

1998

## Evaluation of the Community Living Adaptation Scale

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**EVALUATION OF THE COMMUNITY LIVING ADAPTATION SCALE**

**By**

**Jane M. Morris, BSN, R.N.C.**

**A THESIS**

**Submitted to  
Grand Valley State University  
in partial fulfillment of the requirement for the  
degree of**

**MASTER OF SCIENCE IN NURSING**

**Kirkhof School of Nursing**

**1998**

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## **ABSTRACT**

### **EVALUATION OF THE COMMUNITY LIVING ADAPTATION SCALE (CLAS)**

by

**Jane M. Morris**

The purpose of the study was to evaluate the CLAS. Seventy-three subjects participated from mental health case management agencies. The reliability coefficient for internal consistency of the CLAS was .82. CLAS was compared to the Global Assessment of Functioning scale using the Pearson's correlation. Convergent validity was significant to the .36 level indicating a significant relationship at the .01 level. The Self Profile Scale (SPS) was developed by this researcher as a parallel scale to compare the client's perceptions to the case manager perceptions regarding functional status level. Item to item comparison of the CLAS and SPS indicated similar ratings in 9 of the 13 items. There is support for the reliability and validity of CLAS but this is an initial research effort. Continued evaluation of the CLAS is recommended with a larger sample size.

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## CHAPTER 1

### INTRODUCTION

Collecting health information is a fundamental nursing task. Most often this health assessment function takes place in a hospital or medical facility. However, health assessments are equally as important when completed in the community health setting.

Health assessments require knowledge of science and use of varied communication techniques. Despite the best of intentions on the part of the case manager/nurse and the community mental health (CMH) client, the intended content may be misinterpreted by one or both of them. It is essential that nurses determine the accuracy of health information by requesting feedback from clients regarding perceptions. "Perception is an awareness of objects, persons and situations" (King, 1981, p. 20). "It is each individual's representation or image of reality" (King, 1981, p.20).

To avoid any misperceptions during the performance of a health assessment, the psychiatric-mental health nurse must become skilled in several areas. The nurse will need to anticipate and plan for the level of client disability. Because of cognitive and emotional impairments of persons with mental illness, verbal descriptions of their status may be distorted or relayed symbolically. Although verbal communication is important, it can not be relied upon as the only method of information collection. First, it is necessary for the psychiatric nurse to have knowledge of the client's background history to help interpret symbolic verbal communications. Secondly, the psychiatric nurse must watch for gestures, posturing, and other behavioral indicators to validate perceptions. Lastly, but not the least of significance, collecting input from close family members or significant others will validate previous data.



The psychiatric nurse is required to holistically assess the chronically mentally ill adults. Part of this holistic assessment includes assessment of functional status. Functional status scales are one means of assessing the clients level of functioning in the community over a period of time. Though only one part of the psychiatric assessment, they are indicators of the clients quality of life, their success or failure in trying to be "normal". For example, among the non-mentally ill, you can expect individuals to work 40 hours a week for years in the same place of employment. Mentally ill individuals, on the other hand, have difficulty working on a part time basis due to recurrent psychiatric symptoms which often result in rehospitalization (the revolving door syndrome). Thus, the nurse in assessing the ability or disability of a community mental health client with respect to functioning level must take into consideration the realistic potential for achievement of each client.

The psychiatric-mental health nurse does not function alone in assessing clients in the mental health community but acts as a member of a multidisciplinary team. Each team member will function as a case manager. Case management optimizes the client's self-care capacity and provides for quality health care along a continuum, decreases fragmentation of care, improves the client's quality of life, and provides for cost containment by the prevention of unnecessary duplication of services or institutionalization (Pittman, 1989).

The concept of functional status is important in nursing because nurses are often responsible for assisting patients with maintaining or improving their functional status. Functional status for the purpose of this research means any systematic attempt to measure the level at which a client is functioning in any of a variety of areas, such as physical health, social activity, activities of daily living, personal management of finances, etc. (Moinpour, McCorkle, & Saunders, 1993). The assessment of functional status of chronically ill patients is common for nurses (Moinpour et al., 1993). CMH clients are persons with a chronic illness, sometimes they have both physical and mental

health problems. Use of functional status assessments is particularly important in assessing clients living in the community because the results will help to guide case managers in determining the clients level of independence or dependence in completion of health related tasks. Competence is usually judged against an implicit set of collective norms of health care specialists caring for the patient (Moinpour et al., 1993).

The Community Living Adaptation Scale (CLAS) measures the functional status of community mental health clients. The original CLAS was developed by committees of mental health professionals from several case management agencies in 1982 (Masterton, 1985). This questionnaire sought to measure the level of adaptation/functioning of adult mental health clients living in the community. Reliability and validity of this tool were never published. The CLAS was revised in 1994 and continues to be used in this midwestern state as well as community mental health settings in other states. Since the 1980's, the CLAS has been part of psychosocial assessments at KCCMH (These initials will be used in reference to the location of this study). The psychosocial assessment is completed at the initial admission to a case management agency by a case manager and then yearly when goals are reviewed.

This research attempts to examine the validity and reliability of the CLAS. The CLAS will be compared to the Global Assessment Function (GAF) scale, a functional scale used by psychiatrists. In addition, the perceptions of mental health professionals, specifically case managers, will be compared to those of the clients with respect to the Community Living Adaptation Scale (CLAS) and the Self Profile Scale (SPS). Many questions need to be answered, for example: Is the CLAS a valid and reliable tool? Will the perceptions of the mental health client regarding level of functioning be congruent with the perceptions of the case managers' evaluations of level of functioning? Ideally, there will be a high correlation between the scores of both questionnaires. However,

accuracy of self report is questioned in this population because many individuals with schizophrenia exhibit information processing deficits (Rund & Landro, 1990).

It is hoped that as nurses are more involved in CMH research and service planning at an administrative level, awareness of the capability of RN's in the psychiatric-mental health settings will be increased. Nurses direct involvement with the assessment of the functional status of CMH clients will benefit both clients and case management teams.

#### Purpose

The purpose of this study was to evaluate the CLAS used with chronically mentally ill clients in community mental health agencies. Reliability and validity of the CLAS were examined.

## CHAPTER 2

### CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

#### Conceptual Framework

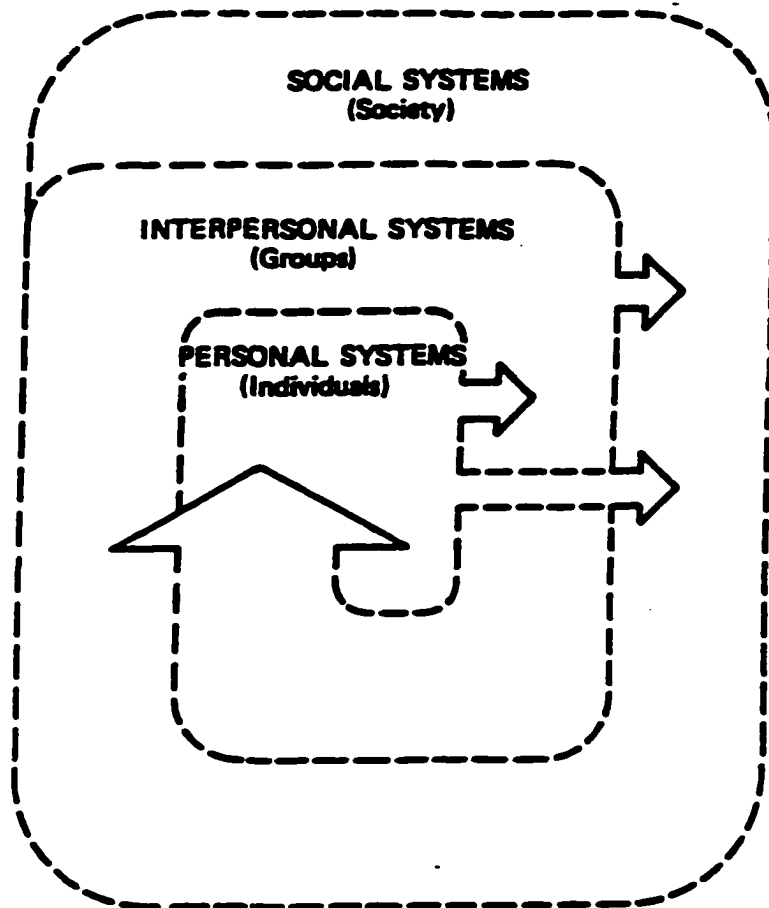
Imogene King's (1981) conceptual framework is composed of three interacting systems; these are the personal systems, the interpersonal systems, and the social systems (see Figure 1). The concepts of nursing; health and environment are important in this framework. They are defined as follows:

**Nursing:** the process of action, reaction, and interaction whereby nurse and client share information about their perceptions in the nursing situation (King, 1981, p.2).

