A single system research design on the effectiveness of behavioral family therapy on the reduction of early warning signs of acute onset symptoms of schizophrenia

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ABSTRACT
SOCIAL WORK

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College, 1989

A SINGLE SYSTEM RESEARCH DESIGN ON THE EFFECTIVENESS
OF BEHAVIORAL FAMILY THERAPY ON THE REDUCTION
OF EARLY WARNING SIGNS OF ACUTE ONSET SYMPTOMS
OF SCHIZOPHRENIA

Advisor: Dr. Gale Horton, DSW
Thesis Dated: May 1994

Behavioral family therapy will decrease the severity of
early warning signs being reported by the patient with an
Axis I diagnosis of schizophrenia.

This study was conducted to find out what effect, if
any, behavioral family therapy would have on the reduction
in severity of early warning signs reported by a person with
schizophrenia currently involved in outpatient treatment.

The research design employed in this study was an A-B
single subject research design. One of the main reasons
this design was utilized were the time constraints within
which the author had to work.

Findings supported a decline in the severity of early
warning signs that were sustained for a long period of time.
However, it cannot be safely assumed that the intervention
accounted for the change which occurred in the reporting
behavior.
A SINGLE SYSTEM RESEARCH DESIGN ON THE EFFECTIVENESS OF BEHAVIORAL FAMILY THERAPY ON THE REDUCTION OF EARLY WARNING SIGNS OF ACUTE ONSET SYMPTOMS OF SCHIZOPHRENIA

A THESIS
SUBMITTED TO THE FACULTY OF CLARK ATLANTA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SOCIAL WORK

BY
GINA CELEASE WESTMORELAND WILLIAMS

SCHOOL OF SOCIAL WORK

ATLANTA, GEORGIA
May 1994
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The author would like to thank God for giving me strength to set and accomplish a major goal in my life. Special thanks are sent out to Dr. Horton for all of his interest and encouragement throughout this project. To my husband, Ned, who told me I could do it even when it seemed impossible. The author would like to also thank a host of colleagues and friends too numerous to mention here for their love and support during this study. Lastly, to my parents from whom I draw strength, courage, moral, and financial support, I wish to say thank you and I love you.
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CHAPTER I

INTRODUCTION

"Schizophrenia," the word itself calls to mind many different thoughts probably as different as the people who have this illness. Schizophrenia is a name used to describe a complex and extremely confusing mental illness. Schizophrenia is a psychotic disorder which puts it in the class with the most debilitating psychiatric conditions.¹

The term schizophrenia was first used by the Swiss psychiatrist Eugene Bleuler. Bleuler derived the term schizophrenia from two Greek words; the first being schizein meaning to split and phren meaning the mind.² Thus literally translated schizophrenia means "split mind", a phrase Bleuler felt captured the breaking up of the normal thought processes that occur in schizophrenia.³

Schizophrenia is defined as a type of psychosis characterized by the breakdown of integrated personality functioning, withdrawal from reality, emotional blunting and distortion, and disturbance in thought and behavior.⁴

³Ibid.5
Schizophrenia does not come without a social stigma, caused by the widespread lack of understanding and misuse of the word compound the problems faced by the person with schizophrenia. Schizophrenia is often confused with multiple personality disorder, but the split schizophrenia refers to is between thinking and feelings, not personalities. The effects of schizophrenia are not merely limited to the individual with this illness. Social, vocational, and emotional relationships are all altered, often in inexplicable ways. The behavioral changes that occur are diverse, often seem illogical, and do not appear to be attached to any specific observable cause. Social workers are concerned with finding and implementing the most effective strategies for treating individuals and families with schizophrenia. With the many myths that exist social workers and other clinicians face the challenge of educating the patient with schizophrenia, their family and the community at large about this disorder.

Generally, symptoms of schizophrenia become apparent during adolescence or early adulthood, but can begin later in life. Most often no two people suffering from schizophrenia will have the same symptoms, however there are certain types

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6Ibid.ix

7National Institute of Mental Health, You Are Not Alone: Mental Health Mental Illness, (Rockville, Maryland: National Institute of Mental Health, 1992), n.p.
of experiences that are common to people with schizophrenia.\(^8\) The acute symptoms are what help clinicians to diagnose schizophrenia, and by carefully observing their severity, the clinician can assess whether the person is getting better or worse.\(^9\) Specific symptoms may vary from person to person or even within one person over time. Some people develop symptoms gradually over months, and still others, seemingly well adjusted, become severely disorganized over a few days time.\(^10\) The symptoms a person exhibits during their psychosis are characteristic or acute symptoms. The acute symptoms are: delusions, catatonia, hallucinations, flat or inappropriate affect, disturbance of thinking, and incoherence or severely disorganized behavior.\(^11\)

Delusions are false beliefs that are quite real to the person experiencing them although others don't share these beliefs or ideas.\(^12\) Some examples of delusions are: believing your thoughts are being broadcast to the outside

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\(^9\)Ibid.1


\(^12\)National Institute of Mental Health, *What is Schizophrenia?*, (Rockville, Maryland: National Institute of Mental Health, 1985), 2.
world so that other people around can hear them, another belief is that someone is trying to harm you for no justifiable reason. Along with delusions a person who has schizophrenia may also experience what are commonly called hallucinations.

Hallucinations are sense perceptions for which there is no appropriate external stimuli. Hallucinations include hearing, seeing, or smelling things that others can not see, hear or smell. Hearing voices or seeing visions are classic examples of auditory and visual hallucinations. Peculiar posturing is another symptom that can also be exhibited by a person with schizophrenia and this is referred to as catatonia.

Catatonia is characterized by stupor, rigidity, peculiar posturing, or catatonic excitement, i.e., motor excitation that is purposeless and not affected by external stimuli. Individuals experiencing catatonia may sit rigid for hours without moving, often in positions that appear very uncomfortable. Feelings are also examined when clinicians are making a diagnosis of schizophrenia.

Flat or inappropriate affect refers to a person who has schizophrenia and feels a loss of identity. The word "flat", meaning unreal. It's hard for the person to relate to others; their reactions maybe inappropriate (such as laughter in sad

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Along with the changes in feelings a person with schizophrenia may also experience changes in their behavior. Disturbance of thinking occurs when a person speaks in a manner that is difficult to follow, this is frequently a sign that something is interfering with the way he or she is thinking.  

A person experiencing a disturbance in thinking may jump in a disconnected manner from topic to topic in mid-sentence, or make up words that have no meaning to anyone but themselves. Deterioration of functioning occurs in work, social relations, and even self care. It is important to remember that no single symptom positively identifies schizophrenia; all of the individual symptoms can be found in other brain diseases. In addition, an individuals symptoms do tend to be less severe in women.

Schizophrenia affects approximately one out of every one hundred americans, or over two million people. Over 900,000 people are treated each year for schizophrenia.

