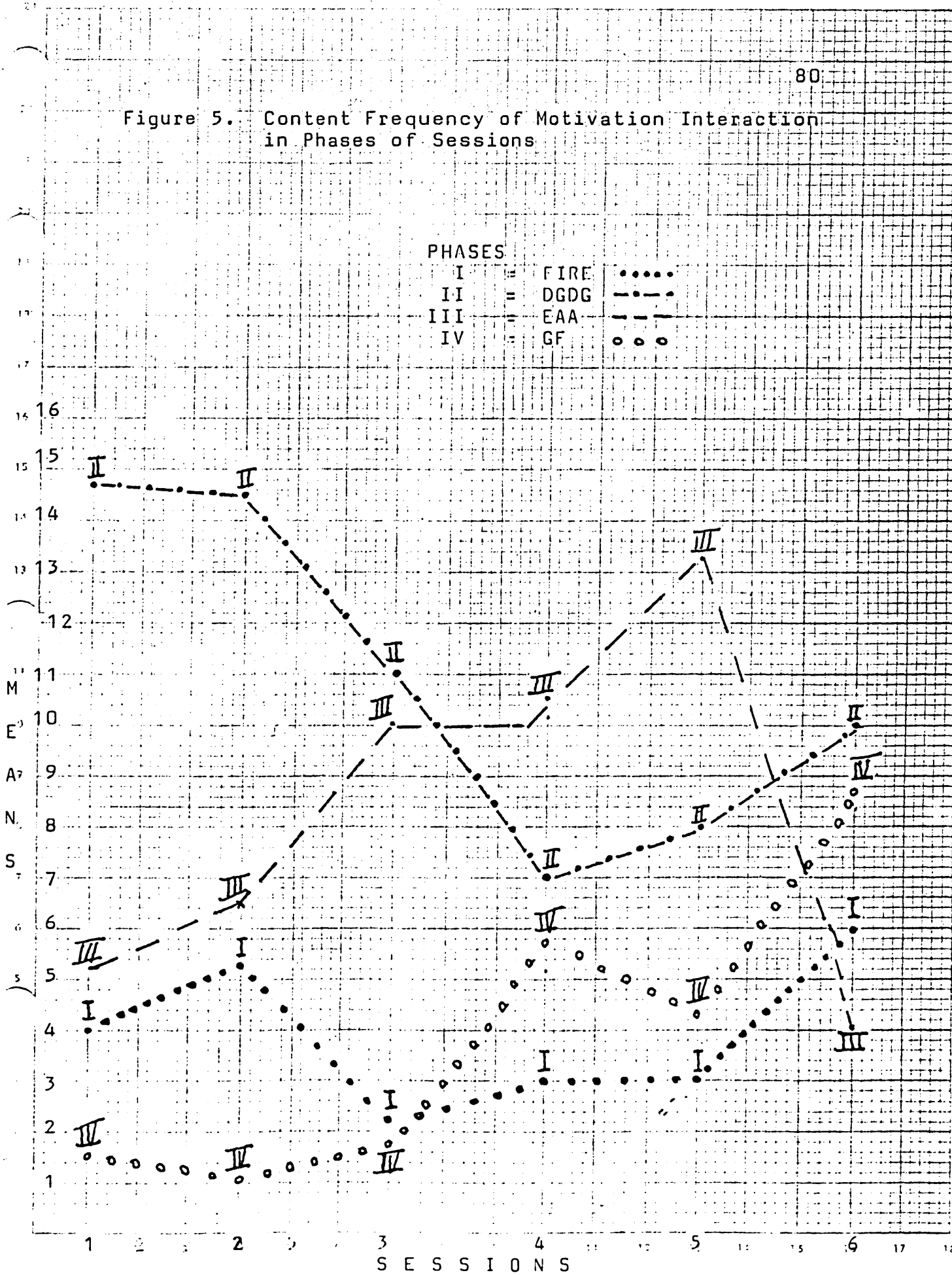


Figure 5. Content Frequency of Motivation Interaction in Phases of Sessions



Hypothesis 3

This hypothesis tested whether there was significance in interactional behaviors within the phases and sessions of the Motivational Interaction. An analysis of variance was used to examine the presence of significance difference in the interactional levels in the sessions and the phases (see Table 5). At the alpha level of 0.05, the interaction for sessions was 0.9975. The ANOVA outcome for the interaction within the phases of Motivation Interaction with an alpha level of 0.05 was 0.016. The phase of session interaction was 0.0005.

Summary of Findings

Demographic

1. The teenage clients ranged in age from thirteen years to eighteen years.

2. The teenage sicklers were in most instances the youngest in their families.

3. Diagnosis of the sickle cell anemia in clients had occurred in early childhood.

4. All clients continue to experience sickle cell crises with accompanying acute pain into their teenage period.

Hypothesis 1

This hypothesis asked whether there was a significant

TABLE 5

REPEATED MEASURES OF ANOVA

Analysis of Variance for
1st Dependent Variable:

Source		Sum of Squares	Degrees of Freedom	Mean Square	F	Tail Probability
1.	Mean	4347.04167	1	4347.04167	13.36	0.0354
	Error	975.87500	3	325.29167		
2.	TSES	13.08333	5	2.61667	0.06	0.9975
	Error	693.00000	15	46.20000		
3.	ZPHA	867.45833	3	289.15278	5.93	0.0161
	Error	438.95833	9	48.77315		
4.	YZ	672.91667	15	44.86111	3.53	0.0005
	Error	571.66667	45	12.70370		

difference between the pre and post scores of each client on the TSCS. The t test was run on each of the eight categories on the test. Client profiles were also plotted according to test manual protocol for comparisons. The t test showed no significant difference on total mean. The profiles showed a change in every instance on the physical self profile score except in the instance of the subject who withdrew.

