SOCIAL SUPPORT AND COMMUNITY FUNCTIONING OF CLIENTS WITH SCHIZOPHRENIA: A NURSING INVESTIGATION

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BY

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ABSTRACT

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The purpose of this study was to increase knowledge regarding the concept of social support and its role in contributing to a better understanding of clients with schizophrenia and their ability to function in the community. The conceptual framework based on Norbeck's model of social support (Norbeck, 1981) suggested that individual and situational properties combine to impact on the need for social support and its actual and perceived availability from the social network surrounding the individual. Adequate, appropriate social support is expected to be more likely to result in satisfactory levels of functioning in the community.

A convenience sample of 30 subjects between the ages of 18 and 61 participated in the study. They each had a diagnosis of schizophrenia, attended an Ambulatory Care service and had been discharged from a psychiatric hospital within the past year. The study instruments utilized were the Norbeck Social Support Questionnaire, the Global Assessment of Functioning Scale and a Client Profile, designed by the investigator. The study was designed to obtain information related to subjects' perceptions of their social networks, their perceptions of social support

available from those networks, and their levels of community functioning. Relationships between community functioning and social support were analyzed.

Social support was conceptualized on the Norbeck Social Support Questionnaire as two variables: functional social support, composed of affect, affirmation and aid; and network properties, composed of network size, duration of relationships with network members and frequency of contact with network members. Community functioning was measured by the Global Assessment of Functioning Scale.

The results of the study demonstrated that this sample of clients with schizophrenia had social networks which were small and family-dominated. Relationships outside the family were not long-standing and contact with network members was limited. Recent loss of network members was relatively common. Subjects perceived that they received less social support than other groups. Eight subjects indicated serious problems with their level of functioning in the community while 22 subjects had mild or moderate difficulties.

A significant positive relationship was found between social support as measured by the Norbeck Social Support Questionnaire and community functioning as measured by the Global Assessment of Functioning Scale. Because the relationship between social support and community functioning may operate bidirectionally, it was suggested

that enhancing social support may improve community functioning and alternatively that improving community functioning may improve social support.

Based on the information provided by this study, guidelines for incorporating the concept of social support in clinical practice were addressed as well as implications for nursing theory and research.

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CHAPTER I

Problems and Purposes

Over the past twenty-five years, the literature has reflected a growing interest in social support. The concept of social support generally refers to the helping aspects of interpersonal relationships and has been described as having an intuitive validity for clinicians (Beels, 1978; Tilden, 1985). That supportive behaviour between people is important is not a new phenomenon. However its current importance derives from emerging knowledge of the diverse impact of social support on health and illness (Cobb, 1976).

Although terminology has differed, there is a long history of the recognition of the concept of social support, including Florence Nightingale's early references to the importance of environmental support. Nursing has continued to contribute to an understanding of social support as a crucial component of the social environment. This is illustrated by the identification of social support as a research priority in its role as a determinant of wellness (American Nurses Association, 1980) and as an important element in future theory development in nursing (Tilden, 1985).

The focus on social support is based on a wealth of evidence that describes it as a key factor in physical and

emotional well-being. The ultimate goal of social support research is to answer the question: "What types of social networks are most useful for which individuals in terms of what particular issues under what environmental conditions?" (Mitchell & Trickett, 1980, p.28).

Statement of the Problem

Problems in social support research have arisen from variations in conceptualization and a lack of standardized measurement instruments (Cohen, Mermelstein, Kamarck, & Hoberman, 1985; Israel & Antonucci, 1987; Tilden, 1985; Turner, Frankel, & Levin, 1983). Norbeck (1981), a leading nurse researcher, has recommended replication of previous research and further refinement of our knowledge of social support so that this can be implemented in clinical practice. This need for additional clarification has been echoed by others (Hammer, 1981; Schaefer, Coyne, & Lazarus, 1981; Turner et al., 1983).

The interest in social support has been intertwined with a growing emphasis on the importance of the community in health promotion and maintenance, and care of the physically and mentally ill. Questions about social support therefore should also address the most effective mechanisms for the recognition and facilitation of the role of the community in providing support. Community members need to know how best to create a community where people can help

themselves and each other toward an optimal level of functioning (Beels, 1978).

While this remains an admirable goal, the definition and measurement of a high level of functioning within the community is difficult. Many attempts have been made to develop appropriate measures of community functioning with conflicting results (Anthony, 1978; Avison & Speechley, 1987). As with research on social support, there is a lack of consensus on theoretical perspectives and measurement criteria.

The need for further information about social support is nowhere more evident than in the field of mental health, particularly in the study of schizophrenia (Galanter, 1988). Social conditions have been implicated in the incidence and course of schizophrenia (Hammer, Makiesky-Barrow, & Gutwirth, 1978). Similarly, difficulties in the social environment of those with schizophrenia have been noted as a characteristic of the illness (Schooler & Spohn, 1982; Tolsdorf, 1976).

It has been suggested that the provision of an appropriate quantity and quality of social support may be a factor in the well-being and community functioning of individuals with schizophrenia (Brown, Birley, & Wing, 1972; Tolsdorf, 1976; Turner et al., 1983). However, there has been a lack of research considering the specific relationship between social support and community adaptation

of individuals with psychiatric disorders (Avison & Speechley, 1987).

The importance of studying schizophrenia is illustrated by Carpenter's assertion that "schizophrenia remains unparalleled as a stigmatizing disease with all the societal consequences of personal shame, family burden, and inadequate support of clinical care, research, and rehabilitation" (Carpenter, 1987, p.3). Schizophrenia presents a major concern for health care professionals (Babigan, 1980; Kane, 1987) due to its prevalence, severity, chronicity and refractoriness to traditional treatment modalities.

Approximately 10 to 12 million people in the world are afflicted with schizophrenia (Lehmann, 1980). It has been estimated that 40% of psychiatric hospital beds are utilized by clients diagnosed with schizophrenia (Keith & Matthews, 1984). In Canada, psychiatric hospital statistics indicate that the largest percentage of patient day utilization has been for clients with schizophrenia. In general hospitals, this group has ranked second only to clients with organic psychotic conditions for use of psychiatric beds (Statistics Canada, 1987).

The financial cost to society for schizophrenia has been identified as 10 to 20 billion dollars yearly in the United States, with much of this cost related to the lack of employment within this group (Cancro, 1980). Thus the toll

on the community, the health care system, and most importantly on the lives of these individuals and their families is enormous.

After hospitalization, despite the introduction of innovative therapeutic approaches, approximately 40% of discharged clients relapse within a year (Hogarty, 1984). A recent 5 year outcome study of clients with schizophrenia found that approximately half of the subjects had a poor symptomatic outcome. Of this group, most had experienced a major psychotic disorder for at least one half of the 5 year study. Of particular significance was the finding that 10% of this group had never recovered symptomatically from their schizophrenic episode at the beginning of the study (Prudo & Munroe Blum, 1987).

The growth of the community mental health movement, the process of deinstitutionalization, and advances in pharmacotherapy have resulted in an ever increasing number of individuals with schizophrenia living in the community rather than in hospital. While this trend has been beneficial for some clients, health care workers would note that for many, the amount of suffering has not been reduced but has simply changed location (Keith & Matthews, 1984).

Without effective community based programs and treatment strategies, life remains a struggle for the individual with schizophrenia. To deal with this issue, the need has been identified to provide an overall conceptual

framework, such as a social network perspective, and to develop new constructs to organize the expanding body of knowledge (Ellison, 1983; Keith & Matthews, 1984).

The treatment of schizophrenia has undergone transition leading to a current emphasis on psychosocial treatments which attempt to improve overall functioning within the community (Kane, 1987). Knowledge of the nature of the social dysfunction experienced by clients is often the basis for the development of such programs (Schooler & Spohn, 1982). However, the need remains for the holistic integration of biological, psychological, social and environmental perspectives (Carpenter, 1987; Kane, 1987) as a basis for practice and research.

A lack of integration of knowledge has interfered with progress in developing relevant concepts which would aid in the understanding and treatment of schizophrenia (Carpenter, 1987; Keith & Matthews, 1984). Social support has been identified as one of the most promising of such concepts and so merits further study (Greenblatt, Becerra, & Serafetinides, 1982; Mosher & Keith, 1980).

In summary, research on social support and community functioning has been hampered by a lack of theoretical perspectives and inconsistent methodology. The need for clarity and refinement in these areas is crucial. Schizophrenia is one area requiring further study and one

which would benefit from research incorporating the concepts of social support and community functioning.

Thus the overall problem selected for study is a need for increased knowledge about social support and its role in contributing to a better understanding of clients with schizophrenia and their ability to function in the community.

Research Questions

The overall purpose of this study was to provide a greater understanding of the social support experienced by individuals with schizophrenia and to identify any relationship between social support and general level of functioning in the community.

Specific research questions were:

1. What are clients' perceptions of the following characteristics of their social networks: network size, duration of network relationships, frequency of contact with network members, network composition and loss of social support, as measured by the Norbeck Social Support Questionnaire (Appendix A)?

2. What are clients' perceptions of the level of social support available and /or provided to them by their social networks, as measured by the Norbeck Social Support Questionnaire (Appendix A)?

3. What are the levels of community functioning of clients with schizophrenia, as measured by the Global Assessment of Functioning Scale (Appendix B)?

4. Is there a relationship between the clients' perceptions of overall social support and their levels of community functioning?

Rationale for Study

The value of studying social support is illustrated by Cassel's statement that "throughout all history, disease, with rare exceptions, has not been prevented by finding and treating sick individuals, but by modifying those environmental factors facilitating its occurrence" (Cassel, 1976, p. 121). Increasing and improving the social support available to those who experience mental illness, such as schizophrenia, is noted as a priority in future prevention (Cassel, 1976).

The concept of social support incorporates the domains of health, environment and person and therefore is a useful concept for study by nursing. The emphasis on environment is timely as it has been the least developed component of most nursing theories (Flaskerud & Halloran, 1980). As well as contributing to theory development, social support has implications for all phases of the nursing process and is emerging as an essential concept for nursing practice. Because social support represents an area of shared

knowledge with other disciplines, nursing research will also promote an interdisciplinary discussion of information (Tilden, 1985).

The study of social support by nurses is designed to improve nursing practice in the areas of interpersonal environments, health promotion and prevention of illness. Further knowledge will enhance nursing's endeavours to promote holistic, community oriented, cost-effective programs which encourage the utilization of natural support networks and enhance opportunities for self-help and self-care (Tilden, 1985). The contention that social support research and subsequent interventions will improve client care has been supported by other researchers (Galanter, 1988; Schaefer et al., 1981; Moxley, 1988).

Additional understanding of the role of social support in the treatment of schizophrenia is essential for nursing. Recent reviews of nursing research on social support recommended more empirical studies and expansion to new target populations, particularly at-risk groups. Although mental health studies were not the focus of the reviews, the lack of research with psychiatric populations was noted (Stewart, 1989a, 1989b). Support has been studied in a broad range of client groups, but the generalizability of this information in the area of schizophrenia must be clarified to ensure effective clinical utilization of the concept.

The development of the clinical relationship has been described as the foundation of treatment in schizophrenia (Carpenter, 1986). Mental health / psychiatric nurses often become the client's foremost contact within the health care system and so nurses can be expected to provide leadership in the development of knowledge of schizophrenia.

Improving our understanding of schizophrenia and social support will enhance theory development in these areas and will also contribute to nursing theory. Based on this theoretical base, interventions can be designed to utilize social support with the goal of improving community living for clients with schizophrenia. These will include efforts to decrease an individual's vulnerability to stressors and increase community living skills and community involvement. This in turn may lead to less dependence on professional caregivers and a new found sense of belonging in a community network (Mitchell & Trickett, 1980; Schooler & Spohn, 1982).

CHAPTER II

Literature Review

The literature review will focus on the concepts of social support and social networks followed by a discussion of relevant research. The mechanism and measurement of social support will be addressed. This will be followed by a review of community functioning. Finally, the study's conceptual framework will be presented.

Concept of Social Support

Much of the literature on social support has dealt with clarifying the concept. The concept of social support has evolved from the sociological research of J. A. Barnes who introduced the term of social network and formally studied the impact of social relationships (Barnes, 1954). One of the earliest definitions of social support was proposed by Caplan (1974) and included elements of feedback and assistance from others which act to enhance the individual's sense of environmental mastery.

This was further reinforced by Cassel's epidemiological review of social environments which discussed social support and its impact on health (Cassel, 1976). Research on schizophrenia was included in Cassel's consideration of the importance of both negative and protective factors in the social environment and the need for the provision of

adequate feedback in social situations. This work on social support was an important foundation for future research and prompted further clarification of the concept of social support.

Cobb (1976) defined social support as a process in which a person is enabled to perceive himself as cared for, loved, esteemed, and belonging to a group of mutual obligations. Weiss (1974) identified similar dimensions of social support as attachment, social integration, nurturance, reassurance of worth, reliable alliance with kin, and availability of guidance. Sokolove and Trimble (1986) added another perspective by incorporating social exchange theory and defining social support as an exchange of services, information and caring words.

Syrotuik and D'Arcy (1984) discussed social support as an interpersonal process to meet social needs such as affection, identity, belonging and security. Kahn and Antonucci (1980) also specified dimensions of social support that are provided through interpersonal interactions. These include the expression of positive regard toward another (affect), the endorsement of another's identity and behaviour (affirmation) and the provision of symbolic or instrumental assistance (aid).

Schaefer, Coyne and Lazarus (1981) further attempted to operationalize a definition and presented the three components of social support as emotional, informational and

tangible support. While similar to the work of Kahn and Antonucci, the underlying theoretical framework was not clarified. House (1981) provided yet another development in definition by integrating themes from other conceptualizations. The four subconcepts illustrated were emotional support, appraisal support, informational support and instrumental support.

From this review, it can be seen that the majority of conceptualizations of social support view it as a multidimensional construct. Clarifying and differentiating dimensions and their impact has been the focus of much discussion and research. However, it has been suggested that social support may operate at some general level as a unidimensional construct (Brown, 1986). Thus although there may be a variety of dimensions or components of social support, they may operate collectively in providing a supportive experience for the individual.

In summary, although there have been many definitions and perspectives on social support, most include reference to the following four characteristics (Dimond & Jones, 1983):

1) Expressions of positive feelings and regard to enable the person to feel valued,

2) Social identity and belonging related to having useful roles to fulfill in groups such as the family or community,

3) Instrumental or tangible assistance, such as loaning

money or providing transportation, as useful services and as a further means of expressing positive regard,

4) Reciprocity or the expectation that the recipient of support can or will provide some type of service in return at another time if needed.

Concept of Social Networks

Literature pertaining to social networks has focused on describing and identifying network characteristics. The provision of social support is one of the possible functions of a social network, a term used to describe the set of interpersonal linkages surrounding an individual. These relationships are with the individual and also with each other and in turn with sets of people who have no contact with the focal individual. These linkages in the form of social ties form the basis of our social structure and have the capacity to provide the "psychosocial supplies" (Llamas, Pattison, & Hurd, 1981, p. 184) required for well-being (Hammer et al., 1978).

Kahn and Antonucci (1980) described the social network as a convoy of people who surround an individual throughout life linked by the giving and receiving of support. Analysis of the social network explores the capability of the network or convoy to provide social support.

Some writers do not clearly differentiate between the concepts of social support and social network. This not

only interferes with accurate understanding and use of the concepts but has led to a common assumption that the benefits of social support are in direct proportion to the size and range of the network. This ignores the unique contribution of each of these concepts and the knowledge that some relationships and functions within a network are inappropriate, lacking or negative in nature and likely to change over time.

The study of social support must therefore include a discussion of social networks as a distinct yet related concept. Social networks will be viewed in this study as a factor or component of overall social support. Research related to each of these concepts will be presented.

Social Support Research

There are numerous studies which explore the relationship between social support and health as this has been the focus of much of the research undertaken. A wide range of situations have been studied including recovery from myocardial infarction (Finlayson, 1976), pregnancy (Nuckolls, Cassel, & Kaplan, 1972), unemployment (Gore, 1978), relocation due to war (Steinglass, Weintrub, & Kaplan De-Nour, 1988), hemodialysis (Dimond, 1979) and aging (Lowenthal & Haven, 1968).

One of the most comprehensive projects undertaken was that of Berkman and Syme (1979) which included over six

thousand adults in California over a 9 year period. Independent relationships were found between risk of mortality and measures of social support such as marital status, relationships with family and friends, church membership and contact with groups on a formal and informal basis.

The overall consensus has been that social support is important for both physical and emotional well-being. Studies in the area of mental health and mental illness have been a more recent addition to the field of social support research with much of the work focused on groups of clients with specific psychiatric diagnoses.

For example, Henderson (1981) attempted to establish causality between neurosis and social relationships in a study of 756 residents of Canberra. Results indicated that the presence or absence of social bonds was not the crucial factor in neurosis but rather the individual's perception of the adequacy of relationships in adverse circumstances. He further suggested that a personality attribute such as anxious attachment might be related to both neurotic symptoms and a negative description of the adequacy of social support.

In studying depression, Brown, Bhrolchain & Harris (1975) identified four factors which increased a woman's likelihood of developing a psychiatric disorder in the presence of life events but which were otherwise not

significant. These included maternal death during the woman's childhood, three or more children under the age of 14 who lived at home, the absence of an intimate relationship with a confidant such as a boyfriend or husband, and the woman's unemployment.

The importance of an intimate, confiding relationship was also revealed in a study of depression in the elderly. A stable, intimate relationship was more significant for mental health than factors such as social interaction and role status. Results indicated that of the 280 subjects, those without a confidant were far more likely to suffer from depression and that this was more evident with men (Lowenthal & Haven, 1968).

In more recent research on bipolar disorders, the relationship between social support and long-term lithium outcome was studied (O'Connell, Mayo, Eng, Jones, & Gabel, 1985). Results indicated that social support was the factor most strongly associated with good outcome using an affective episode score, a social adjustment scale and a global assessement scale. Social support was viewed as one element in the process leading to the onset of affective episodes and subsequent response to treatment.

Research on social support and schizophrenia has indicated differences in the quantity and quality of social support available and experienced by this group. Clients with schizophrenia were less likely to request help from

family members and had more negative feelings toward them. As well, although they may have received as much support as other groups, they described it in less positive terms which has been attributed to characteristics of the illness (Tolsdorf, 1976).

