

ABSTRACT

This research study was designed to compare the mode of handling anger in families of individuals with schizophrenia with families of individuals without schizophrenia. It was hypothesized that the families with schizophrenic members would handle anger in a more destructive mode than in those without schizophrenia.

Anger communication inventories were administered to an experimental group of 23 subjects having a diagnosis of schizophrenia, and their mothers. The same inventory was administered to a control group of 26 subjects, having no diagnosis of a chronic mental illness, and their mothers. High scores on the questionnaire indicated a maintenance mode of communicating anger as defined in Duldt's Anger Theory, and low scores indicated a destructive mode of handling anger.

The hypothesis was not supported; the results revealed no significant difference in the scores of the experimental and control groups. Several explanations for the findings were offered.

MODES OF COPING
WITH ANGER IN INDIVIDUALS
WITH SCHIZOPHRENIA

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Chapter 1

INTRODUCTION

Statement of the Problem

It is estimated that two million Americans suffer from some form of schizophrenia with more than two hundred thousand new cases being diagnosed each year. Historically, there has been much speculation as to the etiology of schizophrenic illnesses with theories emerging from biology, psychology and sociology. In recent years theories have been combined to propose a multivariate causality for this disorder.

In keeping with the supposition that there is no one single cause of schizophrenia, statistics show there is a high familial incidence of the disease which may be indicative of genetic as well as environmental factors. For example, if a specific genetic component is present in some family members a dysfunctional family system could precipitate an exacerbation of a schizophrenic illness. On the other hand, if the genetic component is absent in some members, it would account for those who are a part of the same system and never suffer from schizophrenia. An epidemiological analogy is the symbiotic relationship between smoking and exposure to asbestos in the incidence of lung cancer. The rate of lung cancer increases when either factor is present; however, the combined factors result in a far greater rise in the incidence than the two single factors alone would produce (Chase et al., 1985). The incidence of schizophrenia is also thought to be affected by a combination of factors including biological make-up and sociocultural components such as roles and relationships within the family. Being aware that the etiology is probably multifaceted, this

study will focus on the environmental aspect of communication within the family.

Bateson, et al., (1956) in studying the origin and nature of schizophrenia hypothesized that it is essentially a result of family interactions. As part of this theory, these authors developed the double bind pattern of communication in which the individual receives conflicting messages from the mother with the threat of punishment attached to both messages. For example, the mother says to the child who is dependent on her for survival, "You are bad if you do not love your mother," as she physically pushes him away. For such an unresolvable sequence of events, Bateson, et al., used the term double bind. Over time, when the individual has learned to perceive the world in double bind patterns, any part of the sequence may be sufficient to precipitate panic or hallucinatory voices, which is a common aberration of communication in schizophrenia.

Dysfunctional communication patterns have been studied by many researchers and occur to some degree in all families. Watzlawick (1969) notes, "The pathogenicity does not rest in isolated double bind communicational events, but in the learned pattern of how to behave in such circumstances." As early as 300 B.C., Aristotle noted that people feel slighted and become angry when parents do not perceive their needs (Barnes, 1984). Through the centuries parent-child relationships and needs have been studied extensively. The present study is concerned with anger generated within the family and the way it is handled.

Duldt's theory of Humanistic Nursing Communication also explores dysfunctional interactions and assumes that the survival of human beings

is based on the ability to communicate (Duldt, 1985). Therefore, double bind communications threaten survival as the individual is dependent upon the mother but can neither decipher her message nor make his needs known to her. Duldt further assumes that feelings of anger are part of being human; however, reactions to anger (eg. by parents) are varied and may play a significant role in the development of one's feelings of being recognized and accepted as a human being. When anger is handled in a maintenance mode the relationship is maintained in a humanizing fashion. Conversely, when anger is handled in a destructive mode the individual may feel dehumanized and the relationship deteriorates. Assuming that anger occurs in all human beings and that double bind communications occur in all families to some degree, the research question is: is there a relationship between the mode of handling anger and the manifestation of schizophrenia?

Theoretical Framework

This research is based upon the double bind theory of schizophrenia by Bateson, et al. (1956) and Duldt's (Appendix A, page 49) theory of anger. The concepts of schizophrenia and anger, as used in this study, are brought together in the interpersonal interactions within the family and, therefore, are grounded in communication theory.

Bateson and colleagues in developing the double bind concept used the part of communication theory described by Russell (Whitehead & Russell, 1910) as the Theory of Logical Types. This theory is based upon the premise that there is a logical method of understanding and labeling signals or messages when people communicate. The author notes that various communicational modes are used in human communications.

Typically, vocabulary for describing abstract ideas is poorly developed causing individuals to rely heavily upon nonverbal modes such as posture, gesture, facial expression, intonation and the context of the communication in order to send messages. Furthermore, there may be a falsification of messages such as the artificial laugh, kidding, or the manipulative simulation of friendship which occurs within the person sending the message. On the other hand, the receiver may unconsciously falsify a signal such as mistaking shyness for contempt.

Russell also incorporates the concept of learning into communication theory. Learning occurs when a subject receives a message and acts appropriately upon it. There are multiple levels of learning. The ability to handle multiple types of signals is itself a learned skill and, therefore, a function of the multiple levels of learning.

A primary assumption of the double bind theory (Bateson, et al. 1956), is that the individual with schizophrenia exhibits weakness in receiving and sending messages and in labeling his own thoughts, sensations and perceptions. A further assumption is that schizophrenia is essentially a result of family interactions characterized by a mother who becomes anxious and withdrawn if the child responds to her as a loving mother. That is, the child's very existence has a special meaning to the mother which arouses her anxiety and hostility when she is in danger of intimate contact with the child. Feelings of anxiety and hostility toward the child are typically unacceptable to the mother; she may deny these feelings by expressing overt loving behavior to persuade the child to respond to her as a loving mother, and withdraw from him if he does not. "Loving behavior" does not necessarily imply

affection; it can be set in a framework of doing the proper thing, instilling "goodness", etc.

According to Bateson, et al. (1956), there are five necessary ingredients for a double bind situation. First, there must be two or more persons. This may be the mother, father and/or siblings. The second criterion is a repeated experience, as the double bind is not a single traumatic event but a recurrent theme. The third ingredient is a primary negative injunction. This may have either of two forms: a) "Do not do so-and-so or I will punish you, or, b) "If you do not do so-and-so I will punish you." Fourth, there is a secondary negative injunction conflicting with the first at a more abstract level, and, like the first, enforced by punishments or signals which threaten survival. This injunction is commonly communicated by non-verbal means. The next criterion is an injunction or perceived situation which prohibits the victim from escaping the field. Finally, the complete set of ingredients is no longer necessary when the victim has learned to perceive his universe in double bind patterns. Almost any part of a double bind sequence may then be sufficient to precipitate panic or rage. The pattern of conflicting injunctions may be taken over by the hallucinatory voices which is a common symptom of schizophrenia.

All families experience some angry communications, and anger may occur more frequently in families with schizophrenia. The concept that anger may be handled constructively or destructively is part of the theory of Anger by Duldt (1982a). This theory borrows from existentialist philosophy and assumes that human beings exist in a "here and

now" existentialist context from which there is no escape. Indeed, there is continual concern with certain existentialist elements such as being, becoming, choice, freedom, responsibility, solitude, loneliness, pain, struggle, tragedy, meaning, dread, uncertainty, despair and death. (Sartre, 1957). These ideas seem to be shared with a philosophy of humanism which would embody an understanding of the existentialist context in human relationships and communications. Lee (1975) states, "At the heart of humanization is our image of man, how we value man and how we treat the individual."

Duldt (1982a) subsequently relies upon communication theories to further explore human interactions. Stewart and D'Angelo (1975) assume that the need to communicate is an innate imperative for human beings and the way in which one communicates determines what one becomes. Likewise, Buber (1970) notes that survival, coping and quality of life are based upon one's ability to communicate with others in order to share feelings and facts about the environment. A following assumption is that due to innate fallacies, human beings use and misuse all capabilities, especially the ability to communicate - an example is speaking to a human being as if he were a thing rather than a person.

In studying the communications which are specific to anger, Duldt used the process of anger described by Rothenberg (1971), who assumes that feelings and expressing anger are an integral part of the existential, holistic human condition. Anger arises from anxiety, signals distress and calls for change. Human beings can choose to express feelings of anger symbolically as well as in animalistic ways (fight or flight) in order to control and reduce tension, achieving closure.

Principles pertaining to the expression of anger which have been supported through research by Grant (now Duldt) (1977) are first; if one expresses anger one can expect an angry response; second, if one expresses angry feelings one will tend to become less angry, and finally, the recipient of angry expressions tends to direct angry responses to the source of the initiator of angry expressions, not to others.

Continuing the process, Rothenberg (1971) states that expressing anger has constructive as well as destructive potential in interpersonal relationships. In addition, humanizing patterns of communicating with angry people and in communicating one's own anger can be learned. Thus, Duldt (1982a) concludes that anger may be handled in a humanizing (maintenance) mode or in a dehumanizing (destructive) mode.

Hypothesis

The operational hypothesis which guides this study is: anger tends to be communicated in a more destructive mode in families of individuals with schizophrenia than in families of individuals without schizophrenia. Communication of anger in a destructive mode will be operationalized by the receipt of low scores on Currin's adaptation of Bienvenu's Inventory of Anger Communication. (Appendices C & D, Pages 59 & 65).