The physical self notch was the one factor which contributed to the overall lowered self concept in the sickler scores on the TSCS and was the universally low score for the Physical Self. It manifested itself on the profile as a dip or notch in the scoring pattern. This prevailed no matter how the overall profile was presented; i.e., if the client scored at the mean or above in all other categories, then the physical self would show a drop below the other scores even if the Physical Self score was also at the mean or better. If the client showed a prevailing profile well below the mean, then the Physical Self score dipped even further below the mean than the other scores. The investigator's notion that this score might be more sensitive to interaction than any of the others, based on the genetic and physical components of sickle cell anemia, proved to be a valid assumption.

Hypothesis 1a was accepted because there were significant differences between the pre and post scores at the

alpha level of .05 in Physical Self. The other hypotheses were rejected because there was not significant difference between the pre and post scores at the alpha level of .05.

Hypothesis 2

The four phases of the phenomenon of Motivation Interaction are discernible as entities and can be described by content analysis of the phases and group sessions. Hypothesis 2 was accepted.

Hypothesis 3

There is content in verbalization frequency which is phase specific and can be statistically analyzed. There is significant phase interaction within the sessions. Hypothesis 3 was accepted.

CHAPTER 5

SUMMARY OF THE STUDY

This chapter presents an overall summary of the investigation. Discussion of significant findings and conclusions reached are presented. Implications for nursing in teaching and client care and recommendations for further studies are also considered.

Summary

This investigation focused upon the phenomenon called Motivation Interaction and examined the phenomenon and its effect upon a group of clients selected from a population at risk. Three questions were raised: (1) Will the scores of the clients reflect a change in self concept when they are subject to a motivation interaction with specific protocol and specified criterion behavior? (2) Will the phenomenon of Motivation Interaction be discernible in the four phases as presented during the client group sessions? (3) Will the verbalized content during each phase of the Motivation Interaction be phase specific?

Three hypotheses were tested. The instrument used in the research design for testing the first hypothesis was a

standardized psychological test, the Tennessee Self Concept Scale. Demographic data sheets were utilized and provided information for some conclusions. These sheets were investigator-designed. A parametric test was used for testing the first hypothesis concerning the clients. Parametric and non-parametric t4sts were used to test the hypotheses about the phenomenon of Motivation Interaction.

The sample consisted of a group of seven teenagers with the diagnosis of sickle cell anemia. These clients were drawn from the population available to the investigator through the aegis of the Sickle Cell Anemia Association of Texas at Fort Worth.

All the participants in the study were volunteers and all the criteria expressed by the Committee on Human Rights for Research Subjects were met. All of the clients except one were below the age of eighteen years, and parental consent was obtained for these.

From Table 1, Demographic Data, it can be seen that all subjects had a diagnosis of sickle cell anemia. By genetic demand, all subjects' parents both possessed the sickle cell trait. Additionally, most of the siblings of the subjects had the sickle cell trait, or the disease itself, although there were a few notable exceptions. In most instances, six of seven, the subjects were the youngest in birth order in their families. This suggests that childbearing in

families stopped with the appearance of a child with sickle cell anemia.

In physical appearance, four of the subjects were small for age, with all three males being in this group. Two of the females were on the small average size, and one female, the eighteen-year-old, was well developed. By self report, all are able to return immediately to daily activities and school following periods of hospitalization for sickle cell crises without periods of recuperation at home. All reported numerous sickle cell crises during the past year. All declined to specify a number of crises, but all admitted to having been hospitalized at least once during the past year because of sickle cell crises. One subject has had several serious surgical procedures including surgery for gallstones since he was twelve years old. All subjects have been hospitalized for blood transfusions and all are on some medications at home. These include antipyretics such as Tylenol, major tranquilizers such as Thorazine, and narcotics such as Talwin and Codeine. All the sicklers are under the care of private physicians.

Because of the smallness of the sample, there can be no generalizations made beyond those which apply to the subjects themselves. This is one delimitation. Although all sickle cell anemia victims are eligible to utilize the services of Sickle Cell Anemia Association of Texas (SCAAT),

a second delimiter is that the population was drawn from those known to the SCAAT and, therefore, may not be completely representative of the total sickle cell anemia population in Fort Worth. However, by working from the common denominator of the SCAAT, the researcher was able to include in the sample subjects who utilize three separate area hospitals and seven different private physicians. This aspect provided some diversity to the sample.

Only one group of subjects was used in the sample since the subjects were used as their own control. The use of subjects in this manner is thought to be a most valid method for controlling for variables which could not otherwise be controlled. Siegel (1954) believes this is more reliable than the use of related pairs since the matching is identical and thus perfect "matching with respect to relevant extraneous variables is achieved" (p. 68).