Such characteristics include hostility, ambivalence, general lack of satisfaction and negative orientation toward the support network. This negative network orientation was found to precede the onset of schizophrenic symptoms and had often been evident since childhood (Tolsdorf, 1976).

Relationships within the network were superficial with families unaware of the stress experienced by the client until psychotic symptoms were severe. Clients responded to stress by withdrawing from the network and by not availing of support. Tolsdorf hypothesized that this response led to feelings of failure and anxiety which resulted in deteriorating functional performance and lowered self-esteem. A psychotic episode was the result (Tolsdorf, 1976).

Much of the research on the families of clients with schizophrenia has identified expressed emotion (EE) or more specifically, expressed negative emotion, criticism and emotional overinvolvement as a significant predictor of relapse (Vaughn & Leff, 1976). Other studies have also reported a similar process identifying disturbed communication from family members which resulted in clients

developing increased negative feelings toward others (Goldstein & Rodnick, 1975).

A return of schizophrenic psychopathology approximately 9 months after discharge was noted for clients exposed to high levels of expressed emotion (Brown et al., 1972). It was suggested that pathogenic levels of expressed emotion could be modified if clients complied with medications and reduced face to face contact with network members who exhibited this negative impact (Brown et al., 1972; Vaughn & Leff, 1976).

A deterioration of functioning was also noted for clients with schizophrenia when the intensity of social interaction intensified (Schooler & Spohn, 1982). However conflicting evidence is provided by a study of long-term clients, most of whom had a diagnosis of schizophrenia (Earls & Nelson, 1988). More intense support was positively associated with feelings of emotional well-being. Subjects who reported greater satisfaction with the support provided had less negative affect. As indicated by Vaughn and Leff (1976), it may not be the degree or intensity of contact that has a negative impact but rather the amount of negative expressed emotion or overinvolvement.

This experience of expressed emotion is similar to the social stress described by Sokolove and Trimble (1986) whereby social support is not provided when requested and criticism and physical violence may occur. Malone, a nurse

researcher, emphasized the importance of considering these negative effects of social support and introduced the concept of social "dissupport". Dissupport evolves from relationships that interfere with clients' growth and adaptation and which deplete clients of their own resources. She suggested that social support and social dissupport should be viewed as a continuum so that both positive and negative aspects of relationships can be explored (Malone, 1988). For clients with schizophrenia, this is a useful concept in exploring their social networks.

As well as focusing on specific diagnostic categories, research has considered the roles played by others in providing social support. A positive relationship was illustrated between being married and social and occupational functioning along with community tenure. This was thought to be due to the higher self-expectations of married clients (Freeman & Simmons, 1963).

Friends rather than family outside the home were found to provide more support for psychiatric clients, particularly in crises. Friends were especially important in promoting clients' use of professionl caregivers (Horowitz, 1978). In another study of peer relationships of males who had schizophrenia and a control group, no significant differences were found in the amount of time spent in socialization but there were variations in the network density for both groups. The findings also

indicated that male adolescents who were later diagnosed with schizophrenia often had one best friend in a non-reciprocal relationship (Kreisman, 1970).

Social support is usually perceived as being provided by laypersons, rather than professional sources. However, support available from professional sources, such as health care providers, may be invaluable for clients who lack other sources of support and nurses have been urged to become active participants of the social networks of their clients (Malone, 1988). Norbeck (1988) described this as surrogate support designed to augment deficiencies within clients' networks. Such support may be temporary, such as during an admission, or may be long-term, as would be expected for clients with schizophrenia in the community.

Some authors have suggested that community support may have a protective mechanism for secondary stressors, such as job difficulties, in the absence of primary supports, such as a spouse (Syrotuik & D'Arcy, 1984). Nonfamilial relationships were also cited as important in a study of Manhattan "SRO" hotels which revealed a correlation between satisfaction with life, high levels of social functioning, and casual contacts with other hotel residents. More intense relationships resulted in neutral or negative outcomes (Cohen & Sokolovsky, 1978).

One unique study has considered the roles of social relationships of clients recovering from psychotic episodes

(Brier & Strauss, 1984). The investigators looked at specific factors in relationships which were helpful and their changing nature over time. A convalescent phase lasting approximately three months was identified which required assistance with emotional ventilation, reality testing, social approval and integration, material support, problem solving and constancy. Relationships were dependent and non-reciprocal with family and hospital relationships considered most valuable.

A rebuilding phase followed in which new relationships were formed within the community, and reciprocity became increasingly important. The authors suggested that large networks were essential because they were more likely to meet the variety of needs experienced by clients.

In summary, research has demonstrated the influence of social support on physical and emotional well-being. The majority of studies have not focused on the psychiatric population. However, a growing body of knowledge has indicated the importance of social support provided through the social network in impacting on mental health and illness. Clients with schizophrenia receive less support or perceive this to be the situation. This may be related to characteristics of schizophrenia and also to characteristics of the types of social networks available to the clients.

Social Network Research

Social networks of psychiatric clients differ from those found in other populations. In the general population, individuals were found to have a personal network of twenty-five to fifty people with five or six clusters of six or seven people (Hammer et al., 1978). Two studies conducted in Newfoundland by nurse researchers found networks of eight members for noninstitutionalized elderly subjects (Turner, 1988) and twelve members for widows (Hustins, 1986).

Networks of clients with neurotic disorders consisted of ten to twelve people with whom negative interactions were more likely (Henderson, Byrne, Duncan-Jones, Scott, & Adcock, 1980; Pattison, DeFrancisco, & Wood, 1975). In a study of active substance abusers, the mean network size was six with small network size associated with more severe psychopathology. Larger networks correlated with higher levels of functioning (Westermeyer & Neider, 1988).

Although the results have been inconsistent, variables such as social disintegration, lower social status and urban residence have been associated with higher rates of schizophrenia. This is important for social support because these variables are associated with social networks with minimal and weakened ties. Further, these networks do not provide a client with schizophrenia with adequate and consistent feedback to promote the development of socially

accepted behaviour (Hammer et al., 1978). Whether these networks contribute to the development of schizophrenia or whether the illness results in the individual being surrounded by a particular type of network remains a topic for future research (Llamas et al., 1981).

Networks of individuals with psychotic disorders, including schizophrenia, were smaller, more asymmetrical or dependent, and more likely to be dominated by family (Pattison et al., 1975; Sokolovsky, Cohen, Berger, & Geiger, 1978; Tolsdorf, 1976). Despite the smaller size, network members were found to be more powerful and dominant than in other networks (Tolsdorf, 1976). Fewer multiplex relationships (relationships serving more than one function) have been identified in the networks of clients with psychotic disorders (Sokolovsky et al., 1978).

The degree of density (mean number of relationships each individual has with others in the same network) in these networks was found to be less than half that found in networks in the general population (Cohen & Sokolovsky, 1978). However, analysis of density for specific network members indicated a high degree of density for kin with only minimal interaction for non-kin (Pattison et al., 1975). Thus relatives within the network knew each other and had some degree of contact. Other network members, such as friends, co-workers or neighbours did not know each other or have contact with the other members of the subjects'

networks.

In an attempt to explore the relationship between network density and rehospitalization in clients, many of whom had a diagnosis of schizophrenia, investigators arrived at some useful conclusions (Dozier, Harris, & Bergman, 1987). They found that networks with low or high density were associated with higher rates of hospitalization. Moderate density or interconnectedness between network members was linked to fewer hospitalizations. In this type of network, members validated their impressions of the client with each other and provided support which was more effectively sustained in stressful circumstances.

In a study of clients with chronic mental illness, many of whom had schizophrenia, social networks were found to have their own unique types of social support and stressors. Clients with schizophrenia who had more severe symptoms had fewer instrumental relationships than those with less severe symptoms. However the number of reciprocal and dependent relationships was similar (Sokolove & Trimble, 1986).

Contrary to previously discussed studies, other research has indicated that psychiatric clients spent less time with kin and more time with friends. Closer relationships were described with friends compared with family (Silberfeld, 1978). Baker's unpublished work (1979) found that clients who returned to a stable, supportive social network which was family dominated had less severe

psychopathology (cited in Greenblatt et al., 1982).

Improved social integration and functioning was found to be linked with larger social networks which provided emotional and informational support, a wider variety of types of network members, frequency of contact with network members, duration of network relationships and clients' positive perceptions of the network (Moxley, 1988).

Based on descriptions of the characteristics of social networks surrounding the individual with schizophrenia, it has also been suggested that specific situations may require specific types of networks. Cutler and Tatum (1983) advocated for multisegmented networks which provide assistance with skills for socializing, daily living, leisure and work. Others have recommended a small, dense network to provide affective and instrumental support and a sense of identity (Israel & Antonucci, 1987). Flexibility and stability have also been noted as crucial network characteristics (Morin & Seidman, 1986).

Social network therapy has been developed on the basis of such research as a means of assisting clients to systematically develop an apropriate social network. Interventions of this type have been linked with a significant decrease in the use of crisis, hospital and community support services over an approximate 2 year period after network therapy has been completed (Schoenfeld, Halevy, Hemley-van der Velden, & Ruhf, 1986).

To summarize the previous research , the social networks of individuals with schizophrenia have been found to be smaller, family-dominated, and less capable of providing the quality and quantity of social support required for well-being. The process by which support is provided to and experienced by clients is unclear but progress in this area is a major thrust of present research.

Mechanism of Social Support

Controversy remains regarding the mechanism by which social support operates to create its multifaceted impact on health and illness. Current discussions recommend that social support research be considered as an element of stress and coping research (Pearlin, Lieberman, Menaghan, & Mullan, 1981; Wilcox & Vernberg, 1985). Much of the discussion of the mechanisms of social support deals with the role of social support in the avoidance, reduction and elimination of environmental stressors (Pearlin et al., 1981).

This is the basis for the buffering hypothesis which views social support as crucial in providing protection from the negative impact of stressors. However, social support is seen as insignificant in the absence of environmental stressors (Cohen et al., 1985; Nuckolls et al., 1972). This was demonstrated in a nursing study of social support and pregnancy which revealed a significant relationship between

social support and pregnancy complications only when a high number of life changes occurred (Nuckolls et al., 1972).

In functioning as a buffer, social support may operate primarily by providing emotional support which demonstrates that the individual is valued. This in turn bolsters self-perceptions so that the individual can cope with stress thereby preventing or reducing symptomatic responses to stress (Thoits, 1985). Social support may assist with adaptation to stressors or facilitate a withdrawal from stressful situations (O'Connell et al., 1985).

As well, social support may have a direct effect on well-being. Low levels of social support may be needed as a continuous element of everyday life to facilitate well-being and role performance (Kahn & Antonucci, 1980; Norbeck, 1981). It may be useful then to consider both a direct (main) effect combined with a buffering (protective) effect (House, 1981). Norbeck (1988) has further suggested that the relationships between social support and other variables may be bidirectional so that health outcomes may also have an impact on social support.

While progress has been made in understanding the mechanism of social support, much attention has also been paid to advancing the measurement of social support.

Measurement of Social Support

Measurement of social support has provided a stimulus

for the development of numerous instruments. However, measurement remains imprecise and inadequate with a lack of standardization and poor methodological approach (Israel & Antonucci, 1987). Many techniques are available for assessing both the quantity and quality of social support available to an individual. Data on structural characteristics of social networks provides useful information. These variables include the size of the network and density or interconnectedness of network members. Demographics, composition, and heterogeneity or homogeneity are also included in this category (Ellison, 1983; Lipton, Cohen, Fischer, & Katz, 1981).

Relational variables include the frequency, intensity and duration of contacts. Multiplexity is assessed by the number of various content areas within the relationships of network members. For example, members could be friends only (uniplex) or may be both friends and co-workers (multiplex). Reciprocity or the give and take between members and the focal individual is also considered (Ellison, 1983; Lipton et al., 1981). The type and quantity of actual support is also measured, often by asking network members to describe the support they provide.

The need remains to include a measure of the clients' perceptions and experiences of their social networks and the social support available and utilized. Measurement of the quantity and quality of social support available or provided

does not necessarily correlate with individuals' experiences of being supported. Thus, subjective measures of social support have been developed to assess levels of perceived social support.

The perceived adequacy of social support reflects the interaction between personality and situational factors and has been identified as a useful predictor for the onset of psychiatric symptoms (West, Livesley, Reiffer, & Sheldon, 1986). Turner et al. (1983) also conceptualized social support as a personal experience rather than merely objective characteristics or interpersonal processes. The individual's perception does not constitute reality as others may see it but represents his or her own reality.

This becomes particularly relevant in research involving clients with schizophrenia who may interpret reality differently than other groups. Characteristics of schizophrenia such as difficulty in perceiving and managing boundaries between individuals lead to a misinterpretation of relationships. Cognitive patterns, such as paranoid delusions, or misinterpretation of others' behaviours, especially criticism, are examples of difficulties which affect the perception of social support (Kayloe & Zimpfer, 1987).

This has been demonstrated in a study of schizophrenia comparing clients' and significant others' perceptions of the clients' networks. Clients differed with significant

others in describing their networks as larger, more supportive and composed of more friends (Crotty & Kulys, 1985). Similarly, other researchers have found that the perceptions of the client with schizophrenia differ. Clients with chronic mental illness were described as providing unrealistic reports of the amount of support received (Klein, Hawkins, & Newman, 1987).

Tolsdorf (1976) noted that although clients with schizophrenia received as much support as other groups, they reported otherwise, which he attributed to factors such as a negative network orientation. Thus clients may perceive a higher or lesser amount of social support than is actually available from the social network and may perceive their networks differently than they actually exist.

In summary, while many frameworks and instruments have been developed to improve the measurement of social support, this remains an area for continued work. The consensus has been however that clients' perceptions of both characteristics or properties of the social network and the support provided by that network are essential variables for study. Similarly, measurement of social support has encountered many of the difficulties also found in studying community functioning.

Community Functioning

Problems with functioning in a community setting are characteristic of clients with schizophrenia. Most remain on the outside of society with few social ties (Kammer et al., 1978) and have major difficulties with relationships (Kayloe & Zimpfer, 1987). The majority of clients remain unmarried and unemployed (Tessler, Bernstein, Rosen, & Goldman, 1982) and many live with their families (Goldman, 1982).

Areas of impairment include inadequate coping skills, problems with interpersonal relationships, and difficulties with activities of daily living. The latter difficulties include self-care, language, learning, mobility, self-direction, self-sufficiency and potential for independent living. Low self-esteem contributes to a preoccupation with avoiding failure rather than achieving success. This becomes perceived as a lack of motivation on the part of clients (Price Hoskins, 1987).

A group of clients with schizophrenia between the ages of 18 and 35 have been recognized as experiencing problems which differ from those of older clients. This group, the young adult chronic patients, usually have had briefer psychiatric admissions, problems with substance abuse, disorganized social networks and relationships, and avoidance or inappropriate use of the health care system, particularly psychiatric services. They do not readily

participate in programs or treatment and tend to move from one community to another (Bachrach, 1982).

The growing numbers of people with psychiatric disorders, particularly schizophrenia, in the community and an increasing awareness of their needs have led to a proliferation of community based programs. A recent Ontario report has identified the essential components in any organized framework of care for clients with schizophrenia in the community. These components include a range of medical and psychiatric services, adequate housing, coordination of services, and advocacy for clients. Psychosocial services required include rehabilitation assessments, case management, social and recreational programs, social skills training, family counselling, social network therapy, self-help groups, vocational and educational services, financial assistance and individual psychotherapy (Wasylenki, Goering, Humphrey, Martin, & Glaser, 1988). These services have been offered in a formalized manner in the United States as Community Support Systems (National Institute of Mental Health, 1980).

Such service delivery frameworks are designed with the goal of assisting clients to function at an optimal level within the community. However, criteria for successful community functioning are usually not specified. Many attempts have been made to develop appropriate measures of level of functioning within the community with conflicting

results. Some correlates of community adaptation have been suggested by researchers while acknowledging their limitations. A review by Avison and Speechley (1987) of social, social-psychological and psychiatric correlates of community adaptation for discharged psychiatric clients emphasized the lack of progress in defining and measuring community functioning.

The most commonly used outcome criteria were identified as: recidivism, community tenure, employment and role performance, social adjustment, symptomatology, and global ratings of outcome (Avison & Speechley, 1987). Previous history of hospitalization and pre-hospitalization employment history have been the most frequently utilized indicators of community adjustment. Avison and Speechley recommended that these factors continue to be included but that they should be supplemented particularly by global assessments of functioning within the community.

In an example of the type of research designed to measure community functioning, an early study of 229 clients discharged after at least 2 years in a British psychiatric hospital linked successful community outcome with functional level at discharge, employment, and accommodations in boarding houses or with siblings rather than with parents, spouses or in hostels. No significant relationship was identified for age, diagnosis or length of stay in hospital (Brown, Carstairs, & Topping, 1958).

A recent Canadian study (Goering, Farkas, Wasylenki, Lancee, & Ballantyne, 1988) looked at predictors and correlates of instrumental role functioning in the community for discharged psychiatric clients. The strongest relationship at 12 months after discharge was between symptoms and instrumental role functioning or performance in a role such as student or homemaker. Factors such as diagnosis, sex, and age were not significant. As with other research, the level of prior functioning was found to be the most reliable predictor of functioning in the community. The value of being involved with some form of meaningful activity was also noted.

In the same study, a number of predictors of unimproved instrumental functioning at 1 year post-discharge were identified when subjects were evaluated after 6 months post-discharge. These included thought disorders, anxiety and depression; inadequate housing; increased difficulty with household chores, self-care and relationships; and a lack of involvement with rehabilitation programs or vocational services. It is important to note that over half of the moderately to severely impaired clients were able to improve their functional performance within the community.

A 5 year outcome study of clients with schizophrenia found that 44% had global functioning scores in the lower half of the Global Assessment Scale. The best predictors of poor community functioning were poor employment performance

prior to admission, the duration of difficulty, and poor clinical state at discharge. Precipitating factors prior to the first admission as well as age at that time were predictors of better community functioning (Moller, vonZerssen, Werner-Eilert, Wuschner, & Stockheim, 1982).

Some similarities were noted in a comparison of the community functioning of clients with schizophrenia in both urban and rural settings. Urban residents had lower scores on the Global Assessment Scale, poorer interpersonal functioning and increased evidence of anxiety-depression and withdrawal-retardation. This group also had a lower standard of housing, less support from any residential staff and less community acceptance.