In 1986, an estimated 390,000 clients were receiving

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16 Ibid.3

17 Ibid.3

18 Ibid.3
treatment on a single day in organized inpatient, outpatient, and partial care programs carried a diagnosis of schizophrenia. That number represented 22 percent of the 1.8 million clients treatment on any given day. The majority of patients in treatment in outpatient settings (68 percent), followed by inpatient setting (19 percent), and partial care programs (13 percent).

The majority of people carrying a diagnosis of schizophrenia are males (64.2 percent), and more than half of them are white (64.4 percent). Although the age range from 18 years to over 65 years old, most fall between 25-44 years old (60.9 percent).

What do I do? Where do I turn? Are just two questions a schizophrenic patient asks upon leaving the hospital and returning to his community, and realizing that some of the things they used to do everyday they can no longer complete. Not knowing where to go for help, or why they are receiving their specific treatment may be an additional source of stress for the patient. Stress is a very important element to try and control and the social worker can provide the client and his family with the stress management techniques to solve most of the everyday problems.


20Ibid.51

21Ibid.51
SIGNIFICANCE OF THE STUDY

The outpatient phase of treatment is critical for a schizophrenic patient because this is where the client begins to learn to deal with his illness and the changes it causes in his/her everyday life. The social worker must be sure the patient is aware and understand the doctors instructions. The social worker also informs the patient of follow up clinic appointments and their importance.

PURPOSE OF THE STUDY

The purpose of this study is to identify the social work skills, techniques, and methods that can aid in keeping acute symptoms under control. Describing acute symptoms is a difficult task when you try to individualize your descriptions because what are acute symptoms for one patient may not be the same for another. Acute or characteristic symptoms of schizophrenia are: hallucinations, delusions, catatonia, etc. An exacerbation of these symptoms will usually require a inpatient hospitalization. During the onset of acute symptoms the hospital social worker explains what the medications are, and why they are important to the patient. The social worker also connects the patient with other resources that will be available to work with him. The community outreach social worker helps the patient with educational information about their disorder stress management, communication skills, and problem solving.
CHAPTER TWO

LITERATURE REVIEW

While the literature on the treatment of schizophrenia is plentiful, only a limited amount of research has exists about the effectiveness of antipsychotic medications combined with behavioral therapy in reducing symptoms of schizophrenia. Thus, the literature in this study is organized around antipsychotic medications and their advantages and disadvantages, behavioral family therapy, and the skills necessary for the social workers effective use of this therapy.

Advantages Of Anti-Psychotic Medications

Year after year thousands of people seek treatment for schizophrenia. Schizophrenia is a highly treatable disease. A cure has not been found, but symptoms can and are being controlled with medication in most people. The drugs used to treat schizophrenia are called antipsychotic or neuroleptic, they help relieve the hallucinations, delusions, flat or inappropriate behavior, and thinking problems associated with this illness. Research suggests that these drugs appear to work on correcting an imbalance in the chemicals that help brain cells communicate with each other.1

1National Alliance for the Mentally Ill, Understanding Schizophrenia: What You Need to Know About this Medical Illness (Arlington, Virginia: National Alliance for the Mentally Ill, 1993), 5.
The modern treatment of schizophrenia began in 1952 with the introduction of chlorpromazine (Thorazine), the first drug that was truly effective in treating the illness. Prior to the introduction of chlorpromazine (Thorazine), most people with schizophrenia were committed to psychiatric hospitals and had little hope of ever resuming a normal life.

Previous attempts to treat schizophrenia were largely unsuccessful. Various sedatives and stimulants did little more than calm or energize the person. Prior to the introduction of chlorpromazine (Thorazine), Electroconvulsive therapy (ECT) was introduced into this country in the late 1930's; although a few patients did benefit from ECT, the effects were most often short lived.

Unfortunately, physicians tended to exaggerate the success of these treatments. But in reality, with the exception of a few patients who recovered spontaneously, schizophrenia remained essentially non-treatable until the introduction of Thorazine.

Since the introduction of Thorazine, many other antipsychotic medications have been invented. However, these earlier medications were not very different from Thorazine.

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3 Ibid.3

4 Ibid.3
Some were more activating, or sedating. These medications were not anymore successful than Thorazine, in treating the onset symptoms of a schizophrenic patient.

Currently, there are a number of different antipsychotic medications in use for the treatment of schizophrenia. These medications usually have a brand name and a larger chemical name. Usually on a patient medication the pharmacist will print the chemical name and not the brand name; although the patient is usually familiar with the brand name.

Some of the most common antipsychotic medications include: chlorpromazine (Thorazine), thiothixene (Navane), thioradizine (Mellaril), trifluoperazine (Stelazine), and perphenazine (Trilafon). These medications seem to be equally effective in relieving characteristic symptoms of schizophrenia but, they do not differ in the strength they are prescribed.

New antipsychotic medications that are currently available in the United States offer an effective amount of treatment as the previously mentioned medications, with fewer side effects. The first of the new antipsychotic medications is clozapine (Clozaril).

Clozapine (Clozaril), is now offering new hope to thousands of severely ill patients. This unique, atypical antipsychotic medication is considered the first significant advantage in the treatment of schizophrenia in more than two
decades. Clozaril is currently being used with patients who have suffered for years from schizophrenia, often with no real hope of recovery. The major drawback to Clozaril, is the fact that it has to be monitored weekly. Doctors have to check a patient's blood levels weekly with this drug, and this is often a problem with non-compliant patients. However, the newest antipsychotic drug on the market is risperidone (Risperidal), it does not require a weekly blood test. Doctors unfortunately can not predict which drug will work best for which person, so some doctors try several different antipsychotic medications before they find the one, or combination of medications that will work best for the individual.

The antipsychotic medications do not differ with respect to the benefits that they can and do provide, they all do a similar job of bringing the person's acute symptoms under control and preventing relapses. However, they do differ in the way they are administered. Antipsychotic medications are usually taken daily in a pill or liquid form, although fluphenazine (Prolixin), and haloperidol (Haldol), can be given in an injection. The fluphenazine (Prolixin), injection is administered once every two weeks. The haloperidol (Haldol), injection is administered once a month. These injections are used with many patients that are non-compliant.

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with their oral medications. The antipsychotic medications that are given in the form of an injection are referred to as "depot neuroleptic". These neuroleptic help to ensure that the patients stay on a regular course of treatment.6

The person with schizophrenia is usually started on medication in the hospital where the focus of treatment is to bring the acute symptoms under control as quickly and safely as possible. Usually antipsychotic medication is given to a schizophrenic patient upon admission to the hospital during an episode. Eight out of ten patients experience substantial improvement of a wide range of symptoms as a result. Hallucinations (distorted perceptions), delusions (false beliefs), and difficulties in thinking generally improve dramatically and the feelings of apathy, lethargy, and loss of interest in people and personal appearance may improve as well.7

Medication also helps to prevent the return of symptoms and rehospitalization. In the first year after leaving the hospital, about six out of ten patients will have a relapse if they don't take any medication compared to three out of ten patients.