Since the subjects were accepted as they became available at SCAAT, the sample was a convenience sample. According to Diers (1979), the "sampling frame" included certain demographic data such as age, sex, diagnoses as sampling criteria, and the ability to participate fully in the procedure with informed consent. Diers states the convenience sample is the method most often used in clinical research and as in this research are the total "timebound population" and as such "they are still samples of the total theoretical population of all patients at all times" (p. 86).

Demographic Findings

1. The sickle cell anemia clients were aged thirteen years to eighteen years.

2. All sicklers had the genetic condition and had been diagnosed in early childhood.

3. All sicklers had areas of information deficit regarding their disease entity.

4. Five of the seven teenagers were the youngest members of their families. One of seven was the oldest child in a family of five children.

5. Six of seven of the teenagers were the only members of their families to have the sickle cell disease.

6. Five of seven of the sicklers had brothers or sisters with sickle cell trait.

Hypotheses

Hypothesis 1. The result on the Student *t* for the Total Score on the TSCS was 0.121 with 6 df at the alpha level of .05. The overall self concept did not differ significantly following the Motivation Interaction sessions. Hypothesis 1 was rejected.

Hypothesis 1a. The result on the Student *t* for the pre and post scores for the Physical Self was significant at .041 with 6 df at the alpha level of .05. Hypothesis 1a was accepted.

Hypotheses 1b-1h. The results on the Student *t* for the pre and post scores for Moral-Ethical, Personal, Family and Social Self, for Identity, Self Acceptance and Behavior were not significant at the alpha level of .05 with 6 df. Hypotheses 1b-1h were rejected.

Hypothesis 2. The four phases of the phenomenon of Motivation Interaction are discernible as entities and can be described by content analysis of the phases and group sessions. Hypothesis 2 was accepted.

Hypothesis 3. There is content in verbalizations which is phase specific and can be statistically analyzed. There is a significant difference in the appearance of criterion referenced verbal units within the phases of the sessions. Hypothesis 3 was accepted.

Discussion of Findings

Before the client with an early childhood or neonatal diagnosis of a chronic disease condition such as sickle cell anemia reaches adulthood, the client has already developed a lowered self concept. There is a need for a program of group sessions for teenagers with diagnoses of chronic diseases particularly when the diagnosis has been made prior to the time of language development and good communication skills. This ability to communicate verbally has a great deal to do with the client's concept of the disease and its relation to himself. Teenagers seem to

develop a high level of comfort and rapport in the presence of age mates and are very open when emotionally facilitating ploys provide an ambience of comfort. Expressions of areas of data deficit were facilitating in moving the group into the DGDG phase of the sessions.

The degree of change in scores in the various categories of the TSCS (Table 3) suggests several things: (1) that these areas are more resistant to change than the others and would show more fluctuation in a longer term interaction; (2) that there is some sort of negative correlation in which a rise in some of the more sensitive categories results in a corresponding decrease in some of the low response areas; or (3) that the low response areas are, in fact, those most in flux during the adolescent period and may vary without rational provocation. It might be interesting to check for responsiveness in these areas in a replicated study.

Hypothesis 1

Scores on the pre and post tests on the Tennessee Self Concept Test did not indicate an overall response to the phenomenon of Motivation Interaction. However, the response demonstrated on the profile in the specific area of Physical Self suggests that a longer period of "treatment" might produce change of discernible significance in other areas as well. The sensitiveness of the Physical Self component to

the interaction reflects the fact that learning has occurred in the area of the clients' disability. It suggests that a rise in the mental health of the sicklers has been initiated and it can be projected that the elicitation of stronger verbalizations of goal focused autonomy would effectively assist the sickler to become a more self actualizing person.

The significant difference on the t test for the subject mean scores on the TSCS for Physical Self is highly suggestive of the fact that this is the most sensitive area to Motivation Interaction, particularly as it is concerned with the aspect of nursing intervention as a primary prevention modality. It supports the descriptive analysis presented earlier and the notion that in instances of physical dysfunction, involving chronicity, the component of the self concept most apt to show greatest sensitivity is the physical self, particularly in the presence of a depressed "notch" on the profile.

In other instances of chronicity, there are implications for the use of such a motivational exercise. Lowered self concepts have been demonstrated in children with diabetes and asthma. Further studies might discover a similar pattern in youngsters with many other physical disabilities particularly in instances in which there has been a long-standing problem originating in early childhood or of genetic origin.

There is a serendipitous find in the near significance on the *t* test for the pre and post scores of Identity and Behavior. These two factors of the self concept are closely aligned with peer acceptance and group process. The term Identity on the TSCS represents what the subject *is* and Behavior represents how he *acts*. Of these three components, only the Self Satisfaction representing how the subject *accepts* himself was not responsive to any degree of significance.

Hypotheses 2 and 3

These two hypotheses are discussed together since they both examine the phenomenon of Motivation Interaction and one dealt with the qualitative and the other with the quantitative aspects.

The utilization of the four phases as separate units in the nurse teaching intervention provides an on-going assessment of the progression of the process. The utilization of the phase specific verbal behaviors assists in providing the nurse with suggestive content and parameters for that content.