Significance of the Study

If there is less adaptive functioning in families of individuals with schizophrenia than in families without schizophrenia, interventions may be provided to assist families in coping with anger in constructive modes. Changing this communication pattern would then contribute to maintaining a stable mental status and help prevent exacerbations of

illness in those with schizophrenia. These interventions might also be incorporated into primary prevention programs for populations at risk of developing schizophrenia.

Definition of Terms

Selected communication terms are defined according to Duldt's theory of Anger as applied to the parameters of this study.

Anger: An emotional state that is communicative, at least covertly. It may be expressed (intentionally or unintentionally) in a destructive mode or a maintenance mode, measured by Currin's adaptation of Bienvenu's Inventory of Anger Communication.

Communication: A dynamic interpersonal process involving continual adaptation and adjustments between two or more human beings engaged in face-to-face interactions during which each person is continually aware of the other. The process is characterized by being existential in nature, involving an exchange of meaning, concerns facts and feelings, and involving dialogical communing.

Dehumanizing communication: A method of communication that employs attitudes which are monological, categorical, directive, degrading, careless and judgmental.

Destructive mode: A response to anger which is dehumanizing and is destructive to an interpersonal relationship.

Humanizing communication: A method of communication that employs attitudes which are dialogical, individual, holistic, accepting, empathetic and caring.

Maintenance mode: A response to anger which is humanizing and tends to be constructive or maintain an interpersonal relationship.

Schizophrenia: a diagnostic category defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) which includes a large group of disorders typically manifested by disturbances of thought, mood or behavior. Disturbances of thought are marked by alterations of concept formation which may lead to misinterpretation of reality, delusions and hallucinations. Changes in mood are manifested by ambivalence, constriction and inappropriateness of affect and loss of empathy for others. The patient's behavior may be regressive, withdrawn and bizarre and there is a deterioration from a previous level of functioning during some phase of the illness in the areas of work, social relations and self-care (American Psychiatric Association, 1980).

Chapter 2

LITERATURE REVIEW

Many researchers have explored the etiology of schizophrenia in an attempt to provide more effective treatment and an eventual cure for those who suffer with this chronic mental illness. Numerous theories have been proposed encompassing the fields of biology, psychology and sociology with recent studies focusing on communication within the family system. It is evident that there is a high incidence of schizophrenia within some families, and theorists use a combination of inborn and environmental factors to explain this phenomenon. This literature review will summarize both genetic and interactional circumstances in families with a concentration on the double bind pattern of communication. As angry communications, which are assumed to occur in all families, are part of the double bind pattern, there will be a specific focus on studies regarding anger and the way it is handled in the family.

Research on the Family

Statistics show that the risk of having schizophrenia increases when a family member has the illness (Neale & Oltmann, 1980). For example, when one parent has schizophrenia the morbidity risk of the children is 5-10 percent higher than in the general population. Likewise, siblings have an 8-14 percent increase in the occurrence of the disorder. These findings could be due to genetic or environmental circumstances or to a combination of the two.

The Genetic Factor

Various twin studies have supported the theory that schizophrenia

is transmitted genetically (Fisher, 1974; Kallman, 1946; Kringlen, 1967; Pollin et al., 1969; Slater & Shields, 1953). While the concordance rate for schizophrenia is 5-16 percent in dizygotic twins, these researchers found the concordance rate to be three to four times greater in monozygotic twins. However, it was questioned that similar child-rearing practices may occur more often with monozygotic twins than with dizygotic twins and that having a mirror-image sibling may diminish one's ability to develop a clear, differentiated self concept. These factors could substantially affect the results of the research. Further support for genetic transmission was provided by a study of 27 sets of monozygotic twins in which at least 1 twin was raised by adoptive parents (Gottesman and Shields, 1976). The results were similar to those found in monozygotic twins raised by their natural parents, i.e., approximately a 50 percent concordance rate; however, this situation has occurred too rarely to provide conclusive results.

There has been some controversy in other adoptive studies. One group of researchers found that when children (non-twins) of schizophrenic parents were adopted by normal families they developed the disease at about the same rate as children raised by their natural parents (Heston, 1966; Rosenthal, et al., 1968). In these studies, adopted children of schizophrenic mothers also became ill at a greater frequency than adopted children whose biological mothers were not schizophrenic. However, in other natural experiments when adopted children were studied reverse results were found. (Kety, et al., 1975; Wender, et al., 1973, 1974). The incidence of schizophrenia decreased among children of parents with schizophrenia when they were adopted

by normal families.

Although the findings of genetic studies are controversial (Lidz, Blatt & Cook, 1981), there is strong presumptive evidence that a genetic factor operates in schizophrenia. On the other hand, many questions remain unanswered regarding the nature of the defect which is transmitted by the genes and the possibility that some environmental interaction may trigger the genetic factor.

The Interaction Factor

In an effort to identify environmental variables, research has also focused on family interactions. Tienari (1968) presented an adoptive study that assessed both genetic and family variables in schizophrenia. His results supported the importance of genetic factors, but suggested that the manifestation of psychopathology depends on the concurrent presence of a highly disturbed family. In subsequent research on families, Lewis and colleagues (1976) developed a rating scale with thirteen variables to measure the competence of family functioning. The scale was used to rate families on a continuum ranging from severely dysfunctional to extremely competent. The researchers found that extremely competent families consistently produced autonomous, socially competent adolescent offspring while schizophrenic adolescents are found in families with the most dysfunctional scores on the rating scale.

Other investigators looked at parental relationships and communication patterns (Farina and Dunham, 1963; Farina and Holzberg, 1968; Leighton, et al., 1971). Comparisons of normal families with families of schizophrenics revealed: 1) more conflict in clinic families;

2) fathers tended to be the dominant authority figure in normal families which was acceptable to the family; 3) mothers tended to be the dominant authority figure in clinical families which was unacceptable to the family. Bowen (1960), hypothesized that a parental state of "emotional divorce" is found in families of schizophrenics which results in an ego-disorganizing effect on a developing child and impairs normal development.

Research by Fischer, et al. (1959) on parents of schizophrenics, neurotics and normals also revealed difficulties in communication patterns. The parents of schizophrenics showed less ability to work together, be cooperative and have a mutually congruent interpretation of events than the other two groups.

In similar studies, other investigators (Wynn and Singer, 1963a, 1963b; Stabneau et al., 1965; Wynn et al., 1975) described deviant styles of communicating thoughts and feelings in families of schizophrenics. They found that parents conveyed their ideas in piecemeal, blurred and deviant ways that revealed their own attentional deficits and induced and reinforced difficulty in understanding by listeners. This occurred in a standardized fashion with families of schizophrenics and only minimally with normal families. Strong correlations were also noted between the degree of parental "communication deviance" and the severity of symptoms in adolescents.

Research on the Double Bind

In the early investigation of dysfunctional family interactions as a causal link to schizophrenia, Bateson et al. (1956) proposed the double bind pattern of communication. This hypothesis was first

developed in a research project conducted at Stanford University from 1952-1954 and directed by Gregory Bateson. The researchers contributed according to their varied experience in anthropology, psychiatry and psychoanalysis. Data were collected from case studies of schizophrenic patients and their families obtained from other psychotherapists as well as those interviewed and treated during the duration of the research project.

As previously stated there are three criteria considered essential for a double bind situation. First, the individual is involved in an intense relationship, usually with the mother; secondly, the other person in the relationship is expressing two orders of messages which are contradictory; and thirdly, the individual feels constrained not to comment on the contradiction. Research on the double bind theory has generally concentrated on the first two criteria. As the intensity of the relationships and communication patterns within the family are difficult to measure, results remain inconclusive but lend support to the double bind pattern of communication.

Tietze (1949) studied a group of twenty-five mothers of hospitalized adult schizophrenic patients to determine personality characteristics, maternal attitudes and behavior patterns in the relationship to the schizophrenic child. All mothers were found to be overanxious, obsessive and domineering and most of them were perfectionistic and oversolicitous. All of the schizophrenic patients who were able to communicate with the psychiatrist expressed a feeling of being rejected by their mother. The sample was biased in that it used only subjects who were intelligent enough to understand the study and who lived close

enough to the hospital to keep regular appointments. Another limitation was the absence of a control group. Lu (1961, 1962) on the other hand, selected normal families with a member of the same sex and approximate age as the schizophrenic patient and compared child-rearing practices and maternal attitudes between the two groups. As in Tietze's study, mothers in the clinical group were more dominant and over-protective toward the child and were also found to have greater expectations for their child than mothers in the control group. These studies support the criteria of an intense relationship between the mother and the child with the occurrence of conflicting messages.

A comparative study of parents of delinquents, ulcerative colitis patients and controls tested the three aforementioned criteria of the double bind situation (Sojit, 1969). Parents of each group were given the task of teaching their children the meaning of the paradoxical proverb "A rolling stone gathers no moss." Responses of the three groups were related to their pathology. The parents of normals frequently disagreed on the interpretation and commented on the contradictory meaning. The ulcerative colitis parents were less open -- the total number of interchanges were fewer and disagreements were rare. Parents of delinquents had a high frequency of giving contradictory messages and performing communicational maneuvers in order to covertly criticize or disagree. A follow-up study by Sojit (1971) added a group of parents of schizophrenics. The results for the three previous groups were similar to the first study with the parents of the schizophrenic group giving contradictory injunctions and concealing the contradictions. The findings in these studies were consistent with

the stated criteria and offer support for the double bind hypothesis.