6National Alliance for the Mentally Ill, What you Need to Know About this Medical Illness (Arlington, Virginia: National Alliance for the Mentally Ill, 1993), 5.

7National Alliance for the Mentally Ill, Understanding Schizophrenia: What You Need to Know About this Medical Illness (Arlington, Virginia: National Alliance for the Mentally Ill, 1993), 5.
who continue on medicine regimen.\textsuperscript{8} Thus, medication is an important factor in the treatment of schizophrenia, both when they are exhibiting the acute symptoms and later when those symptoms are under control.

Disadvantages Of Anti-Psychotic Medications

The benefits of medication do not come without a price, the antipsychotic medications previously discussed can and do cause unwanted side effects.

Some of the most common side effects of antipsychotic medications are drowsiness, shakiness, muscle stiffness, feeling jittery or restless and dizziness.\textsuperscript{9} Although not all of the medications cause these side effects; quite a few patients don't even have side effects; and the ones that do usually experience mild ones. Some side effects given a little time will disappear by themselves, others can be controlled by adjusting the patient's dosage, or adding another medication to counter-act the side effects. Doctor usually will try to find the lowest dosage of medication a person can take and still keep his/her acute symptoms under control. This is particularly important when considering all the possible side effects a person may experience. Some side effects like stiffness and trembling require a separate

\textsuperscript{8}Ibid.5

\textsuperscript{9}National Institute of Mental Health, Medication for Schizophrenia, (Rockville, Maryland: National Institute of Mental Health, 1985), 2.
medication to control them. Unfortunately, in some patients side effects will persist as long as the patients is on antipsychotic medication. Like with any other medical condition, a person may have to deal with a little discomfort to enjoy the benefit of having acute symptoms under control.

Although the previous side effects are troublesome for some clients they usually can be controlled without much difficulty, but there are some side effects that are of more concern to clinicians than other side effects and that is because of their seriousness. The side effects being referred to are: tardive dyskinesia (TD), agranulocytosis, and neuroleptic malignant syndrome (MNS).

The first of these, tardive dyskinesia, occurs as a side effect to antipsychotic medication. Early symptoms of TD include mild vermicular tongue movements, smacking of lips, pressing the tongue against the cheeks, and chewing movements. The risk of a person developing TD increases the longer the person remains on antipsychotic medications, as well as how much of that medication the person is taking. This is one of the main reasons why doctors try to find out the least amount of medication it will require to keep a person's symptoms under control, thereby reducing the risk of developing TD.

10Ibid. 2
Aging is a major risk factor for TD. Research states the annual incidence of TD in patients over 45 is over thirty percent.\textsuperscript{12} Older patients also appear to have a less optimistic course of TD; with fewer instances of spontaneous remission.\textsuperscript{13}

Another risk factor that has been associated with TD is gender. Gender differences in the prevalence of TD have been reported by a number of researchers.

The prevalence of TD in women has been found to be higher than it was for men. The rates were 26.6 percent for women and 21.6 percent for men. Women also tend to have more severe TD than men. There appears to be an interaction between age and gender. Whereas the prevalence of TD seemed to peak in the 50-70 year age group in men, it continued to rise after age 70 in women.\textsuperscript{14}

Not all dyskinesia seen in psychiatric patients is related to antipsychotic medication. There is a natural rate of occurrence which may approach five percent in some populations without neuroleptic.\textsuperscript{15} It is also important to mention that all dyskinetic movements can increase with

\textsuperscript{12}Dilip V. Jeste and Michael P. Caligiuri, \textit{Schizophrenia 1993}, "Tardive Dyskinesia" (Rockville, Maryland: National Institute of Mental Health, 1993), 129.

\textsuperscript{13}Ibid.130

\textsuperscript{14}Ibid.131

various forms of stress and decrease when a patient is sedated.\textsuperscript{16}

The main reason that TD is of such great concern to clinicians is because there is no known cure for TD. In recent years, there has been a growing interest in the use of atypical neuroleptic is clozapine (Clozaril), has been found to increase a persons risk of developing agranulocytosis.\textsuperscript{17}

Agranulocytosis is a fatal blood disorder that has been so linked to clozapine (Clozaril), that patients that are taking clozapine (Clozaril), have to receive a weekly monitoring of their white blood cell count. The doctors are checking to make sure there is no drop in the patients white cell count. This is one of the main reasons that the use of clozapine (Clozaril), for the treatment of TD should be restricted to patients with severe TD, especially tardive dystonia.\textsuperscript{18}

The last of the serious effects to be discussed in this review is Neuroleptic Malignant Syndrome, (NMS). This syndrome presents unpredictably among psychiatric patient as an idiosyncratic response to therapeutic doses of neuroleptic. It is more likely to occur with high potency neuroleptic,
especially when given in conjunction with lithium and other drugs.\textsuperscript{19} Exhaustion and dehydration are thought to be the predisposing factors. This syndrome is a response to excitement and agitation. The person having this syndrome will appear to be in a catatonic state with confusing symptoms of waxing and waning course, similar to the characteristics of delirium.\textsuperscript{20}

Side effects of antipsychotic medication can range from mild to severe. Side effects account for a large percentage of the reasons given for non-compliance with prescribed medications, patients/families are not always adequately prepared for the adjustments they may have to make in their lives because of the side effects they may experience this is one thing why community based behavioral therapy can work on.

**Behavioral Family Therapy**

Because of the deinstitutionalization, most individuals with schizophrenia and other debilitating mental illnesses are now depending heavily on their families for financial, and emotional support, as well as daily guidance in their everyday living.\textsuperscript{21} The families are hit with this responsibility for their relatives care, either because they are living with them


\textsuperscript{20}Ibid. 138

or they are trying to find treatment and alternative housing for them. The recognition that families play an important role in supporting the rehabilitation of a person with a debilitating illness, although it may cause extreme stress in understanding this endeavor, spurred enthusiasm for providing both the patient and his/her relatives treatment to maximize reintegration into the community.22

Research states that carefully developed and reliably conducted family based interventions can have a significant, positive impact on many patients with schizophrenia.

The behavioral family therapy is a little more than twenty years old, its application to families affected by schizophrenia began more recently. This type of therapy was first used with parents to try and modify the disruptive behaviors of their children. This therapy was also used with married couples before being used in the treatment of schizophrenia.

The earliest behavioral family therapy approaches employed straightforward behavioral contracts whereby family members agreed to exchange specific pleasing behaviors. Somewhat more complex assignments were employed by behavioral family therapists who worked with mentally ill adults and children. A more detailed analysis of behavioral sequences preceding and following problem behaviors was necessary before devising specific strategies to reduce the frequency or

22Ibid.1
intensity of the problem behavior.23 In recent years this therapy has attempted to train family members to become more efficient problem solvers.