**Health:** dynamic life experiences of a human being, which implies continuous adjustment to stressors in the internal and external environment through optimum use of one's resources to achieve maximum potential for daily living (King, 1981, p.5).

**Environment:** the setting for the nursing situation is the immediate environment, spatial and temporal reality, in which nurse and client establish a relationship to cope with health states and adjust to changes in activities of daily living if the situation demands adjustment (King, 1981, p.2).

King identified specific concepts relative to each system. In the personal system: self, body image, perception, growth, development, time and space ( King 1981, p. 20), and in the interpersonal system concepts of interaction, communication, transaction, role, and stress were placed, but are also relevant knowledge for personal systems (King 1981, p.59). The major concepts in social systems are: organization, power, authority,



**Figure 1.1** A conceptual framework for nursing: dynamic interacting systems.

Reprinted with permission from I. M. King, *Toward a Theory for Nursing*, New York, John Wiley & Sons, 1971, p. 20.

status and decision making (King, 1981, p. 114) The concepts forming the goal attainment theory which apply to the nursing health assessment situation are: self interaction, perception, communication, transactions, role, stress, growth and development, and decision making. Perception connects all of these concepts and is the key concept in the personal systems component of the interacting systems framework.

Perception is a process of organizing, interpreting, and transforming information from sensory data and memory. Perception is a major concept because it influences behavior. "If behavior is an outcome of perceptions, then human perceptions become the basic data of human interactions and the facts that nurses must gather and analyze if they are to deliver effective nursing care" (King, 1981, p.55). King emphasizes that it is important to remember we all live in the same world and have common experiences; however, individuals differ in filtering perceptual stimuli. Thus, perceptions are selective. They are based on each individual's background of experiences, the dynamics of nursing involves accuracy of the nurses' perceptions and of the individuals' perceptions of his health status.

Congruence of perception is particularly important during an initial interaction with a client. Sometimes this initial contact is at the time of a health assessment. One of the functions of nurses is to assist others in attaining a healthful status. When making health assessments, it is necessary to consider the three fundamental health needs of all human beings (a). useable health information at a time when they require it and are able to use it, (b). preventive care, and (c). care when they can not help themselves. From nursing assessments and collaboration with the client, a goal or plan will emerge to help individuals attain, maintain, or restore health. This is the goal for nursing.

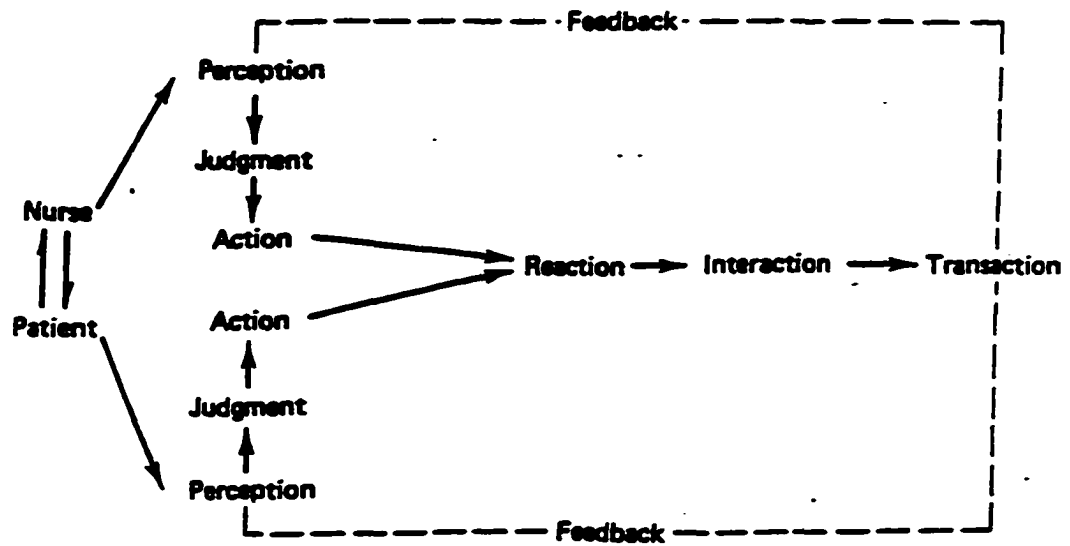
The process of interaction between two or more individuals represents a sequence of verbal and nonverbal behaviors that are goal-directed. Interaction between individuals or groups is part of the interpersonal systems component of the interaction framework

(see Figure 2). Communication is the key concept within this system. "The means used to share information and ideas are verbal and nonverbal signs and symbols by which individuals also express their goals and values" (King, 1981, p.79). All behavior is communication that can be observed directly or indirectly, and/or verbally or nonverbally.

It is vital to understand the difference between the concept of interaction and the concept of transaction in the interactional process. "Interaction is the process of perception and communication between person and environment and between person and person, represented by behaviors that are goal directed" (King 1981, p.145). "The concept of transaction is defined as observable behavior of human beings interacting with their environment" when the goal is met (King, 1981, p.147). The social systems include family, religious influences, schools, and work environments.

In summary, all components of the interactional system are involved in the collection of information for assessment of community mental health clients' functional status. The explanation which follows will attempt to relate this general conceptual framework to this particular study. The personal systems includes individuals diagnosed with schizophrenia who receive services from a county community mental health agency. Also, it includes the case managers, who function as mental health care providers. Each person is a total system.

The interpersonal system consists of the case manager/psychiatrist and the client. The process of human interactions involves two or more persons. Figure 2 illustrates the way these interactions occur. The collection of data for assessment of functional status begins with perceptions of the client, case manager, and psychiatrist. These perceptions are formed during conversation, activities, and reading written information. From these individual impressions of each other, judgments are formed. Their actions will be the completion of functional status questionnaires. The reaction will be persons responding to the information which will be presented, for example, this response could be satisfaction



**Figure 5.1** A process of human interactions.

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or disbelief. The data collected from the questionnaires is the directly observable interaction. The human interaction process involves a continuous exchange between the person and the environment. Communication is written in numbers or filling in circles. The final transaction component is an exchange of client, case manager, and psychiatrist values when discussing the scales or study results. This collaboration will result in a plan or decision on how to use the informational data collected from the study. Client and case manager feedback will result in another interaction process.

The societal system is mainly the mental health system which includes the county mental health board, case management agencies and case management teams within each service oriented agency.

### Literature Review

The body of literature reviewed consists of research conducted in the areas of perception and measurement of functional status. These key words will be used to organize the presentation of articles. Two studies were conducted out the United States in France and Australia. The remaining studies were here in the United States.

#### Perception

The accuracy of self report is questioned in the chronically mentally ill population because individuals diagnosed with schizophrenia exhibit information processing deficits. According to Rund and Landro (1990), most research so far on pathological groups has been done with schizophrenic patients.

The cognitive functioning factor is important when talking about perceptions. Many theories have been developed to explain information processing in persons with a psychiatric disorder. According to information processing, the human brain, to a certain extent, works like a computer (Rund & Landro, 1990). A principle assumption is that cognitive activities go through a series of stages. A general introduction to information processing models and experimental methods is presented in the article review done by

Rund and Landro. In conclusion they write: "What we consider at the present time to be the most essential contributions of information processing research are the attempts to differentiate vulnerability-related factors from symptom-related ones or trait-dependent factors from state-dependent factor ones" (p.314). The authors indicate criticisms of the information processing model, such as: the tendency to study psychopathology within a framework of cold cognition, and to ignore affect, and that methods of cognitive psychology are characterized by an oversimplified conceptual model.

Few studies have dealt specifically with the clients' perspective of mental illness. In one qualitative study, the personal perceptions of the mentally ill are seen as essential in order to be able to provide services that are valued by the clients and enhance their view of life (Vellenga & Christenson, 1994). The sample included 15 clients in an outpatient mental health clinic. Interviews were analyzed for common themes. The following themes emerged: stigmatization and resulting alienation, loss, distress, and acceptance. This study emphasized the importance of obtaining the client's perceptions in order to promote a meaningful therapeutic relationship. There are several areas which could be considered as limitations of the study; it is based on interviews with males who were veterans of the military, several psychiatric diagnoses were present in the sample, and all subjects needed to be able to verbally articulate their feelings.