The environmental measures utilized in the study: neighbourhood type, practical support, household conflict and congruency with housemates were all associated with community adjustment. An increase in practical support was positively correlated with poorer relationships with peers, fewer leisure interests and lower scores on the Global Assessment Scale (Davies, Bromet, Schulz, Odenburn, & Morgenstern, 1989).

While it is evident that there has been an increasing recognition of the need for effective community programs for clients with schizophrenia. One of the difficulties encountered has been in reaching a consensus regarding appropriate criteria for evaluating community adaptation or

functioning. The additional task of developing suitable measurement tools and techniques has also impaired progress in this area. Recommendations for improvement include utilization of a variety of outcome criteria, inclusion of global or overall measures of functioning, and incorporation of a conceptual framework.

Conceptual Framework

The lack of a unifying theory of social support has been cited as an obstacle to understanding the concept (Israel & Antonucci, 1987). This is further hampered by the neglect of many authors in presenting the conceptual framework upon which their work is based. This leads to continued confusion about social support and interferes with the application, replication and generalizability of research (Tilden, 1985). Dr. Jane Norbeck, a nurse researcher, has developed a nursing model for social support and a framework for research related to the application of social support to clinical practice (Norbeck, 1981, 1982). Norbeck's theoretical perspective is also relevant to schizophrenia and community functioning and was utilized as the basis for the conceptual framework for this study (Figure 1).

Norbeck's conceptualization of social support, based on the work of Kahn and Antonucci (1980) delineates two major components of social support: functional social support and

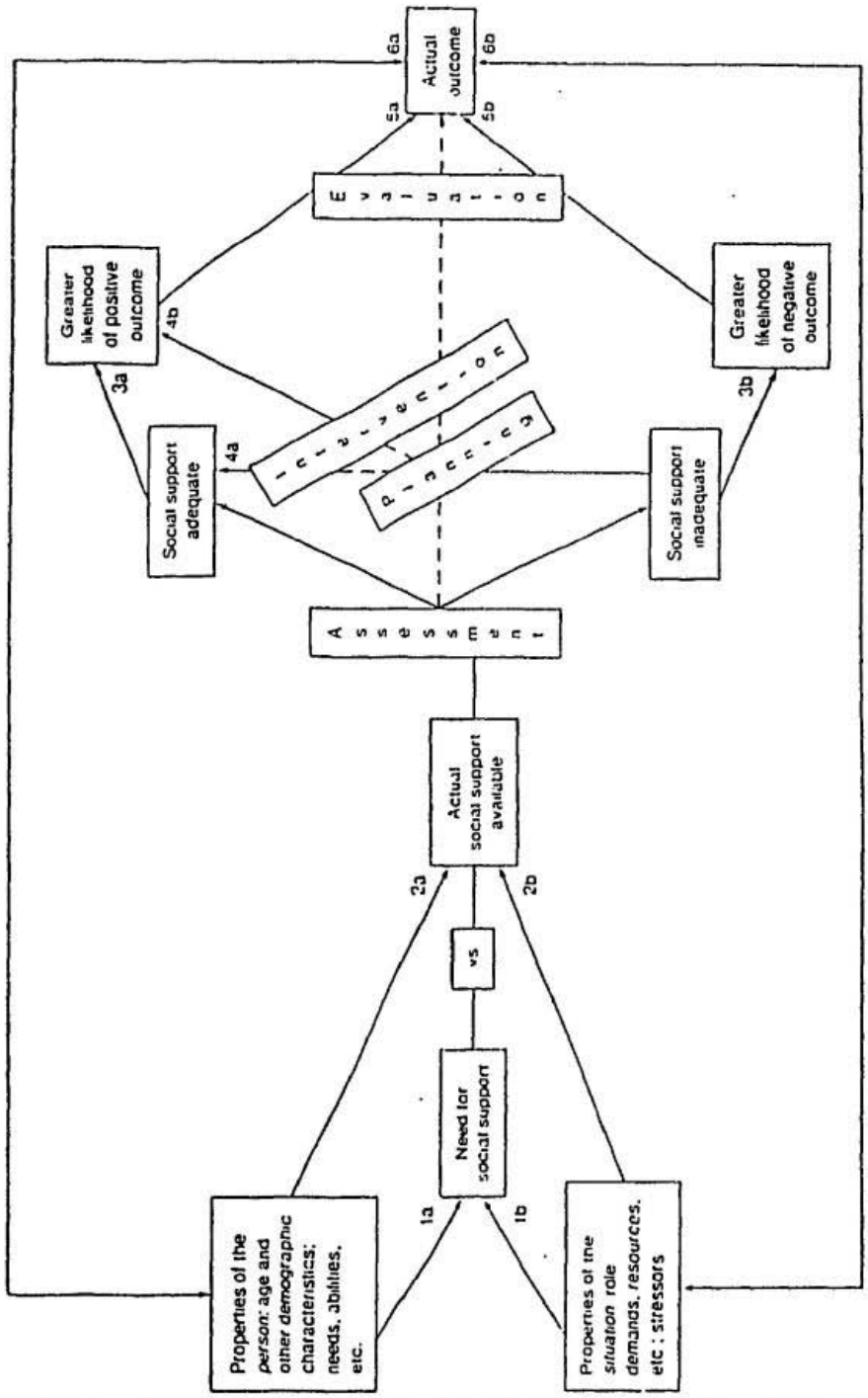

Figure 1. Norbeck's model of social support. From "Social support: A model for clinical research and application" by J.S. Norbeck, 1981, Advances in Nursing Science, 3, p.46. Copyright 1981 by Aspen Publishers,Inc. Reprinted by permission.

properties of the social network. Functional social support is defined as the interpersonal transactions within a social network that include one or more of the following: affect, affirmation or aid. Affect is defined as the expression of positive affect of one person toward another, including expressions of liking, admiration, respect and love. Affirmation is defined as the endorsement, agreement or acknowledgement of the appropriateness of another's behaviours, perceptions or views. Aid is defined as the giving of symbolic or material aid or assistance to another, such as information, time or money (Kahn & Antonucci, 1980).

Functional social support composed of expressions of affect, affirmation and aid is provided by the social network. The social network is defined in Norbeck's model as the people from whom an individual receives functional support and to whom the individual will give support in return. While many characteristics of social networks may have an impact, Norbeck specifies three characteristics as most crucial and refers to them as the network properties which are elements of overall social support. These properties are the network size or number of people within the network, the duration of time that an individual has had a relationship with each network member, and the frequency with which an individual has contact with network members (Figure 2).

Additional characteristics of the network considered by

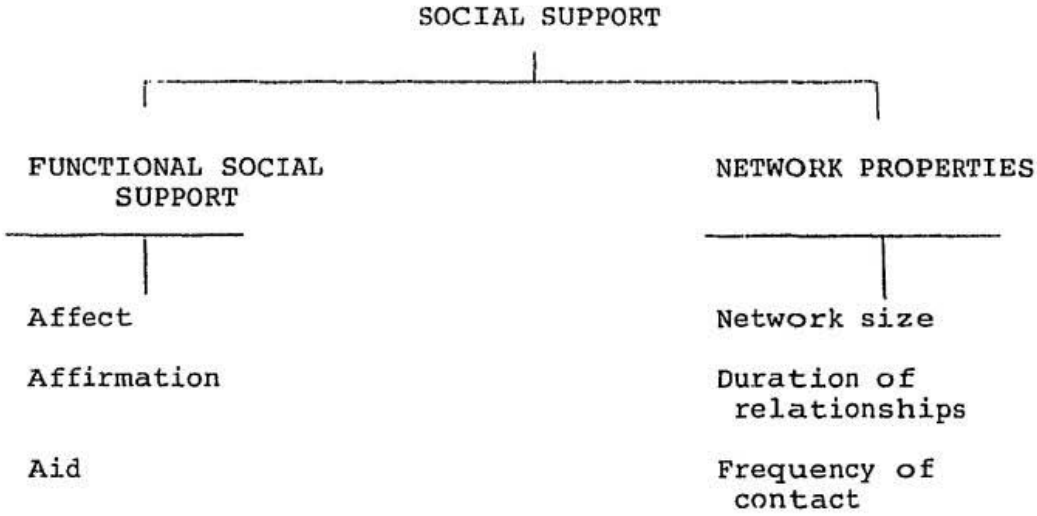

Figure 2. Norbeck's components of social support.

Norbeck include the composition of the social network or the categories of members within the network, such as friends, family members or co-workers. Useful information is also provided by exploring the number of network members who may no longer be available and how this loss of support is experienced by the individual.

Norbeck specifies six underlying theoretical assumptions (Norbeck,1982). 1) Supportive relationships are important in dealing with role demands throughout the life span. 2) Social support is provided through a network composed of relationships. 3) Most relationships within the network will demonstrate stability with some enduring over many phases of the life span. 4) Relationships within the network are typically healthy or functional. 5) Characteristics of individuals and situations will impact on the type and amount of support required. 6) Characteristics of individuals and situations will also impact on the type and amount of support available.

Norbeck's model of social support has been developed for general nursing practice. It can also be applied to a population with schizophrenia and can incorporate the concept of community functioning. Her conceptualization of social support is integrated with elements of nursing theory and the nursing process. Person-specific properties, such as age, combine with situation-specific properties, such as crisis, resulting in a need for social support. These

properties will also affect the quantity and quality of support available from the social network.

Adequate social support leads to a greater likelihood of positive health outcomes while inadequate social support leads to a greater likelihood of negative outcomes. The nursing process is used to assess levels of social support, plan and implement appropriate interventions and evaluate their impact on health outcomes.

In this study of clients with schizophrenia, Norbeck's model of social support was adapted to incorporate community functioning (Figure 3). Properties of the individual are viewed as affecting the need for, perception, utilization and availability of social support. Characteristics such as age, sex, marital status, cultural differences and coping patterns may have an impact. Examples of such properties associated with schizophrenia include a lack of social skills and symptomatology such as paranoid thinking. Early dysfunctional relationships may result in difficulties with attachment as evidenced by withdrawal from relationships or high levels of dependency (Bernstein, 1987; Kahn, 1984; West et al, 1986; Will, 1980), both of which may be evident in the social networks of individuals with schizophrenia.

Properties of the situation associated with schizophrenia would include stressors related to the difficulties in meeting the expectations of daily living. The chronic stress associated with any long-term illness, a

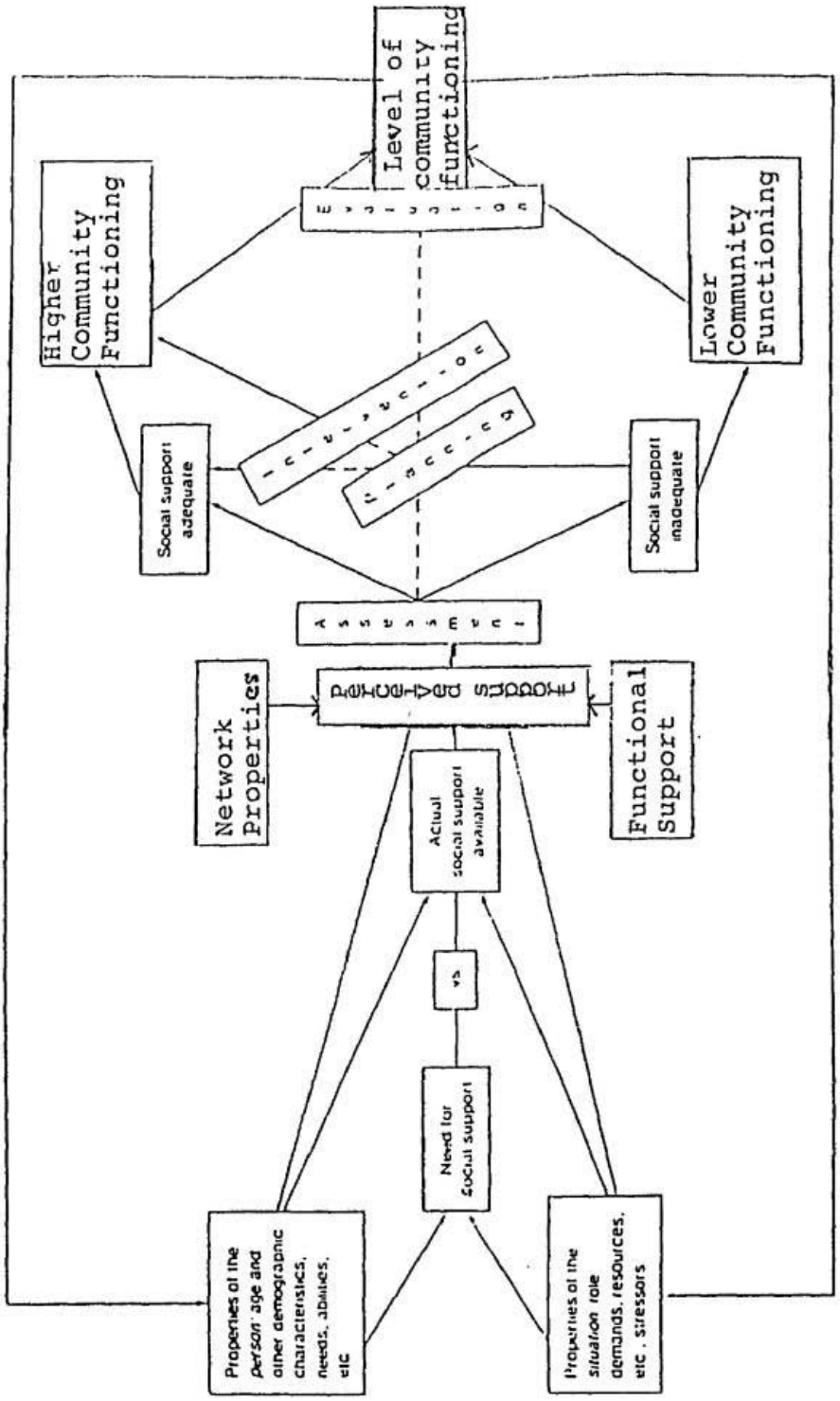

Figure 3. Model of social support and community functioning.

lack of community resources and unrealistic role demands of family members or society in general all have an impact.

Properties of the person and the situation combine to create a need for social support. This will vary depending on factors such as individual characteristics, phase of the illness, and previous experiences with needing social support. The actual support available will also be influenced by properties of the person and the situation. These include variables such as the geographic location of the network and the existence of formal mechanisms, such as case management or supportive employment and housing, to ensure that clients receive support.

Characteristics of the social networks of individuals with schizophrenia may interfere with the adequate provision of social support. Network properties specified by Norbeck which were explored in this study include network size, duration of relationships with network members, and frequency of contact with network members. The amount of functional social support, or affect, affirmation, and aid, provided by the network is also explored. Additional network characteristics considered include the composition of the social network and the occurrence of loss of social support.

Although social support may be available, clients may not perceive the network as supportive. This perception would be affected by many factors, such as the client's view

of his or her illness (Brier & Strauss, 1984) or the expectation that the network's support will be harmful or ineffective (Tolsdorf, 1976). In this study, clients' perceptions of social support, composed of the properties of their social networks and the levels of functional social support available or provided, are the focus, rather than the actual support available.

Nursing assessment focuses on an understanding of whether the social support perceived by clients as being available, is adequate and appropriate to provide the support required for adequate community functioning. Perceptions that the available support is adequate increase the probability that there will be positive outcomes and that clients will demonstrate higher levels of community functioning. Perceptions of inadequate support necessitate further planning and nursing interventions to provide support directly, enhance the social networks' capabilities of providing support and/or increase the clients' receptivity to support. Without effective planning and intervention, negative outcomes or lower levels of community functioning would be expected.

The concept of social support also incorporates the major domains of nursing: client, health and environment (Tilden, 1985). Nursing concerns itself with the client, including the individual, family, group or community; and the environment as a resource for providing social support.

The goal of considering the client-environment interaction is to assist clients toward an optimal level of health. Health would include appropriate levels of social support and satisfying degrees of adaptation to the environment. Nursing interventions may focus on the client, the environment, or their interaction.

This study focused on individual clients, their social environment and their functioning within the community environment. Positive outcomes as described in Norbeck's model would include satisfactory levels of community functioning for clients. There is a lack of agreement about indicators of effective community functioning. Thus it is useful to specify the assumptions underlying this study's assessment of level of functioning. These are common normative value assumptions that community living, productivity, socialization, coping with stress and conformity to the behavioural and role expectations of others are preferable (Avison & Speechley, 1987).

Thus for clients with schizophrenia in the community, the perception of adequate amounts of social support, composed of adequate network properties and adequate functional social support, is likely to lead to positive outcomes, which in this study would be higher levels of functioning within the community. For clients who perceive inadequate social support, negative outcomes or lower levels of community functioning would be expected.

This conceptual framework then forms the basis for a nursing study of clients with schizophrenia and their perceptions of their social networks and levels of functional social support, their levels of community functioning, and the relationship between social support and community functioning.

CHAPTER III

Methodology

Design

A non-experimental, descriptive design was used in which 30 discharged clients were interviewed by the investigator over a 4 month period. Males and females were included. The selection criteria were:

1. a diagnosis of schizophrenia based on DSM-III-R criteria,
2. discharge from the selected psychiatric hospital during the 12 month period prior to the study,
3. arrangements for follow-up appointments with a psychiatrist in the Ambulatory Care Department of the selected hospital,
4. age range between 18 and 65,
5. fluency in English,
6. stable residence in a community for a minimum of 6 months prior to the study.

Sampling Plan

A convenience sample of 30 clients attending the Ambulatory Care Clinic at a psychiatric hospital was utilized. The study criteria were discussed with psychiatrists providing follow-up care. They were asked to

identify any clients meeting the selection criteria when clients attended the Ambulatory Care clinics for a scheduled appointment with their psychiatrist. Psychiatrists then asked potential subjects for their verbal consent to be contacted by the researcher. This process was continued until 30 clients had participated in the study.

Setting

The study was conducted in the Ambulatory Care Department of a psychiatric hospital. This area constituted the outpatient services for the hospital and offered follow-up clinics for discharged clients. Interviews took place in an interviewing room in the Ambulatory Care Department.