The term transactional disqualification was used by Sluzki and colleagues (Sluzki, Beavin, Tarnpolsky, Veron, 1967) to describe the conflicting messages which are a criterion for a double bind situation, and the response of the schizophrenic individual to the message. This research was conducted under the auspices of the World Health Organization and consisted of case studies of families with a schizophrenic member. Assuming that double bind situations are not isolated events but patterns of interactions in these families, the researchers attempted to identify pathological responses to the conflicting messages. They found that responses tend to encourage a pathological circle and consolidate the double bind situation. A follow-up study (Sluzki and Veron, 1971) concluded that "crazy" behavior may become the only "acceptable" response to the double bind communication.

Likewise, according to Hirsch and Leff (1975), "Schizophrenia is a 'strategy of behavior' by which a patient can extricate himself from a series of incongruent communications or demands from which there is no other form of escape within the rules of the system." Thus, research again offers evidence that the double bind communication is not an isolated event but a pattern of behavior that is frequently pathological in families with a schizophrenic member.

Duldt (1981b) views the double bind pattern as an alienating form of communication. The parent, by giving incongruent verbal and non-verbal messages, conveys feelings of distrust, resentment or anger, causing the child to be confused and to withdraw from the relationship. Caputo (1963), from a comparative study of parents of schizophrenics

and normals, also supported the hypothesis that a hostile atmosphere is present in the home of the premorbid schizophrenic so that identification with either parent is precluded and the child is isolated within the family.

Research on Anger

There has been a paucity of research on anger for a number of reasons. Research on hostility and aggression has overshadowed research on anger as they are more readily quantifiable. Furthermore, anger has often been treated as a minor part of aggressive responses which overlooks the fact that even when it does not lead to hostility or aggression, anger may have other deleterious effects (Biaggio, 1980). Duldt (1981a) cites disagreements regarding the definition of anger and the role of anger in interpersonal relationships which also thwart research. According to Moritz (1978), hostility is the behavioral expression of anger and this research review is based upon that assumption.

As theorists and researchers began looking more closely at family interactions, attitudes and child-rearing practices, they found repeated correlations between the emotional atmosphere in the home and the exacerbation of symptoms in family members with schizophrenia. The Camberwell Family Interview was developed to assess several aspects of a parent's attitude towards a schizophrenic child and was later modified to measure the Expressed Emotion (EE) of a key relative (Brown, Monck, Carstaus, and Wing, 1962). This scale measured three areas; 1) over-involvement of the relative with the patient, 2) hostility of the relative, and 3) criticism directed at the patient. Brown et al. studied

101 schizophrenic patients discharged from the hospital back to the homes of their families. At the end of a year, 56 percent of the patients returning to homes with high EE were readmitted to the hospital in contrast to 21 percent who returned to low EE families. These results have been replicated in a number of subsequent experiments. (Brown, Briely and Wing, 1972; Vaughn and Leff, 1976; Leff and Vaughn, 1980; Leff and Vaughn, 1981) More recently, both Falloon (Falloon and Liberman, 1983) and Leff (Leff, Berkowitz and Kuipers, 1983) have shown that family interventions directed at reducing high EE can decrease relapse rates dramatically.

Studies of EE describe a high frequency of hostility in many relatives of schizophrenics and according to Areti (1974), there is also a high level of hostility in the person with schizophrenia, although it may be disguised. Research has shown that most people become mildly to moderately angry from several times a day to several times a week (Anastasi et al, 1948; Averill, 1979, 1982). Increasing this frequency in families with schizophrenia may give rise to dysfunctional or pathological patterns of behavior if the anger is handled inappropriately in the family.

In a study of lower socioeconomic class Puerto Rican families, 20 families containing a schizophrenic husband or wife were matched with a demographically similar control group to study child-rearing practices and relationships with parents. There was no significant difference in many of the features under investigation; however, more schizophrenics than normal women had experienced a severe beating as a child from a parent in rage. (Rogler and Hollingshead, 1965).

Steinmetz and Strauss (1975) note that in families where violence occurs there is a build up of rage culminating in physical abuse which affords immediate relief to the abuser but provides no insight. Anger is created in the abused person who may feel unable to escape the situation or handle the anger appropriately; therefore, the situation occurs repeatedly and a pattern of violence is established.

Tavris (1982) also describes a pattern of behavior in response to anger. She challenges the view that anger should always be expressed and proposes that the people who are most prone to give vent to their rage become angrier not less angry. They fall into a pattern of reacting with angry outbursts which hurt the recipients of their rage and damage relationships.

Anger is commonly encountered in daily life and is a highly interpersonal emotion. It typically involves a close affectional relationship between the angry person and the target of the anger (Averill, 1983). Not only is there a higher than normal frequency of anger and hostility in relatives, but angry outbursts are often a reflection of the illness in schizophrenic individuals. They may form paranoid delusions involving revenge against others or the fantasy of needing to defend themselves against attack during a psychotic phase. (Seeman, et al, 1982) However, anger in the schizophrenic is often unexpected and seemingly unprovoked. The family may feel guilty if they believe they bear responsibility in causing the illness and may also feel overburdened in caring for this very disturbed family member with no hope for a cure. These feelings may intensify and prolong anger if it is not dissipated effectively.

Moritz (1978) notes that the direct release of anger requires a strong sense of self-worth for it is usually socially taboo and retaliation is often a real concern. The schizophrenic typically lacks feelings of self-esteem and is dependent upon the person who precipitates the anger. According to Zola (1982), people with a chronic disability cannot afford to be angry with others as they need them too much. Moreover, anger is evidence that one is not sufficiently grateful for what is being done for them. On the other hand, anger may be an effort to overcome powerlessness (Holderby and McNulty, 1979; Self and Viau, 1980; Smitherman, 1981). A study by Gluck (1981) showed that caretakers may respond angrily in a way that antagonizes or humiliates the individual or may give responses aimed at reducing the client's stress rather than their own. After instruction on appropriate responses to angry comments, a group of nursing assistants scored significantly higher on the number of responses they made to reduce the client's stress.

Holt (1970) noted "there can be both constructive and destructive ways of expressing anger and both adaptive and maladaptive consequences of not expressing it." This article cited studies of somatic responses to anger including changes in blood pressure, pulse rate and respiration. The results are conflicting as values are raised by anger in some studies and lowered in others. However, the author suggests that responses to anger can be learned which are both gratifying and without negative delayed consequences, such as the development of psychological symptoms.

There is a great deal of evidence to support the presence of a

high level of anger in the person with schizophrenia and in his family. There is also data which shows patterns of interactions in response to anger which may lead to pathology. According to Von Kreisler-Bomben (1986) people fail to handle anger appropriately because of our "emotionally illiterate culture."

Anger Theory

Theories of anger are not available in the nursing and medical literature to serve as a basis for nursing intervention with the exception of Duldt's (1982a) theory of anger. This author explored the emotion of anger and developed a theory which explains the modes of dealing with anger. Anger may be handled in the humanizing "maintenance mode" or in the dehumanizing "destructive mode." Research was conducted by Grant (1977) to determine the intensity of anger and the degree of constructivity (maintenance) or destructiveness conveyed by a written angry message. Messages were rated on seven-point Likert-type scales by judges knowledgeable about the criteria of the anger modes. Using Heider's (1958), P-O-X Balance Theory, it was found that if an observed member, O, of a group expresses anger regarding the task performance of another member, P, who perceives O, then P will tend to respond to O with a greater intensity of anger and less constructivity (maintenance) and P's perception of group cohesiveness will be diminished.

Another research project by Duldt (1982a) used 115 randomly selected RN subjects assigned to control and experimental groups with the experimental treatment consisting of an 8 hour training program on anger communication. The workshop included specific instruction in how to respond to alienating communications, including the double

bind and communication denial (Duldt, 1982b). The experiment supported the basic relationship statements of the Humanistic Nursing Communication Theory and provides a teaching model which may be used for instruction of families with a schizophrenic member.

Anger Instruments

A variety of instruments have been devised which measure individual anger as well as anger within family communications. For example, the Anger Self-Report Form (Zelin and Adler, 1972) differentiates between the awareness and the actual expression of anger. Another widely used instrument, the Buss-Durkee Hostility Inventory (Buss and Durkee, 1957) attempts to describe one's preferred mode of handling anger; however, the eight categories used are all negative modes with no positive modes being considered. The Reaction Inventory (Evans and Strangeland, 1971) and the Novaco Anger Inventory (Novaco, 1975), both focus on situations which precipitate anger. A measure of Children's Responses During Toddler and School-Age Periods to Naturally Occurring and Simulated Anger Incidents (Cummings, et al., 1984) is designed for the longitudinal study of anger during childhood development. Likewise, parental attitudes towards anger and children's perception of how their parents react to anger are included in some family interaction assessment scales (Schaefer and Bell, 1958; Schafer, 1965; Moos, 1974).