The behavioral method of family therapy aims to enhance the efficiency of the problem solving functions of the family caregiving unit. It is assumed at any point in time each family member (carer) is doing his or her very best to reduce unpleasant stresses and to maximize their positive feelings of well-being. Distress occurs when factors limit the effectiveness of this coping process so that stresses remain unresolved and/or its equivalent care group of intimate, confiding friends, are the greatest natural resource in assisting an individual in coping with life stresses and in generating mutual positive feelings. However, to harness this resource it is essential that clear communication of specific unpleasant feelings and specific pleasant feelings occurs between family members, and that a clearly structured approach to resolving problems and planning and achieving goals is employed. Behavioral family therapy assists families to seek more efficient problem solving and goal achievement by strengthening their assets and training them in the crucial skills deficits.24

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24 Ibid. ii
The cornerstone of the behavioral family therapy is the behavioral analysis of the family system. This assessment assumes that at any point in time, all members of the household are performing at their best possible level of functioning, given specific contingencies that they are experiencing. Coping mechanisms that may appear undesirable to an observer, such as social withdrawal, aggression, intrusiveness, or criticism, represent each person's best effort in that environment at that particular point in time.\(^{25}\)

The behavioral family therapist aims to identify specific areas where intervention may result in maximal improvements in social functioning areas of all family members. This is accomplished through a detailed systematic analysis of family behavior is conducted prior to beginning family therapy. This behavioral assessment continues throughout all phases of treatment. It involves three levels of assessment: (1) identifying specific assets and deficits of individual family members; (2) identifying the assets and deficits of the family group as a whole; and (3) identifying the role that specified "problem" behaviors play in the functioning of the family group.\(^{26}\) This information is obtained from individual


\(^{26}\)Ibid. 118
interviews with family members, observations made during skills and educational training. This information is usually gathered in the home of the family begin worked with.

The behavioral assessment can be a very long process. The social worker is trying to fit together all components of a families interaction patterns so he/she can develop an idea of the families current problem solving potential for any specific problem that is encountered. The clinician attempts to pinpoint a few critical deficits of their communication and problem-solving behaviors that, if improved, would be expected to facilitate positive changes (both positive and negative) are evaluated and further interventions planned that are based upon the status of the problem.\textsuperscript{27}

According to relatives of schizophrenic patients, the main problems they have fall into three categories: (1) distress caused by the patients' symptomatic and socially impaired behavior; (2) anxiety and "burnout" experienced by the relatives; and (3) disturbances in relatives' own social network.\textsuperscript{28} When using the behavioral family therapy to address these problems the behavioral therapist will specify the families problems in concrete, directly observable terms. Strategies that are going to be used with these families are also very specific.

\textsuperscript{27} Ibid. 118

Most families appear to respond in an understandable manner to the increased amounts of stress associated with caring for a mentally ill family member. Many of their experiences including conflicts, fears, and feelings are similar to those experienced by families caring for a family member with a chronic illness. It is often difficult for families to cope with the additional stress both financial and emotional, but surprisingly enough most families with a member who has schizophrenia tend to cope exceptionally well.29 The families can benefit from social, emotional, and financial supports. The additional family stress can make pre-existing family problems like, marital discord, sibling rivalry, or even social isolation worse.30 The literature states that certain family problems may be more common in families with members with schizophrenia. These include: (1) a lack of understanding of the complex nature of schizophrenia and the social impairments; (2) a lack of skills to cope effectively with acute and chronic symptoms of schizophrenia; (3) difficulties in expressing feelings, both positive and negative, especially toward the index patient (this may result in hostile criticism or over-concerned behavior); (4) difficulties in reducing tension in the family through effective problem solving; and/or (5) a tendency to feel


30 Ibid. 123
stigmatized and to limit social contact outside the family circle.\textsuperscript{31}

The last three problems are not specific to schizophrenia. However, the vulnerability to relapse of schizophrenia is greatly increased in situations involving elevated levels of environmental stress and tension. Reducing the amount of stress a person has in their lives is something people work on daily, but reducing the amount of stress in the life of a person with schizophrenia can change the course of the illness for the better.

In 1971, as a response to the needs of families who were living with a chronically mentally ill family member, Liberman began conducting weekly meetings for patients and their families. These weekly meetings reviewed the nature and management of major illness.\textsuperscript{32}

The topics covered in these family education workshops are: Translation of Mental Illness as "problems in living"; (2) Determinants of Illness-behavior, symptoms, and impairments: the central nervous system ("the world inside") and the environment ("the world outside"); (3) learning through imitation and reinforcement (social learning principles); (4) reinforcing steps in a desired direction (shaping); (5) the power of social reinforcement: shaping

\textsuperscript{31} Ibid. 124

behavior, especially the amount and content of conversation; (6) family contracting: giving and getting needs and rewards through negotiated exchanges; (7) description of social psychiatric programs at the day hospital: educational workshops, personal effectiveness training; (8) antipsychotic drugs: side effects and indications; and (9) recognizing the early warning signs of relapse.33

The educational sessions provide family members but are not specifically directed toward any diagnostic group. Families are encouraged to attend these educational workshops with all relatives and friends so everyone involved in the patient's life can learn about their relatives' illness and the best way to manage the illness. During these workshops efforts were made to individualize the content presented, only family treatment was provided. During these session the patients were encouraged to attend each session with their families and participate fully in the discussion.

The educational workshop serves to relieve confusion and uncertainty that often makes it difficult for the patient and the family to cope with a confusing illness like schizophrenia. Separate from the benefits received by the patient and his/her family, this type of education can also enhance community support for the mentally ill.

Upon completion of the education workshops the family then begins to move into the next phase of the treatment and that is the communication training. The focus of this intervention is the enhancement of the communication of feelings among family members.\(^{34}\)

The emphasis on the appropriate expression of feelings was derived directly from the results of a further replication of the "expressed emotion" study.\(^{35}\) The manner in which family members communicate their thoughts and feelings has a major impact on the course of mental illness. During a crisis effective communication may aid in reducing family tensions, facilitate problem solving, and as a sequelae may reduce the risk of stress related exacerbation. On the other hand ineffective cooperation may hinder problem solving and may increase the rate of acute symptom exacerbation. In behavioral family therapy is given to the communication patterns within a family. Working with the family gives the social worker the opportunity to intervene and possibly alter dysfunctional communication patterns.