The Expressive Integrative interaction phase is needed because as Rogers (1970) believes, the conditions for a therapeutic relationship are created when the clients feel peer acceptance and comfort in expressing feelings. The comfort generated by phase one is essential to the Data

Giving, Data Gathering phase. In essence, the client's attention is related to the client's comfort. The ability to ask pertinent questions is based on the assurance that the questioner has achieved a level of acceptance. Thus the DGDG phase is an exchange phase with the greater burden for Giving resting with the nurse and the greater burden for Gathering resting with the client. However, the giving is fed by the recipient's skill in recognizing valid questions. The nurse has a responsibility to structure this portion of the session in a didactic manner and to come prepared with data specific for the session.

The Exploration of Alternative phase is a phase which is often neglected in the nurse teaching intervention. But the exploration should be fostered through the client presentation of alternatives which are available to the client. There is less nurse structuring here and nurse participation can be limited to throwing out some suggestions for exploration and a few suggestions for facilitation, mainly in the form of new data. The problem of solving aspect is a process in which the client internalizes the data and accepts the diagnosis of the disease entity. This self acceptance with appropriate option selection is congruent with Rogers' (1970) view that the self-actualizing quality of the client serves as the motivational force in therapy.

The Goal Focusing phase is critical for prediction of

compliance. This expresses the on-going of the motivation beyond the sessions. It validates the internalization of data by the client and its application to the client as an individual. At this point, the client must instigate the closure statements since the statements emanate from client comfort with the session and the autonomy expressions reflect client self-confidence and feelings of control. The increase in the length of this phase at the end of the sessions verified the client awareness of increased knowledge and confidence to handle himself and his disease entity.

The use of the group process was particularly valuable with the teenagers because of the dynamic of peer pressure and acceptance available to the therapist.

In the analysis of variance done on the interaction between sessions of Motivation Interaction, there was no significance of difference. This suggests there was a comparable level of activity and interactional content at all six sessions. This may be good since the cell means indicate at least a highly consistent frequenty of content input. In the analysis of variance done on the phases and the interaction within each phase of the Motivation Interaction, the conclusion drawn was that there was significance of difference. This suggests that the level of interaction within each phase differed significantly. This can be visualized on the graph in Figure 2 and is supported by the variance in the cell means.

There was significance in the interaction between the phases and the sessions of Motivation Interaction. This suggests that the content in the phases contributed to a great extent to the between phases and sessions content input, so there was greater interaction in some phases in some sessions than in others.

Conclusions

The ramifications of the results of this study proliferate in several directions. They may be divided first into those study specifics for the Motivation Interaction and the responsiveness of the study group to the intervention. A second facet of the study can be the implications which it has for nursing in community agencies with the use of groups to reach a larger parameter of clients. Finally there are some conclusions which are implicit for nursing education and teaching in that motivation is applicable to nursing students as well as nursing clients.

The Motivation Interaction can be said to be an extant phenomenon whose component phases repeat themselves in a recognizable form in consecutive group sessions. The proportion of time and content length for each phase would appear to be heavily slanted toward the first phase, the ERIE stage, during early sessions. This is congruent with the need to establish rapport, trust, and an ambience for self disclosure.

With the progression of the sessions, the second and third stages become the most elongated phases. This is logical since the didactic nature of the sessions predicts that information giving and receiving and problem solving based on this data would be the business of the group. The final stage of Goal Focusing becomes more critical as the sessions progress and to some extent seemed to be vested into the chronology of the sessions. With a stated time at which the sessions would end, the process of arriving at closure seemed imperative. Thus the time devoted to closure-seeking statements increased as that time neared. The problem solving (AA Phase) was more apt to be interspersed with autonomous remarks during the last two sessions. This was encouraged by the investigator as an evidence that the interaction had produced positive learning. Statements of new data which had been assimilated were encouraged. Thus the Motivation Interaction is functionally an entity with replicable components. Although the temporal framework almost precluded a statistically significant change in self concept, the variance in the physical scores suggests that a longer period of interaction might provide a measurable significance in the self concept score. The other scores which showed variance suggest that some greater level of mental health is being achieved in reduced denial and less defensiveness in

answering questions on the TSCS. This reinforces the theory that self disclosure is more possible in peer groups with a single somatic complaint. The peer group for the adolescent may, in fact, be the only functional group for this process.

Implications

In summary, these are implications from the study.

1. Populations at risk may benefit from interventions which increase their utilization of measures of primary mental health prevention.

2. Nurses in situations in which they exercise a degree of autonomy can effectively institute interventionary measures within the province of the nursing diagnosis.

3. Replication of the specified protocol in generalized situations such as clinical teaching with phase specific behaviors being elicited may have value in making predictions more predictable.

Recommendations for Further Study

Since the Motivation Interaction has been investigated as a replicable phenomenon whose constituent phases can be recognized in a predictive protocol, and the utilization of this phenomenon as a specific nursing teaching intervention has been tested on a group of clients from a population at risk, and the responsiveness of the sickle cell anemia

clients to the Motivation Interaction has been measured by the changes in their self concept, which is deemed to be a valid index of mental health (Fitts, 1972) by pre and post tests with the Tennessee Self Concept Scale, it is recommended that:

1. The specific nurse teaching intervention is suited to fulfilling the need for providing health care in a simultaneous manner to clients in a community setting and that this kind of care be effected in mental health and other health care facilities.