Bienvenue (1974a, 1974b) developed an instrument to assess communications between parents and their children and one to assess modes of handling anger both positive and negative. As these inventories identify modes of handling anger between parents and children, which

none of the other scales addressed directly, they are being combined for use in this investigation.

Chapter 3

METHODOLOGY

Design

This was a descriptive, comparative study based on the administration of two questionnaires. Research was conducted to determine if there is a relationship between the mode of handling anger in the family and the presence of schizophrenia. Two groups were studied, a schizophrenic group and a control group. Data were collected by administering a questionnaire to the subjects and their mothers.

Subjects

Group I consisted of outpatients from a county mental health, mental retardation and substance abuse center between the ages of 18 and 35 years, with a diagnosis of a schizophrenic illness according to DSM III criteria, and their mothers. Any diagnosis of a schizophrenic illness coded as 295 in DSM III was used for this study. The type of schizophrenia, eg. paranoid, catatonic, undifferentiated, etc. which is coded in the fourth digit was recorded. Clients who were severely agitated or psychotic were excluded. All of the clients who were on the active list according to the computer print-out and met the above stated criteria were used.

Group II was a control group from two community colleges between the ages of 18 and 35 years with no diagnosis of a chronic mental illness, and their mothers. Classes were selected by faculty members to obtain the control subjects. This group is assumed to be closely matched to the Schizophrenic group with regard to socioeconomic level which may have a significant bearing on child rearing practices and

the handling of anger within the family.

Instrument

A modification of the Inventory of Anger Communication and the Parent-Child Communication Inventory by Bienvenu (1974, 1976), were employed with the author's permission. The instrument was designed to assess the mode of handling anger between the mother and the subjects as this is the relationship within the family that seems to be the most significant in schizophrenia.

The first questionnaire, the Inventory of Anger Communication, was developed to identify the subjective and interactional aspects of anger as manifested by the individual. In the subjective category, awareness of the expression of anger, intensity of anger, attitudes towards the expression of anger, and the reaction of the individual to his own anger were explored. Items related to the interactional aspects of anger focus on the verbal and physical manner of expressing anger and the mode in which the individual handles it with himself and with others. Originally, the two contained 45 items; however, after pilot testing the scale was revised to 34 items. A further validation study using 238 subjects was conducted to determine the differences on a rating scale between subjects who handled anger more effectively and those who handled anger poorly. A comparison was made between the upper third of the scores denoting a constructive mode of handling anger and the lower third denoting a destructive mode. Results of a chi-square test in an item analysis showed that most of the items in the inventory were significantly discriminating between the upper and lower thirds of the sample ($p < .01$). Four questions were

dropped as they did not fall within this range leaving the current inventory with 30 items. In the modified inventory used in this research the questions focus on the relationship between the mother and the offspring rather than on relationships in general. Permission by Dr. Bienvene was also given for this change.

The second questionnaire, the Parent-Child Communication Inventory, assessed the feelings and attitudes about the communication in the family by both the parent and child. The Child Form of the Inventory provided an opportunity for the child to offer his views on the communication between him and his parents while the Parent Form afforded the parent an opportunity to offer his perception of how he and his child communicated. The questions on both forms are counterparts of each other, thereby facilitating a convenient and effective cross check on the communication perceptions of both child and parent. Again, high scores on a rating scale denoted constructive modes of communication and low scores denoted destructive modes of communication.

In a validation study, the inventory was administered to 240 subjects evenly divided between the sexes with fifty-five percent white and forty-five percent black. The Chi-square test results showed that 35 of the 40 items were significantly discriminating between the upper and lower quartiles ($p < .01$).

The instrument used in this study combined the Anger Communication Inventory with sixteen questions from the Parent-Child Communication Inventory which pertained to anger. There was a form for the child and a form for the mother with the scoring procedure being the same since the questions were identical counterparts.

The three possible responses, "Yes", "Sometimes", and "No", were scored from one to four with a favorable response (one indicative of a constructive mode of communicating anger) given the higher score. In some instances the "yes" response may be favorable, in others unfavorable, depending on the wording of the item. The possible range of scores to be earned on the inventory is from 46 to 184. If the question deals with a negative behavior such as "Did you hit others when you were angry?" a "sometimes" response is given a value of 2. If the question deals with a positive behavior such as, "Did you discuss your anger?" a "sometimes" response is given a value of 3. A higher total score is indicative of a more constructive mode of communicating anger.

Data Collection

Subjects were interviewed to obtain their consent and were administered the Child Form Inventory. A consent form and a Parent Form were mailed to their mothers. Confidentiality was maintained by using code numbers on the forms with only the primary investigator having access to names. All identifying information was destroyed at the completion of the project.

Data Analysis

Descriptive statistics were used to determine the frequencies and percentages of the scores on the forty-six items of The Anger Inventory questionnaire as well as on selected demographics of the subjects. The samples were characterized according to age, race, sex, education, occupation, religious preference, marital status, parent's marital status and psychiatric diagnosis. Variables were identified that

may be useful in further comparisons of subjects and to decide if frequencies are adequate. The internal consistency reliability of the forty-six test items was examined to determine if they are cohesive and uniformly measure the mode of handling anger.

Mean scores were computed over the items answered for each parent and each child and were designated as "P" and "C" respectively. The following summary measures were employed for subsequent analysis: (a) individual parent and child scores, (b) the mean of parent and child scores for each family, (c) the difference of parent minus child score for each family. A Pearson correlation of parents' scores and those of their children was computed to establish the extent of parent-child agreement in the expression of anger. Independent sample t-tests were used to compare the experimental and control groups with respect to the mean parent-child scores for each family, the difference of the two scores and the individual parent and child scores. A related sample t-test was used to compare the parent and child scores separately within the experimental group, and within the control group. Finally, differences in scores according to demographic data were examined for variables of interest.

Chapter 4

RESULTS OF THE STUDY

Questionnaires were completed by a total of 49 dyads of adult children and their mothers which were divided into an experimental group and a control group. The experimental group was obtained from the computer printout of a county mental health center. The instruments were administered to all subjects who met the criteria for the study, were available and consented to participate. The control group was obtained from two community colleges. In order to protect the confidentiality of the subjects, the questionnaires were distributed among the classes by various instructors and were mailed to the researcher. All questionnaires which were received by the designated date were used.

Sample

The experimental group, who carried a diagnosis of schizophrenia, consisted of 11 males, 12 females, and their mothers. The control group, who had no diagnosis of a chronic mental illness, was made up of 12 males, 14 females and their mothers. Seventy-three and one half percent of the subjects were single, 12.2 percent were married and 14.3 percent fell into the "other" category of being either separated, divorced, or widowed. Likewise, 14.3 percent of the mothers were single, 61.2 percent were married and 24.5 percent were in the "other" category. Ages of the subjects ranged from 18 to 35 years with one half falling below 26 years which was also the mean age. The mothers' ages ranged from 35 to 86 years with 55 years being the mean age and 56 years the median. Twenty-four of the cases were white and 25 were

black. Fifty-three percent of the subjects had completed 12 years of school and educational levels ranged from 9 to 16 years. The mother's educational level fell between zero and 17 years with a mean of 10 years. Eighty-one percent of both the subjects and their mothers were Protestant. Seven percent of the subjects and 11 percent of the mothers were Catholic with other religions and no religious preference accounting for the remaining percentage.

Slightly more than half of the experimental group was unemployed with the remaining subjects being employed in unskilled jobs. Two members of this group were also students. All of the subjects in the control group were students. Forty percent of the mothers were housewives, 10 percent were employed in unskilled jobs, 23 percent were employed in skilled jobs, 12 percent were professional women and 15 percent were unemployed.

All of the subjects in the experimental group carried a diagnosis of schizophrenia. Thirteen of the subjects were diagnosed as paranoid, 3 as schizophreniform disorder, 2 as schizoaffective and 5 as undifferentiated. In the control group only 1 subject had received psychiatric treatment and this was for a brief period. Forty-four of the mothers had never received psychiatric treatment. One mother had received treatment on one occasion and the remaining four had been treated on an ongoing basis.

Instrument

The internal consistency reliability of the instruments was shown to be good for the measurement of the mode of handling anger. The coefficient alpha on the instrument administered to the subjects was

.85. On the questionnaire administered to the mother, the coefficient alpha was .87.

Mean Scores

Four mean scores were created to evaluate the data collected on the 46 item questionnaire. Possible scores ranged from 1 to 4 with 4 indicating a maintenance mode of handling anger and 1 indicating a destructive mode of handling anger. The first mean was the "C" or child mean, which was the average of the subject's scores. The second average was the mother or parent response denoted as "P" mean. The family or "F" mean, was the third average which was half the combined scores of the subjects and their mothers. Finally, the "D" mean indicated the difference between the parent mean and the child mean to determine the agreement of the subjects and their mothers on their responses to the 46 items. The four mean scores and standard deviations are presented in Table 1.

TABLE 1. MEANS AND STANDARD DEVIATIONS FOR THE TOTAL SAMPLE

Sample	Mean	Standard Deviation
Child	3.30	.41
Parent	3.27	.40
Family	3.29	.34
Difference	-.04	.45

Hypothesis

The hypothesis was: anger tends to be communicated in a more destructive mode in families of individuals with schizophrenia than in families of individuals without schizophrenia. The experimental, or schizophrenic group consisted of 23 cases, and the control or normal group, had 26 cases. A comparison of the mean scores using the T test is presented in Table 2.