Dzurec (1990) conducted a study to describe the connection between a client's perception of self and his level of functioning. The study included the variables of perception of care givers and clients, and functional ability of clients with chronic schizophrenia. The Progressive Evaluation Scale (PES) and structure interviews were used to measure perceptions. Although the sample size was small ( $n = 15$ ), several significant findings were reported. First, respondents have a more positive self perception of themselves than their care givers have of them. Respondents' perceptions of mental health were not significantly related to functioning. Lastly, respondents who were verbally

communicative received higher caretaker scores on the functioning scale than did clients less able to communicate their thoughts.

### Measurement of Functional Status

Of the three major methods used to measure functional status, i.e., clinical assessment, interview, and standard tests, this research review will focus on standard tests of clients' performance. The depth of functional status assessment varies, for example, an item entitled; "management of finances" may require a case manager to consider the following subcategories; budgeting, bill payment, managing a checking account, etc. Perhaps only a general statement regarding level of functioning is listed for each level of functioning selection possible under the title. Other functional status scales may evaluate each of these subcategories, giving a very in-depth assessment of specific behavior related to functioning.

All research articles reviewed described studies by mental health professionals whose purpose was to validate and/or create instruments to measure the functional status of chronically mentally ill clients. Most instruments developed were designed to be completed by the case manager, e.g., Multnomah Community Ability Scale, Global Assessment Scale, Instrumental Activities of Daily Living and Physical Self Maintenance Scale, Missouri Level of Care, St. Louis Inventory of Community Living Scale, and the Life Skills Profile.

In France, a study of the Independent Living Skills Survey (ILSS) was conducted using psychotic patients. This scale was developed in the United States (Wallace, 1986) and has two versions: one completed by the patient and the second by the significant other or care giver. The rating method, a 5-point likert scale, can be quickly completed and is easy to read. Both the frequency of behavior and degree of behavioral problem are recorded in columns following the questions. According to the authors (Cyr, Toupin, Leseage, & Valiquette, 1994), the ILSS has been specifically designed to provide an

evaluation of day-to-day living skills, including personal hygiene, personal appearance, and care of clothing, care of personal possessions, food preparation and storage, health maintenance, money management, transportation, leisure and recreation, and job seeking and job maintenance skills. Results of the study in France, using the self report scale, supported the usefulness of the ILSS as a measure of the skills needed by psychiatric patients to live autonomously in the community. One of the limitations of the scale is that questions are value laden and biased for middle class response, for example, under the area of eating - #1. Drinks neatly (without prompting). Also, domestic activities include traditional gender specific duties which would tend to skew response in favor of females.

Trauer, Duckmanton, and Chiu (1995) completed the most significant recent study of functional assessment of persons with schizophrenia living in the community in Australia. They proposed the Life Skill Profile (LSP) scale be divided into five subdivisions: Self Care, Non-turbulence, Social Contact, Communication, and Responsibility. The LSP consists of 39-items. All items are answered on anchored 4-point scales with 4 being the highest and 1 being lowest level of functioning. The sample, 200 persons diagnosed with schizophrenia living in the community, was tested by mental health professionals. One finding of significance was discussed as follows:

self assessed familiarity of the rater with the patient was significantly and linearly related to the social contact and withdrawal subscales. This may mean that raters who knew their patient well rate the patient's social contact as better.

Alternatively, it may mean that only patients whose social contact is relatively good allow case managers to get to know them well (Trauer, Duckmanton, & Chiu, 1995, p.498).

Also, subscales, with exception of self care, were rated higher by raters who had known the patient longer. Multiple other rating scales such as The Brief Psychiatric Rating Scale (Overall & Gorham, 1962) and Resource Associated Functional Level Scale (Leff, Graves,

Natkins, & Bryan, 1985) were compared with results of the LSP, showing positive and significant correlations.

A study to validate the St. Louis Inventory of Community Living Scale (SLICLS) hypothesized that the scale would differentiate varying types of clients according to the independence levels of their residential placements (apartment, boarding home, and nursing home) (Fitz & Evenson, 1995). This 15-item instrument requires little training and takes only a few minutes to complete. Raters are asked to "rate the client's current (past week) level of functioning" on a scoring system from "1-Few or no skills to 7-Self-sufficient, very adequate skills" (Fitz & Evenson, 1995, p.371). Construct validity was supported for the three types of residences and concurrent validity was demonstrated in relation to the Missouri Level of Care Instrument (Massey, Pokorny, & Kramer, 1989).

The goal of a study done in the northwestern United States was to provide clinicians and managers with a measurement tool that would be sensitive to the variation in levels of severity within a population of consumers who, by definition, are seriously disabled (Barker, Barron, McFarland, & Bigelow, 1994). The Multnomah Community Ability Scale (MCAS) is a 17-item instrument that measures the level of functioning of chronically mentally ill persons living in the community. It was developed by a group of mental health professionals. Raters choose from 6 levels of ability or disability with 1 indicating the lowest and 5 the highest level of functioning; 6 is listed simply as "Don't know". Researchers state that this scale is meaningful for field applications for chronically mentally ill persons living in the community. Authors noted as an afterthought that the scale measured both impairment (symptoms) and ability (functioning).

One study of depressed adults (Lyness, Caine, Conwell, King, & Cox, 1993) examined the relationship among depressive symptoms, mental illness, and functional status. An inpatient population of 109 patients with a diagnosis of major depression was tested using 5 different instruments (Hamilton Rating Scale for Depression, Cumulative

Illness Rating Scale, Global Assessment of Functioning Scale, Karnofsky Performance Status Scale, and Instrumental Activities of Daily Living and Physical Self-Maintenance). It is concluded that symptom-based and functionally based assessments within each realm tap aspects that are related but clinically differentiable. The study, also, confirms the long standing clinical notions that diagnosis and symptom severity need not parallel functional disability (Lyness et al., 1993).

### Summary and Implications of Study

In reviewing the above articles, it is evident that much more research is needed in the areas of client perceptions and functional status. Every research has a different purpose. When looking at them collectively, it is as though a central theme has yet to be identified. It is logical to ask yourself, "Why is another functional status tool necessary if others are readily available?" There are a number of reasons why further tool development and research are essential. First, consider the diversity of resources available from one area of the country to another, such as housing availability or political support to local community mental health agencies. Secondly, social consciousness in the United States demands community mental health treaters incorporate consumer involvement in treatment planning. Lastly, professionals particularly social workers, psychiatrists and psychiatric nurses are still searching for techniques to improve the quality of living for chronically mentally ill individuals who are being treated in community settings. Many questions still need to be answered related to the measurement of client functional levels so that human resources and funding will be effective and efficiently utilized to benefit the greatest number of mentally ill clients.

### Research Questions

- Is the CLAS a reliable and valid measurement tool?
- How do clients perceive themselves regarding various levels of functioning?
- How do the clients' perceptions of functional status compare to the case managers' perceptions of the clients' level of functioning?
- How will cumulative scores from the CLAS compare to GAF scores?

### Definition of Terms

**Case Management:** a systematic process of assessment, planning, service coordination and/or referral, and the monitoring and reassessment through which the multiple service needs of the client are met (Parker, 1988). Persons performing case management are case managers.

**Chronicity:** not determined by a diagnosis, but rather by the degree to which the illness interferes with self-care, employment, education, and the ability to interact and socialize meaningfully with others (Goldman, Gatozzi, & Taube, 1981).

**Functional Scale:** an assessment instrument which attempts systematically to measure the level at which a client is functioning in any of a variety of areas, such as physical health, social activity, activities of daily living, personal management of finances, etc.

**Perceptions:** an awareness of objects, persons and situations; each individual's representation or image of reality (King, 1981).

**Schizophrenia:** a mental disorder characterized by cognitive functioning deficits, due to delusions, hallucinations, disorganized speech or other negative symptoms, and social and occupational dysfunction over at least 6 months. These disturbances are not due to physiological effects of a substance or a general medical condition (DSM-IV, 1994).

## CHAPTER 3

### METHODOLOGY

#### Research Design

The descriptive correlation design was used. This research may confirm the existence of correlation, but it is generally insufficient to establish a causal relationship. Several measures to reduce the threats to internal validity were taken. In order to decrease the number of intrusive events which may occur during testing, case managers who were not completing the CLAS were asked to choose a stress free setting for completion of the SPS. Special instructions were given to these case managers to assess fatigue, cognitive difficulty, or psychiatric symptomatology, such as hallucinations or delusions which may affect subjects during completion of the questionnaire.