During the behavioral assessment the clinician examines how each family member expresses positive and negative feelings, listens to others, and makes requests that lead to


behavioral changes. The results of this analysis is used to tailor the interventions necessary for each family.\textsuperscript{36}

Several aspects of communication are addressed with nearly all families. These include the basic components of verbal and nonverbal communication used when expressing feelings to others. Because much "emotional expression" is communicated at the nonverbal level, this aspect of the family communication is considered important. Elements of nonverbal communication that are include in this segment of the training are: tone of voice, eye contact, posture, facial expressions, and the proximity of the speakers.\textsuperscript{37}

Communication skills training take place in the family home as do the other components of this theory. The training involves rehearsal, feedback, coaching, repeated rehearsal, social reinforcements, and planning generalization. The skill is presented and explained to the family in a clear and direct manner. After the skill is introduced and explained the family members are asked for examples of how they currently express the type of feelings being discussed for that particular session. Positive feedback is given for the examples provided by the family members and the steps for the


skill being discussed are introduced and explained. Once the steps are explained the clinician then goes over each one of the examples previously provided by the family members, using the steps just discussed, being sure that each member of the family has an opportunity to practice. One example at a time the family members model the feeling they used as an example previously using the steps they just received from the clinician. This modeling and rehearsing continues between a family member and the clinician while the other family members are observing to be sure that the steps are being followed. Upon the completion of the practice the clinician is always there with positive reinforcement for the family members in the form of praise, as he/she points out the steps that the individual was able to follow. The clinician then models the same example with all the steps showing the person exactly how it should be done. After that then the clinician asks the family member to try it again.

The final step in the skills training sequence is the most important. This step involves contracting a specific homework assignment that will provide the family with additional practice on the skill covered in the current session. At the beginning of the next session, the homework will be reviewed and feedback along with positive reinforcement will be given before the next skill is introduced. The skill covered in the communication skills training are: expressing positive feeling, expressing negative
feelings, making a positive request, and attentive listening. Each communication skill is handled in the same manner.

Behavioral family therapy employs the skills-training method to enhance the interpersonal communication skills of family members in their daily activities. Major deficits in the accurate expression and reception of information and feelings are remedied through repeated behavioral rehearsal accompanied by coaching, modeling, feedback, and reinforcement followed by homework practice between sessions. Clear communication is important because it will be utilized in the next phase of this therapy which is the problem solving phase.

The way in which people cope with difficulties that may occur in their lives is important, difficulties include how the person handles stress. Effective coping behaviors are very important for household where there is a member or members that have a mental illness; particularly when it is a stress-related illness. Schizophrenia is an illness like peptic ulceration, diabetes, asthma, and rheumatoid arthritis, that is made worse by environmental stress.

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40L. C. Wynne, J. E. Jones, and M. Al-khayyal Healthy Family Communication Patterns: Observations in Families "at Risk" for Psychopathology (New York: Guilford Press, 1982), 124.
The two major sources of stress in a person's life are usually family tension and life events. Critical, hostile, or rejecting attitudes, or emotionally over-involved and intrusive behaviors have been implicated as having a particularly unhealthy effect on person with schizophrenia.41 These patterns of family interaction tend to mediate against effective problem solving during times of family crisis, whether the source of the stress is related to external factors, (financial problems, trouble with the law, or disputes with friends), or family factors (sibling arguments, marital discord, behavioral disturbances).42

Families deal with problems in differently. Some families have the perseverance necessary to cope with the many problems that can come along with a mentally ill family member, no matter how severe the problem is. In some cases problems occur as a result of how the family members communicate about a particular problem. Poor communication can create new problems or make existing problems worse. Not all problems are a result of poor communication, some occur or escalate as result of ineffective planning. Other families can develop plans for solving any problem that may arise, but when it comes to implementing those plans they run into trouble.

41Ibid.261

42Ibid.7
For these reason this theory incorporates a problem-solving component. The problem-solving component is a six step approach to problem solving derived from the behavioral problem-solving method by Spivack, (Spivack, Platt, & Shure, 1976).43

The first step is to discuss the problem and to come to a consensus of what the problem is. Secondly, the family is taught to generate a list of possible solutions. No solution that is offered at this time is criticized or praised, all suggestion are just noted. Third, the family systematically discusses the pro's and con's of each suggestion offered as a solution. Fourth, the "best" solution or combination of solutions is selected. Next the family plan on how the solution will be implemented. Lastly, the family will review the progress toward resolving the problem. Legitimate efforts to solve the problem should be praised regardless to whether the plan worked or failed. If a plan did not work the family can go back and re-brainstorm a possible solution as well as discuss why the one they chose first did not work.

The Social Workers Role In Behavioral Family Therapy

When a patient is referred to community outreach services, a process begins where as the patient and his/her family are assessed, treated, or referred for another type of treatment based on the effectiveness of the treatment being

undertaken. These steps are completed by a social worker whether the patient is going to be followed by a social worker utilizing this therapy or not.

The social worker's function during this therapy is: to be an active and directive participant when initially teaching the skills. The social worker will decrease their active involvement at the earliest possible time and sit on the sidelines to coach, support and encourage family members.44

**Theoretical Framework**

Social learning theory is the theoretical framework used in this study. Social theory focuses on the interrelationship between environment and social changes as antecedents and the behavioral changes that occur in a given person as sequelae rather than as a function of their age.45 The social learning theory postulates that communication is very important for two reasons. First, verbal and nonverbal communication is one of the major strategies which is used by adults to punish and reward each other.46 Thus many conversations become aversive and adults avoid each other.

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after they insult, downgrade, and criticize each other. Secondly, communication is important because it is one means through which adults attempt to resolve non-communication areas of conflict. Social learning theory assumes that people learn complex social skills most effectively by imitating the behavior of others rather than by reinforcement. The modeling effect is where the observer imitates the model's behavior and acquires response patterns that were not there before. The ability to subdue or stimulate effect on the observer, and the behavior is increased. Lastly, the eliciting effect provides specific cues that facilitates the release of similar responses from the observer that are already in the observer's repertoire. Bandura states that the effectiveness of the model is producing matching responses in the observer depends on a variety of factor such as the model's attractiveness, prestige, competence, and willingness to dispense rewards and praise.

Definition of Terms
The terms used throughout this study have been operationalized in the following manner:

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49 Ibid, 291.

Schizophrenia -- schizophrenia is a complex mental illness that can cause a person to experience hallucinations and delusions.

Acute Onset Symptoms -- those symptoms present at the time of a person's most recent hospitalization. These can include auditory or visual hallucinations and delusions.

Psychosis -- this is when a person is unable to distinguish what is real from that which is imaginary.

Neuroleptics -- the medications prescribed to bring psychotic acute onset symptoms under control. These medications are also used during the out-patient phase of treatment to keep the acute onset symptoms under control.
CHAPTER THREE
METHODOLOGY

The methodology section is organized in the following manner: (1) Single System Research Design, (2) Patient Information, (3) Treatment Hypothesis, (4) Intervention Strategy and Plans.