Operational Definitions

1) Social support was measured for each subject by two major variables on the Norbeck Social Support Questionnaire (NSSQ) (Appendix A):

a)Total network properties variable: score obtained for each subject by summing the scores of the three subscales for:

-size of network, or sum of number of members listed by each subject in their social network,

-duration of relationships with network members, or sum of scores from NSSQ Question 7 rating each network member on the duration of time of their relationship with

the subject,

-frequency of contact with network members, or sum of scores from NSSQ Question 8 rating each network member on their frequency of contact with the subject

b) Total functional social support variable: score obtained for each subject by summing the scores of the three subscales for:

-affect, or sum of scores from NSSQ Questions 1 and 2 rating each network member on the amount of affect provided to the subject,

-affirmation, or sum of scores from NSSQ Questions 3 and 4 rating each network member on the amount of affirmation provided to the subject,

-aid, or sum of scores from NSSQ Questions 5 and 6 rating each network member on the amount of aid provided to the subject

2) Network composition: sum of number of individuals listed by each subject in their social network in the following categories: spouse/partner, relative, friend, work/school associate, neighbour, health care provider, counsellor/therapist outside the health care system, clergy, other

3) Total loss variable: score obtained for each subject

by summing the scores of the three subscales for:

-number of subjects experiencing loss, or sum of scores from NSSQ Question 9 indicating whether or not each subject had experienced loss from the social network in the past year (rated as no-0 or yes-1),

-total number of losses, or sum of scores from NSSQ Question 9a indicating actual number of individuals lost from the social network in the past year,

-significance of losses, or sum of scores from NSSQ Question 9b ranking lost network members on the amount of support that they had provided

4) Schizophrenia was defined according to DSM-111-R criteria (American Psychiatric Association, 1987)

5) Level of community functioning variable: the score obtained for each subject on the Global Assessment of Functioning Scale (GAF) (Appendix B)

Instrumentation

a) Norbeck Social Support Questionnaire (NSSQ): The Norbeck Social Support Questionnaire (Norbeck, 1981) (Appendix A) has been widely used, including recent Newfoundland studies (Turner, 1988; Hustins, 1986). It was developed by Dr. Jane Norbeck, University of California, a nurse who is a prominent researcher in the field of social

support. Permission to use the Norbeck Social Support Questionnaire in this study was given by Dr. Norbeck.

Satisfactory results for reliability, internal consistency, concurrent validity, construct validity and predictive validity have been reported (Norbeck, Lindsey, & Carrieri, 1983). In a psychometric review of social support and social network scales, the work by Norbeck and colleagues was commended for its attention to basic measurement criteria (Rock, Green, Wise, & Rock, 1984).

Although no reports were available for the use of the Norbeck Social Support Questionnaire specifically with subjects with schizophrenia, one study had been implemented to evaluate the instrument's reliability and validity for psychiatric clients in general (Byers & Mullis, 1987). The sample was composed of 84 males who were hospitalized at the time of the study for psychiatric problems.

The test-retest correlations of .90 to .96 indicated a high degree of reliability. The Alpha coefficients with values of .92, .94 and .93 indicated a high degree of validity. The test was also administered to male hospital employees. Their scores were higher than those of the subjects and similar to scores reported by Norbeck (Norbeck et al., 1983). This is an indication of construct validity.

In this study, the researcher read the questionnaire with the subjects and recorded their answers on a coded

answer sheet provided with the Norbeck Social Support Questionnaire. To complete the instrument, basic demographic data on age, sex, marital status, education, ethnic background and religious involvement is collected. Subjects are asked to identify up to 24 individuals who are significant, important or sources of personal support, using only first names or initials. This list represents subjects' personal networks. Subjects are then asked to rate each network member on a Likert-type scale ranging from "not at all" to "a great deal" for 6 questions designed to explore the amount of functional social support provided by the network.

Questions 1 and 2 indicate the amount of affect provided, Questions 3 and 4 deal with affirmation, and Questions 5 and 6 focus on the amount of aid. This makes available sets of scores for the 3 subscales of affect, affirmation and aid.

In Question 7, subjects rate the identified network members on a scale from "less than 6 months" to "more than 5 years" to represent the duration or length of these relationships with the subject. Question 8 explores the frequency with which subjects have contact with their network members by asking subjects to rate their contacts on a scale from "daily" to "once a year or less".

Question 9 on loss is included to identify the number of network members lost during the past year and the amount

of support that they provided.

Using Norbeck's instructions, results are obtained by adding and combining scores for Questions 1 and 2 on affect; Questions 3 and 4 on affirmation; and Questions 5 and 6 on aid. These 3 subtotals are then summed to provide a total functional social support score for each subject.

Similarly, scores for the number of individuals listed in the networks, Question 7 on duration of relationships and Question 8 on frequency of contact are summed separately to provide 3 subtotals. These subtotals are then summed to provide a total network properties score for each subject.

A total loss score is also calculated for each subject by summing the scores from the 3 subscales for the experience of loss from the network, the number of individuals lost and the amount of support lost.

It is important to note that except for the variables of number of network members and the number of network members lost, the remaining variables included in the Norbeck Social Support Questionnaire are measured on an ordinal scale. This allows the investigator to identify the graded order of responses but not the specific distances or intervals between responses (Knapp, 1978).

For example, Subject A who has a score of 50 on Question 8 dealing with frequency of contact obviously interacts more with network members than Subject B with a score of 10. However, it cannot be said that Subject A has

5 times more contact than Subject B. Thus the scores derived from the Norbeck Social Support Questionnaire become most meaningful when comparisons are made between subjects and with other studies.

b) Global Assessment of Functioning Scale (GAF): This scale (Appendix B) is based on the earlier Global Assessment Scale developed by Endicott and associates (Endicott, Spitzer, Fleiss, & Cohen, 1976). It constitutes Axis 5 of the DSM-III-R (American Psychiatric Association, 1987) and so is widely and routinely used with clients with psychiatric disorders to provide an overall rating of functioning. It focuses on psychological, social, and occupational functioning on a continuum of mental health and mental illness. The Global Assessment of Functioning Scale is convenient to use and is an example of the type of comprehensive instrument recommended as a useful measure of community adaptation in a recent critique of criteria and measurement issues (Avison & Speechley, 1987).

The investigator makes a rating on a scale from 0 to 90 which is correlated with detailed, multidimensional anchor points included with the scale. These are descriptions of a variety of psychological, social and occupational examples of functioning with which the subject is compared to arrive at a rating. In this study, ratings were obtained from subjects' responses and from the investigator's clinical

observations during the interview.

c)Client Profile (Appendix C): This was constructed by the investigator to collect additional data related to the level of community functioning to arrive at a rating on the Global Assessment of Functioning Scale. The data included: length of time residing in the current geographic area, family's home, financial status, age at first admission, number of hospitalizations, occupational level, employment history, employment status, accommodations, present treatment programs (staff, treatments or programs, medications), and psychiatric symptoms experienced in the 2 week period prior to the study.

Areas of symptomatology included were those most often demonstrated by clients with chronic psychotic disorders as described by previous researchers (Krawiecka, Goldberg, & Vaughan, 1977). Only symptoms experienced within the past 2 weeks were considered during the interview. The areas of depression, anxiety, delusions, hallucinations, behavioural problems, communication problems and cognitive problems were rated on a scale of absent, mild, moderate and severe.

An Interview Guide (Appendix C) with sample questions was developed with the Client Profile to provide criteria for the rating scale. A mild degree of symptomatology was evaluated as infrequent episodes or occasional, temporary difficulty. A moderate degree of symptomatology indicated

more frequent episodes or more extensive impairment of general functioning. Severe symptomatology represented frequent episodes or extreme distress which interfered with general well-being.

To assess face and content validity, this instrument was discussed with three psychiatric nurses who have had extensive experience in the area of community psychiatric nursing with clients with schizophrenia. Their conclusion was that the Client Profile could be easily administered and would collect appropriate data related to community functioning of clients, thereby suggesting that the tool had construct validity.

Procedure

Formal permission to conduct the research was requested from the hospital involved (Appendix D). The research was also discussed in a multidisciplinary Ambulatory Care Department meeting so that all staff were informed regarding the study purpose and design and the involvement of clients (Appendix E).

Clients meeting the study criteria who agreed to have their names released by their psychiatrists were contacted in person by the investigator during a regularly scheduled follow-up clinic appointment. After a brief explanation (Appendix F), if interested in participating, the client was asked to sign a standard university research consent form

(Appendix G). Questionnaires were completed by the researcher during an interview which lasted from ten to thirty minutes.

A pretest with two clients who met the study criteria was undertaken. As a result of this, no changes were considered necessary in procedures or instrumentation.

Data Analysis

Analysis of data was accomplished through the use of the Statistical Package for the Social Sciences, or SPSSx (SPSS, Inc.,1983). Descriptive statistics were utilized including the mean, standard deviation, range, frequency distribution, skewness and kurtosis. These were used to report data on the characteristics of the sample, characteristics of social networks, social support perceived by subjects and levels of community functioning.

Program statements written for SPSSx were available with the Norbeck Social Support Questionnaire and were utilized in this study. Responses from the questionnaire were transferred to a scoring sheet so that subscales and variables could be analyzed. The scores from the subscales obtained for the affect, affirmation and aid perceived by subjects were summed to provide a total functional social support score. The scores from the subscales for the number in the network, duration of relationships and frequency of contact were summed to provide a score for the variable of

total network properties. The scores from the subscales on loss were summed to measure the total loss experienced by subjects.

Inferential statistics were used to explore the relationships between variables and subscales. Pearson's product moment correlation coefficients, a parametric test, were calculated. Two-tailed tests were used with a significance level of less than .05 considered acceptable. The use of the Pearson correlation allowed comparison with other studies using the Norbeck Social Support Questionnaire.

Ethical Considerations

A separate ethical review process through the university and the hospital involved addressed these issues. The priority of the investigator was the protection of the well-being and often precarious stability of the subjects. The individuals who were approached to participate were treated with respect and attention to their right to privacy. The request for consent to interview subjects was accompanied with assurances that information would be considered with the utmost respect for confidentiality.

The research procedure was explained to subjects and permission given to withdraw at any time. Information which could identify individual subjects was not included in any written reports. Such information was also not discussed

with others, such as hospital staff. Subjects' names were coded so that data was anonymous during the statistical analysis phase. All information was stored in a locked cabinet.

There was minimal risk to subjects in the form of discomfort which some clients could experience regarding their participation. It was hoped that the nursing skills of the investigator were adequate to deal with discomfort of subjects or of clients who decided not to participate. Other Ambulatory Care staff had been informed about the study and so were available to provide assistance if any clients developed a negative response to the study.

It was anticipated that for the majority of the subjects, the interview was a positive experience and that they benefitted from discussing their perceptions about their social networks and social support. Long-term benefits will be expected from the implementation of the study recommendations in the Ambulatory Care Department so that the sample group may directly benefit.

Limitations

There were three major limitations of this study.

1) The sample was drawn from clients attending an Ambulatory Care clinic in a psychiatric hospital. Therefore the relevance of findings to those clients who attend other facilities or the many who do not have contact with the

psychiatric health care system was not determined by this study.

2) The small size of the sample also limits the generalizability of the findings.

3) The investigator formulated the hypothesis and also rated community functioning after rating social support. No external or blind assessment was included.

It should also be noted that there was no reliability testing for the Norbeck Social Support Questionnaire specifically for this group of subjects in the study setting or in Newfoundland.

CHAPTER IV

Results

Results will be presented in the following format. Characteristics of the sample will be outlined followed by a discussion of the descriptive statistics relevant to each of the research questions. Correlations between study variables and subscales will then be described.

Characteristics of the Sample

Complete results related to a description of the sample are recorded on the first page of the Norbeck Social Support Questionnaire (Appendix A) and on the Client Profile (Appendix C). A total of 30 subjects were interviewed, all of whom were Caucasian. Twenty-eight subjects (93.3%) were male and 2 (6.7%) were female. The mean age was 34.6 years with ages ranging from 18 to 61 years. Twenty-seven subjects (90.0%) had never been married.

The mean number of years spent in school was 9.6 years with subjects having from 6 to 16 years of education. Most subjects were receiving government financial assistance (66.7%) or unemployment insurance benefits (16.7%). The majority of subjects (70%) were of the Roman Catholic religion and most (70%) had minimal or no involvement with religious activities.

Subjects were asked to indicate the area where their family currently resided. Most subjects (70.0%) had families who lived in St. John's. Twenty-eight of the subjects (93.3%) had lived in their current geographic area, such as St. John's, for more than 5 years.

Five clients refused to participate in the study when approached by their psychiatrists. Four were male, 4 were unmarried and their ages ranged from 28 to 60 years. No other information was available.

Perceived Characteristics of Social Networks

The first research question focused on clients' perceptions of their social networks. The following variables for each subject were determined from the Norbeck Social Support Questionnaire: total network size, total duration of relationships, average duration of relationships, total frequency of contact, total network properties, total network composition, and total loss.

Total network size.

The total network size was determined for each subject by summing the number of individuals that subjects listed in their social networks on the Norbeck Social Support Questionnaire. The mean for the sample was 5.9 members (standard deviation of 3.4) with a range of 1 to 13 individuals (See Table 1).

Table 1

Mean, Standard Deviation and Range of Social Network Characteristics Scores from NSSQ

Characteristic	Sample Scores		
	Mean	Standard Deviation	Range
Network size	5.9	3.46	1.0-13
Duration of relationships with members	26.8	16.03	5.0-65
Frequency of contact with members	22.5	12.69	5.0-50
Average duration of relationships with members	4.5	.58	2.7-5
Total network properties (Network size + Duration of relationships + Frequency of contact)	55.3	31.36	11.0-128

Note. n=30

Total duration of relationships.

The total duration of relationships with each network member was rated by each subject to provide an indication of the length of time that the subjects had known each individual listed in their network (NSSQ Question 7). The total of the duration of relationships scores for all network members listed by each subject was summed. The mean value for the sample was 26.8 with scores ranging from 5 to 65 and a standard deviation of 16.0 (See Table 1).

Average duration of relationships.

The average duration of relationships with network members was determined for each subject by dividing the total duration score for each subject by the number of network members listed by each subject. The sample mean was 4.5 with a standard deviation of .58 (See Table 1).

Total frequency of contact.

The total frequency of contact with each network member was rated by each subject (NSSQ Question 8). The total of the frequency of contact scores for all network members listed by each subject was summed. The sample mean score was 22.5, with a score range from 5 to 50 and a standard deviation of 12.6 (See Table 1).

As discussed earlier, the scores for the variables of duration of relationships and frequency of contact do not

reflect specific time periods or a specific number of contacts. Rather, the scores allow for comparison between subjects and with other studies.

Total network properties.

The total network properties variable was one of the two major social support components on the Norbeck Social Support Questionnaire. The total network properties score was determined for each subject by summing the number of network members listed, the duration of relationships score and the frequency of contact score. The sample mean was 55.3 with a minimum score of 11.0 and a maximum score of 128.0. The standard deviation was 31.3 (See Table 1). The distribution of the scores approximated to a normal distribution, neither the skewness, nor kurtosis being significant.

Network composition.

Network members identified by each subject were categorized on the Norbeck Social Support Questionnaire in groupings such as family, friends or co-workers. Family members were identified by all subjects as network members, followed in frequency by health care providers and friends (See Table 2). Other sources of support, such as clergy members, were rarely mentioned.

Table 2

Categories of Persons comprising Network, Frequencies for Subjects from NSSQ

	Number of subjects identifying category	
Category of persons	Frequency	Percentage
Family	30	100.0
Health care providers	15	50.0
Friends	12	40.0
Clergy	4	13.4
Spouse/partner	2	6.7

Note. n=30

Total loss of social support.

When asked about any loss of network members during the preceding year, 16 subjects (53.3%) reported loss (NSSQ Question 9). Family, friends and health care providers were the categories of network members where loss had occurred (See Table 3). Most of these subjects had lost only 1 member (NSSQ Question 9a). As a consequence of these losses, most stated that they had lost "a great deal" or "quite a bit" of the support usually available (NSSQ Question 9b).

A total loss score was calculated for each subject by summing scores for the occurrence of loss, the number of members lost, and the amount of support lost. The sample mean was 2.9 with a standard deviation of 2.9 (See Table 3).

Perceived Levels of Social Support

The second research question focused on clients' perceptions of the levels of social support provided by their social networks. This is defined by Norbeck as functional social support and was one of the two major social support variables explored in this study, with the network properties variable already discussed. The following variables for each subject were determined from the Norbeck Social Support Questionnaire: total affect, total affirmation, total aid, total functional social support, and average functional social support.

Table 3

Loss of Social Support, Frequency of Numbers lost and Reduction of Support from NSSQ

Loss variables	Number of subjects	
Number of network members lost	n	% sample
1	12	40.0%
2	3	10.0%
3	1	3.3%
Reduction of support from loss		
None	2	6.6%
Quite a bit	5	16.7%
A great deal	9	30.0%

Affect, affirmation and aid.

Scores for each subject from the subscales for affect, affirmation and aid were summed to determine the total functional social support score for each subject on the Norbeck Social Support Questionnaire. The total affect score was determined for each subject by summing scores from NSSQ Questions 1 and 2. The sample mean was 35.2 with a range of scores from 8.0 to 104.0 and a standard deviation of 26.0 (See Table 4).

The total affirmation score was determined for each subject by summing the scores from NSSQ Questions 3 and 4. The sample mean was 31.6 with a range of scores from 3.0 to 104.0 and a standard deviation of 23.9 (See Table 4).

The total aid score was determined for each subject by summing the scores from NSSQ Questions 5 and 6. The sample mean was 28.8 with scores from 0 to 104 and a standard deviation of 25.9 (See Table 4).

Total functional social support.

On the Norbeck Social Support Questionnaire, a total functional social support score was determined for each subject by summing the scores from the three subscales of affect, affirmation and aid to indicate the total amount of functional support perceived by subjects. The sample mean was 95.6 with scores from 16 to 312 and a standard deviation of 73.6 (See Table 4).