To assure that subjects were tested only once specific assignment of identification numbers was done, specifically the client file number was used. Numerical values were given to each answer to avoid any possible bias in scoring the completed questionnaires. Demographic information included: age, sex, race, and level of education so that the selection of subjects could be assessed to determine if this sample was representative of the total population. Subjects were told when offered the opportunity to participate that they were not penalized for lack of interest in this study.

Social desirability may be one factor affecting the data collection. If clients anticipate that they need to answer positively to every answer just to please the case manager, then the true perceptions were not evidenced. On the other hand, case managers may feel they need to show how well they have succeeded in monitoring a



client by falsely giving a high rating of functional status. To decrease the possibility of social desirability, two interventions occurred. For the clients, a statement at the top of the Self Profile questionnaire indicates there were no right or wrong answers. The next underlined statement indicates This is not a test. Next, the case managers were assured that results would remain confidential. Thus, case managers whose results do not match those of clients were not identified or penalized.

To remove the possibility of the Rosenthal Effect (investigator bias), a potential issue involving external validity, it was necessary to code the questionnaires. No respondents names appeared on either questionnaire. However, to be certain that there was only one questionnaire for each mental health client, the client case number was the code used. Others factors considered were increase communication problems including: the presence of severe cognitive deficits, parataxic thinking, mood disturbances, or dysfunctional behavior patterns with clients. Techniques to minimize communication problems were noted on the handout given to case managers administering the SPS.

### Sample and Setting

The target population chosen for the study were chronically mentally ill clients of KCCMH (the agency servicing this population) who have been diagnosed with types of affective thought disorders related to schizophrenia. Their diagnoses as taken from the Diagnostic and Statistical Manual IV (DSM IV) were as follow: 295.30, 295.10, 295.90, 295.60, 295.70, and 295.40.

One hundred and eight clients of KCCMH were selected. However, seventy-three clients agreed to complete the questionnaire (68%). Using the above diagnostic numbers a list of eligible subjects was computer generated. These lists were then numbered from one to the end of the particular team roster. Using the random table of numbers clients were chosen. This process was repeated for each of four case management (CM) teams from two separate agencies (a total of 8 CM teams). The assigned case managers and

team members from these teams were predetermined. Specifically, since case managers were assigned to these clients, they are not randomly selected.

Exclusionary and inclusionary criteria were as follows:

**Inclusion**

**Exclusion**

**CLIENT:**

Older than 18 years of age  
Current clients with KCCMH  
Legal competency or proxy  
Primary diagnosis of Schizophrenia

Terminal illness  
Psychiatric inpatients  
Geriatric Network Services  
(GNS) clients

**CASE MANAGER:**

Employed by KCCMH agencies as  
case managers  
Assigned a case load

Probationary case managers  
Those not available due  
to illness or vacation

**Instruments**

Four instruments were used in this study: the Community Living Adaptation Scale (CLAS), the Self Profile Scale (SPS), the Global Assessment Functioning scale (GAF), and demographic information sheets.

**Community Living Adaptation Scale (CLAS)**

The CLAS was completed by case managers (see Appendix A). This scale has been used since 1985 to measure functional status for chronically mentally ill clients at KCCMH. It was developed by professionals within the KCCMH system to improve client outcome evaluation. The group proposed scales which would deal with the areas of life functioning that they felt were critical in determining the quality of life for the adult chronically mentally ill. By June 1985 the work group had settled on seventeen items. A research study was initiated to study the reliability and construct validity of the newly devised scales.

Factor analysis by W. Chamberlain (personal communication, September 26, 1985) was completed on the original 17 scales. A Varimax rotation procedure with a factor loading of .50 and higher was used as a criterion. It revealed a four factor solution: inpatient proneness, irresponsibility, role socialization, and survivability. Factor 1 was viewed as inpatient proneness, since persons with high scores on this factor tend to be "revolving door" types or have dysfunctional episodes of greater severity than others. Factor 2, irresponsibility or impulsivity, was the only factor which suggests possible attitude of indifference to social convention. Factor 3, client role socialization, includes behaviors which were seen as "compliance" by case managers. Factor 4, survivability, includes the concepts of daily living skills and psychoticism.

From the statistical results the items within the CLAS were regrouped and several were deleted including: aggressiveness/assaultiveness, bizarre public display, residential stability, attitude to self and assessment of mental status. The revised CLAS consists of 13-items with 5 likert scale selections. Each functional status item was identified, for example, Scale One-Residential. Beneath this title were five statements about behaviors from most desirable to least desirable. Case managers were to pick one level which best describes their clients' functional status during the last 3 months.

Each item had a possible score of 5 for the highest level of functioning and a score of 1 for the lowest level of functioning. Since there were 13 items a cumulative overall score could range from 13 to 65.

### Self Profile Scale

Secondly, the Self Profile Scale (SPS) was completed by CMH clients (see Appendix B). This is a scale designed by this researcher to parallel the CLAS. Questions were simplified because of the cognitive impairments of the target population. The question format was forced-choice on a four point scale. The scale used structured alternatives in the form of two statements regarding functional status for each area to be

measured. These statements are written to off-set the tendency to give socially desirable responses by suggesting that half of the people in the world felt one or the other way. Thus, answers were scored from 1 to 4 with 4 being the highest and 1 being the lowest level of functioning. Since there were 13 items, a total cumulative score ranging from 13-52 points was possible.

A pilot study to test the reactions of clients to the SPS was completed on 8 clients from one KCCMH agency. The interview with each client was conducted on a voluntary basis with the clients being read or given an introductory letter about the study (see Appendix C). After talking with a couple of clients, the need to assess comprehension and literacy level become apparent (see Appendix D). A simple scale consisting of three levels of comprehension was developed: high - able to read and ask questions without assistance or prompting, medium - needed some assistance and prompting to continue or guidance on how to proceed, and low - unable to read the letter or questionnaire and required concrete personal comparisons to answer questions. Thus, from the 8 clients completing the SPS: 3 were high, 3 medium, and 2 low functioning. Several clients declined the opportunity to participate. The interviews were held from 9:00 a.m. to 11:00 a.m. during the agency medication injection clinic time.

Overall, a few minor changes in the format were evident, such as writing "OVER" in parenthesis at the bottom of the first page, underlining the three month time frame for behavior assessment, and changing a typographical error. Other problems were related to comprehension levels and the cognitive deficits of this population, for example, the adjustment to the type of questionnaire, and extra time needed to validate client understanding of the instruction for the SPS. By the end of the eighth interview, a list of instructions and suggestions for non-primary (secondary) case managers to use when clients complete the SPS was created. These instructions were attached to the client information packet.

### Global Assessment Functioning Scale

Thirdly, the Global Assessment Functioning scale (GAF) (see Appendix E) (Endicotte, Spitzer, Fleiss, & Cohen, 1976) an instrument with well documented validity and reliability, was compared to the CLAS score. The Global Assessment Scale (GAS) was developed originally from the Health-Sickness Rating Scale (HSRS) in 1962 by Luborsky as cited in (Endicotte et al., 1976). GAS was a single rating for evaluating the overall functioning of a subject during a specific time period on a continuum from psychological or psychiatric illness to health (Endicotte et al., 1976, p.766). A modified version of the GAS was included in the Diagnostic and Statistical Manual (DSM) IIIR as the GAF. The GAF is used in multiaxial assessments done by psychiatrists and psychologists when making psychiatric diagnoses. It was noted in Axis V of the assessment as a global measure of clinical progress. The GAF scale was to rate functional status with respect to psychological, social and occupational functioning.

The scale ranges from 1-100 with level of functioning from highest (100) to lowest (1). The levels of functioning change every 10 digits. A zero indicates that no information was available. The vast majority of individuals in treatment rated between 1 and 70. Most outpatients rated 31 to 70, and most inpatients between 1 and 40 (Endicotte et al., 1976, p.766). Agency psychiatrists assigned to particular clients were asked to assign an updated GAF for the clients participating in the study.

The interrator reliability coefficients of the GAF over the 5 studies ranged from .69 to .91. Criterion related validity was examined in three areas: correlation's with other independently rated measures of overall severity, relationship to rehospitalization, and the sensitivity to change (Endicotte et al., 1976).

### Demographic Information Sheet

A demographic information sheet was attached to each client and case manager questionnaire. The case manager (see Appendix F) was asked to respond to questions

regarding gender, level of education, years/months of experience as a case manager, years/months knowing client to be rated, number of contacts with client per month, status within team, professional status, and level of confidence completing CLAS. The client (see Appendix G) was asked to respond regarding age range, gender, education level, race, guardianship status, and residential status. These answers were used to compare sample characteristics.