TABLE 2. A COMPARISON OF THE MEAN SCORES OF THE EXPERIMENTAL AND CONTROL GROUPS USING T-TEST

Measure	Group	Mean	SD	T Value	Degrees of Freedom	2-Tail Probability
Child	Experimental	3.29	0.42	-0.15	47	0.88
	Control	3.31	0.42			
Parent	Experimental	3.23	0.38	-0.67	47	0.51
	Control	3.30	0.42			
Family	Experimental	3.26	0.33	-0.49	47	0.63
	Control	3.31	0.35			
Differ.	Experimental	-0.07	0.47	-0.45	47	0.65
	Control	-0.01	0.44			

The t-tests reveal no significant differences in the mean scores of the experimental and control groups; therefore, the hypothesis is not supported.

Intragroup Comparisons

The standard deviations for the four means of both the experimental and control groups have previously been reported in Table 2. They depict a low variance on the mean scores of the 46 items within the groups. A paired t-test and a Pearson correlation coefficient were used to determine the agreement between the subject's scores and the mother's scores within the two groups. These results are reported in Tables 3 and 3.5.

TABLE 3. PAIRED T-TEST TO COMPARE MOTHER'S AND CHILD'S SCORES

Group	Measure	Mean	SD	T Value	Degrees of Freedom	2-Tail Probability
Experimental	Child	3.29	0.42	0.69	22	0.50
	Parent	3.23	0.38			
Control	Child	3.31	0.42	0.11	25	0.92
	Parent	3.30	0.42			

TABLE 3.5 PEARSON CORRELATION COEFFICIENTS TO COMPARE MOTHER'S AND CHILD'S SCORES

Group	r	r ²
Experimental	.32	.106
Control	.44	.197
Total Sample	.39	.152

The results show that there is no significant difference in the mother's scores and the child's scores between the groups. The correlations within each group are statistically different from zero at the .05 level for the control group but only at the .10 level for the experimental group. In both cases, the correlations are quite modest in size.

Other Group Comparisons

A comparison of the sex of the subjects was made using a paired t-test to determine if there was a difference in the four mean scores. Table 4 depicts the results.

TABLE 4. COMPARISON OF MEAN SCORES OF MALE AND FEMALE SUBJECTS

Group	Measure	Mean	SD	T Value	Degrees of Freedom	2-Tail Probability
Female	Child	3.24	0.43	-1.21	47	0.23
Male		3.38	0.39			
Female	Parent	3.18	0.43	-1.61	47	0.12
Male		3.36	0.35			
Female	Family	3.21	0.36	-1.70	47	0.10
Male		3.37	0.30			
Female	Differ.	-0.05	0.49	-0.29	47	0.77
Male		-0.02	0.42			

There was no significant difference in the scores according to the sex of the subject.

The final comparison was according to the marital status of the subjects. There were 36 single subjects and 6 married subjects. These data are presented in Table 5.

TABLE 5. COMPARISON OF MEAN SCORES ACCORDING TO THE MARITAL STATUS OF THE SUBJECTS

Group	Measure	Mean	SD	T Value	Degrees of Freedom	2-Tail Probability
Single	Child	3.33	0.44	0.10	40	0.92
Married		3.31	0.30			
Single	Parent	3.32	0.35	-1.02	40	0.31
Married		3.47	0.24			
Single	Family	3.32	0.33	-0.47	40	0.64
Married		3.39	0.24			
Single	Differ.	-0.01	0.43	-0.94	40	0.35
Married		0.16	0.24			

Again there was no difference in the scores of the single and married subjects.

Chapter 5

DISCUSSION

The results of the study and the rejection of the hypothesis led to a reexamination of both the instrument and the theory base. There was little variance in the scores on the questionnaire both within the groups and between the groups. While the inventories by Bienvenu (1974a, 1974b) which served as a basis for this questionnaire had been tested for validity and reliability, no dividing score to designate the mode of handling anger as constructive or destructive had been established. Furthermore, the literature offered no reports of the original inventories being used in research projects. As the purpose of this study was to compare the mode of handling anger in a normal and clinical group, rather than to rate the mode, this instrument was deemed appropriate for use.

Scores on the questionnaires were higher than expected, especially within the schizophrenic group. The feeling of anger is difficult to measure and this research was based on subjective data. Anger is typically viewed as negative and inappropriate, and answers may have been biased by the way participants thought they should feel or act.

The double bind theory (Bateson, et al., 1956) assumes that those with schizophrenia have difficulty labeling their thoughts, sensations and perceptions. This may affect the report of their feelings of anger as well as their perception of their mother's feelings and responses. Subjects may also, consciously or unconsciously, be reluctant to admit feelings of anger in the relationship with their mothers as they are frequently dependent upon her. This is another premise of the double

bind theory and also mentioned by Zola (1982) in the literature review. Likewise, feelings of anxiety and hostility are typically unacceptable to the mother, according to the double bind theory, which may also cause mothers to deny feelings of anger and give more positive responses on the questionnaire.

Although the mean scores between the parents and the subjects for the total groups were similar, the correlation between each parent and child score was quite low. The inventory was designed to establish a family pattern of handling anger. The purpose of the first twenty-eight questions was to determine if the parent and child reacted in the same way to anger, and asked for each one's response to the same situation. The remaining eighteen questions asked for the same information from the parent and child. The lack of agreement between the subjects and their parents may have been due to denial, difference in perception, miscommunication within the family, or difference in the way they respond to anger. There was a slightly higher correlation in the control group but the difference between the two groups was not significant. Further analysis of the data to determine if there is a difference in the correlation coefficients of the two sections of the questionnaire may offer some insight into the low correlation between the child and parent scores.

Another consideration is that memories may have dimmed as the questions related to childhood years. Time tends to diminish unpleasant events and may additionally influence answers. Further, it is possible that the respondents misinterpreted the questions or the instrument did not ask the right questions to obtain the desired information.

A review of the theory base revealed a number of researchers, previously cited, who supported the presence of hostility in the families of schizophrenics. Areti (1974) contends there is a high level of hostility in schizophrenics although it may be disguised. Caputo (1963) reported on the hostile atmosphere in the families of premorbid schizophrenics and the expressed emotion studies repeatedly correlated the hostility and criticism of family members directed at the schizophrenic as causing an exacerbation of the illness. In the present study, there did not appear to be excessive hostility or criticism in the families nor did it appear to be directed toward the schizophrenic member. Perhaps the hostility is generated in relationships not involving the mother as only the mother-child relationship was addressed in this study. This may be an enmeshed relationship with the mother protecting the child from the hostility of others in the family.

On the other hand, schizophrenia may be preponderantly a biological defect and even though families function normally, schizophrenia will occur at the same rate. Studies by Gottsman and Shields (1976), Heston (1966) and Rosenthal, et al. (1968) supported this theory. They reported research on twins, who were raised by adoptive parents, developed schizophrenia at the same rate as those raised by their natural parents. Moreover, a study of 20 families by Rogler and Hollingshead (1965), revealed no difference in child rearing practices of normal and schizophrenic families.

Limitations

Generalizations from the study need to be made with caution because of certain limitations. The first limitation of the study was the

small sample size. It was also difficult to attain a control group which was demographically matched to the experimental group, particularly the males. Furthermore, members of the control group were all enrolled in college which may have caused some bias as only a small percentage of the experimental group had attended college.

Conclusion

The present research does not support the theory that families of schizophrenics communicate anger differently from those without schizophrenia. One conclusion is that the subjective measure of anger used in the questionnaire may have not given an accurate report. Since the self-reports were the same in both groups, the findings do not support the theory of a dysfunctional communicative system in families having a schizophrenic member.

Recommendations

The research conducted in this project indicated no difference in the mode of handling anger in families with a schizophrenic member and in families without a schizophrenic member. While the scores were generally somewhat high, suggesting that anger is handled in a maintenance mode, it is notable that there were no perfect scores and that some were quite low. Therefore, studies might be conducted to determine if incorporating instructions on handling anger into health care teaching and general family education programs may be beneficial.

Future research might also provide varying information by changing the instrument or variables within the family. An instrument designed to gather objective information might be used. The expressed emotion scale contains some objective measures of hostility which could serve

as a basis for developing an objective instrument to measure the mode of handling anger. Alternate family relationships could also be studied such as sibling relationships which frequently involve angry feelings, but provide more acceptable circumstances for the expression of anger. Assessing the mode of handling anger in the extended family and in triangular relationships might also be useful in identifying family patterns of communicating anger. Expanding the relationships studied would, likewise, increase the available number of people to sample.

Subsequent studies might also focus on present expressions of anger rather than on retrospective reports. This would enhance the accuracy of reporting, and again, provide a larger population for sampling as the age range would not need to be limited. These considerations may be helpful in identifying control subjects as well as experimental ones as obtaining a male control group was a troublesome aspect of this study.

Summary

Schizophrenia is a widespread problem causing devastation in the lives of the victims as well as their families. While there is no definitive evidence to prove the etiology of this illness, there is considerable support for the theory that there is more than one factor involved, such as biological causes in conjunction with a dysfunctional family system. Therefore, this research focused on family relationships in an attempt to identify a problematic area that could be addressed by nursing interventions to assist families in dealing with ill members as well as preventing a manifestation of the disease in other members.