2. The phases of the phenomenon are designed for replication and generalization in future studies by the specificity of their presentation, and replication of the protocol with other clinical situations such as diabetic clinic or obstetrical classes should be made.

3. The data generating format and analysis tools from this study may provide a model for similar studies in nursing intervention with chronic disease populations such as the childhood diabetic and the asthmatic.

4. The replication of this study using the techniques of measurement which are appropriate and relatively precise for qualitative data should be attempted.

APPENDIX A

PERMISSION TO CONDUCT INVESTIGATION

TEXAS WOMAN'S UNIVERSITY
Box 23717 TWU Station
Denton, Texas 76204

HUMAN SUBJECTS REVIEW COMMITTEE

Name of Investigator: Armentha Hill Center: Denton

Address: 4520 S. Hughes Ave. Date: May 2, 1980

Ft. Worth, TX 76119

Dear Armentha Hill

Your study entitled The Responsiveness of Sickle Cell Anemia Clients to a Nurse-Teaching Intervention

has been reviewed by a committee of the Human Subjects Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education, and Welfare regulations typically require that signatures indicating informed consent be obtained from all human subjects in your studies. These are to be filed with the Human Subjects Review Committee. Any exception to this requirement is noted below. Furthermore, according to DHEW regulations, another review by the Committee is required if your project changes.

Any special provisions pertaining to your study are noted below:

__X__ Add to informed consent form: No medical service or compensation is provided to subjects by the University as a result of injury from participation in research.

_____ Add to informed consent form: I UNDERSTAND THAT THE RETURN OF MY QUESTIONNAIRE CONSTITUTES MY INFORMED CONSENT TO ACT AS A SUBJECT IN THIS RESEARCH.

_____ The filing of signatures of subjects with the Human Subjects Review Committee is not required.

_____ Other:

_____ No special provisions apply.

cc: Graduate School
Project Director
Director of School or
Chairman of Department

Sincerely,

Marilyn Hinson

Chairman, Human Subjects
Review Committee

at Denton

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Sickle Cell Anemia Association of Texas, Inc.

GRANTS TO Ms. Armentha Hill
a student enrolled in a program of nursing leading to a Ph.D. ~~Master's~~ Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem.

Response of Sickle Cell Clients to a Group Process Interaction used as a Nursing Management Intervention.

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other _____

Date: Nov. 11, 1981

Signature of Agency Personnel

Signature of Student

Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows: Original - Student; First copy - Agency; Second copy - TWU College of Nursing.

APPENDIX B

CONSENT FORM

(Form A -- Written presentation to subject)

Consent to Act as a Subject for Research and Investigation:

(The following information is to be read to or read by the subject):

1. I hereby authorize Mrs. Armentha Elliott Hill RN
(Name of person(s) who will perform procedure(s) or investigation(s)

to perform the following procedure(s) or investigation(s):
(Describe in detail)
Administer the Tennessee Self Concept Test.
Perform a group teaching activity as a nursing management intervention for a two month period (Meetings to be held once weekly).

2. The procedure or investigation listed in Paragraph 1 has been explained to me by Mrs. Armentha Elliott Hill, R.N.
(Name)

3.(a) I understand that the procedures or investigations described in Paragraph 1 involve the following possible risks or discomforts:
(Describe in detail)

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

Better understanding about my specific condition, sickle cell anemia. Help in the design of a teaching program which will help others with sickle cell anemia.

No medical service or compensation is provided to subjects by the University as a result of injury from participation in research.

4. An offer to answer all of my questions regarding the study has been made. If alternative procedures are more advantageous to me, they have been explained. I understand that I may terminate my participation in the study at any time.

_____ _____

Subject's signature Date

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

Subject is a minor (age____), or is unable to sign because:

Signatures (one required)

_____ _____

Father Date

_____ _____

Mother Date

_____ _____

Guardian Date

APPENDIX C

INSTRUMENT

INSTRUCTIONS

On the top line of the separate answer sheet, fill in your name and the other information except for the time information in the last three boxes. You will fill these boxes in later. Write only on the answer sheet. Do not put any marks in this booklet.

The statements in this booklet are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully; then select one of the five responses listed below. On your answer sheet, put a circle around the response you chose. If you want to change an answer after you have circled it, do not erase it but put an X mark through the response and then circle the response you want.

When you are ready to start, find the box on your answer sheet marked time started and record the time. When you are finished, record the time finished in the box on your answer sheet marked time finished.

As you start, be sure that your answer sheet and this booklet are lined up evenly so that the item numbers match each other.

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

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

You will find these response numbers repeated at the bottom of each page to help you remember them.