#### Procedure for Data Collection

Prior to proceeding with this study, approval was obtained from the Grand Valley State University Human Subjects Review Committee (see Appendix H) and the Kent County Community Mental Health Research Review Committee (see Appendix I). Also the investigator obtained permission from each of the case management agencies involved. Staff meetings were planned to explain the study to the team case managers.

Lists of identified subjects, as stated in the sampling section, were given to the team coordinator. Primary case managers were given packets to complete. A secondary case manager from the team was identified by the team coordinator to present the packet of information to the subject. The secondary case manager was given a handout indicating instructions for the administration of the SPS. The secondary case managers was instructed to allow the subjects to complete the questionnaire with no coaching on which answer they should choose for each of the 13 items. The packet of information for the subjects contained the following: a formal consent form, a sheet of questions regarding demographic information, and the SPS questionnaire.

The formal consent (see Appendix J) indicated that answers remain confidential and that the subjects could withdraw at any time. Case managers were asked to check whether the subject had a guardian. If the subject was not his/her own guardian, then the court appointed guardian needed to be contacted to sign the consent form before it could be completed. In order to assure that only one questionnaire was completed by each

subject, the code for his/her set of information was the subjects case number. All data were kept confidential. The use of file numbers, rather than names, maintained accuracy and anonymity. This measure was taken a step further and packets of information were give an entry number as they were returned.

The questionnaire took from 10 to 20 minutes to complete depending on the comprehension level of the subject. The completed packet and consent were put into a sealed envelope and returned to the investigators mail box at each agency. The investigator collected completed questionnaires at least weekly.

Primary case managers completing the CLAS were given a packet containing the following: an introductory letter (see Appendix K), demographic information sheet, and the CLAS. They were requested to return the materials within 2 weeks after the client has completed the SPS. The CM's return of the completed CLAS served as an indication of willingness to participate and therefore gave consent to use of the information provided. All information remained confidential. The case manager was asked not to put his/her name on any of the forms. Therefore, there was minimal risk to the case manager. The packet of information completed by the CM was placed in a sealed envelope and returned to the investigator's mailbox at the case management agency. These packets were picked up at each agency on a weekly basis. A luncheon to celebrate the end of data collection was provided for case management agencies.

Lastly, the psychiatrist assigned to monitor the CMH client was given a letter of introduction (see Appendix L). He/she was asked to complete an updated GAF on the client participating in this study. This GAF score was recorded and returned in a sealed envelope to the investigator's mailbox at the case management agency . The information sheet was identified by the client case number only.

client participating in this study. This GAF score was recorded and returned in a sealed envelope to the investigator's mailbox at the case management agency . The information sheet was identified by the client case number only.

#### Human Subjects Consideration

Approval for the use of subjects was requested of two different review committees. First, required information was presented to KCCMH Research Review Committee for the use of Community Mental Health clients. Secondly, permission to conduct the study was obtained from the Grand Valley State University Human Research Review Committee. Lastly, case management agencies were approached for permission regarding case manager time and access to client information.



## CHAPTER 4

### RESULTS

The purpose of this study was to evaluate the CLAS. The design for this evaluation provided an opportunity to determine whether or not relationships exist among the perception of three different persons regarding functional status. The research design was ex post facto because subjects were asked to focus on rating the past 3 months regarding functional status.

Data were collected over 3 months from KCCMH case management agencies. In preparation for computer analysis, data were entered into a coding sheet. The data were analyzed using the Statistical Package for the Social Sciences (SPSS).

Reliability of the CLAS was evaluated by computation of Cronbach's Coefficient Alpha. In addition, the Pearson correlation coefficient was computed to compare level of functioning for the case managers' perception (total score of CLAS), the clients' perception (total score of the SPS), and the psychiatrist perception (GAF assigned).

GAF scores routinely done for each KCCMH client by a psychiatrist were used to evaluate the convergent validity of the CLAS. In order to compare the responses of case managers and clients for each item of the SPS and CLAS, the McNemar test was used. Descriptive statistics of demographics information collected from clients and case managers were also analyzed. Demographic data were computed for frequency and percentage. Incomplete or missing data were not used or were estimated.

## Characteristics of Subjects

### Clients

There was a total of 108 clients who were asked to participate in the study. Seventy three (68%) chose to complete the questionnaires and 35 (32%) refused. In the accessible sample the number of clients diagnosed with schizophrenia was 679. Of these 423 (62%) were males and 256 (38%) females. The clients in this study (see Table 1) are 44 (60.3 %) males and 29 (39.7%) females. Ages range from 20 to over 60 years. The sample was culturally diversified with the following racial representation: African American, Caucasian, Hispanic, American Indian, and other. Levels of educational preparation ranged from elementary school to masters level. Residential situations were apartment/home, living with family, adult foster care settings (AFC), hotels, and residential treatment home.

### Case managers

Although only one CLAS rating for each client was completed by the primary case manager, it is possible that some case managers completed scales for more than one client. This situation makes it impossible to determine how many CM's actually completed scales. However, responses for the number of CLAS forms completed indicate that (see Table 2) nineteen (26%) were male and fifty four (74%) female. Various levels of educational preparation were represented from associate degree to masters degree. The years of experience as a case manager ranged from less than one year to 17 years. The case manager completing the CLAS knew the client assessed for lengths of time varying from less than a year to 15 years with the median time of 8 years. Case managers contacted this client from none to 10 times in the past month. Levels of responsibility for information regarding the client assessed were from team member to team supervisor according to job title held. Registered nurses, masters in social work, psychologists, registered social workers and other related human service fields were involved in

completion of the CLAS. Confidence levels regarding their ability to complete the CLAS accurately ranged from very confident to not at all.

Table 1

Characteristics of Clients ( N = 73 )

Characteristics	Value	n	%
Gender	Male	44	60.3
	Female	29	39.7
Age	20 - 29	8	11.0
	30 - 39	24	32.9
	40 - 49	25	34.2
	50 - 59	9	12.3
	≥ 60	7	9.6
Race	African – American	18	24.7
	Caucasian	45	61.6
	Hispanic	1	1.4
	American – Indian	5	6.8
	Other	4	5.5
Education	Elementary	7	9.6
	High School	48	65.8
	Technical	5	6.8
	College (part time)	9	12.3
	College degree	3	4.1
	Master level	1	1.4
Residential Status	Apartment/Home	33	45.2
	Family	9	12.3
	Adult Foster Care	23	31.5
	Hotel	3	4.1
	Residential Treatment Home	5	6.8

**Table 2**

**Characteristics of Case Managers ( N = 73 )**

<b>Characteristics</b>	<b>Value</b>	<b>n</b>	<b>%</b>
<b>Gender</b>	<b>Male</b>	<b>19</b>	<b>26.3</b>
	<b>Female</b>	<b>54</b>	<b>74.0</b>
<b>Education</b>	<b>Associate Degree</b>	<b>3</b>	<b>4.1</b>
	<b>College Degree</b>	<b>43</b>	<b>58.9</b>
	<b>Masters</b>	<b>27</b>	<b>37.0</b>
<b>Experience (years)</b>	<b>Less than one</b>	<b>7</b>	<b>9.6</b>
	<b>1 – 6</b>	<b>26</b>	<b>35.6</b>
	<b>7 – 10</b>	<b>28</b>	<b>38.3</b>
	<b>11 – 17</b>	<b>12</b>	<b>16.4</b>
<b>Knowing Client (years)</b>	<b>Less than one</b>	<b>17</b>	<b>23.3</b>
	<b>1 – 3</b>	<b>26</b>	<b>35.7</b>
	<b>4 – 8</b>	<b>21</b>	<b>28.7</b>
	<b>9 – 15</b>	<b>9</b>	<b>12.3</b>
<b>Monthly Contacts</b>	<b>Less than one</b>	<b>4</b>	<b>5.5</b>
	<b>1 – 3</b>	<b>41</b>	<b>57.2</b>
	<b>4 – 6</b>	<b>23</b>	<b>31.5</b>
	<b>8 – 10</b>	<b>5</b>	<b>6.8</b>
<b>Primary Team Status</b>	<b>Primary</b>	<b>41</b>	<b>56.2</b>
	<b>Team Member</b>	<b>26</b>	<b>35.6</b>
	<b>Supervisor</b>	<b>6</b>	<b>8.2</b>
<b>Occupation</b>	<b>Registered Nurse</b>	<b>5</b>	<b>6.8</b>
	<b>Masters in Social Work</b>	<b>16</b>	<b>21.9</b>
	<b>Psychology</b>	<b>8</b>	<b>11.0</b>
	<b>Registered Social Worker</b>	<b>32</b>	<b>43.8</b>
	<b>Other</b>	<b>12</b>	<b>16.4</b>
<b>Confidence in CLAS completion accuracy</b>	<b>Very Well</b>	<b>63</b>	<b>86.3</b>
	<b>Moderate well</b>	<b>9</b>	<b>12.3</b>
	<b>None</b>	<b>1</b>	<b>1.4</b>

### Reliability and Validity of the CLAS

The 13 item CLAS was subject to the Cronbach alpha test for internal consistency. The reliability coefficient was .82. Since the reliability of any instrument will vary between zero, no reliability, and 1, perfect reliability, then the .82 value can be evaluated to be an acceptable level of reliability. Table 3 shows results of the reliability analysis of the CLAS. Column one indicates the value label for each item of the CLAS. Column two is the variance which would exist if this item was deleted. Column three is the alpha rating if the item was deleted from the entire scale. Items registering  $<.232$  item-total correlation in the second column, questions 8 and 12, could be reevaluated for possible revision or deletion.