Single System Research Design

The design used in this study was an A-B single system research design. The A-B design is referred to as the foundation of single system designs, because of the basic distinction between, and combining of, a baseline observation period, the A, and an intervention period, the B. The assumption of the design is that the problem or behavior observed during the baseline period will likely continue in the same pattern if no changes are made in those things that are affecting the problem.¹

Bloom and Fisher also refer to this basic design as the "workhorse" design of evaluative research. It is referred to as a "workhorse" design for several reasons, according to Bloom and Fisher. The reason stated include: (1) It provides clarity about when target events have changed, (2) It allows the practitioner to know whether target events have changed, and (3) It provides information for the practitioner, the

patient, the agency, and society at large in a way that is most familiar to each.² Upon the completion of the intervention the patient was evaluated through a post intervention.

Patient Information

In this section and throughout most of this chapter, the subject of this study will be referred to as Yvonne. The background of this young woman is average for a child who grew up being raised by people other than his/her parents.

Yvonne is a 32 year old, divorced African American woman, who happens to come from a broken home here in the Atlanta area. Yvonne was raised by her maternal grandmother from age one to age fifteen, because her mother was a resident at Central State Hospital in Milledgeville, Georgia. It is unclear what the patient's mother diagnosis was, but it is speculated by the patient that her mother also had schizophrenia. The patient does not know who her father was nor is she interested in finding out. The patient was born in Akron, Ohio and moved to Atlanta immediately thereafter. Yvonne stated that she enjoyed living with her grandmother and was very upset when at age fifteen she became too ill to take care of her. At this time she moved to Philadelphia to live with an aunt and finish high school. Yvonne graduated from

high school through a special education curriculum, because she is mildly mentally retarded.

Yvonne moved away from her family when she was twenty-one years old and has been living on her own ever since. Yvonne was married in early 1986 and was divorced in 1993. During the marriage Yvonne and her husband had a son which they placed for adoption in July of 1989. Yvonne's husband was an alcoholic at the time that she married him. Throughout her marriage Yvonne was physically and emotionally abused as evidenced by the records of the Atlanta Police Department.

Yvonne currently has an Axis I diagnosis of Schizophrenia, Chronic Undifferentiated Type, an Axis III diagnosis of Gastritis and Mild Mental Retardation. The patient states that her grandmother felt that she had the same problem as her mother so she was taken to a private psychiatrist and placed on medication. Yvonne states that she is not aware why she was taking medication, because the diagnosis she was assigned at that time was not shared with her. Yvonne states that her first hospitalization was when she was age twenty or twenty-one years old. This is supported by hospital records from Georgia Regional Hospital. During her two admissions Yvonne's Axis I diagnosis was Schizophrenia Paranoid Type. Yvonne has been hospitalized at least once a year every year from 1988 to 1993. Yvonne was hospitalized twice in 1993. Her Axis I diagnosis has been changed numerous
times based on her acute onset symptoms presented at each hospitalization. During her marriage one of the main stressors that caused an exacerbation of her symptoms was the stormy relationship with her husband.

Yvonne receives her outpatient treatment at Florida Hall, which is a part of the Grady Health System. Although she is currently taking 200mg of Thorazine and 2mg of Artane, she has also taken numerous other neuroleptic medications. Her dosage of Thorazine seems to vacillate between 150 and 200mg. The reason for this, is because as her symptoms increase her doctor has to prescribe more medication to keep her acute onset symptoms under control. This is a serious matter because of the side-effects neuroleptic medications cause, and the patient in this study has mild TD. Early on in her treatment she was not very compliant with taking her medications or with other forms of outpatient treatment. However currently she is compliant with taking her medications and keeping her outpatient appointments. She is assigned to a outpatient therapist from the outpatient psychiatry department within the Grady Health System. Yvonne sees her therapist monthly. The author was assigned to work with Yvonne at the request of her outpatient therapist.

**Treatment Hypothesis**

Behavioral family therapy will decrease the occurrence and severity of the patients acute onset symptoms. Acute
onset symptoms are: hallucinations, delusions, disturbance of thinking, odd behavior, and flat affect.

**Intervention Strategy and Plans**

Behavioral family therapy is considered to be an effective treatment to use with families that contain a member that has schizophrenia. This therapy is divided into four components that together make up the intervention package utilized in this study. Each component was introduced and explained to the patient in this study.

Baseline data was collected during the initial assessment over a two week period, through self report of the patient. This data was collected at the same time that the therapy sessions were to take place during the intervention. The baseline data was collected in the patient's home. The intervention also took place in the patient's home. The patient lives alone in a studio apartment, where there were no distractions. The therapy sessions lasted from one hour to one and a half hours depending on the difficulty of the skill being taught during that session. A session usually consisted of going to the patient's apartment and reviewing the skill from the week prior to this visit, and then presenting the new skill. Ample time for questions, concerns, and conversation was allowed during these sessions. On rare occasions when a problem presented itself the skill originally prepared for that particular week was postponed to deal with the crisis that had arisen.
Instrument Design

The questionnaire utilized in this study was designed by the Department of Health and Human Services Public Health Service; Alcohol, Drug Abuse, and Mental Health Administration. This questionnaire was used by the National Institute of Mental Health Treatment Strategies in A Schizophrenia Study. The questionnaire has twenty questions that are measuring the feelings of the respondent. The questions related to the respondents feelings consisted of: Did you lose interest in doing things, did you feel discouraged about the future. Did you have trouble sleeping, lost interest in the way he/she dressed, trouble concentrating. Were their thoughts coming so fast that he/she couldn't keep up with them, did you feel distant from friends or family, did religion become more meaningful than previously. Was the respondent seeing less of friends, or feeling badly for no reason, was the respondent tense or nervous, did the respondent have trouble sitting still as evidenced by pacing, did the respondent feel depressed or worthless, did the respondent have trouble remembering things, whether they were eating less, or have any problems getting along with family members,did respondent feel that people were making fun of him/her, and finally, did their personal appearance deteriorate.

The questionnaire was designed to collect data on how the respondent felt over the course of a week. The respondent was
asked to tell whether they had "no" trouble, "slight" trouble, "some" trouble, "very much" trouble, or "extreme" trouble.

The data was coded with a computer and analyzed using the Statistical Package for Social Sciences. The data analysis was conducted utilizing frequency analysis, and the mean. The raw data was then graphed according to baseline, intervention, and post-intervention phases.