Page 1

	Item No.
1. I have a healthy body	1
3. I am an attractive person	3
5. I consider myself a sloppy person	5
19. I am a decent sort of person	19
21. I am an honest person	21
23. I am a bad person	23
37. I am a cheerful person	37
39. I am a calm and easy going person	39
41. I am a nobody	41
55. I have a family that would always help me in any kind of trouble	55
57. I am a member of a happy family	57
59. My friends have no confidence in me	59
73. I am a friendly person	73
75. I am popular with men	75
77. I am not interested in what other people do	77
91. I do not always tell the truth	91
93. I get angry sometimes	93

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

	Item No.
2. I like to look nice and neat all the time	[redacted]
4. I am full of aches and pains	[redacted]
6. I am a sick person	[redacted]
20. I am a religious person	[redacted]
22. I am a moral failure	[redacted]
24. I am a morally weak person	[redacted]
38. I have a lot of self-control	[redacted]
40. I am a hateful person	[redacted]
42. I am losing my mind	[redacted]
56. I am an important person to my friends and family	[redacted]
58. I am not loved by my family	[redacted]
60. I feel that my family doesn't trust me	[redacted]
74. I am popular with women	[redacted]
76. I am mad at the whole world	[redacted]
78. I am hard to be friendly with	[redacted]
92. Once in a while I think of things too bad to talk about	[redacted]
94. Sometimes, when I am not feeling well, I am cross	[redacted]

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

	Item No.
7. I am neither too fat nor too thin	7
9. I like my looks just the way they are	9
11. I would like to change some parts of my body	11
25. I am satisfied with my moral behavior	25
27. I am satisfied with my relationship to God	27
29. I ought to go to church more	29
43. I am satisfied to be just what I am	43
45. I am just as nice as I should be	45
47. I despise myself	47
61. I am satisfied with my family relationships	61
63. I understand my family as well as I should	63
65. I should trust my family more	65
79. I am as sociable as I want to be	79
81. I try to please others, but I don't overdo it	81
83. I am no good at all from a social standpoint	83
95. I do not like everyone I know	95
97. Once in a while, I laugh at a dirty joke	97

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

		Item No.
8.	I am neither too tall nor too short	8
10.	I don't feel as well as I should	10
12.	I should have more sex appeal	12
26.	I am as religious as I want to be	26
28.	I wish I could be more trustworthy	28
30.	I shouldn't tell so many lies	30
44.	I am as smart as I want to be	44
46.	I am not the person I would like to be	46
48.	I wish I didn't give up as easily as I do	48
62.	I treat my parents as well as I should (Use past tense if parents are not living)	62
64.	I am too sensitive to things my family say	64
66.	I should love my family more	66
80.	I am satisfied with the way I treat other people	80
82.	I should be more polite to others	82
84.	I ought to get along better with other people	84
96.	I gossip a little at times	96
98.	At times I feel like swearing	98

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

	Page 5	Item No.
13.	I take good care of myself physically	13
15.	I try to be careful about my appearance	15
17.	I often act like I am "all thumbs"	17
31.	I am true to my religion in my everyday life	31
33.	I try to change when I know I'm doing things that are wrong	33
35.	I sometimes do very bad things	35
49.	I can always take care of myself in any situation	49
51.	I take the blame for things without getting mad	51
53.	I do things without thinking about them first	53
67.	I try to play fair with my friends and family	67
69.	I take a real interest in my family	69
71.	I give in to my parents. (Use past tense if parents are not living)	71
85.	I try to understand the other fellow's point of view	85
87.	I get along well with other people	87
89.	I do not forgive others easily	89
99.	I would rather win than lose in a game	99

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

		Item No.
14.	I feel good most of the time	
16.	I do poorly in sports and games	
18.	I am a poar sleeper	
32.	I do what is right most of the time	
34.	I sometimes use unfair means to get ahead	
36.	I have trouble doing the things that are right	
50.	I solve my problems quite easily	
52.	I change my mind a lot	
54.	I try to run away from my problems	
68.	I do my share of work at home	
70.	I quarrel with my family	
72.	I do not act like my family thinks I should	
86.	I see good points in all the people I meet	
88.	I do not feel at ease with other people	
90.	I find it hard to talk with strangers	
100.	Once in a while I put off until tomorrow what I ought to do today	