Individual item scores for the CLAS and the SPS were added together to create a single cumulative score for each scale. These two ratings were then correlated to the GAF rating using the Pearson's correlation coefficient to examine convergent validity of the CLAS. One case was eliminated from the total participants for the SPS as the client was unable to complete the scale correctly. Relationship between the GAF and the CLAS measured .36 with a significance of  $p = .00$ . Correlation between the SPS and CLAS is .48 with  $p = .00$  and between GAF and SPS is .21 with  $p = .08$  which is not significant.

As mentioned in chapter 3, the CLAS is a likert scale with levels of functional status from 5, the highest, to 1, the lowest. On the other hand, the SPS is a forced choice response scale measuring functional status with 4 and 3, the highest, and 2 and 1, the lowest. In order to code data for analysis, the responses to the CLAS and SPS were changed to a dichotomous comparison, positive or negative qualities. Each individual functional status item in the CLAS was reviewed to determine which level of responses could be equated to positive and negative qualities. For example, the first item has to do with residential status. Respondents were to rate levels of functioning as being an independent or dependent quality; levels 5,4, and 3 focus on independence, while levels 2

and 1 focus on dependence. Similar analysis was done for each of the 13 items. The dichotomous coding was reviewed by an expert in mental health who was familiar with this scale and its intended use.

Table 3

Results of Reliability Analysis of the CLAS (N = 73)

Value Label	Scale Variance it Item Deleted	Corrected Item - Total Correlation	Alpha if Item Deleted (p<.05)
CLAS Q1	48.28	.46	.81
CLAS Q2	47.44	.61	.79
CLAS Q3	47.58	.66	.79
CLAS Q4	51.30	.57	.80
CLAS Q5	47.75	.58	.80
CLAS Q6	49.26	.54	.80
CLAS Q7	49.64	.50	.80
CLAS Q8	55.50	.07	.83
CLAS Q9	47.12	.63	.79
CLAS Q10	49.82	.52	.80
CLAS Q11	48.62	.60	.80
CLAS Q12	56.39	.02	.84
CLAS Q13	48.86	.34	.82

The SPS items were more easily determined, as the scale was designed for forced choice responses. Therefore, ratings delineated as 4 and 3 were positive qualities, and 2 and 1 were the negative qualities for all 13 items.

Computer frequency of responses was calculated to determine a total number of responses for each item of the CLAS and SPS by case managers and clients. The McNemar Test compares dichotomous data responses (see Table 4). The p value of  $> .05$  indicates that the responses by the case manager and the client are the same (perceptions are alike). This occurs in 8 of the 13 items: residential status, management of ADL's, support system, financial management, recognition of prodromals, use of case managers, medication management, and vocational functioning. In items labeled feelings and actions (7), substance abuse (8), and inpatient hospitalization (12), the case manager rated the client significantly higher than the client rated themselves. In 2 items labeled community integration (2) and use of social and legal services, the case manager rated the clients lower than the clients rated themselves. Factor analysis was not performed due to the small sample size.

#### Additional Findings of Interest

The reliability and validity of the SPS were examined. Reliability for internal consistency by the Cronbach alpha for the SPS was .67. As with the CLAS, the SPS scores were subject to computer analysis to examine the reliability of each individual item (see Table 5). Items registering  $< .232$  correlation in the second column, questions 8, 12 and 13, could be evaluated for revision or deletion.

Content validity for the SPS was established through literature review and input from nursing faculty and social workers in clinical practice. Convergent validity of the SPS was examined by computing a Pearson correlation coefficient between the SPS and the GAF ( $r = .2127$  and  $p = .075$ ). Again, factor analysis was not performed due to the small sample size.

Table 4

Comparison of CLAS and SPS Functional Status Ratings (n =72)

Items	CM > CL	CM < CL	CM = CL	p
1 - Residential Status	6	1	65	.12
2 - Community Integration	2	10	60	.04
3 - Managing ADL's	4	11	57	.12
4 - Support System	2	5	65	.45
5 - Use of Social and Legal Services	1	25	46	.00
6 - Financial Management	12	10	50	.83
7 - Feeling and Actions	31	3	38	.00
8 - Substance Abuse	8	1	63	.04
9 - Recognition of Prodromals	7	6	59	1.00
10 - Use of Case Managers	1	7	63	.07
11 - Medication Management	1	2	69	1.00
12 - Inpatient Hospitalization	14	0	58	.00
13 - Vocational Functioning	7	16	49	.09

Note. CM > CL = This column indicates the number of times the case manager ratings were higher than the client ratings; CM < CL = This column indicates the number of times the client ratings were higher than the case manager ratings; CM = CL = This column indicates the number of times the ratings were equal.



Table 5

Results of Reliability Analysis of the SPS (N = 71)

Value Label	Scale Variance if Item Deleted	Corrected Item - Total Correlation	Alpha if Item Deleted (p < .05)
SPS Q1	21.09	.48	.62
SPS Q2	25.64	.26	.66
SPS Q3	24.07	.45	.63
SPS Q4	25.43	.30	.66
SPS Q5	22.90	.39	.64
SPS Q6	22.36	.48	.62
SPS Q7	25.10	.41	.64
SPS Q8	28.36	.01	.68
SPS Q9	24.23	.49	.63
SPS Q10	26.13	.32	.66
SPS Q11	27.16	.24	.66
SPS Q12	27.62	.19	.67
SPS Q13	27.17	-.001	.72

McNemar test analysis of the SPS provided an opportunity for inspection of the frequency of client responses (see Table 6). In general, clients tended to rate themselves positively rather than negatively in terms of functional status ability. Items coming close to the 50% level ( n = 36 ) were vocational status (13), financial management (6), and use of social and legal services (29).

**Table 6**

**Client Response to Individuals Items of SPS (n=72)**

<b>Items</b>	<b>Positive n</b>	<b>Negative n</b>
1 - Residential Status	45	27
2 - Community Integration	62	10
3 - Managing ADL's	57	15
4 - Support System	65	7
5 - Use of Social and Legal Services	43	29
6 - Financial Management	41	31
7 - Feeling and Actions	61	11
8 - Substance Abuse	68	4
9 - Recognition of Prodromals	64	8
10 - Use of Case Managers	64	8
11 - Medication Management	70	2
12 - Inpatient Hospitalization	71	1
13 - Vocational Functioning	39	33

The GAF has undergone significant statistical testing and is used in this study as the standard for comparison. It is a scale which is widely used in mental health settings by psychiatrists. GAF ratings of this chronically mentally ill adult sample ranged from 25 to 85 of the possible 100 points (see Table 7).

Table 7

Results of GAF Ratings by Psychiatrists (N = 73)

Value	n	%
25 - 39	4	5.6
40 - 49	14	19.1
50 - 59	36	49.4
60 - 69	17	23.3
70 - 85	2	2.8

Summary

The findings of this study indicate that the CLAS has an acceptable level of reliability. When calculating the cumulative scores using the Pearson's  $r$ , the relationship between the GAF and the CLAS measured .36 ( $p = .00$ ). Correlation between the SPS and CLAS is .48 ( $p = .00$ ) and between GAF and SPS is .21 ( $p = .08$ ) which is not significant. On the other hand, analysis of the individual items in the CLAS indicate that 2 of the 13 items may need to be changed or deleted: substance abuse (8), and inpatient hospitalizations (12).