Two theories were used as a basis for this study. The first was

the double bind theory of schizophrenia proposed by Bateson et al. (1956) which was developed around the relationship between the mother and the schizophrenic individual. These authors assume there is a basic deficit in the ability of the individual with schizophrenia to communicate. The mother, in turn, gives the child paradoxical imperatives which both result in punishment. The child is thus caught in a double bind and escapes into a world of unreality which results in the psychotic symptoms of schizophrenia.

The second theory was Duldt's (1982a) anger theory which concludes that anger may be handled in a humanizing (maintenance) mode or in a dehumanizing (destructive) mode. The humanizing mode maintains relationships and the dehumanizing mode tends to destroy them. This research concentrated on the mode of handling anger between the individual and the mother.

The operational hypothesis which guided the study was: anger tends to be communicated in a more destructive mode in families of individuals with schizophrenia than in families with individuals without schizophrenia. Communication of anger in a destructive mode was operationalized by the receipt of a low score on a Currin's adaptation of Bienvenu's Inventory of Anger Communication (Appendices C & D, pages 59 & 65).

A total of 49 subjects and their mothers were used in the study. The aforementioned questionnaire was administered to an experimental group consisting of 23 subjects with a diagnosis of schizophrenia and their mothers. These subjects were obtained at a county mental health center. A control group of 26 subjects who were students at a community

college and their mothers also completed questionnaires. The control subjects carried no diagnosis of a chronic mental illness.

The results of the study showed little variance on the scores of the questionnaires both within the two groups and between the groups. There was no significant difference in the mean scores and standard deviations between the experimental and control groups, although there was a low correlation between the parent and the child scores. Moreover, demographic variables made no difference. The hypothesis that anger tends to be communicated in a more destructive mode in families with schizophrenia was not supported.

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APPENDIX A

Candace T. Currin has my permission to publish the theory of anger
in her thesis.

Signature: Bonnie W. Duldt
(Bonnie W. Duldt)

Date: 5/4/87

Theory: Anger by Bonnie W. Duld

Phenomenon: Dehumanizing and Alienating Anger Encounter between
Nurses and Other Health Care Professionals

Duldt, et. al. Participant's Manual for Anger Workshops,
Minneapolis, Minnesota: Metropolitan Medical Center, 1983.

ASSUMPTIONS	CONCEPTS	RELATIONSHIP STATEMENTS	EVALUATION
<p><u>Philosophical Sources:</u></p> <ol style="list-style-type: none"> Human beings exist in a "here and now" existential context from which there is no escape. Human beings are continually concerned with certain existentialist elements, as: being, becoming, choice, freedom, responsibility, solitude, loneliness, pain, struggle, tragedy, meaning, dread, uncertainty, despair, and death. <p><u>Communications Sources:</u></p> <ol style="list-style-type: none"> The way one communicates determines what one becomes. Evaluation of one's own communication skills is subjective: each individual must make his/her own decisions and choices about communication behaviors and choose to change, depending upon one's ability to utilize feedback. Survival, coping, and quality of life are based upon one's ability to communicate with others in order to share feelings and facts about the environment, social and physical. It is normal for anger to be expressed in small task groups. 	<ol style="list-style-type: none"> Human Being - a holistic, existential living being capable of symbolizing, perceiving the negative, transcending his environment by his interventions, striving for perfection, imposing structure and categories according to some value or theme, making choices among numerous options, and self-reflecting. Nursing - the art and science of positive, humanistic intervention in changing health states of human beings interacting in the environment of critical life situations. Elements are communing, caring, and coaching. Nursing Process - involves assessment, planning, implementation, and evaluation. Health - one's state of being and becoming; self awareness. It is indicative of one's adaptation to the environment. Environment - one's time/space/relationship context. Critical Life Situation - a situation in which there is a perceived threat to one's health state, and in which one's existential state of being is salient. 	<ol style="list-style-type: none"> The manner in which anger is expressed by one group member will change the degree of perceived cohesiveness and, ultimately, productivity of another group member in a small task group situation. Receiving other S' expressions of anger is a greater concern for nurses than for non-nurses. Nurses receiving others' expressions of anger is related to annual turnover rates in health care agencies. Nurses who receive training in coping with alienating communications, particularly expressions of anger, will tend to demonstrate more group cohesiveness, improved productivity, and lower turnover rates than nurses without this training. 	<ol style="list-style-type: none"> Research support for the primary relationship statement and general principles provided by experimental study; Bonnie Weaver Grant (now Duldt), "Anger, Cohesiveness, and Productivity in Small Task Groups," Lawrence, University of Kansas, 1977 (unpublished doctoral dissertation). Dissertation Abstracts International (University Microfilms International No. 7824799, 36, 3916A, January, 1979). Determined the intensity of anger and the degree of constructivity (maintenance) or destructiveness conveyed by a written angry message by a process <p style="text-align: right;">Bonnie W. Duldt, 1983 1984, Revised 1985, Revised-a,b 1986, Revision</p>

ASSUMPTIONS	CONCEPTS	RELATIONSHIP STATEMENTS	EVALUATION
<p>8. Interpersonal communication is a humanizing factor in human relations and is the means by which one becomes increasingly sensitive and aware of another's state of being and potential.</p> <p><u>Nursing Source:</u></p> <p>9. Humans function as unique, holistic beings responding to the environment.</p> <p><u>Specific to Anger:</u></p> <p>10. Feeling and expressing anger is an integral part of the existential holistic human condition.</p> <p>11. Anger arises from anxiety, signals distress, and calls for change.</p> <p>12. Expressing anger has constructive as well as destructive potential in interpersonal relationships.</p> <p>13. Human beings can choose to express feelings of anger symbolically as in animalistic ways (flight or fight) in order to control and reduce tension and achieve closure.</p> <p>14. Satisfaction and success in one's life and work --one's state of being--is derived from one's feeling human.</p>	<p>7. Communication - a dynamic interpersonal process involving continual adaptation and adjustments between two or more human beings engaged in face-to-face interactions during which each person is continually aware of the other. The process is characterized by being existential in nature, involving an exchange of meanings and concerns, facts and feelings.</p> <p>8. Humanistic Communication - being aware of the unique characteristics of being human.</p> <p>9. Dehumanizing Communication - to ignore the unique characteristics of being human.</p> <p>10. Alienation - having negative attitudes toward and withdrawing from others whom one would normally expect to be near, to be similar to, and to like or love.</p> <p>11. Anger - an emotional state that is communicative, at least covertly, and which can be expressed (intentionally or unintentionally) in a destructive mode (destructive to interpersonal relationships and dehumanizing) or in a maintenance mode (tends to maintain interpersonal relationships and humanize.) Process elements include alerting, describing, and identifying.</p>	<p>5. As the number of anger expressions received increase, there tends to be a corresponding decrease in interpersonal trust of the angry person.</p> <p>6. As the number of anger expressions received increase, there tends to be a corresponding decrease in the job satisfaction and communication satisfaction of the recipient of anger.</p> <p>7. Nurses who receive training in coping with alienating communication, particularly of anger, will tend to cope with the anger dismay syndrome more effectively than nurses who have not had their training.</p> <p>8. Nurses who receive training in coping with alienating communication, particularly of anger, will tend to have more effective coping strategies than nurses who have not had their training.</p>	<p>of Q-sort and ratings by well trained judges. Messages were rated on a seven-point Likert-type scales by judges knowledgeable about the criteria of the anger modes and trained on sample messages. An interrater reliability of over 97% was obtained for intensity of anger and 93% for amount of degree of destructiveness. Fritz Heider's Balance Theory (<u>The Psychology of Interpersonal Relations</u>, New York: John Wiley & Sons, Inc., 1958) was used as the theoretical perspective for the research project. Experimental expressions of anger produced evidence of perceived interpersonal unbalance in the 88% of the subjects receiving angry messages. Findings are:</p> <p>a) In a group, if one member (the observed or "O") expresses anger regarding the perceiver's (or P's) performance, then P's perception of group</p>

ASSUMPTIONS	CONCEPTS	RELATIONSHIP STATEMENTS	EVALUATION
<p>15. Due to the bureaucracy and complexity of the present health care delivery systems, there is a tendency for people--clients, nurses and others involved in health care delivery--to experience dehumanizing interpersonal communications.</p>	<p>Static elements of expressing anger are (a) <u>maintenance mode</u>-- a humanizing way of communicating anger symbolically so that the effects will be to promote use of human resources in task or goal achievement and to maintain workable relationships within the group; and (b) <u>destructive mode</u> - a dehumanizing way of communicating anger so that the effect is to divert human resources from task or goal achievement and to be disruptive of interpersonal relationships.</p>		<p>cohesiveness will tend to be less than in a group in which no group member expresses anger. (Supported, $p < 0.001$).</p>
<p>16. Humanizing patterns of communicating with angry people and in communicating one's own anger can be learned in order to increase awareness of self and sensitivity to others state of being and becoming.</p>	<p>12. Anger Dismay - being perplexed, shocked and at a loss about how to deal with another's angry expressions to the extent that one feels powerless and overwhelmed, tends to cower and cringe, and is unable to change these responses.</p>		<p>b) In a group, of one member, O, expresses anger regarding the P's task performance, then the mode of expression which Q uses will tend to change P's perception of group cohesiveness (Partially supported: total cohesiveness, $P < .001$;</p>
<p>17. The ultimate goal of interpersonal communication is unity among human beings.</p>	<p>13. Cohesiveness - the resultant of all forces acting upon members to remain in the task groups. Set of elements include: (a) Member attraction--the degree to which one tends to perceive the individual group members as being attractive; (b) Task attraction--the degree to which one tends to perceive the activities of the group as being attractive; (c) Group attraction--the degree to which one tends to perceive all members as being attractive.</p>		<p>group identity, $P < .14$; task attraction, $P < .10$; desire to remain with group, $P = .0001$.)</p> <p>c) In a group, if one member, O, expresses anger regarding P's task performance, then the mode in which O expresses anger will tend to change P's attributions of O's anger. (not supported)</p> <p>d) In a group, of one member, O, expresses anger regarding P's task performance then P will tend to respond with greater intensity of anger and with less constructivity. (supported, $P < .001$)</p> <p>e) In a group, of one member, O, expresses anger</p>