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3Micro Soft Corporation, SPSS/PC (Micro Soft Corporation, 1988)
CHAPTER FOUR

PRESENTATION OF FINDINGS

The graphs presented on the following pages represent the findings in this study. Figures one through twenty display the severity of a given problem as reported by the patient in this study.
FIGURE 1
Lose Interest Doing Things
FIGURE 2
Lose Interest In The Way Dressed

Baseline  Intervention  Post Intervention

Weeks:
1  2  3  4  5  6  7  8

Respondent Scores:
0  1  2  3  4  5  6
FIGURE 3
Discouraged About The Future

Baseline  Intervention  Post Intervention

WEEKS

RESPONDENT SCORES

1  2  3  4  5  6  7  8
FIGURE 4
Having Trouble Concentrating

Baseline | Intervention | Post Intervention

RESPONDENT SCORES

0 1 2 3 4 5 6

WEEKS

1 2 3 4 5 6 7 8
FIGURE 5
Thoughts Too Fast To Keep Up With
FIGURE 6
Feels Distant From Friends

Baseline  Intervention  Post Intervention

WEEKS

RESPONDENT SCORES
FIGURE 7
Religion Became More Meaningful

Baseline  Intervention  Post Intervention

RESPONDENT SCORES

WEEKS
FIGURE 8
Trouble Making Everyday Decisions

Baseline  Intervention  Post  Intervention

WEEKS

RESPONDENT SCORES

1  2  3  4  5  6  7  8  9  10

1  2  3  4  5  6

0  1  2  3  4  5  6

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FIGURE 9
Bothered By Thoughts Can't Get Rid Of

Baseline Intervention Post Intervention

WEEKS

RESPONDENT SCORES

1 2 3 4 5 6 7 8
FIGURE 10
Having Trouble Sleeping

Baseline Intervention Post Intervention

WEEKS

RESPONDENT SCORES
FIGURE 11
Seeing Friends Less

Baseline  Intervention  Post Intervention

RESPONDENT SCORES

WEEKS
FIGURE 12
Feeling Badly For No Reason

WEEKS

Baseline    Intervention    Post Intervention

RESPONDENT SCORES

0 1 2 3 4 5 6

1 2 3 4 5 6

1 2 3 4 5 6
FIGURE 13
Feeling Tense And Nervous

Respondent Scores

WEEKS

Baseline Intervention Post Intervention
FIGURE 14
Trouble Sitting Still Kept Moving

WEEKS
Baseline  Intervention  Post Intervention

RESPONDENT SCORES

1  2  3  4  5  6  7  8

WEEKS
FIGURE 15
Feel Depressed And Worthless

Baseline  Intervention  Post Intervention

WEEKS
FIGURE 16
Have Trouble Remembering Things

![Graph showing respondent scores over weeks with baseline, intervention, and post-intervention phases.]
FIGURE 17
Eating Less

Weeks 1-8
Baseline intervention post intervention

Respondent scores
0 1 2 3 4 5 6

WEEKS
FIGURE 18
Trouble Getting Along With Family

[Graph showing baseline, intervention, and post-intervention scores over 8 weeks.]
FIGURE 19
Feel People Are Making Fun Of You

Baseline | Intervention | Post Intervention

Weeks

Respondent Scores

Weeks
FIGURE 20
Personal Appearance Deterioration

Baseline  Intervention  Post Intervention

WEEKS

RESPONDENT SCORES

1  2  3  4  5  6  7  8
The baseline data was collected over a two week period. Due to the short amount of time during which the baseline data was collected it is hard to be certain if the baseline being displayed is actually stable. The problems represented by the respondent during the baseline ranged from 3, "some" trouble, to 5, "extreme" trouble.

During the intervention phases of this study, the problems being studied did decrease in severity from where there were rated during the baseline period. The patient had given rating of 4, or "very much" trouble for her loss of interest in doing things, Figure 1, and at intervention that rating dropped down to two, "slight" trouble, and leveled out at three, "some" trouble, during the maintenance or post intervention phase.

Figure 2, shows the severity of the problem of losing interest in the way that patient dressed. During the first week of the baseline period the patient felt that this was a problem she was having "very much" trouble with, but by the second week of the baseline, period the rating of severity had decreased to just some trouble. At the end of the intervention phase, this was not a problem for the patient at all, but during the post intervention phase this began to become a "slight" problem.

Figure 3 represented how the patient felt about the future. The patient was extremely discouraged about the
future, but by the end of the intervention phase she only viewed this as "somewhat" troubling.

Figure 4 represented how much trouble the patient was having concentrating. When the baseline observations were made, the patient was experiencing "extreme" trouble with her level of concentration. During the intervention phase the patient was only experiencing "slight" trouble with concentration. Her concentration level was at the "some" trouble level, as of the last observation recorded during the post intervention phase.

During the baseline, intervention and post-intervention phase the patient had some difficulty with keeping up with the speed of her thoughts. Although, during the second week of the intervention phase the patient did report that she was having "no" trouble whatsoever keeping up with the rate that her thoughts were entering her mind.

During the baseline period, the patient in this study had "extreme" trouble with feeling distant from her friends, as documented in Figure 6. The intervention phase indicated some instability, which might account for the rating levels returning to the baseline level. Religion is a concern for many people with schizophrenia, since often during a psychotic episode a person can develop a sense of hyper-religiosity.

Figure 7 demonstrated the amount of trouble that religion created in this patients life. Religion was an "extreme" source of trouble for this patient during the baseline period.
Noteworthy here, is the fact that during the intervention phase the patient reported "slight", and "no" trouble respectively during the intervention phase. During the maintenance phase the patient began to experience more trouble due to thoughts surrounding religion.

Making decisions is something the patient in this study usually had a moderate amount of difficulty completing. Although, she did rate this area as "extreme" trouble with thought control, which persisted throughout the study. This fluctuation is described in figure 9. Another area of trouble for this patient is sleeping, figure 10. This area has been rated as "some" trouble, but was reported to be giving the patient "very much" trouble during the post intervention phase. The patient reported the amount of time she spent with friends was "very much" a source of trouble during the baseline phase of treatment. By the end of the post intervention phase, this problems severity decreased to only "slight" trouble.

Figure 12 demonstrated how much the patient felt that feeling bad for no apparent reason was a problem for her. For the most part this was only "some" trouble for her, until the first week of the post intervention phase, where it began to cause her "extreme" trouble. Figure 13 described how much trouble the patient felt tension and worry added to her life. Figure 14 examined the patients difficulty keeping still, possibly evidenced by pacing. This one area gave the patient
an "extreme" amount of difficulty. Although, this was an area of difficulty for the patient, she reported "no" problem in this area during the first week of the intervention phase of treatment. Feelings of depression and worthlessness, figure 15, caused the patient "very much" trouble during the baseline period. Also, worthy of mention is the fact that this same individual said that the rating in this area decreased to "no" trouble during the first week of the intervention phase of treatment.

Figure 16 demonstrated the amount of trouble the patient had remembering things. During the baseline period in this study the patient only reported having "some" trouble with remembering things, and after the intervention phase of the treatment the patient still reported having "some" trouble remembering things. Figure 17 represented how much trouble the patient was having with her eating habits. The rating for this question during the baseline period was a 3, indicating that "some" trouble did exists. During the intervention phase the amount of trouble the client experienced with her level of appetite dropped to none.