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

Tennessee Self Concept Scale

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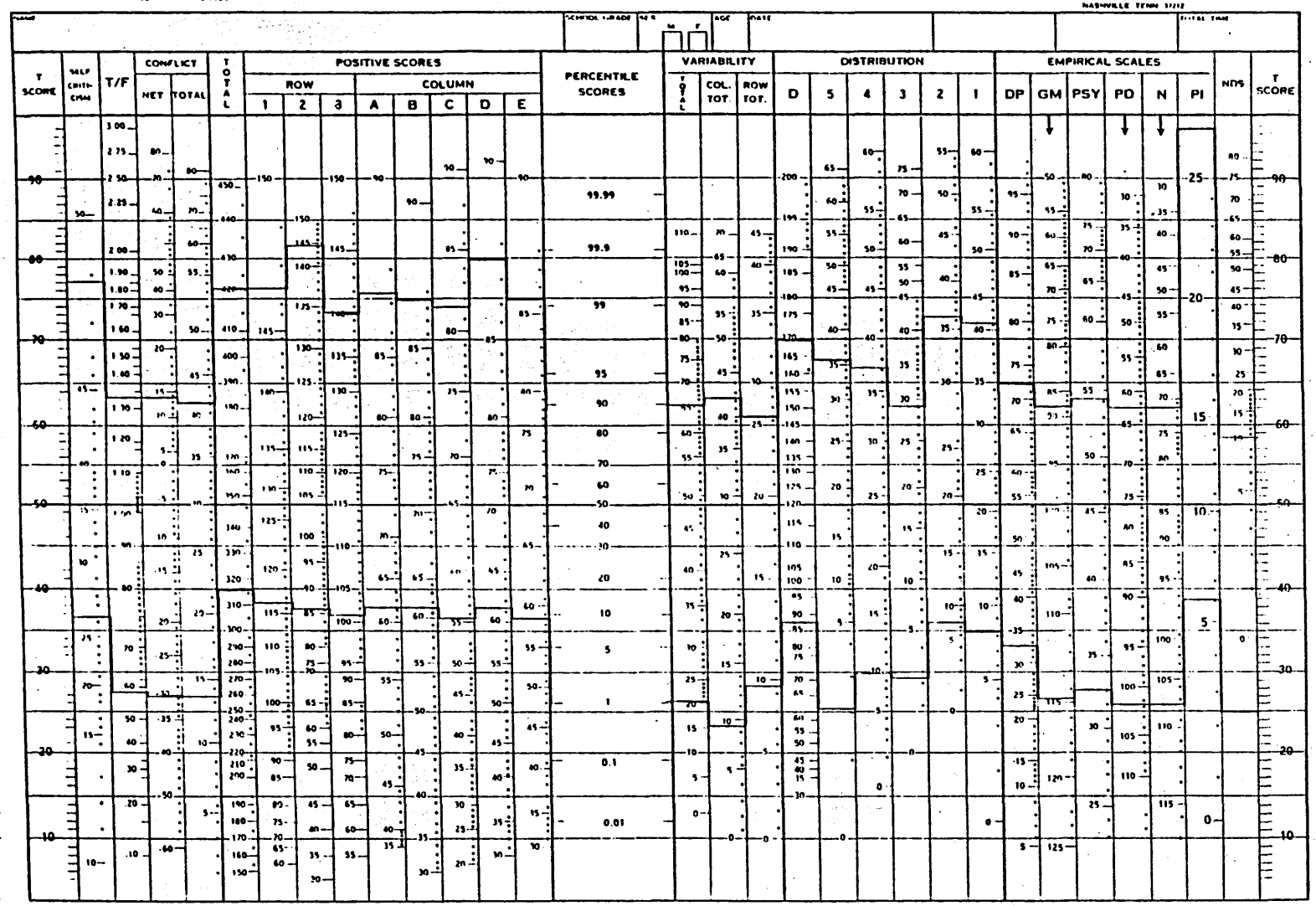
PROFILE SHEET

Clinical and Research Form

PUBLISHED BY
COUNSELOR RECORDINGS AND TESTS
BOX 6184 ACKLEN STA
NASHVILLE TENN 37212



DATA SHEET

NAME _____

SEX ___M ___F BIRTHDATE _____

ADDRESS _____ PHONE _____

	Check one SS	SA	AA	
FATHER'S NAME _____				BIRTHDATE _____
MOTHER's NAME _____				BIRTHDATE _____
BROTHERS _____				BIRTHDATE _____
_____				BIRTHDATE _____
SISTERS _____				BIRTHDATE _____
_____				BIRTHDATE _____

NUMBER OF BEST FRIENDS _____

AGE WHEN DIAGNOSED AS SS _____ HOW DIAGNOSED? _____

CRISES HISTORY _____

_____

_____

OTHER ILLNESSES _____

IMMUNIZATION HISTORY _____

MEDICATION HISTORY _____

AGE ON ENTRY TO SCHOOL _____ CK. GRADE ENTRY ___4 YR. PG. ___K ___G.1 ___OTHER

CURRENT GRADE _____ USUAL REPORT CARD GRADES _____

SCHOOL ACTIVITIES _____

OUT-OF-SCHOOL ACTIVITIES _____

RELIGIOUS ACTIVITIES _____

HOBBIES AND CLUBS _____

AMBITION GOAL _____

MCD for meetings _____ MCT for meetings _____

APPENDIX D

PERMISSION TO USE INSTRUMENT

COUNSELOR RECORDINGS AND TESTS
Box 6184 • Acklen Station
Nashville, Tennessee 37212

June 26, 1981

Ms. Armentha L. Hill
4520 S. Hughes Avenue
Fort Worth, Texas

Dear Ms. Hill:

As per your request of June 20, 1981, permission is given for you to duplicate the Tennessee Self Concept Scale for use within your dissertation. Copies should be made only to meet the requirements of your dissertation committee.

Sincerely,

Nina Peppers
Executive Secretary

np

APPENDIX E

BEHAVIORS FOR CONTENT ANALYSIS

ANTICIPATED BEHAVIORS FOR CONTENT ANALYSIS
[EXAMPLES]

PHASE I EXPRESSIVE, INTEGRATIVE RELATIONSHIP ESTABLISHING PHASE CLIENT RESPONSES

Smiling greeting — Vocal quality cheerful
Exchanges health inquiries
Exchanges account of activity between sessions and makes inquiries
Expresses affectively like/dislike of beverage
Makes social remarks about family, friends and school activities (football games, tests, etc.)
Makes expressions of common goal and group spirit
Offers help to other group members
Asks help from other group members
Offers suggestioons to other group members
Sympathizes with others
Reassures others
Gives approval
Expresses mutuality
Praises
Makes anticipatory remarks toward session task
Makes evaluative remarks about previous session
Makes summative remarks about self and previous session
Comments in other ways about self or previous sessions

PHASE II DATA GIVING-DATA GATHERING PHASE CLIENT RESPONSES

Asks general questions about stated group task
Asks specific questions about group task
Gives opinions
Makes inguiries
Asks opinions
Clarifies
Responds with specific data about specific area
Gives data and asks for information relating to it
Gives data and evaluative statement about it
Informs: gives general/specific information about group task
Interprets
Summarizes
Makes explanatory statement about data given by another
Poses question about data given by others
Makes supportative statement about data being given
Makes facilative statement "That's true because..."
Makes evaluative statement "That's nonsense."
Makes argumentative response "I don't believe that."