Table 4

Mean, Standard Deviation and Range of Scores for Functional Social Support Variables from NSSQ

Variable	Sample Scores		
	Mean	Standard Deviation	Range
Affect	35.2	26.0	8-104
Affirmation	31.6	23.9	3-104
Aid	28.8	25.9	0-104
Average functional support	15.3	4.4	7-24
Total functional support (Affect + Affirmation + Aid)	95.6	73.6	16-312

Note. n=30

This distribution differed significantly from normal being positively skewed (1.54) and kurtotic (2.29). This was largely due to two subjects who had exceptionally high total functional support scores of 288 and 312. These subjects listed large networks composed entirely of family and gave the highest rating possible for each member on each question. Their scores for other items did not show such large deviations.

Average functional social support.

The average functional social support score was calculated for each subject by dividing the total functional support score for each subject by the number of network members listed by each subject. The sample mean was 15.3 with a standard deviation of 4.4 and scores from 7.0 to 24.0 (See Table 4).

Levels of Community Functioning

The third research question examined the levels of community functioning of clients with schizophrenia as measured by the Global Assessment of Functioning Scale. The Global Assessment of Functioning (GAF) scores had a mean of 56.2 with a range of 35 to 72 out of a possible 90 and a standard deviation of 10.1 (See Table 5). Eight subjects (26.7%) had serious problems in the community while 8 (26.7%) had a moderate degree of impairment and 12 subjects

Table 5

Frequency Distribution of Scores on Global Assessment of Functioning Scale

GAF Score range	Number of subjects	Percentage
35-50	8	26.7
51-60	8	26.7
61-70	12	40.0
71-90	2	6.6

Note. n=30

(40.0%) demonstrated mild difficulties. Only 2 subjects (6.6%) had scores over 70.

Psychiatric symptomatology.

Data from the Client Profile was used to arrive at a score on the Global Assessment of Functioning and is reported in detail in Appendix C. All subjects reported some degree of severity of psychiatric symptoms experienced within the past 2 weeks. Those symptoms most commonly described were communication problems, behavioural problems, cognitive problems, anxiety and depression (See Table 6). Only 1 subject (3.3%) did not take any prescribed medications. The other subjects (96.7%) stated that they took psychiatric medications prescribed by their psychiatrist.

Employment.

Most subjects (25 or 83.3%) were unemployed while 3 (10.0%) were employed in the regular workforce and two subjects (6.7%) were in supportive work training programs. Within the past 2 years, 15 subjects (50.0%) had been employed compared with 14 (46.7%) who had been employed more than 2 years previously. Only 1 subject (3.3%) had never been employed.

Housing.

A variety of living arrangements were represented.

Table 6

Frequency Distribution of Recent Psychiatric Symptomatology experienced by Subjects

Symptoms	Number of subjects experiencing symptoms by degree			
	Absent	Mild	Moderate	Severe
Communication problems	3	15	9	3
Behavioural problems	4	13	10	3
Cognitive problems	7	14	8	1
Anxiety	8	15	7	0
Depression	10	14	5	1

Note. n=30

Sixteen subjects (53.3%) lived with their families while 7 (23.3%) lived in supportive housing programs, such as transition houses. Five (16.7%) lived in bedsitting rooms or their own home while 2 (6.7%) subjects were in boarding houses.

Health care services.

Sixteen subjects (53.3%) did not have any ongoing involvement with hospital staff except for their psychiatrist. Eight subjects (26.7%) regularly saw a hospital social worker while 4 subjects (13.3%) saw a nurse.

Few subjects participated in hospital programs with 25 subjects (83.3%) having no involvement. The other 5 subjects (16.7%) attended Day Care, Occupational Therapy or Adult Education programs.

Psychiatric history.

Information on the number of psychiatric hospitalizations was not available for 2 subjects. These subjects could not remember the number of admissions and the information was not available from their hospital records. For the remaining 28 subjects, the mean number of psychiatric hospitalizations was 8.2 with a range of 1 to 11 admissions. Information on the age of subjects at their first psychiatric admission was also unavailable for 8 subjects due to inaccurate memories and incomplete records.

Of the remaining 22, the mean age was 23.3 years with a range of 16 to 61 years.

Subjects were required to have had an admission within the past year. The sample mean for number of months since discharge was 4.6 months with a range of 1 to 12 months.

Relationship between Social Support and Community Functioning

The fourth research question inquired about the relationship between the social support variables previously discussed and measures of community functioning. Pearson's product moment correlations (two-tailed tests) were calculated with a significance level of less than .05 considered significant.

Positive significant relationships were found between the Global Assessment of Functioning and each of the two major social support variables under study. The Pearson correlation between the Global Assessment of Functioning scores and the total network properties scores was .4045 (p=.027) (See Table 7). The correlation between the Global Assessment of Functioning scores and the total functional social support scores was .4004 (p=.028) (See Table 7).

Positive associations were also found between the Global Assessment of Functioning scores and scores from the social support subscales of average functional support, and frequency of contact with network members (See Table 7).

Table 7

Pearson's Product Moment Correlations (r) between Social Support Variables and Global Assessment of Functioning Scores (GAF)

Social support variables/GAF	r	Significance
Total network properties/GAF	.4045	p=.027
Total functional support/GAF	.4004	p=.028
Average functional support/GAF	.4403	p=.015
Frequency of contact with network members/GAF	.5119	p=.004
Current age of subjects /GAF	-.4269	p=.019

Note. n=30

Global Assessment of Functioning scores and the current ages of subjects were negatively correlated (See Table 7).

Significant correlations were not found between the Global Assessment of Functioning scores and the following variables: duration of relationships, number of network members; the three subscales of aid, affect and affirmation; number of months since discharge, age at first admission or number of hospitalizations.

Relationships between other Social Support Variables

Pearson product-moment correlations were also calculated to analyze relationships between major variables included in the Norbeck Social Support Questionnaire. The correlation between total network properties scores and total functional social support scores revealed a correlation of .9269 (p=.00).

Scores for frequency of contact with network members had a positive association with scores for each of the three subscales of affect, affirmation, and aid, as well as with the duration of relationships (See Table 8).

Similarly scores for duration of relationships with network members had significant separate correlations with affect, affirmation, and aid scores and also with frequency of contact (See Table 9). The number of network members listed was found to be positively associated with scores for affect, affirmation, and aid, frequency of contact and

Table 8

Pearson's Product Moment Correlations (r) between Social Support Variables and Frequency of Contact Scores (FC)

Social support variables /FC	r	Significance
Affect /FC	.8732	p=.000
Affirmation /FC	.8695	p=.000
Aid /FC	.8598	p=.000
Duration of relationships /FC	.9039	p=.000

Note. n=30

Table 9

Pearson's Product Moment Correlations (r) between Social Support Variables and Duration of Relationship Scores (DR)

Social support variables /DR	r	Significance
Affect/DR	.9219	p=.000
Affirmation/DR	.9119	p=.000
Aid/DR	.8239	p=.000
Frequency of contact/DR	.9039	p=.000

Note. n=30

duration of relationships (See Table 10).

Summary of Results

The majority of subjects were unmarried males under the age of 40 who were receiving government financial assistance or unemployment insurance benefits. Most had lived in the same area for more than 5 years and had access to their families.

Social networks were small with a maximum of 13 members and were family-dominated. A small majority of subjects had experienced the loss of network members during the previous year. A total network properties score was calculated for each subject based on summing scores for subjects' perceptions of the number of members in the network, the duration of these relationships and the frequency of contact with network members.

A total functional social support score was obtained for each subject. Measurement of subjects' perceptions of the functional social support provided by their social networks was accomplished by summing scores from the three separate subscales for affect, affirmation, and aid.

Community functioning was measured on the Global Assessment of Functioning Scale with 8 subjects indicating serious problems in the community and 22 subjects with mild or moderate difficulties in community living. All subjects had experienced some degree of psychiatric symptomatology in

Table 10

Pearson's Product Moment Correlations(r) between Social Support Variables and Size of Network Scores (Size)

Social support variables /Size	r	Significance
Affect/Size	.9328	p=.000
Affirmation /Size	.9010	p=.000
Aid/Size	.7899	p=.000
Frequency of contact/Size	.9225	p=.000
Duration of relationships /Size	.9768	p=.000

Note. n=30

the 2 weeks prior to the study. The majority had been discharged from a psychiatric hospital within the previous 4 months. Most had a history of readmissions and were under the age of 25 at the time of their first psychiatric admission.

Most subjects were unemployed and living with their families or in supportive housing programs. The majority had no involvement with hospital programs or daily structured activity.

The level of community functioning as measured by the Global Assessment of Functioning Scale was found to be positively correlated with each of the two major variables of social support from the Norbeck Social Support Questionnaire: network properties and functional social support. Community functioning from the Global Assessment of Functioning was also significantly associated with frequency of contact with network members and the average functional social support provided by each network member from the Norbeck Social Support Questionnaire. A negative relationship was found between community functioning and the current age of the subject so that younger subjects demonstrated higher levels of community functioning.

Positive correlations were also found between other social support variables on the Norbeck Social Support Questionnaire. Frequency of contact, duration of relationships and the number of network members were

positively associated with each other and also with the variables of affect, affirmation and aid.

These results will now be discussed with reference to other research and the study's conceptual framework.

CHAPTER V

Discussion

The results related to characteristics of the sample will be reviewed followed by discussion of each of the research questions. Findings will then be explored in more detail as they are incorporated in the conceptual framework for this study.

Characteristics of the Sample

Demographic data was unavailable for the general client population in the study setting so it was not possible to establish whether the sample was truly representative. Staff from the Ambulatory Care Department confirmed that the sample characteristics corresponded with their observations of the total population of clients with schizophrenia who had contact with their service.

The characteristics of the sample reflected the marginal status in society which has been associated with individuals with schizophrenia. The majority of subjects were unmarried males under the age of 40 who were currently unemployed and receiving either government financial assistance or unemployment insurance benefits. Subjects demonstrated the lower social status and lack of social ties and contact found in other studies of schizophrenia (Cassel,

1976; Hammer et al., 1978).

Poorer community functioning has been associated with clients who are unmarried (Freeman & Simmons, 1963) partially based on lower expectations of clients by spouses and by clients themselves. Lack of a spouse or partner also deprived the clients of a potentially significant source of social support. Being male has also been related to lower levels of social support although the basis for this remains unclear (Norbeck, 1981).

The mean age of 34.6 years for the sample was within the age parameters associated with discussions of young adult chronic patients. Many of the characteristics of this younger group were also found within the sample and will be discussed later. Adults from the general population within this age group would be expected to be employed and living independently with their own nuclear family. Subjects however did not conform to these societal expectations.

Unemployment and lack of adequate financial resources meant that subjects were forced to deal with poverty and its consequences of low self-esteem, apathy, pessimism regarding the future and a negative reaction from the community. In practical terms, a lack of money interfered with adequate housing; purchasing psychiatric medications, groceries and appropriate clothing; and prevented subjects from using transportation and participating in community activities. Thus physical and emotional well-being were endangered and

involvement within the community was limited.

The lack of opportunity to socialize with others further increased the likelihood that clients would interact with their families. As most subjects lived with relatives or within the same area, their influence on the subjects was intensified. Most subjects had lived within the same area for more than 5 years rather than demonstrating the mobility sometimes associated with this group (Bachrach, 1982).

This absence of mobility may have been because subjects preferred to stay in familiar areas near their families. Transportation difficulties associated with living on an island or lack of necessary resources may also have been factors. This period of time in a community provided subjects with the opportunity to develop social networks and reach some degree of community integration.

In summary, subjects in this study were considered representative of clients with schizophrenia. The impact of sample characteristics on social support and community functioning will be explored in more detail after a discussion of other study findings.

Perceived Characteristics of Social Networks

The characteristics of social networks which were studied were the network size, duration of network relationships, frequency of contact with network members,

total network properties, network composition, and loss.

Network size.

The mean social network size of 5.9 members was in contrast to the 25 to 50 members found in networks for the general population (Hammer et al., 1978). Results in this study were also lower than Norbeck's reports of normative data (Norbeck et al., 1983) and recent Newfoundland studies of widows (Hustins, 1986) and noninstitutionalized elderly clients (Turner, 1988).

In the psychiatric population, clients with neurotic disorders were found to have larger networks (Henderson et al., 1980). The sample mean was similar to that found for substance abusers (Westermeyer & Neider, 1988) and other studies of clients with schizophrenia (Crotty & Kulys, 1985). Very few groups, such as institutionalized elderly clients (Turner, 1988) reported smaller networks than found in this study.

Duration of relationships.

Duration of relationships was measured by analyzing the length of time that subjects had known each network member. This provided an indication of the stability of the network. The mean score of 26.8 was approximately half the mean found by Norbeck (Norbeck et al., 1983). This was also slightly lower than the mean for noninstitutionalized elderly clients

but twice as high as the mean for elderly clients in institutions (Turner, 1988). The mean value for average duration of relationships was 4.5 but no results from other studies were available for comparison.

The majority of network members were relatives whom subjects had known all their lives and so received the maximum rating for duration of relationships. This trend would be expected to lead to a higher mean value. However, the low overall mean value on this measure was explained by the recent and brief relationships with other categories of network members such as friends and health care providers.

This lack of stability does not bode well for this group as the importance of maintaining relationships rather than forming new ones has been reported (Lowenthal & Haven, 1968). The need for long-term relationships is also recognized as a crucial element of community mental health services for clients with schizophrenia.

Frequency of contact.

The frequency with which subjects had contact with network members provided a mean value of 22.5 which was half of the mean value in Norbeck's findings (Norbeck et al., 1983); and somewhat lower than the mean for noninstitutionalized elderly clients (Turner, 1988). Again, only institutionalized elderly clients had a lower mean value (Turner, 1988).

Subjects reported that many of their network members, particularly relatives, were seen infrequently, sometimes not within the past 5 years, but were still considered as sources of support. This is again linked with Tolsdorf's description of network members as extremely powerful and influential (1976).

Network properties.

The total network properties score was calculated by summing scores for subjects' perceptions of the number of network members, the duration of these relationships, and the frequency of contact. This provided an overall measure of social network properties considered by Norbeck to be crucial elements of overall social support. The sample mean network of 55.3 was approximately half of the mean value in Norbeck's normative data (Norbeck et al., 1983) and a study of Newfoundland widows (Hustins, 1986).

Network composition.

The predominance of family members in the social networks of subjects was in keeping with other studies of clients with schizophrenia (Pattison et al., 1975; Sokolovsky et al., 1978; Tolsdorf, 1976). Family membership in the network has been linked by Baker with a lesser degree of psychopathology (cited in Greenblatt et al., 1982). However, family members may also exhibit high levels of

expressed emotion or hostility and overinvolvement which has been associated with relapse (Vaughn & Leff, 1976).

The identification by half of the sample of health care providers as sources of support reinforces the need for further study of this concept by professional caregivers. Subjects specified health care providers such as a psychiatrist whom they saw monthly, a nursing supervisor from the unit where they had been admitted, family doctors and case managers. Often the health care provider saw the client only occasionally and for a brief period of time but was described nonetheless as a meaningful source of support.

Less than half of the subjects included friends as sources of support. Friends are not only important as support providers but have been influential in encouraging clients to seek out professional caregivers (Horowitz, 1978). This is especially important as the need for health care services is evident with a schizophrenic illness but is combined with a characteristic avoidance or misuse of such services (Bachrach, 1982).

Work associates, spouses or partners as well as friends would be expected members in the social networks of adults within the age group of these subjects. Thus there are marked gaps in the social networks of this sample. This lack of diversity in support sources has been linked by Moxley (1988) with lower social integration and functioning and does not provide the types of networks recommended for a

range of support in varying conditions (Cutler & Tatum, 1983).

Loss of social support.

Support from networks deteriorated for a small majority of subjects who experienced the loss of network members during the past year. Types of loss included the death of immediate family members, and a loss of friends due to their reluctance to associate with individuals with a psychiatric illness. The mean total loss score based on the experience of loss, number of network members lost and amount of support lost, was 2.9. This was four times higher than the mean for males as reported by Norbeck but was similar to that found for females (Norbeck et al., 1983).

As the sample in this study was primarily male, a marked difference exists in the total loss scores when compared with males in the general population. As Tolsdorf (1976) noted, network members of clients with schizophrenia, are often powerful and so the loss of even one member can be more traumatic than for other groups.

To summarize, the social networks of subjects in this study were small, dominated by family and lacking in friends or other sources of support. Contact with network members was limited and relationships outside the family were not long-standing. Recent loss of important network members was

relatively common and its impact exceeded the experience of adult males in the general population.

One purpose of describing the social network is to assess the network's capacity to provide social support. The study findings would indicate that the networks surrounding these subjects would have difficulty providing an appropriate quality and quantity of support. Useful interventions would include efforts to increase network size, minimize loss, maintain relationships over time and increase contact with network members who are supportive. However such approaches only focus on one dimension of social support. It is also essential to consider clients' perceptions of the functional social support which is available from the social network.

Perceived Levels of Social Support

Affect, affirmation and aid.

Scores from the subscales of affect, affirmation and aid were summed to give a total functional social support score as a measure of the levels of social support perceived by subjects as being available to them. Scores for the general population were approximately twice as high as those for this sample of clients with schizophrenia (Norbeck, 1984).

The rank order of results: affect, affirmation, aid,

was identical to Norbeck's normative data (Norbeck, 1984). Another study of social support using different instruments also reported that clients with schizophrenia rated closeness and availability of network members higher than concrete assistance (Crotty & Kulys, 1985).

Thus, subjects' perceptions that network members cared about them and respected them were most evident. This was especially true of family members. There were some discrepancies as a number of subjects gave one parent the highest rating possible while the other parent received the lowest.

When asked about being able to confide in network members or the willingness of network members to agree with the subjects' actions or thoughts, affirmation scores were lower. Some subjects stated that they were reluctant to confide because of fear of hospitalization or of creating stress within the family. Some subjects acknowledged that their actions and thoughts were sometimes unrealistic and a lack of support from network members was not only expected but beneficial.

Questions regarding the perception of the availability of aid or practical assistance resulted in the lowest subscale scores. Subjects were generally unsure about whether health care professionals or friends could provide or arrange practical assistance. Remaining network members, primarily family, were perceived as often being unable or

unwilling to provide practical help, such as money or transportation.

Functional social support.

When scores from the subscales of affect, affirmation and aid were summed, a total functional social support score was derived. The mean score was less than half the values found by other researchers (Hustins, 1986; Norbeck, 1984). The average functional social support score indicated the average amount of support provided by network members. The mean of 15.3 could not be compared as other results were not available.