Figure 18 described the severity of the problem the patient faced when she tried to get along with her family members. Figure 19 described the amount of trouble caused by the patient thinking that people were talking about her. This caused her "some" trouble throughout the study.
The final graph in this chapter, figure 20, describes how much difficulty the patients personal appearance was to her.

Limitations of the Study

The first limitation of this study is the design type employed during this study, the A-B design. The A-B design does not provide the researcher with clear proof that the intervention used caused the change that was observed.\textsuperscript{1} Another limitation to this study was the time constraints the author had to work under. The author conducted this study over a two month period that may not be enough time for another patient. Another limitation is the diagnosis of the patient, Schizophrenia Paranoid Type. Due to this illnesses susceptibility to environmental stressors, results might have been altered. The last limitation is one of historicism. History appeared to have the greatest impact on the subject of this study. During the time this study was being conducted the patient was informed that her once abusive, substance abusing ex-husband was inquiring as to her whereabouts. The patient was led to believe that her ex-husband was looking for her, subsequently she became very frightened. This belief led the patient in to a regression as well as an increase in the severity of the early warning signs of her acute onset symptoms. She began feeling like people were watching her.

\textsuperscript{1}Martin Bloom and Joel Fischer, Evaluating Practice: Guide lines for The Accountable Professional (New Jersey: Prentice-Hall, Inc., 1982).
that she needed to move out of the Atlanta area, and was having extreme difficulty sitting still. During this period the patient's medication was increased by her doctor by 50mg. This increased amount is the amount she remained on throughout the study. During this time I also talked to the patient four times within one week.
CHAPTER V
CONCLUSION

The purpose of this study was to determine if weekly meetings which implemented techniques used in the behavioral family therapy, combined with antipsychotic medication would reduce the severity of the early warning signs for acute onset symptoms, as reported by an outpatient with schizophrenia. This study had one treatment hypothesis that stated that: Behavioral family therapy will reduce the severity of early warning signs in a person with schizophrenia while in outpatient treatment. One main assumption throughout this study, was that prolonged ratings in the "very much" to "extreme" trouble range would lead to the reoccurrence of acute onset or characteristic symptoms. The rating scores that was of most concern to this author were the mean score that fell within the danger range at the baseline phase of this study. The warning signs that had such a rating were: lose interest in doing things, feeling discouraged about the future, trouble with concentration or thinking straight, the speed of the patients thoughts, how meaningful religion was to the patient, how difficult the patient found it was to make everyday decisions, feeling tense and nervous, difficulty sitting still as evidenced by pacing, having difficulty getting along with family members, and lastly, feeling that people were making fun of her.
During the intervention none of the warning signs had a mean score within or above the targeted trouble area. The highest mean score during the intervention period of this study was 2.75. The warning signs obtaining the mean score were: bothered by thoughts could not get rid of, having trouble sitting still as evidenced by pacing, having trouble getting along with family members, and finally believing that people were making fun of her.

During the post intervention phase of treatment four of the warning signs returned to their original severity level. An additional warning sign had a mean score in the targeted trouble range during the post intervention phase of treatment, and that was feelings of depression and worthlessness.

The findings of this study clearly suggest that behavioral family therapy in conjunction with antipsychotic medication, may have some merit with patients that have schizophrenia. The goal, at the beginning of the study, was to reduce the severity of early warning signs in a person in outpatient treatment for schizophrenia. This was clearly demonstrated with seventy-five percent of the warning signs tested for during this study. This was not demonstrated with twenty-five percent of the early warning signs. The long-term effects of this intervention can not be determined as this patient no longer is on this authors caseload.

In summary, the patient did report a reduction in the majority of the warning signs contained in the study
instrument. There is also support for the maintenance of the reduction for a sustained period of time. However, there is no support on whether this reduction in severity may not be permanent.

**Implications For Social Work Practice**

Behavioral family therapy is a relatively new treatment being used with people who have schizophrenia. One reason why it may not be presently used is the amount of training required for the clinicians, or because of that particular clinicians theoretical orientation.

This study has shown that behavioral family therapy and antipsychotic medications can work well together with a person with schizophrenia, and is currently in outpatient treatment. Because behavioral family therapy has three components which are based on educating the patient in areas surrounding their illness, communication skills, and the patients ability to problem-solve. The components of this therapy can be emphasized and practiced based on the individual patients needs. The most appealing aspect of this therapy is the fact that it stresses the importance of the patient being responsible for their own lives. Finally, behavioral family therapy offers clinicians a new way to work successfully with their patients that have schizophrenia.

Further use of this therapy is recommended with persons who have schizophrenia and are currently using antipsychotic
medication to help keep their acute onset symptoms under control.

Recommendations For Future Study

A recommendation for future use of this intervention would be to use this procedure with a group of patients having other Axis I diagnosis. Another recommendation would be to use this therapy with persons who are receiving inpatient treatment. The final recommendation would be to make sure you the clinician has adequate time to administer all the areas of this therapy. This study took place over an eight week period. However, future clinicians may wish to extend this period to insure proficiency of the tasks involved in this model.
APPENDIX A

STUDY INSTRUMENT

The answers provided on this questionnaire will be used strictly for educational purposes. All information provided will be held in the strictest of confidence. Thank you for your cooperation.

DIRECTIONS: This questionnaire is designed to find out how you have felt this week. For each question below please circle the answer that best represents the way you felt about that particular question over the course of the last week. Please tell me if the area gave you "no" trouble, "some" trouble, "slight" trouble, "very much" trouble, or "extreme" trouble.

1. Did you lose interest in doing things?
   1  2  3  4  5

2. Did you lose interest in the way you looked or dressed?
   1  2  3  4  5

3. Did you feel discouraged about the future?
   1  2  3  4  5

4. Did you have trouble concentrating or thinking straight?
   1  2  3  4  5

5. Were your thoughts so fast the you couldn't keep up with them?
   1  2  3  4  5

6. Did you feel distant from friends and family?
   1  2  3  4  5

7. Did religion become more meaningful to you than before?
   1  2  3  4  5

8. Did you have trouble making everyday decision?
   1  2  3  4  5

9. Were you bothered by thoughts he/she couldn't get rid of?
   1  2  3  4  5

10. Did you have trouble sleeping?
    1  2  3  4  5
11. Were you seeing friends less?
   1  2  3  4  5

12. Were you feeling badly for no reason?
   1  2  3  4  5

13. Were you tense or nervous?
   1  2  3  4  5

14. Did you have trouble sitting still and had to keep
    moving or pace up and down.
   1  2  3  4  5

15. Did you feel depressed or worthless?
   1  2  3  4  5

16. Did you have trouble remembering things?
   1  2  3  4  5

17. Were you eating less?
   1  2  3  4  5

18. Did you have trouble getting along with your family
    members or friend?
   1  2  3  4  5

19. Did you feel people were making fun of you?
   1  2  3  4  5

20. Did your personal appearance deteriorate?
   1  2  3  4  5
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