PHASE III EXPLORATION OF ALTERNATIVE AND ATTEMPTED ANSWERS
CLIENT RESPONSES

Questions an alternative posed
Poses an alternative as a question
Poses an alternative as a solution
Gives an example of an alternative
Discounts a posed alternative
Evaluates a posed alternative in a positive way
Evaluates a posed alternative in a negative way
Acknowledges an alternative as viable.
Advises
Cooperates in "brainstorming"
Agrees with an answer
Enlarges on a posed alternative by
a. adding components
b. adding solutions
c. analyzing several aspects
d. giving pros and cons
Assumes role of confidant
Assumes role of concilitator
Acts in role of participator

PHASE IV GOAL FOCUSING CLIENT RESPONSES

Participates in presenting pros and cons of selected action
Affirms acceptance of posed alternative
Suggests several means of achieving alternative
Expresses acceptance of self or physical condition
Applies means of achieving alternative to self
Applies means of achieving alternative to other group members.
Makes closure type remarks:
a. Uses finality in vocal tone
b. Makes statement which indicates session is over
c. Asks topic/content of next session
d. Mentions time in framework of group ending
e. Mentions later in evening tasks
f. Expresses confidence in a selected outcome
g. Expresses confidence in several selected outcomes
h. Makes summative declaration
Makes expressions of consensual group action
Behavior:
Gathers possessions preparatory to leaving
Leaves

P R O T O C O L

MOTIVATING INTERACTION

A NURSE-TEACHING INTERVENTION

FOR

PRIMARY MENTAL HEALTH CARE

Armentha (Mickey) Hill
December 1980

SESSION I

GOALS FOR GROUP	Orientation to reality and realistic choices (Wolf)
CONTENT	History and etiology of sickle cell anemia Specific organs affected and ensuing disease conditions
STRATEGY	Use of slide production on SS to promote interaction as exchange of personal notions (Producer: Hill)
CLOSURE	Conclusions about:"What SS is"

STATEMENT EXAMPLES

"I have SS and I first knew about it when _____

"I wish I had known that _____

"I blame _____for my having this disease.

SESSION II

GOALS FOR GROUP — Combat feelings of lonliness and isolation (Wolf)

CONTENT — Application to group members of physical problems and outcomes.

STRATEGY — Use of description of personal and family myths (See Journal of Orthopsychiatry, July 1980)

CLOSURE — Identification of commonalities in SS shared by group members and successful coping behaviors being utilized.

STATEMENT EXAMPLES

"I have SS and my family feels _____ "

"They accept me because_____"

"Whenever I feel a crisis, I can always go to____"

SESSION III

GOALS FOR GROUP	Achieve better interpersonal relationships (Wolf)
CONTENT	Adolescence: Growth and Development Physiological Psychosocial
STRATEGY	Use of Rites of Passage Specific physiological data related to developmental crises of Erikson.
CLOSURE	Expressions of awareness of identity as individual and to peer group.

STATEMENT EXAMPLES

"I am a teenager with SS and I am unique because____"

"What my friends like most about me is _____"

SESSION IV

GOALS FOR GROUP	Growth of mutual empathy and acceptance of others(Wolf) Defenses strengthened
CONTENT	Application to group members Growth problems - specific Social problems including home and school Stress management
STRATEGY	Encourage group to list specific problems.(Hopefully group trust has been established now). Use anecdotal method.
CLOSURE	Enunciation of specific coping behaviors for cited problems.

STATEMENT EXAMPLES

"The best way to feel good at home is to _____"

"The best way to answer a classmate or teacher when they ask about sickle cell anemia is to say _____"

"I'd like to tell the world _____"

"Once when I felt a crisis starting I _____"

SESSION V

GOALS FOR GROUP	More socialized personalities Defenses strengthened Growth of interpersonal relationships, mutual empathy and acceptance.
CONTENT	Self Actualization What it means - Maslow's hierarchy in skeletal detail for movement above physical and safety needs.
STRATEGY	Elicit activities which indicate movement toward autonomy.
CLOSURE	Participation of each group member in enunciation of general defenses and mechanisms.

STATEMENT EXAMPLE

"Whenever I feel stressed I can_____"

SESSION VI

GOALS FOR GROUP	Improved self image through feedback from peers and authority figure (Wolf).
	Combat feelings of loneliness and isolation.
	More socialized personalities.
	Mutual empathy in termination process.
CONTENT	Application of SS in specific instances to group members.
	Means of expressing individuality productively.
	Means of achieving vocational productivity.
STRATEGY	Invite unstructured expressions following announcement of termination needs.
	Encourage via directive reinforcement appropriate mental health responses.
CLOSURE	EXPRESSIONS OF AUTONOMY BY AT LEAST 50% OF GROUP.

STATEMENT EXAMPLE

"I have SS, but I can _____"

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