## CHAPTER 5

### DISCUSSION AND IMPLICATIONS

#### Discussion

A unique feature of the CLAS is the fact that it was developed at the community level by a group of clinicians and KCCMH administrators. It is important to mention that scale developers were not seeking to evaluate the effectiveness of individual clinicians or programs in the CMH system, but to assess the impact of the systems.

The fact that the CLAS has only 13 items may lower the reliability value. A newly developed scale such as the SPS should have a reliability score of at least .70, while a more established instrument, such as the CLAS, should have at least .80 or better as an acceptable reliability score ( Talbot, 1995). The CLAS is short, making it quick to complete. Individual item levels are simple and self explanatory requiring minimal training for case managers .

The results of the Pearson's coefficient indicate a slight relationship between the CLAS and the GAF ( $r = .36$ ,  $df = 71$ ,  $p = .00$ ), and the CLAS and SPS ( $r = .48$ ,  $df = 70$ ,  $p = .00$ ) using a cumulative score for each scale. As an individual rating for each test item, comparison between the CLAS and SPS using the McNemar test reveals actual variations of client and case manager responses. Of the 13 items in the CLAS, the case manager and client agreed ( $p > .05$ ) in 8 of 13 items.

It is useful to have both the cumulative score (Pearson's  $r$ ) and an individual question by question comparison (McNemar) for analysis of these data. This study substantiates that perceptions of psychiatrists, case managers, and clients regarding

functional status are weakly or not at all correlated using either type of statistical analysis. As the method of analysis is simplified and made more specific to item by item, the statistical validity decreases due to the level of measurement. In this particular situation it was not possible to have the psychiatrist or the client use the CLAS. In terms of data analysis, it would perhaps increase the significance to use the same scale for all three types of respondents.

A couple of factors to keep in mind when looking at the results are related to the subjectiveness of the data collected and the effort level from the case managers. As a likert scale the CLAS requires case managers to make a subjective determination regarding the clients level of functioning. Many items use the terms frequent and occasional as a rating choice which leaves margin for individual case manager interpretation. Also, because of the increased work loads for case managers, some were not eager to take on extra paperwork. Thus, individual effort level to complete the scales accurately varied.

The SPS was developed by this researcher to allow for client input into their self rating of functional status. Clients overall were flattered to be asked to rate themselves. This was a new experience for them. Most took the exercise seriously and attempted to understand each item to chose the correct response as it related to them. Some wanted to participate but even with guidance could not complete the questionnaire correctly. For example, one person chose two responses for each item even on the second attempt.

Reliability measurements indicate that measurements about substance use (8), inpatient hospitalization (12), and vocational status (13) were not correlated to the overall measure of functional status. However, the answers for these items were very concrete and direct. Clients were in the hospital or they were not, they use substances or they do not, and, finally, they are employed or they aren't employed. One might anticipate a high correlation between the responses of case managers and clients for these items. It is

logical to conclude that these questions are not measuring functional status. Factor analysis would be helpful in making a final analysis.

There are similarities between the sample characteristics (specifically regarding gender) and those of the accessible population as reported in Chapter Four. Also, the sample is culturally diverse. The likeness in gender representation and in cultural diversity indicates that the sample is in some ways representative of the accessible population of chronically mentally ill CMH clients in KCCMH.

### Limitations

It is necessary to consider the threats to statistical conclusion validity in this study. The small sample size creates low statistical power. Due to political factors beyond the control of this researcher, a larger sample was not possible at this time. Another more significant limitation was evident during the pilot study of the SPS with clients. In order to have case managers uniformly present the scale, it was necessary to develop a cognitive assessment tool. Thus, some coaching of the clients was required so that they were able to complete the scale and to understand the statements. Case managers were directed not to tell clients how to answer. Several case managers remarked that specific forced choice answers of yes or no would be easier for clients to understand. The number of clients refusing to participate is significant. The percentage of clients refusing to participate in this study may give future researchers an idea of how many persons will be needed to acquire a statistically significant sample.

Some deviance on the part of the psychiatrists from the recommended method to perform the GAF may have skewed final results, for example, directions in completion of the GAF indicate that persons with delusions should be rated 21 - 30. A significant number of clients in this sample experience delusions on a daily basis despite medication treatment. Only one client was rated in this range in this study of 73 clients. Perhaps, further research needs to be done to see over time if professionals performing a scale

become desensitized to the severity of illness of the client and then under report impairment in level of functioning. This may be particularly true for the GAF which has been in use for over 20 years. Another speculation is that because psychiatrists play a different role in the maintenance of the chronically mentally ill adults, they may be removed from accurately measuring the level of functioning since they may see clients only every 6 months. However, ratings of most outpatients are correctly to be in the range 31-70 according to GAF instrument instructions.

Another problems arose regarding the demographic question referring to the number of times a client is seen by a case manager in a month. Case management teams see most clients at least monthly, giving report back to their peers of the contact. Some case managers reported being unclear on how to answer this question. Specifically, some case managers wrote how many times the team saw a client, instead of how many times the case manager saw the client.

### Implications

#### Community Benefit

The process to develop instruments which will accurately measure functional status is lengthy. The CLAS and SPS were both reviewed by professionals and were piloted with clients before being used with clients. With such an investment in time and energy on the part of many professionals, it is worthwhile to test the instrument for reliability and validity as the instrument is being introduced. However, this process is not always supported by persons in the community as a priority concern. Research is costly in terms of professional time and proper analysis of the data. The CLAS was used for many years on every client in the community mental health system before being tested. Items not statistically supported as measurements of functional status could have been deleted or changed. It may be replaced in the near future by another statistically analyzed functional status instrument.

Instruments undergoing the rigors of research will be supplying professionals with meaningful and significant information about the area of measurement. Without the research process, professionals reviewing the data will never be sure that information provided is representative of the population being assessed. In the end, it is more cost effective to complete the necessary research to support use of an instrument, then to use the instrument for years only to find out that it is not measuring the desired variable.

### Nursing Benefit

Functional status scales can be useful to nurses as part of the health history assessment. Completion of these scales should be done with the client's input. Conversations related to the various functional areas and levels affords nurses with unique educational opportunities regarding health issues and sets the stage for cooperative goal setting. This process is directly related to Imogene King's conceptual framework.

Functional status scales are a method of communicating perceptions of reality. Assuming that all persons are capable of accurately relating a true representation of reality, however, is faulty. This requires the nurse make a diagnosis indicating impairment in thought processes. Having made this diagnosis, it is necessary to validate reality related to the clients health and environment with significant others or family. Only after collaboration with the client and others, is it possible to plan measures which will assist the client in health maintenance according to his/her functional ability.

Few functional status scales are developed requiring client input. This study was an attempt to develop and evaluate such an instrument. There is a practical reason for exclusion of clients input in the assessment process at this time, that is, lack of instruments to measure which clients are able to communicate and which are not. The mental health system is in desperate need of a method to measure client cognitive functioning ability. Specifically, an instrument focusing on comprehension and problem solving ability based on an awareness of reality. Such a measure could assess which clients are or are not



capable of reality oriented decision making and therefore, would indicate more specifically the clients who are capable of giving accurate information about themselves to others. This communication could be written or verbal. At this time one can only assume that all responses from clients are accurate representations of reality. Misperceptions result in misdiagnosis and establishment of goals which are not needed.

### **Recommendations**

More research is needed to evaluate the validity of the CLAS. Factor analysis is one statistical method of determining constructs for validity. However, a larger sample is necessary for factorial analysis of the CLAS.

Involvement of consumers (clients) in evaluation of functional status is desirable. However, it is imperative that the researcher be able to rely on the respondents to be able to make logical and truthful responses. If in fact, the respondents are making random responses which are not based on fact, then the evaluation of the data will lead to false results. Somehow client respondents need to be screened prior the completion of the SPS to determine if they are competent in making decisions.

It is also essential that the researcher be able to rely on the respondents to know how to complete the instruments as they are designed to be used. Thus, interrater reliability needs to be evaluated with each testing of an instrument, whether it be the CLAS or GAF. For the SPS, a test - retest method may be appropriate. Retraining persons on the use of scales which have been used for a long period of time will help decrease the interrater error margin.

The most speculative area of concern is related to the degree of knowledge professionals need to have to evaluate clients. Who are the best persons to assess a clients level of functioning? Is it based on the degree of education of the professional? Is it based on the amount of time a professional has spent observing the client? What kind of data do professionals use to determine which level of functioning a client has?

Assessment of this type of information would be helpful to determine if the results are representative of the true level of functioning of the client.