In summary, in comparison with other groups, subjects with schizophrenia perceived that less social support was available or provided to them from their social networks. The availability of practical assistance was the area most lacking. A picture then emerges of a sample with small, unstable, family-dominated social networks, with limited interaction between the subject and the sources of support. The amount of social support provided by these social networks is experienced as lacking when compared with other groups. Before considering the impact of these findings, the overall community functioning of subjects will be discussed.

Levels of Community Functioning

A number of variables were considered in measuring the overall functioning of clients with schizophrenia in the community. The overall assessment will be discussed, followed by a review of the specific factors contributing to this measurement.

Scores on the Global Assessment of Functioning Scale with their mean of 56.2 were higher than those of a previous 5 year outcome study which reported that almost half of the sample had scores lower than 45 on the Global Assessment Scale, the earlier version of the Global Assessment of Functioning Scale (Moller et al., 1982). The range of scores from 35 to 72 was indicative of the clinical variability found within this client group (Prudo & Munroe Blum, 1987).

Three subjects had scores of 40 or less out of a possible 90. Such scores have been associated with the need for readmission (Endicott et al., 1976). These subjects exhibited interference with reality testing and communication processes and had major difficulties living in the community. In contrast, two subjects had scores over 70 indicating only occasional symptoms and slight temporary difficulties in the community.

Psychiatric symptomatology.

All subjects had experienced some degree of psychiatric

symptomatology within the 2 weeks prior to the study. This continuing evidence of symptoms has been noted in a 5 year study of clients with schizophrenia (Prudo & Munroe Blum, 1987). The recent psychiatric symptoms most often experienced by subjects in this current study were related to communication. Examples of problems ranged from subjects' reports that they occasionally had difficulty expressing their feelings and ideas effectively to the extremes of irrelevant, excessive speech or poverty of speech.

Behavioural symptoms included examples such as occasionally lacking motivation to get out of bed for a day to frequent substance abuse. Cognitive impairment included such difficulties as an occasional inability to concentrate to frequent episodes of confusion, memory loss and interference with problem solving and decision making.

Subjects most often described their levels of anxiety and depression as mild or moderate. Examples included occasional feelings of general tension or temporary feelings of sadness which were precipitated by some external factor.

As the majority of subjects took psychiatric medications, it can be assumed that their symptoms were modified to some degree by the medications. Although current emphasis is on innovative treatment approaches to schizophrenia, a holistic model which encompasses biological, psychological, social and environmental

perspectives remains crucial. The high number of subjects reporting recent psychiatric symptoms emphasizes the need for rigorous ongoing treatments of many types which can lessen symptoms and their impact. The value of careful adjustment of medication and monitoring of efficacy must be seen as an integral component of therapy which will facilitate clients' responses to other forms of treatment.

Employment.

Most subjects were unemployed although many had worked within the previous 4 years and expressed a desire to find employment. Subjects who were employed earned low wages on government projects designed to provide an adequate work period to ensure eligibility for unemployment insurance benefits. This was the experience of most subjects who had worked. The 2 subjects in supportive training programs were more optomistic about the future but prospects for entering the labour force were uncertain for all subjects. If employment status continued to be viewed as a valid indicator of community functioning, then this sample would fare poorly.

Locating employment and maintaining adequate work performance are difficult tasks for the client with schizophrenia, a situation exacerbated by the current high unemployment rate in Newfoundland. Subjects may never be successful in finding and keeping full-time competitive

employment. This in turn may lead to frustration and low self-esteem for clients, a negative response from families, additional stigma on the part of the community and an increased financial burden to society.

Part of the challenge for health care providers and the community is to advocate for the creation of meaningful long-term employment and supportive work programs and to assist clients to function within the community although employment is unavailable. The value of the individual's contribution to society should not be dependent on employment status.

The small number of subjects in supportive employment programs may indicate the need to create programs that are better suited to the needs of clients with schizophrenia, particularly the young adult chronic group. Part-time work, on-site job training, and leaves of absence for hospitalization are examples of strategies which could improve the employment experience for those with schizophrenia.

Housing.

A slight majority of subjects lived with their families. This may have increased the likelihood that relatives would be identified as sources of support although it has been found that geographical proximity and amount of contact are not necessarily associated with network

membership (Kahn & Antonucci, 1980).

This living arrangement has the potential for providing support or stress for clients. Although families may be supportive, the burden of living with a client with schizophrenia may be taxing and result in eventual difficulties. Clients must also face the future prospects of living alone as their parents age, which then creates additional stress. As well as family expectations, societal norms would be for adults to be living independently in the community. Thus for many subjects, living with their family may add to the negative response from the community.

The utilization of supportive housing programs such as transition houses or supervised boarding care represents a growing response of the health care system and the community to facilitate community living for individuals with schizophrenia. The small number of subjects in such programs may indicate that these services require further development to meet the needs of this group who desire to live independently.

The private bedsitters and boarding houses in which 6 subjects lived were representative of the type of low standard of housing most often associated with the psychiatric population due to a lack of financial resources, negative community attitudes and a lack of housing options. For those who wish to live in the community, poor quality housing has often been the only choice. By denying access

to adequate, affordable housing, clients are denied fulfillment of a basic requirement for community living.

Health care services.

The lack of involvement with health care providers and hospital programs has been noted as characteristic of this group (Bachrach, 1982). Clients with schizophrenia are often noncompliant with medications and treatment programs, and do not readily engage in relationships with professional caregivers (Kahn, 1984). If such a relationship is viewed as a cornerstone of treatment, reluctance or inability to become involved is a major obstacle.

Long-term, consistent relationships with professional sources, ongoing structured activity, and case management are recognized as important elements of community care for clients with schizophrenia. These subjects indicated that an effective community support system may not exist or that they are unable or unwilling to avail of it. The need is again emphasized for the development of programs that meet the needs of this specific group of clients.

Psychiatric history.

The majority of subjects had more than five admissions. Some subjects had a history of lengthy hospitalizations which lasted for years while others had frequent brief stays. Recidivism or the revolving door syndrome has been

associated with the illness of schizophrenia. While hospitalization rates provide some indication of the degree of psychiatric disability, they do not give an overall perspective on adaptation within the community.

In summary, results related to the level of functioning in the community point to the diversity of experiences for the subjects involved in this study. There was a wide range of overall outcomes as measured by the Global Assessment of Functioning with severe impairment for 8 subjects, moderate impairment for another 8, and mild impairment for 14 subjects. Subjects had a range of previous contact with the psychiatric health care system and had difficulties in the areas of psychiatric symptomatology, employment, housing, and ongoing involvement with mental health care providers.

The results clearly indicate the need for improved community functioning for this sample as has been demonstrated in the general population of clients with schizophrenia. This will be more thoroughly discussed later within the context of the study's conceptual framework.

The identification of a problem in community functioning leads to a search for explanations and solutions. The relationship between social support and community functioning may begin to provide useful information and will now be considered.

Relationship between Social Support and Community Functioning

Correlations between the major variables in this study will first be examined, followed by a discussion of the correlations found between other study variables and subscales.

This study found a significant positive correlation between social support and level of community functioning. Social support was conceptualized on the Norbeck Social Support Questionnaire as two major variables. The network properties variable measured subjects' perceptions of three crucial characteristics of their social networks: network size, duration of network relationships and frequency of contact with network members. The functional social support variable measured the subjects' perceptions of the levels of support as composed of affect, affirmation and aid. Both major variables were found to be positively associated with subjects' overall levels of community functioning as measured by the Global Assessment of Functioning Scale.

It is essential to remember that significant correlations indicate a relationship between variables but do not explain causality or directionality (Knapp, 1978). Therefore higher levels of social support may lead to improved community functioning. As well, improved community functioning may result in increased social support. However

the relationship between community functioning and social support may be impacted upon by other variables not included in this study which would explain the correlations. In discussion of the study's correlations, alternate interpretations will be considered.

Network properties and community functioning.

Subjects who demonstrated higher levels of functioning within the community as measured by the Global Assessment of Functioning Scale had higher values for the network properties variable as measured on the Norbeck Social Support Questionnaire. This was composed of perceptions of the number of network members, duration of relationships and frequency of contact with network members. The positive correlation was found between the Global Assessment of Functioning and total network properties as a whole. As well, the Global Assessment of Functioning was significantly correlated with the variable of frequency of contact but not specifically with number of network members or duration of relationships. These correlations may indicate that subjects function better in the community when they have an appropriate combination of social network characteristics, particularly an adequate amount of contact with network members. However, it would be inaccurate to assume that an increase in this contact and possibly the number of network members and duration of relationships would lead to improved

community functioning. For clients with schizophrenia, an increase in such areas could be overwhelming, most notably if the network members provide negative interaction.

Alternatively, this correlation between social network characteristics and community functioning may indicate that subjects who functioned at higher levels in the community were better able to develop and utilize social networks. They may have been more successful at involving others in relationships, more receptive to a higher degree of contact and more adept at maintaining long-term relationships.

Functional social support and community functioning.

A significant positive correlation was also found between community functioning as measured by the Global Assessment of Functioning and the total functional social support variable which was composed of the subscales of affect, affirmation and aid from the Norbeck Social Support Questionnaire. Thus subjects who demonstrated higher levels of community functioning perceived their social networks as more supportive. This correlation may indicate that subjects who experienced their networks as providing higher levels of social support were able to perform better in the community.

The provision of social support in the form of caring, endorsement of thoughts and behaviours, and practical assistance facilitated subjects' adaptation in a community

setting. Again, it is important to remember that the actual availability or provision of social support was not considered but rather the subjects' perceptions of this support.

This correlation may also suggest that subjects who functioned at higher levels in the community perceived their networks as more supportive. As with the relationship between community functioning and social network properties, subjects may have been better at eliciting support and utilizing the support available. Due to participation in the community, subjects may have had more contact with people or may have evoked more positive responses so that social support was forthcoming. As well, they may have had a more positive network orientation, perhaps due to their increased success in a community setting.

Average functional social support and community functioning.

A positive relationship was found between community functioning as measured by the Global Assessment of Functioning and the average amount of functional social support provided by each network member as measured by the Norbeck Social Support Questionnaire. A link exists then between community functioning and the amount of affect, affirmation and aid that subjects perceived was available from each network member. As these networks were relatively

small, the power of each network member was thus intensified. This has been considered as a negative factor in some studies (Tolsdorf, 1976).

However, in this study, the findings suggest that a higher amount of support provided by each network member, enhanced the subjects' abilities to function in the community. It may be that clients with schizophrenia cannot tolerate large networks but respond more positively to smaller, powerful networks.

Alternatively, subjects who performed better in the community, may have sought powerful network members or may have elicited higher levels of support from their networks. Whether this was considered to be a burden by network members was not studied but other research suggests that particularly for families, providing social support to clients with schizophrenia is stressful (Carpenter, 1987).

In summary, this study demonstrated relationships between levels of community functioning and the two major variables of social support: network properties and functional social support. Frequency of contact with network members and the average functional social support provided by each network member were also significantly correlated with community functioning. These correlations do not represent causality but do indicate meaningful relationships between these variables.

Other relationships identified in this study will now be considered.

Network properties and functional social support

Further analysis of the correlations between the two major variables of social support sheds light on the process of social support. The high degree of correlation between the scores for the total network properties variable and the total functional social support variable would indicate that both variables may have been measuring similar phenomena. This may suggest that conceptualizing social support as these two separate dimensions may not be valid. Norbeck herself has suggested that the subscales of affect and affirmation may not be distinct (Norbeck, 1981).

Social support may exert its influence at some broad level of experience and so may need to be viewed as a unidimensional construct rather than multidimensional (Brown, 1986). Using Norbeck's model, a unidimensional perspective of social support would show a combination of network properties and functional social support operating together.

Whether the components of social support operate as distinct variables or operate in some combination is undetermined. Further demonstration of the complexity of the interrelationships between components of social support is demonstrated by correlations found between various

subscales of the Norbeck Social Support Questionnaire.

Subscale Correlations

Significant associations were also found between various subscales of the major social support variables studied. The frequency of contact with network members had separate significant correlations with the subscales of affect, affirmation, aid and duration of relationships. Increased contact with network members may have enhanced the subjects' perceptions of the networks, as providing more affect, affirmation and aid. This experience may have promoted the maintenance of enduring relationships. Thus all network members, particularly health care providers might ensure frequent contact with clients to improve their perception of the social support provided and to contribute to lasting relationships.

As well, subjects who perceived their social networks as more supportive and who have had more long-term relationships may have been more comfortable with frequent contact with network members. It may be that these subjects had social networks which did not have the negative impact found in other studies (Malone, 1988; Tolsdorf, 1976).

The duration of relationships was positively correlated with the separate subscales of affect, affirmation, aid and frequency of contact. Subjects with more long-term

relationships perceived their networks as more supportive and had a higher amount of contact with network members. This is consistent with findings in studies of the elderly where maintaining relationships was more supportive than finding a new confidant (Lowenthal & Haven, 1968). The importance of consistent relationships which are not time-limited has also been recognized as a crucial element of community care for clients with schizophrenia.

An alternate interpretation would be that subjects who experienced their social networks as supportive and who had higher amounts of contact with network members may have been more willing to participate in long-term relationships.

The number of social network members was positively related to the separate subscales of affect, affirmation, aid, frequency of contact and duration of relationships. Subjects who had larger networks experienced their networks as more supportive, had more contact with network members and had longer lasting relationships. It is tempting to assume that increasing network size would result in clients experiencing more support, interacting more often and remaining in relationships. However, the parameters beyond which networks may be overwhelming is unknown. The individual variability noted throughout studies suggests that clients differ in their requirements for their own unique social network and social support.

In summary, the correlations between these subscales of the Norbeck Social Support Questionnaire add further evidence to the perspective that social support is a complex concept and that additional knowledge of the relationships between specific aspects will be useful in providing interventions to enhance social support and community functioning for clients.

Other Study Variables and Community Functioning

Apart from the major social support variables and subscales previously discussed, the current age of subjects was the only other significant correlation found with community functioning as measured by the Global Assessment of Functioning Scale. This was partly due to the tools for data collection which were not designed to rate or rank responses for items such as housing or financial status. Thus correlations could not be calculated.

No significant relationships were found between community functioning from the Global Assessment of Functioning Scale and age at first admission or number of hospitalizations although these have been noted as significant in other studies (Moller et al, 1982). It has been suggested however that these factors are not meaningful correlates of community adaptation, which was verified in this study (Avison & Speechley, 1987).

As well, no distinctions could be made based on the

number of months since subjects had been discharged from the hospital. Differences in relationship needs may have been evident as described by Brier and Strauss (1984) but the study instruments were not designed to collect this data and the sample may have been too small. The fluctuating nature of the illness of schizophrenia with its frequent crises does not result in steady, lasting improvement as may be found with other conditions. Thus subjects' levels of community functioning may have increased and decreased without any discernible pattern.

A negative relationship was found between community functioning and the current age of subjects so that younger subjects had higher Global Assessment of Functioning scores. This corresponds with information on young adult chronic patients (Bachrach, 1982). Younger subjects were more likely to have had fewer admissions with a shorter length of stay and so had experienced fewer, briefer disruptions in community tenure. As well, they were more successful at adapting to community living.

Older subjects were more likely to have had lengthy hospitalizations and often had lost or not developed potential sources of support, such as family and friends. They were also less likely to participate in community based programs. This correlation between age and community functioning has implications for service providers who will need to develop a range of community programs to meet the

needs of both younger and older client groups.

Summary of Discussion of Results

The results related to this study's four research questions have been discussed. In general, subjects occupied the marginal position in society which has been associated with clients with schizophrenia. Subjects' social networks were small, family-dominated and provided less support than that available to other groups.

A positive significant relationship was found between social support as measured by the Norbeck Social Support Questionnaire and level of community functioning as measured by the Global Assessment of Functioning Scale. Number of network members, duration of relationships with network members and frequency of contact with members were positively associated with each other and also with the perceived amounts of affect, affirmation and aid available from the network. This information does not indicate that drastic changes in the type of network and level of support would be beneficial for this group. Questions still remain regarding the optimal network and level of support for clients with schizophrenia. The suggestion is that some undetermined combination of these aspects is most appropriate.

Subjects were also found to have various difficulties in community functioning and exhibited many of the

characteristics, such as living with family, or lack of involvement with structured activity, which have been demonstrated by this client group. Although the level of community functioning was associated with social support, the direction of this relationship was not established in this study and requires further exploration. An initial step in this process is to incorporate the results of this study within a conceptual framework.

Discussion of Results and Conceptual Framework

In order for the results of this study to be useful in clinical practice or as a basis for future theory and research, it is important to consider them within the conceptual framework used in this study (Figure 3).

The first aspect of the adaptation of Norbeck's model considers the interaction between the person and the situation and how this determines not only the need for social support but also its actual and perceived availability. This interaction will be discussed with respect to this study.

Properties of the person.

An understanding of the psychodynamics underlying schizophrenia emphasizes the difficulties with attachment which are experienced by clients with this illness. Clients with schizophrenia often have experienced early childhood

relationships which did not provide a necessary basis for the development of future attachment relationships. This results in adult patterns of interpersonal relationships whereby clients differ in their need for affiliation with others.

Some may avoid involvement and interact only superficially, or they may become highly dependent and overinvolved with attachment figures. Both extremes were demonstrated in this study. These patterns interfere with the development of satisfying relationships and elicit negative responses from others thereby compounding clients' difficulties in relating. Problems in attachment in turn lead to difficulties with establishing, maintaining and utilizing a social network which will provide adequate social support. Dysfunctional attachment patterns also lead to increased vulnerability to stress which further increases the need for social support. Impaired attachment may interfere as well with the manner in which clients perceive or react to life events (West et al., 1986). This may again increase the need for social support in situations such as crisis. It may also affect clients' perceptions of the support provided by the network so that support is viewed as inadequate.

Other characteristics of the individual have been identified which may impact on social support and which were noted in the sample. The majority of subjects were male,

under 40 years of age and unmarried; characteristics which have been associated with a lack of social support. Although men receive less support, it is unclear as to whether they actually differ in their requirements (Norbeck, 1981). Within the general population, adults in the same age group would derive support from co-workers and friends, sources of support which were denied most subjects. Being unmarried meant that subjects lacked an important potential source of support.