ASSUMPTIONS	CONCEPTS	RELATIONSHIP STATEMENTS	EVALUATION
	<p>14. Productivity - the degree to which the individual is able to accomplish his/her task and to contribute to the group goal; a unit productivity rate per specified time interval.</p> <p>15. Group - two or more people, i.e., nurses and other health care professionals, who are dependent upon one another to complete interdependent parts of a task in order to achieve the group goal, i.e., delivery of nursing and health care services to an individual or a group of clients.</p>		<p>regarding P's task performance, then P will tend to be less productive (supported, $P < .001$) and to make more errors. (not supported)</p> <p>f) In a group, if one member, O, expresses anger regarding P's task performance, and if P's perception of group cohesiveness is lowered, then P's productivity will also tend to decrease (not supported)</p>
			<p>2. Research support provided by comparative survey of 334 non-nurses and 322 nurses in which subjects were asked how often anger is expressed to them, by whom, about what issues, and what feelings they have toward the angry person. Data shows nurses receive less anger from others than non-nurses, but it causes the nurses more concern than the non-nurses. Many significant differences found by B.W. Duldt, "Anger: Are Nurses Different than Non-Nurses?" (Funded, Faculty Research Grant) Unpublished manuscript 1981.</p>

Note: Numbers in columns are not related, but are used for ease of reference during discussions.

ASSUMPTIONS

CONCEPTS

RELATIONSHIP STATEMENTS

EVALUATIONS

3. Expressing anger was found to be significantly related to the annual turnover rates of the agencies in which the R.N. subjects were employed. The common elements seemed to be an inability to perceive (or at least report) anger in another's communications, to recognize (or report) one's own anger, and to respond with anger. (These elements may be related to R.N.'s experiencing the Anger Dismay Syndrome; needs further study.
4. Research findings indicate that after training, subjects tend to feel less guilty about expressing anger ($p < .001$) and may be more inclined to discuss their feelings with the angry person ($p = .07$). B.W. Duldt, "RN Job Turnover and Coping with Alienating Co-workers: A Pilot Study". Funded by faculty research grant, Unpublished report, 1982.
5. A research project is using 115 randomly selected RN subjects assigned to control and experimental groups with the experimental treatment consisting of an 8 hour training program.

ASSUMPTIONS

CONCEPTS

RELATIONSHIP STATEMENTS

EVALUATIONS

This study supports relationship statements 1,2, 4,5, and 6. (Duldt, 1986; funded by faculty research grant and American Red Cross.)

6. Research support provided by a survey of 188 RN ss employed as staff nurses in three North Carolina Community Hospitals using job satisfaction/anger questionnaire derived from Duldt's instrument. Data show nurses ss received slightly more than one angry message per day from all categories of individuals; most come from nursing peers. Job satisfaction was found to be negatively correlated with the number of angry messages received. Relating this to Herzberg's theory, the investigator suggests lowering the number of angry messages received will only decrease dissatisfaction (hygenic factors): Need to increase recognition by supervisors and other motivating factors to increase satisfaction (M.S. Jones, MSN research project, unpublished, 1985).

APPENDIX B

Candace T. Currin has my permission to combine the Inventory of Anger Communication and the Parent-Child Communication Inventory into one form and focus on the patterns of communication between the mother and the child. This instrument is to be used in the research of anger in Schizophrenia.

SIGNATURE: Millard J. Bienvenu, Sr.
(Millard J. Bienvenu, Sr.)

DATE: 2/25/86

APPENDIX C

Currin's Adaptation of Bienvenu's
PARENT/CHILD ANGER COMMUNICATION INVENTORY

(Child Form)

Anger is a very basic emotion which plays an important role in the way we communicate with others. This inventory is a study of how anger affects you and how it was handled by you and your mother while you were growing up. Please do not place your name on this form and if any of the questions herein are offensive to you, please feel free to stop.

DIRECTIONS

1. Please answer each question as quickly as you can according to the way you have usually felt.
2. Please do not consult with anyone while completing this inventory. You may discuss it with someone after you have completed it. Remember that the value of this form will be lost if you change any answer during the discussion.
3. Honest answers are very necessary. Please be as frank as possible as your answers are confidential. Your name is not required.
4. Use the following examples for practice. Put a (✓) in one of the three blanks on the right to show how the question applies to your situation.

	YES Usually	NO Seldom	SOME- TIMES
--	----------------	--------------	----------------

Did you have a tendency to take
digs at your mother?

--	--	--	--

Did you get very upset when your
mother disagreed with you?

--	--	--	--

5. Read each question carefully. If you cannot give the exact answer to a question, answer the best you can but be sure to answer each one. There are no right or wrong answers. Answer according to the way you have usually felt.

	YES Usually	NO Seldom	SOME- Times
1. Did you admit you were angry when asked by your mother?	_____	_____	_____
2. Did you have a tendency to take your anger out on someone other than the person you were angry with?	_____	_____	_____
3. When you were angry with your mother, did you discuss it with her?	_____	_____	_____
4. Did you keep things in until you finally exploded with anger?	_____	_____	_____
5. Did you pout or sulk for a long time (couple of days or so) when your mother hurt your feelings?	_____	_____	_____
6. Did you disagree with your mother even though you felt she might get angry?	_____	_____	_____
7. Did you hit others when you got angry?	_____	_____	_____
8. Did it upset you a <u>great deal</u> when your mother disagreed with you?	_____	_____	_____
9. Did you express your ideas when they differed from your mother's?	_____	_____	_____
10. Did you have a tendency to be very critical of your mother?	_____	_____	_____
11. Were you satisfied with the way you settled your differences with your mother?	_____	_____	_____
12. Was it very difficult for you to say nice things to your mother?	_____	_____	_____
13. Did you have good control of your temper?	_____	_____	_____
14. Did you become depressed very easily?	_____	_____	_____
15. When a problem arose between you and your mother, did you discuss it without losing control of your emotions?	_____	_____	_____
16. When your mother hurt your feelings, did you discuss the matter with her?	_____	_____	_____
17. Did you have frequent arguments with your mother?	_____	_____	_____

(PLEASE CIRCLE ANY QUESTION THAT WAS NOT CLEAR)

	YES Usually	NO Seldom	SOME- TIMES
18. Did you often feel like hitting your mother?	_____	_____	_____
19. Did you have a strong urge to do something harmful?	_____	_____	_____
20. Did you keep your cool (control) when you were angry with your mother?	_____	_____	_____
21. Did you tend to feel very bad or very guilty after getting angry at your mother?	_____	_____	_____
22. When you became angry, did you pull away or withdraw from your mother?	_____	_____	_____
23. When your mother was angry with you, did you automatically or quickly strike back with your own feelings of anger?	_____	_____	_____
24. Were you aware of when you were angry?	_____	_____	_____
25. Provided the timing was appropriate, did you express your angry feelings without exploding?	_____	_____	_____
26. Did you tend to make cutting remarks to your mother?	_____	_____	_____
27. Did you control yourself when things didn't go your way?	_____	_____	_____
28. Did you feel that anger was a normal emotion?	_____	_____	_____
29. Did your mother wait until you were through talking before "having her say?"	_____	_____	_____
30. Did you pretend you were listening to your mother when actually you had tuned her out?	_____	_____	_____
31. Did you feel your mother "preached" to you too much?	_____	_____	_____
32. Were your opinions respected by your mother?	_____	_____	_____
33. Were you laughed at or made fun of by your mother?	_____	_____	_____
34. Did your mother say that you were bad?	_____	_____	_____

(PLEASE CIRCLE ANY QUESTION THAT WAS NOT CLEAR)

	YES Usually	NO Seldom	SOME- TIMES
35. Did your mother seem to talk to you as if you were much younger than you actually were?	_____	_____	_____
36. Did your mother really understand how you felt and what you thought about things?	_____	_____	_____
37. Did your mother say pretty much what was on her mind?	_____	_____	_____
38. Did you ask your mother reasons for decisions she made concerning you?	_____	_____	_____
39. Were you allowed to say what you believed about things?	_____	_____	_____
40. Did your mother get very upset when you disagreed with her?	_____	_____	_____
41. Did your mother really try to see your side of things?	_____	_____	_____
42. Did your mother say one thing but mean another?	_____	_____	_____
43. Could your mother tell when you were unhappy or troubled about something?	_____	_____	_____
44. Were you afraid to disagree with your mother?	_____	_____	_____
45. Did you really try to understand your mother's side of things?	_____	_____	_____
46. Did you tell your mother what bothered or upset you?	_____	_____	_____

(PLEASE CIRCLE ANY QUESTION THAT WAS NOT CLEAR)

AGE: _____

SEX: MALE _____ FEMALE _____

RACE: WHITE _____ BLACK _____ OTHER _____

HIGHEST GRADE COMPLETED IN SCHOOL _____

OCCUPATION: _____

RELIGIOUS PREFERENCE: _____

MARITAL STATUS: SINGLE _____ MARRIED _____ DIVORCED

SEPARATED _____ SPOUSE DECEASED _____

IN MY FAMILY, THERE WERE _____ CHILDREN. I WAS NUMBER _____.
(Number)

DURING MY GROWING UP, MY PARENTS WERE: NEVER MARRIED _____

MARRIED ONLY ONCE _____ SEPARATED/DIVORCED _____

ONE OR MORE DECEASED _____

HAVE YOU EVER RECEIVED ANY TYPE OF PSYCHIATRIC TREATMENT?