Although not specifically addressed in this study, characteristics such as social competence and behaviours affect the social support process. Appropriate behaviour is necessary for individuals to develop and maintain relationships. Clients with schizophrenia have been described as demonstrating inappropriate, excessive self-disclosure which results in a negative response from others. This is compounded by their misinterpretation and over-reaction to such negative feedback (Kayloe & Zimpfer, 1987). Similarly, when questioned about recent symptomatology, subjects described behaviours such as withdrawal from people, aggression and substance abuse which did not conform to the norms of the community and which interfered with the establishment and maintenance of a social network.

Properties of the situation.

Properties of the person interact with properties of

the situation to determine the need for and availability of social support. Properties of the situation which affect social support include the role demands and expectations of daily life which may be more stressful for clients with schizophrenia. Expectations of others such as families, peers, employers and health care providers may be overwhelming. In turn, clients may be viewed as irresponsible, unfriendly and unmotivated rather than recognizing that role demands may be inappropriate.

Loss of social roles or failure to achieve such roles also influences social support. Loss of a role such as employee or program participant may affect clients' self-esteem, increase stress and increase the need for social support. At the same time, such losses mean a loss of sources of support as clients have less opportunity to interact with others. Actual loss of network members and support was also found to be common for the subjects in this study.

The long-term stress of a chronic illness such as schizophrenia is another situational characteristic of importance. Continuing, fluctuating symptoms, medication side-effects, an indefinite prognosis and ineffective treatments are associated with schizophrenia. These difficulties increase the need for social support while decreasing the likelihood that support will be available or adequate.

The nature of schizophrenia dictates that most clients, including the subjects in this study, experience frequent crises, such as a relapse requiring admission. Transitional crises are also common such as those experienced when a client moves from the hospital to the community.

Other such stressors encountered by subjects included unemployment, poverty and inadequate housing. A lack of understanding by families and a negative response from the community present additional problems which would impact on social support.

Social support: Need and availability.

Properties of the person and the situation interact to affect the need for social support and the availabilty of social support from the social network. Social support is conceptualized by Norbeck as being composed of two major components: network properties and functional social support, both of which are affected by properties of the person and the situation. These properties of the person and situation do not interact in a linear fashion but rather in a spiral so that their impact represents a complex process. For example, difficulties in forming relationships may result in an increased need for social support but will decrease its availability because the social network will be lacking.

Similarly the long-term course of schizophrenia with

its frequent crises will lead to higher support needs. However support is less likely to be available as potential sources of support are unwilling or unable to provide the support required. In this same manner, many individual and situational characteristics interact to increase the need for support while decreasing the availability which subsequently intensifies the need for social support.

A balance is required between the amount of support needed and the actual support available. Kahn and Antonucci (1980) have also referred to the importance of this goodness of fit so that the support available is appropriate in type, quantity and quality. A lack of social support will not assist with fulfillment of roles or promote well-being. An excess amount of support may negate some of the benefits by overwhelming the individual. THe client may perceive himself as helpless or unable to reciprocate and thus the support becomes another source of stress.

Achieving this balance between need and availability is further compounded by clients' perceptions of the social support available from the social network. That the social network and the actual support available may differ from clients' perceptions has been demonstrated (Crotty & Kulys, 1985). Norbeck's model does not distinguish between actual and perceived support and appears to consider them as one variable. It is useful to attempt to measure the actual support available from the actual social network but it is

essential to determine the clients' perceptions of that social support. A modification of Norbeck's model was included in this study's conceptual framework to encompass the clients' perceptions of network properties and functional social support and their relationship to properties of the person and the situation.

Perceptions of social support are also affected by properties of the person. Dysfunctional attachment relationships, negative network orientation, hostility, or paranoid thinking will have a negative impact on the clients' perceptions of available social support.

Situational properties, such as the many stressors encountered by clients with schizophrenia, may shape their perceptions of the social support available to them. Attempting to cope with the stress of unemployment, inadequate housing, poverty, and lack of community acceptance may lead clients to expect little or no support and to perceive potential support in this negative manner. This may also contribute to the development of a network which is incapable of providing adequate support.

This growing body of knowledge about social support must be applied in nursing practice to promote the well-being of clients. This will now be discussed.

Clinical application.

Although further research is needed on the clinical

application of social support, the components of the nursing process: assessment, planning, intervention and evaluation, can incorporate the information already available. Nurses have traditionally included an assessment of the client's social environment and have provided related interventions. However, a more formalized approach which facilitates more effective interventions is required.

Assessment.

Health care providers remain unclear about the appropriate quantity and quality of social support and the most effective type of social networks for clients with schizophrenia in the community. Some areas requiring assessment have been identified from research findings and are similar to the variables considered in this study.

It is useful to determine structural characteristics of clients' social networks such as the size, frequency of contact with network members and the duration of these relationships. The extent of density or interconnectedness of network members should also be assessed.

In addition to structural characteristics, functional properties of the network should be determined to assess the types and quality of support available. Clients should be asked about the types of support they receive, such as feelings of belonging or practical assistance. How effective and available this support is should also be

included. It is useful to consider some measure of reciprocity to determine whether the clients are able or likely to return some of the support provided to them.

Properties of the individual such as the social roles of the clients should be considered with attention to the support available to fulfill these roles in times of stress, as with hospitalization. Individual patterns of affiliation; coping patterns; and relevant demographic characteristics, such as age or marital status can also be included.

Properties of the situation, such as the many stressors experienced by clients with schizophrenia can be assessed. Unemployment, inadequate housing, and poverty impact on social support and require attention. The expectations of others, such as families or health care providers can be assessed to determine whether clients are able to fulfill these expectations. The degree of psychiatric disability and interference with daily living should be considered.

During the assessment phase, it is essential for health care providers to determine not only the need for and availability of social support, but to consider the clients' perceptions of this support. For example, family members may report that they provide a high level of support but clients may experience this as interference rather than support. Knowledge of possible discrepancies and the nature of clients' perceptions provide useful information in

planning nursing interventions.

Planning.

As with the assessment phase, there is a lack of specific guidelines for the planning process. Norbeck (1981) has suggested four areas for consideration in planning social support interventions. These include first the capacity of the social network to make changes that would increase the provision of social support. The second area is the ability of the client to establish and maintain relationships. Thirdly, the extent to which self-help groups and lay support can be useful should be considered. The last area suggested is the social support required by the client.

Interventions.

Further intervention trials and empirical studies are required before interventions can be recommended definitively (Norbeck, 1988; Stewart, 1989a, 1989b). However nurses can use available information to improve social support for clients with schizophrenia. The major areas for intervention focus on the client or the social network.

Interventions associated with the client include strengthening and maintaining the existing social network and improving skills needed to establish network

relationships (Ellison, 1983). Assisting clients to become aware of their own perceptions of the social support available to them and their level of satisfaction with this is an important intervention and involves the clients in their own treatment program.

Because problems may arise not from the availability of support but rather from clients' perceptions, it may be helpful to assist clients to develop a more positive perception of their social networks. Negative network orientation, paranoid thinking and misinterpretation of behaviour are characteristics which are associated with this group and which require intervention. Other measures may be implemented such as reducing the amount of contact with network members who have a negative impact.

Clients with schizophrenia are often lacking in the skills needed for the development and maintenance of a social network. They experience anxiety in relationships and so may develop relationships which are overly involved or superficial. Interventions to improve social and communication skills may be beneficial. Techniques may be needed to assist clients to recognize and respect the boundaries and norms inherent in relationships. Inappropriate self-disclosure has been noted as a characteristic which interferes with relationships and requires modification to lessen the negative response from others (Kayloe & Zimpfer, 1987).

One expectation of a relationship is that of reciprocity. Clients with schizophrenia tend to have dependent, unilateral relationships so that they receive support but do not reciprocate in a similar manner. Recognizing that they are capable of providing support and developing the necessary skills to do so, may be an empowering experience for clients and will facilitate relationships.

Interventions focusing on social networks primarily involve the development of an appropriate network. Clients may need to first acknowledge losses from their networks and then reconstruct the network. Clients with schizophrenia often form relationships with others who are similarly dysfunctional and so may need to eliminate or reduce contact with some network members.

As demonstrated by this study, there is also a need to add a broader range of support sources, rather than depending mainly on family. The use of natural and self-help networks should be promoted whenever they can provide adequate support. From this study, social support may be enhanced by increasing the number of network members, increasing the duration of relationships and frequency of contact, and also by increasing the amount of support provided.

Network members themselves may need assistance with providing support. Educational and support groups, such as

Friends of Schizophrenics, can help network members to better provide appropriate support while also increasing the amount of support available to network members themselves. Interventions of this type may be especially valuable for families who demonstrate high levels of expressed emotion.

Ongoing professional support is another essential intervention to enhance social support. Although professional support may be temporary for some groups, for clients with schizophrenia, support is often required on a long-term basis. Linkages between professional sources and other network members have been recommended (Ellison, 1983). While there are many benefits to this type of intervention, this must be approached with respect for confidentiality which is a particular concern for clients with schizophrenia.

Evaluation.

Norbeck's model does not specify positive and negative health outcomes. It can be assumed that adequate social support leads to emotional and physical well-being. Within the context of this study, specific outcomes refer to the level of community functioning so that a positive outcome indicates a higher level of community functioning while a negative outcome refers to a lower level of community functioning. The process by which social support might impact upon community functioning remains unclear. However

knowledge about the general mechanism for social support can be applied to the findings of this study.

Social support has been described as having a direct effect on health outcomes. Within this study's conceptual framework, it can be postulated that social support may have a direct impact on community functioning. An appropriate combination of quality and quantity of social support may result in improved functioning for clients with schizophrenia in the community.

Clients who feel that others care about them, believe in them and are willing to provide assistance may evaluate themselves more positively, and have a greater sense of mastery and control. This enables clients to better participate in the community. When this quality of support is provided by an adequate number of people within social networks who have regular ongoing contact with clients, this also facilitates community adaptation.

Examples of this direct relationship might be direct support provided by staff in a supported employment project, peer volunteers who offer friendship in a social setting, or families who provide a supportive environment and adequate housing for a relative with a schizophrenic illness.

Although the processes may not appear as distinctively as described in the literature, social support also has a buffering or mediating effect on health outcomes, such as community functioning. Thus social support facilitates the

management of stressors by reducing or eliminating the stressors or their impact, thereby resulting in improved community functioning. Social support may assist clients to more effectively manage stressors such as unemployment, symptomatology, or discharge from hospital.

This process may occur by improving the client's sense of mastery over stressors, by reducing the perceived threat of such stressors or by other unknown mechanisms. Success in dealing with stressors improves self-esteem, mastery and coping skills and may decrease further vulnerability to stress thereby contributing again to higher levels of community functioning.

Examples of this buffering process might include a client with adequate support who participates as a volunteer rather than despairing over a lack of employment; or a client who temporarily increases contact with his family and case manager while he adjusts to the transition from a halfway house to his own apartment. In both examples, social support facilitates the client's management of stressors so that the level of community functioning is maintained or improved.

Bidirectional Model of Social Support and Community Functioning

Norbeck has also suggested that relationships between social support and health outcomes may be bidirectional

(Norbeck, 1988). Based on this study and Norbeck's model of social support, a bidirectional model can be developed to consider the relationship between social support and community functioning (Figure 4). In contrast to the modification of Norbeck's model (Figure 3), this bidirectional model incorporates the possible impact of community functioning on social support.

As with social support, properties of the person and the situation interact to affect community functioning as well as the need for and availability or perception of social support. Properties of clients with schizophrenia would include inadequate coping and daily living skills, difficulties in interpersonal relationships, and continuing psychiatric symptoms. Properties of the situation for this client group would include poor housing, lack of employment, inadequate and ineffective community based programs, and negative attitudes from the community.

Such characteristics interact to determine the clients' levels of community functioning and as previously discussed, also impact on social support. Higher levels of functioning would be expected for clients who have more skills and abilities and a lesser degree of psychiatric disability, and who experience fewer situational stressors and have more community resources.

This model hypothesizes that higher levels of community functioning will lessen the need for social support,

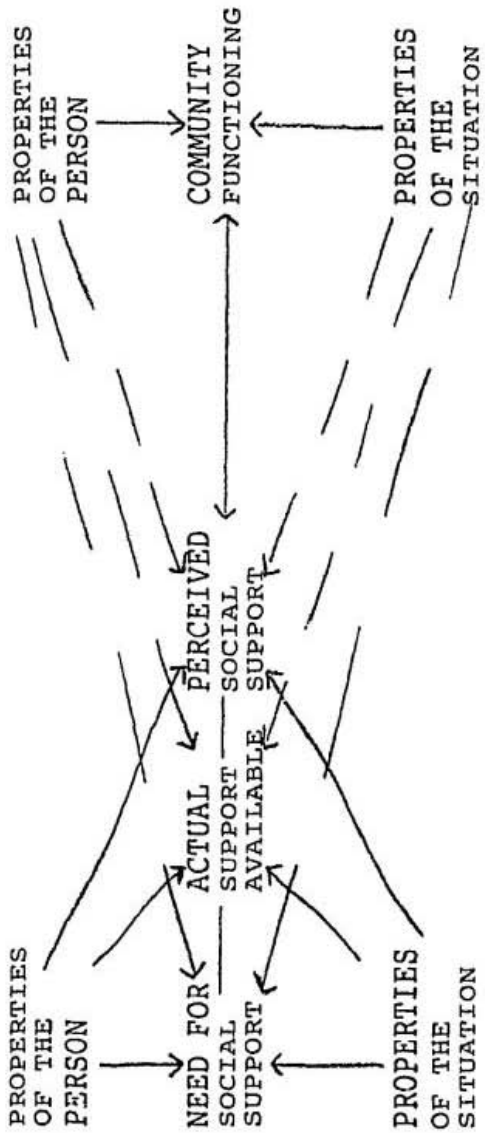

Figure 4. Bidirectional model of social support and community functioning.

increase the availability of support and improve the clients' perceptions of that support. As with social support, the process by which community functioning has its impact is unclear.

It may be that clients who perform better in the community are more skilled at developing and maintaining an effective network and elicit more support of an appropriate quality. Because they are more successful in the community, they may experience a lesser need for social support and may also perceive their networks as more supportive.

The nursing process can also be incorporated in this model so that each phase includes attention to community functioning. Assessment of community functioning has been described as difficult but should obtain information on relationships and social adjustment, symptoms, community living skills, housing, employment or education, financial resources, leisure activities and involvement with the health care system.

Nursing interventions may focus on the individual or the community environment. Individual interventions are designed to improve community living skills and lessen obstacles such as symptomatology. Interventions in the community focus on areas such as improving community acceptance, and increasing the availability and effectiveness of community programs. In this study's model, evaluation would measure not only the level of community

functioning after interventions have been provided, but would also consider whether improved community functioning leads to a decreased need for social support, increased availability of support and/or a more positive perception of that support.

While this model can be used to discuss the findings of this study, it is recognized that factors not included in this study will also have their impact. For example, social support is often linked with stress (Norbeck, 1988) and so the direct role of stress on both social support and community functioning requires study as well as its mediating effect between social support and community functioning.

In summary, results from this study of social support and community functioning have been discussed and suggestions made for incorporating the findings within an adaptation of Norbeck's model of social support. Further implications and recommendations based on this study will now be considered.

CHAPTER VI

Implications and Recommendations

Summary

This study evolved from an identification of the need to increase knowledge regarding the concept of social support and its role in contributing to a better understanding of clients with schizophrenia and their ability to function in the community.

Thirty subjects, ages 18 to 61 years, with a diagnosis of schizophrenia who attended an Ambulatory Care service and who had been discharged from a psychiatric hospital within the past year, participated in the study. The study instruments utilized were the Norbeck Social Support Questionnaire, the Global Assessment of Functioning Scale, and a Client Profile, developed by the investigator. Information was obtained related to subjects' perceptions of their social networks, their perceptions of social support available from those networks, and their levels of community functioning. Relationships between community functioning and social support were analyzed.

The results of the study demonstrated that this sample of clients with schizophrenia occupied a marginal status within the community, had impoverished networks and experienced less social support than other groups. While

suggestions can be offered about enhancing the social support of this group, the parameters related to the ideal type of social networks and optimal social support are yet to be determined. Furthermore, a relationship was found between social support and community functioning which shows promise for improving the lives of clients with schizophrenia.

The results of the study were then incorporated within a modified model of social support developed by Norbeck (1981). Social support was conceptualized as functional social support, composed of affect, affirmation and aid; and social network properties, composed of network size, duration of network relationships and frequency of contact with network members. Both functional social support and network properties were significantly related to community functioning.

Because this relationship may operate in two directions, it can be suggested that enhancing social support may improve community functioning and alternatively that improving community functioning may improve social support. While this study may have produced results which answer the study's research questions, it is also essential to consider how these results can be utilized in nursing practice, theory development and future research.

Nursing Practice

Although social support has been integrated in nursing practice on an informal basis, the wealth of information now available should prompt nurses to incorporate the concept of social support as an essential component of nursing practice. The identification by clients of professional sources of support in their social networks also points to this consideration. Nursing assessment in any clinical area should include attention to the social networks and social support of clients. Nursing interventions designed to enhance social support can be implemented in any practice setting. Evaluation of nursing care should include consideration of the effectiveness of such interventions in improving interpersonal environments.

Interventions to enhance social support could include assistance with enlarging or developing effective social networks, increasing the amount of contact with network members and maintaining long-term relationships. Developing a broader base of support, particularly from friends, is essential for clients with schizophrenia. Improving the availability of actual support and promoting a more positive perception of that support on the part of clients are also useful nursing interventions.

The concept of social support is one which can be introduced to clients and current or potential network members as a means of promoting self-help and the

involvement of community members. Assistance may be provided to enable others to provide support and so nurses may become involved in organizing support groups for relatives or volunteer programs. While the goal is to assist clients and networks to operate effectively without professional involvement, clients with schizophrenia may require consistent, long-term professional support.

Promotion of interventions such as increasing social support are essential for clients with schizophrenia. It is important however, to continue to develop and provide holistic treatment approaches for this client group. Integration of biological, psychological, social and environmental strategies will be of most benefit to clients and their families.

Environmental interventions are particularly important in assisting clients with schizophrenia to achieve higher levels of functioning in the community. The need exists to improve individual skills and decrease psychiatric disability but this will be ineffective unless combined with adequate community resources.