YES _____ NO _____

IF YES, THE PROBLEM I WAS TREATED FOR WAS _____

I RECEIVED TREATMENT FROM _____ to _____.
(approximate date) (approximate date)

APPENDIX D

Currin's Adaptation of Bienvenu's
PARENT/CHILD ANGER COMMUNICATION INVENTORY

(Parent Form)

Anger is a very basic emotion which plays an important role in the way we communicate with others. This inventory is a study of how anger affects you and how it was dealt with while you were raising your son or daughter. Please do not place your name on this form and if any of the questions herein are offensive to you, please feel free to stop.

DIRECTIONS

1. Please answer each question as quickly as you can according to the way you have usually felt.
2. Please do not consult with anyone while completing this inventory. You may discuss it with someone after you have completed it. Remember that the value of this form will be lost if you change any answer during the discussion.
3. Honest answers are very necessary. Please be as frank as possible as your answers are confidential. Your name is not required.
4. Use the following examples for practice. Put a (✓) in one of the three blanks on the right to show how the question applies to your situation.

	YES	NO	SOME-
	Usually	Seldom	TIMES

Did you have a tendency to take
digs at your child?

_____	_____	_____
-------	-------	-------

Did you get very upset when your
child disagreed with you?

_____	_____	_____
-------	-------	-------

5. Read each question carefully. If you cannot give the exact answer to a question, answer the best you can but be sure to answer each one. There are no right or wrong answers. Answer according to the way you have usually felt.

	YES Usually	NO Seldom	SOME- TIMES
--	----------------	--------------	----------------

- | | | | |
|--|-------|-------|-------|
| 1. Did you admit you were angry when asked by your child? | _____ | _____ | _____ |
| 2. Did you have a tendency to take your anger out on someone other than the person you were angry with? | _____ | _____ | _____ |
| 3. When you were angry with your child, did you discuss it with him/her? | _____ | _____ | _____ |
| 4. Did you keep things in until you finally exploded with anger? | _____ | _____ | _____ |
| 5. Did you pout or sulk for a long time (couple of days or so) when your child hurt your feelings? | _____ | _____ | _____ |
| 6. Did you disagree with your child even though you felt he/she might get angry? | _____ | _____ | _____ |
| 7. Did you spank or hit your child when you got angry? | _____ | _____ | _____ |
| 8. Did it upset you <u>a great deal</u> when your child disagreed with you? | _____ | _____ | _____ |
| 9. Did you express your ideas when they differed from your child's? | _____ | _____ | _____ |
| 10. Did you have a tendency to be very critical of your child? | _____ | _____ | _____ |
| 11. Were you satisfied with the way you settled your differences with your child? | _____ | _____ | _____ |
| 12. Was it very difficult for you to say nice things to your child? | _____ | _____ | _____ |
| 13. Did you have good control of your temper? | _____ | _____ | _____ |
| 14. Did you become depressed very easily? | _____ | _____ | _____ |
| 15. When a problem arose between you and your child, did you discuss it without losing control of your emotions? | _____ | _____ | _____ |
| 16. When your child hurt your feelings, did you discuss the matter with her/him? | _____ | _____ | _____ |
| 17. Did you have frequent arguments with your child? | _____ | _____ | _____ |
| 18. Did you often <u>feel</u> like hitting your child? | _____ | _____ | _____ |

(PLEASE CIRCLE ANY QUESTION THAT WAS NOT CLEAR)

	YES	NO	SOME-
	Usually	Seldom	TIMES

- | | | | |
|---|-------|-------|-------|
| 19. Did you have a strong urge to do something harmful? | _____ | _____ | _____ |
| 20. Did you keep your cool (control) when you were angry with your child? | _____ | _____ | _____ |
| 21. Did you tend to feel very bad or very guilty after getting angry at your child? | _____ | _____ | _____ |
| 22. When you became angry, did you pull away or withdraw from your child? | _____ | _____ | _____ |
| 23. When your child was angry with you, did you automatically or quickly strike back with your own feelings of anger? | _____ | _____ | _____ |
| 24. Were you aware of when you were angry? | _____ | _____ | _____ |
| 25. Provided the time was appropriate, did you express your angry feelings without exploding? | _____ | _____ | _____ |
| 26. Did you tend to make cutting remarks to your child? | _____ | _____ | _____ |
| 27. Did you control yourself when things didn't go your way? | _____ | _____ | _____ |
| 28. Did you feel that anger was a normal emotion? | _____ | _____ | _____ |
| 29. Did you wait until your child was through talking before "having your say?" | _____ | _____ | _____ |
| 30. Did you pretend you were listening to your child when actually you had tuned him/her out? | _____ | _____ | _____ |
| 31. Did your child feel you "preached" too much? | _____ | _____ | _____ |
| 32. Did you respect your child's opinions? | _____ | _____ | _____ |
| 33. Did you laugh or make fun of your child? | _____ | _____ | _____ |
| 34. Did you ever say that your child was bad? | _____ | _____ | _____ |

(PLEASE CIRCLE ANY QUESTION THAT WAS NOT CLEAR)

	YES Usually	NO Seldom	SOME- TIMES
35. Did you tend to talk down to your child?	_____	_____	_____
36. Did you understand how your child really felt and thought about things?	_____	_____	_____
37. Did you say pretty much to your child what was on your mind?	_____	_____	_____
38. Did your child ask your reasons for decisions you made concerning him/her?	_____	_____	_____
39. Did you allow your child to say what he/she believed about things?	_____	_____	_____
40. Did you get very upset if your child disagreed with you?	_____	_____	_____
41. Did you really try to see your child's side of things?	_____	_____	_____
42. Did you say one thing but mean another?	_____	_____	_____
43. Could you tell when your child was angry about something?	_____	_____	_____
44. Was your child afraid to disagree with you?	_____	_____	_____
45. Did your child really try to understand your side of things?	_____	_____	_____
46. Did your child tell you what bothered or upset him/her?	_____	_____	_____

(PLEASE CIRCLE ANY QUESTION THAT WAS NOT CLEAR)

AGE: _____

SEX: MALE _____ FEMALE _____

RACE: WHITE _____ BLACK _____ OTHER _____

HIGHEST GRADE COMPLETED IN SCHOOL _____

OCCUPATION: _____

RELIGIOUS PREFERENCE: _____

MARITAL STATUS: SINGLE _____ MARRIED _____ DIVORCED

SEPARATED _____ SPOUSE DECEASED _____

IN MY FAMILY, THERE WERE _____ CHILDREN. I WAS NUMBER _____.
(Number)

DURING MY GROWING UP, MY PARENTS WERE: NEVER MARRIED _____

MARRIED ONLY ONCE _____ SEPARATED/DIVORCED _____

ONE OR MORE DECEASED _____

HAVE YOU EVER RECEIVED ANY TYPE OF PSYCHIATRIC TREATMENT?

YES _____ NO _____

IF YES, THE PROBLEM I WAS TREATED FOR WAS _____

I RECEIVED TREATMENT FROM _____ to _____.
(approximate date) (approximate date)

APPENDIX E

CONSENT

I, the undersigned, agree to participate in the research Candace T. Currin, R.N., is conducting as part of the requirements of the Master's degree in the Nursing program at East Carolina University. I understand that my participation involves completion of one questionnaire and the purpose of this research is to determine my opinions about anger communication in my family.

I understand that participating in the project may help me become aware of how I deal with anger and provide clues for feeling more comfortable with myself and improving my relationship with others. I understand that the names of the participants will be seen only by Candace Currin and will be destroyed at the completion of the project. My parent or child will not see my answers nor be told anything about the nature of my answers. The results of the study will identify group responses; individuals will not be identified by name.

I understand that participation is voluntary and refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled, and I may discontinue participation at any time without penalty or loss of benefits to which I am otherwise entitled.

SIGNATURE

DATE

If you would like a summary of the results of this study, print your name and address below and return this form with the completed Anger Communication Inventory. Otherwise, it does not need to be returned.

Name _____

Street Address

City

State

Zip Code