Nurses must become involved in social welfare and public policy by advocating with governments, the community and health care providers for effective community programs. This may include lobbying for funds, providing direct services, or offering program consultation and evaluation. Adequate housing, employment, and financial resources are

areas which require improvement to enable clients to succeed in the community.

Nursing Theory

For nursing practice to be effective, it must be based on sound nursing theory. The domain of environment is being increasingly recognized as a critical component of theory development. Social support as one element of the social environment needs to be incorporated in current nursing theories. This applies not only to the availability of support but also to clients' perceptions.

The concept of social support itself requires further conceptual clarification. How social support operates to impact on variables and the directionality of these relationships requires consideration. Whether social support is a unidimensional or multidimensional concept also remains unclear. The nature of the negative impact of social support also requires further study.

Although social support represents an area of shared knowledge with other disciplines, it is essential for nurses to develop knowledge of the concept which can be applied to nursing practice. Particularly in the area of mental health, knowledge from other disciplines has been adapted to nursing. It is necessary for nurses to now develop and articulate their own expertise in this area which can then be utilized by others.

Nursing Research

Replication of this study and a variety of modifications would be useful in increasing knowledge of social support. Due to the small sample size, it would be recommended that other studies be implemented with larger samples. Study of clients with other psychiatric diagnoses would add to an understanding of mental health and mental illness. Standardization of study criteria, such as age, sex or length of time since discharge from hospital, could also be considered by other researchers.

This study has pointed to the ongoing need for refinement and standardization of the concept of social support and measurement instruments. There is also a need to go beyond descriptive studies and design empirical studies which will provide information about nursing interventions to enhance social support. This is particularly evident in the field of mental health nursing. Longitudinal designs to study the changing nature of social support are also necessary.

The selection and measurement of correlates of community adaptation remains a challenge. Improved community functioning for clients is a primary goal for nursing and so nurses must become involved in developing more effective means of measuring adequate functioning in the community.

This is notably important for clients with

schizophrenia, a group which encounters many difficulties in the community. Nurses can contribute to an understanding of effective treatment programs for this client group by designing empirical studies to evaluate the success of interventions.

The overall task remains to provide more precise information about the types of social networks and levels of social support which are most useful for clients with schizophrenia and which will contribute to the achievement of optimal community functioning.

Conclusions

In conclusion, this study has demonstrated the value of studying social support and community functioning of clients with schizophrenia. The need for utilization of the concept of social support in nursing practice and future theory development and research is critical.

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APPENDIX A

NORBECK SOCIAL SUPPORT QUESTIONNAIRE

To enable us to compare the results of this study with people from different groups and situations, we would like some additional information about your background. Please complete the following items.

n=30

1. AGE 18-20 (1), 21-30 (11), 31-40 (12), 41-50 (5), 51-60 (0), 61-65 (1)
   Mean 34.6, SD 9.0, Range 18-61

2. SEX
   28 1. male
   2 2. female

3. MARITAL STATUS
   27 1. single, never married
   0 2. married
   2 3. divorced or separated
   1 4. widowed

4. EDUCATIONAL LEVEL
   What is the highest grade of regular school that you completed? (Circle one)

	Grade School								High School				College			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Number						2	1	6	5	7	7		1			1

5. ETHNIC BACKGROUND

   ____ 1. Asian
   ____ 2. Black
   30 3. Caucasian

6. RELIGIOUS PREFERENCE

   8 1. Protestant
   21 2. Catholic
   0 3. Jewish
   0 4. Other
   1 5. None

7. PARTICIPATION IN RELIGIOUS ACTIVITIES

13 1. Inactive
8 2. Infrequent Participation (1-2 times a year)
3 3. Occasional Participation (about monthly)
6 4. Regular Participation (weekly)

SOCIAL SUPPORT QUESTIONNAIRE

PLEASE READ ALL DIRECTIONS ON THIS PAGE BEFORE STARTING.

Please list each significant person in your life on the right. Consider all the persons who provide personal support for you or who are important to you.

Use only first names or initials, and then indicate the relationship, as in the following example:

Example:

	First Name or Initials	Sex	Relationship
1.	MARY T.	F	FRIEND
2.	BOB	M	BROTHER
3.	M.T.	F	MOTHER
4.	SAM	M	FRIEND
5.	MRS. R.	F	NEIGHBOR

etc.

Use the following list to help you think of the people important to you, and list as many people as apply in your case.

- spouse or partner
- family members or relatives
- friends
- work or school associates
- neighbors
- health care providers
- counselor or therapist
- minister/priest/rabbi
- other

You do not have to use all 24 spaces. Use as many spaces as you have important persons in your life.

PERSONAL NETWORK

	First Name or Initials	Sex	Relationship
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			

For each person you listed, please answer the following questions by writing in the number that applies.

1 = not at all
2 = a little
3 = moderately
4 = quite a bit
5 = a great deal

Question 1:

How much does this person make you feel liked or loved?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

Question 2:

How much does this person make you feel respected or admired?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

1 = not at all
2 = a little
3 = moderately
4 = quite a bit
5 = a great deal

Question 3.

How much can you confide in this person?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

Question 4.

How much does this person agree with or support your actions or thoughts?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

1 = not at all
2 = a little
3 = moderately
4 = quite a bit
5 = a great deal

Question 5

If you needed to borrow $10, a ride to the doctor, or some other immediate help, how much could this person usually help?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

Question 6:

If you were confined to bed several weeks, how much co this person help you?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

Question 7 :

How long have you known this person?

1 = less than 6 months
2 = 6 to 12 months
3 = 1 to 2 years
4 = 2 to 5 years
5 = more than 5 years

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

Question 8 :

How frequently do you usually have contact with this person? (Phone calls, visits, or letters)

5 = daily
4 = weekly
3 = monthly
2 = a few times a year
1 = once a year or less

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____

9 During the past year, have you lost any important relationships due to moving, a job change, divorce or separation, death, or some other reason? [57]

_____ 0 No
_____ 1 Yes

IF YES,

9 a Please indicate the number of persons from each category who are *no longer available* to you.

_____ spouse or partner [58]
_____ family members or relatives [59 60]
_____ friends [61 62]
_____ work or school associates [63 64]
_____ neighbors [65 66]
_____ health care providers [67]
_____ counselor or therapist [68]
_____ minister/priest/rabbi [69]
_____ other (specify) _____ [70] [71 72]

9 b. Overall, how much of your support was provided by these people who are no longer available to you? [73]

_____ 0. none at all
_____ 1. a little
_____ 2. a moderate amount
_____ 3. quite a bit
_____ 4. a great deal

APPENDIX B

Global Assessment of Functioning Scale (GAF Scale)

Consider psychological, social, and occupational functioning on a hypothetical continuum of mental health-illness. Do not include impairment in functioning due to physical (or environmental) limitations. See p. 20 for instructions on how to use this scale

Note: Use intermediate codes when appropriate, e.g., 45, 68, 72.

Code	
90 | 81	Absent or minimal symptoms (e.g., mild anxiety before an exam), good functioning in all areas, interested and involved in a wide range of activities, socially effective, generally satisfied with life, no more than everyday problems or concerns (e.g., an occasional argument with family members)
80 | 71	If symptoms are present, they are transient and expectable reactions to psychosocial stressors (e.g., difficulty concentrating after family argument), no more than slight impairment in social, occupational, or school functioning (e.g., temporarily falling behind in school work).
70 | 61	Some mild symptoms (e.g., depressed mood and mild insomnia) OR some difficulty in social, occupational, or school functioning (e.g., occasional truancy, or theft within the household), but generally functioning pretty well, has some meaningful interpersonal relationships.
60 | 51	Moderate symptoms (e.g., flat affect and circumstantial speech, occasional panic attacks) OR moderate difficulty in social, occupational, or school functioning (e.g., few friends, conflicts with co-workers)
50 | 41	Serious symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting) OR any serious impairment in social, occupational, or school functioning (e.g., no friends, unable to keep a job)
40 | 31	Some impairment in reality testing or communication (e.g., speech is at times illogical, obscure, or irrelevant) OR major impairment in several areas, such as work or school, family relations, judgment, thinking, or mood (e.g., depressed man avoids friends, neglects family, and is unable to work; child frequently beats up younger children, is defiant at home, and is failing at school)
30 | 21	Behavior is considerably influenced by delusions or hallucinations OR serious impairment in communication or judgment (e.g., sometimes incoherent, acts grossly inappropriately, suicidal preoccupation) OR inability to function in almost all areas (e.g., stays in bed all day; no job, home, or friends)
20 | 11	Some danger of hurting self or others (e.g., suicide attempts without clear expectation of death; frequently violent; manic excitement) OR occasionally fails to maintain minimal personal hygiene (e.g., smears feces) OR gross impairment in communication (e.g., largely incoherent or mute)
10 | 1	Persistent danger of severely hurting self or others (e.g., recurrent violence) OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death.

APPENDIX C

CLIENT PROFILE

n=30

1. FINANCIAL STATUS
   - _____1. Social Assistance — 20
   - _____2. Unemployment Insurance — 5
   - _____3. Employed — 3
   - _____4. Other (Specify) — 2

2. EMPLOYMENT STATUS
   - _____1. Competitive employment — 3
   - _____2. Unemployed — 25
   - _____3. Training program / Supported employment — 2
   - _____4. Volunteer — 0

3. EMPLOYMENT HISTORY
   - _____1. Employed within past 2 years — 15
   - _____2. Employed 2 to 5 years ago — 9
   - _____3. Employed more than 5 years ago — 5
   - _____4. Never employed — 1

4. FAMILY'S HOME
   - _____1. Labrador — 0
   - _____2. Northern — 0
   - _____3. West coast — 1
   - _____4. Central — 2
   - _____5. South coast — 2
   - _____6. East coast — 3
   - _____7. St. John's area — 21
   - _____8. Other (Specify) — 1

5. LENGTH OF TIME RESIDING IN ST. JOHN'S AREA
   - _____1. Six months to 1 year — 1
   - _____2. One year to 5 years — 1
   - _____3. More than 5 years — 28

6. AGE AT FIRST ADMISSION

Unknown	8
<25 years	14
25-35 yrs.	7
61 yrs.	1

7. NUMBER OF HOSPITALIZATIONS

Unknown	2
1-5	12
6-10	7
11-15	6
>15	3

8. HOUSING
   - _____1. Bedsitter — 4
   - _____2. Boarding house — 2
   - _____3. Family — 16

____4. Supportive housing	7
____5. Other (Specify)	1

9. PRESENT PROFESSIONAL INVOLVEMENT (other than psychiatrist)

____1. Nurse	4
____2. Social worker	8
____3. Psychologist	1
____4. Occupational Therapist	1
____5. Other (Specify)	0
____6. None	16

10. PRESENT PROGRAM

____1. Day Care	1
____2. Occupational Therapy	3
____3. School	1
____4. Other (Specify)	0
____5. None	16

11. PRESCRIBED MEDICATION USE

____1. Yes	29
____2. No	1

12. CURRENT PSYCHIATRIC SYMPTOMS (within past 2 weeks)

	Absent	Mild	Mod.	Severe
Depression	10	14	5	1
Anxiety	8	15	7	0
Delusions	24	3	3	0
Hallucinations	22	4	4	0
Behavioural problems	4	13	10	3
Communication problems	3	15	9	3
Cognitive problems	7	14	8	1

13. NUMBER OF MONTHS SINCE DISCHARGE

1-3 months-_____	15
4-6 months-_____	6
7-9 months-_____	2
10-12 months-_____	7

INTERVIEW GUIDE FOR CLIENT PROFILE

Rating scale:
Mild: occurs infrequently, causes minimal distress to client and/or others

Moderate: occurs often, causes some distress to client and/or others

Severe: occurs frequently, causes distress to client and/or others

Questions regarding past 2 weeks would include:
Have you felt depressed (how often, how severe)?
Have you felt anxious (how often, how severe)?
How have you been getting along with people?
Have you felt anyone has been against you?
Have you had any experiences such as interference with your thinking, difficulty concentrating, difficulty getting your ideas across to others,unusual ideas, hearing voices or seeing visions?
Has your behavior (e.g. drinking, drug abuse, fighting) resulted in any problems?

APPENDIX D

REQUEST TO HOSPITAL

To: Assistant Executive Director (Nursing)

I would like to request approval to conduct research in the Ambulatory Care Department of this hospital. This would be conducted as part of the thesis requirement for the Master's of Nursing program at Memorial University. The research topic is social support and level of functioning in clients with schizophrenia in the community. The information gained would be of benefit in the development and provision of services to psychiatric clients in the community. I would be interested in sharing the findings and recommendations with hospital personnel.

The study design is descriptive and would involve 30 subjects. Selection criteria for subjects would include a diagnosis of schizophrenia, discharge from the hospital within 12 months prior to the study, and arrangements for follow-up in the Ambulatory Care Department.

Subjects would first be approached by their psychiatrist regarding my contact. If they are willing to speak with me, after an explanation of the study they would be asked to sign a consent form agreeing to participate in an interview with the researcher. Access to subject's charts would not be required.

Enclosed is a copy of the research proposal and instruments. This has been approved by my thesis committee and also by the Human Investigation Committee, Memorial University.

I would be happy to meet with you to discuss this further. Thank you for your consideration of this request.

Sincerely,

Judy Power, B.N.

APPENDIX E

EXPLANATION TO STAFF OF AMBULATORY CARE DEPARTMENT

I'm Judy Power and am conducting research to complete a Master's of Nursing degree at Memorial University. The topic is social support with clients with schizophrenia and how this might relate to their overall functioning in the community. I will be interviewing 30 clients from Ambulatory Care. My research proposal has been approved by the university and by the hospital Research Committee.

Subjects will have a diagnosis of schizophrenia and will be attending Ambulatory Care for follow-up. They will be seen here within 12 months after discharge from the hospital. Clients will be approached first by their psychiatrist and then if willing by the researcher. They will then be given a brief explanation of the research and asked for written consent to participate in an interview to complete a questionnaire. The interview would last no more than 30 to 45 minutes at a convenient time and all information would be strictly confidential. Clients can withdraw from the study at any time.

I'm hoping that the results will provide useful information about the types of social networks our clients have and about their perceptions of the social support they receive. This information can then be used to plan interventions in the community that will improve their level of functioning. I am looking forward to discussing the results with you. I would be pleased to answer any questions you have now or later.

APPENDIX F

VERBAL EXPLANATION TO CLIENTS

Hello, I'm Judy Power and I'm doing my Master's of Nursing degree at university. I have spoken to your psychiatrist who has informed me that you would be willing to talk with me about participating in a research study I'm doing for my degree.

I'm trying to learn about the kinds of support and help that outpatients get and who helps them. This would be very useful because then we would all have a better idea of what types of help outpatients need and who would be the best people to give them support.

Being in this study would mean agreeing to sit down with me for a half hour or so to fill out a questionnaire with my assistance. Anything that you tell me will be confidential. The report that I have to write after will not give personal information that could identify anyone.

If you would like to be in the study, I would need you to sign this consent form. You can say no if you wish and that will be alright. Also, if you decide to go ahead now, you can change your mind later and stop being in the study. If you have any questions, we can talk about them now or you can reach me here.

APPENDIX G

CONSENT FORM
TO PARTICIPATE IN BIO-MEDICAL RESEARCH
FACULTY OF MEDICINE
MEMORIAL UNIVERSITY OF NEWFOUNDLAND
ST. JOHN'S, NFLD.

TITLE: Social support and community functioning of clients
INVESTIGATOR: Judy Power, B.N.

You have been asked to participate in a research study. Participation in this study is entirely voluntary. You may decide not to participate or may withdraw from the study at any time without affecting your normal treatment. You may refuse to answer all or part of any of the questions. Confidentiality of information concerning participants will be maintained by the investigator. The investigator will be available during the study at all times should you have any problems or questions about the study.

I,_____, the undersigned, agree to participation in the research study described above.
Any questions have been answered and I understand what is involved in the study. I realise that participation is voluntary and that there is no guarantee that I will benefit from my involvement. I acknowledge that a copy of this form has been offered to me.

_____ _____
(Signature of Participant) (Date)

To be signed by investigator: To the best of my ability I have fully explained to the subject the nature of this research study. I have invited questions and provided answers. I believe that the subject fully understands the implications and voluntary nature of the study.

_____ _____ _____
(Signature of Investigator) (Date) (Phone)

APPENDIX H

PERMISSION FROM DR. NORBECK

Request Form

I request permission to copy the Norbeck Social Support Questionnaire (NSSQ) for use in research in a study entitled: Social Support and level of functioning of schizophrenic clients in the community: Implications for nursing.

In exchange for this permission, I agree to submit to Dr. Norbeck a copy of the one-page scoring sheet for each subject tested. These data will be used to establish a broad normative database for the instrument for clinical and non-clinical populations. Aside from use in the pooled data bank, no other use will be made of the data submitted. Credit will be given to me in reports of normative statistics that make use of the data I submitted for pooled analyses.

(Signature)

Jan 6, 1989
(Date)

Position and Full Address of Investigator: MN Student, Memorial University

Nfld, Canada, A1L 1C1

Permission is hereby granted to copy the NSSQ for use in the research described above.

Jane S. Norbeck

1/20/89
(Date)

Please send *two signed* copies of this form to:

Jane S. Norbeck, D.N.Sc.
Department of Mental Health and Community Nursing
University of California, San Francisco
N505-Y
San Francisco, California 94143

APPENDIX I
PERMISSION FOR GAF SCALE

I, _____, being the copyright holder of the material described below:

American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (third ed. revised). Axis 5: Global Assessment of Functioning Scale.

do hereby permit the inclusion of the described material in the thesis entitled:

Social Support and Community Functioning of Clients with Schizophrenia: A Nursing Investigation

written by Judy Power, B.N., and submitted in partial fulfillment of the requirements for the degree of Master of Nursing at Memorial University of Newfoundland, Canada.

I further permit the National Library of Canada to microfilm this thesis, including the material to which I retain copyright.

DATE:_____

SIGNATURE:_____

Permission granted for one-time use, English language only. The correct citation for this book is: American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised. Washington, DC, American Psychiatric Association, 1987.

Ronald E. McMillan — 6-13-90

Ronald E. McMillan
Director, Publications and Marketing

Date

No Charge
Fee (Send check payable to APA, Attn: Publications and Marketing)