It is vogue and efficacious to use scales to give management a sense of the needs the chronically mentally ill in the community. More importantly, administrators will need to remember that the statistical evaluation of scales, such as the CLAS and many others which have been developed in the United States, are based on imperfections. These imperfections are due to external factors which can only be minimally controlled during research. Overall, the research process is important in evaluating what instruments should be used as determinants of measurement. Without this process decisions are made based on a weak conceptual framework. It takes a commitment on the part of not just administration but all professionals assessing clients to devote time and energy to the research process to assure that results are valid.

## **APPENDICES**

**APPENDIX A**  
**Community Living Adaptation Scale**

**General Instructions:** For all scales, please rate your client by choosing the level that best describes your client's most typical status during the last three months.

Ratings should be based on the client's actual level of functioning rather than on a judgment of their ability or potential level of functioning.

**SCALE ONE RESIDENTIAL STATUS**

- (5) This client lives independently with a minimal support from others outside the home.
- (4) This client lives independently with substantial support from others outside the home.
- (3) This client is in a dependent care setting with emphasis on movement toward greater independent living.
- (2) This client is in a dependent care setting with emphasis on long-term provision of care rather than movement toward independent living.
- (1) This client has an unstable transient housing situation (missions, short-term stays with others, makeshift housing, etc.) or this client is in a locked facility.

**Note:** This rating is based on the independence of the living situation rather than a specific setting. For example, living at home with the family of origin may reflect independent or dependent functioning based on a person's role and participation in the family. Another example is an AFC setting where the person is being actively prepared for greater independence (level 3) or where just basic care is being provided (level 2).

## **SCALE TWO COMMUNITY INTEGRATION**

- (5) This client is involved in self-selected activities or with persons other than paid mental health service providers on a daily or almost daily basis.**
- (4) This client is involved in self-selected activities or with persons other than paid mental health service providers on a frequent basis.**
- (3) This client is involved in self-selected activities or with persons other than paid mental health service providers on an occasional basis.**
- (2) This client is involved in self-selected activities or with persons other than paid mental health service providers on an infrequent basis.**
- (1) This client is not involved in any activities or with any persons other than paid mental health service providers.**

**Note: Community integration does not preclude participation in activities or use of the resources of the mental health system. The client's participation in vocational activities such as competitive employment should not be included in making this assessment. The client's participation in these activities will be used to determine his/her level of functioning on Scale 13.**

**Ratings should take into account the level of family obligations which limit the amount of time available for outside activities and relationships. For example, a person with family obligations who occasionally visits a friend may be assigned the same rating as one who has no family obligations and is involved in activities on a frequent basis.**

**SCALE THREE  
MANAGEMENT OF DAILY LIVING RESPONSIBILITIES**

- (5) This client manages most responsibilities of daily living independently or shares responsibilities equitably with others.
- (4) This client manages most responsibilities of daily living independently if others supply some support and guidance.
- (3) This client manages most responsibilities of daily living only if constant encouragement and monitoring is available from others.
- (2) This client manages most responsibilities of daily living only if direct supervision and assistance is provided by others.
- (1) This client does not manage responsibilities of daily living and is dependent on others to manage for him or her.

**Notes:** Responsibilities of daily living include shopping, meal preparations, dressing, etc.

**SCALE FOUR  
SUPPORT SYSTEM**

- (5) This client has an adequate support system consisting almost entirely of friends and/or relatives.
- (4) This client has an adequate support system consisting primarily of friends and/or relatives with some additional support provided by mental health workers.
- (3) This client has an adequate support system consisting primarily of mental health workers and some additional support from family/friends.
- (2) This client has an adequate support system consisting almost entirely of mental health workers.
- (1) This client does not have an adequate support system.

**Note:** An adequate support system is defined as one that provides the client with a reasonable amount of material and emotional support on a more or less regular basis. If the support system is harmful to the client's well being, it is not adequate.

**SCALE FIVE  
USE OF SOCIAL AND LEGAL SERVICES**

- (5) This client is able to access benefit programs and legal rights successfully with little or no support, guidance and advocacy.
- (4) This client is able to access benefit programs and legal rights with some support, guidance and advocacy.
- (3) This client is able to access benefit programs and legal rights only with moderate support, guidance and advocacy.
- (2) This client is able to access benefit programs and legal rights with substantial support, guidance and advocacy.
- (1) This client requires a guardian to assure rights and obtain benefits.

**SCALE SIX  
ASSESSMENT OF FINANCIAL MANAGEMENT**

- (5) This client manages personal finances without crisis. There is no need for assistance from others.
- (4) This client manages personal finances without crisis if there is occasional assistance from a friend, relative, or mental health worker.
- (3) This client has difficulty with personal finances but can function without crisis with frequent assistance from a friend, relative, or mental health worker.
- (2) This client can manage small amounts of money but depends on others to manage paying for the major necessities (food, rent, health care, etc.).
- (1) This client does not manage personal finances adequately and is in frequent financial crisis (unable to pay for necessities). Needed support is either unavailable or the client resists efforts to help.

**SCALE SEVEN**  
**PERSONAL RESPONSIBILITY FOR FEELINGS AND ACTIONS**

- (5) This client almost always takes responsibility for his or her own feelings and actions.
- (4) This client has some limitations in assuming personal responsibility as seen in occasionally blaming others and/or assuming a helpless posture.
- (3) This client has moderate limitations in assuming personal responsibility as seen in regularly blaming others and/or assuming a helpless posture.
- (2) This client has major limitations in assuming personal responsibility as seen in blaming others and/or assuming a helpless posture most of the time.
- (1) This client does not take responsibility for feelings and actions as seen in constantly blaming others and/or assuming a helpless posture.

**SCALE EIGHT**  
**ABUSE OF ALCOHOL AND OTHER DRUGS**

- (5) There is no indication that this client is abusing alcohol or other drugs.
- (4) There are indications that this client may be abusing alcohol or other drugs but there is no evidence of interference with daily activities and role expectations.
- (3) There are indications that this client may be abusing alcohol or other drugs and there is evidence of some interference with daily activities and role expectations.
- (2) There are indications that this client may be abusing alcohol or other drugs and there is evidence of significant interference with daily activities and role expectations.
- (1) There are indications that this client may be abusing alcohol or other drugs and there is evidence of profound interference with daily activities and role expectations.

**Note:** This is a measure of the impact of the client's use of substances on his ability to function and not measure of the client's level of addiction.



**SCALE NINE  
RECOGNITION OF PRODROMALS**

- (5) This client recognizes prodromals almost every time they occur.
- (4) This client recognizes prodromals in the majority of occurrences.
- (3) This client recognizes prodromals about half the time they occur.
- (2) This client recognizes prodromals occasionally (less than half the occurrences).
- (1) This client rarely or never recognizes prodromals.

**SCALE TEN  
USE OF MENTAL HEALTH TREATMENT PROVIDERS**

- (5) This client informs/requests from treatment provider needed changes in his or her treatment.
- (4) This client informs/requests changes in his or her treatment when assisted and supported by treatment provider.
- (3) This client accepts needed changes in his or her treatment when recommended by treatment provider.
- (2) This client accepts needed treatment changes only if the treatment provider is very assertive.
- (1) This client usually refuses to accept any needed treatment changes from treatment providers.

**SCALE ELEVEN  
MEDICATION MANAGEMENT**

- (5) This client manages psychotropic medications as prescribed without monitoring by others, or no psychotropic medications are prescribed.
- (4) This client manages psychotropic medications as prescribed with others providing some monitoring.
- (3) This client manages psychotropic medications as prescribed with substantial monitoring.
- (2) This client manages psychotropic medications as prescribed with constant monitoring.
- (1) This client refuses psychotropic medications.

**NOTE:** The administration of psychotropic medication injections should not be considered the key factor in determining the client's ability to manage his/her medication. The basis of the level of functioning assigned should be the degree of support required to maintain the client on the medication. For example, a client who regularly comes in for his/her medication injection without prompting or support should be assigned a level 5 rating while a client who requires support or prompting should be assigned a level commensurate with the degree of prompting or support needed.

**SCALE TWELVE  
USE OF PSYCHIATRIC INPATIENT HOSPITALIZATION**

- (5) This client has spent no time in inpatient hospitalization for psychiatric reasons.
- (4) This client has spent from one day to fourteen days in inpatient hospitalization for psychiatric reasons.
- (3) This client has spent from fifteen days to twenty-one days in inpatient hospitalization for psychiatric reasons.
- (2) This client has spent from twenty-two days to forty-two days in inpatient hospitalization for psychiatric reasons.
- (1) This client has spent more than forty-two days in inpatient hospitalization for psychiatric reasons.

**SCALE THIRTEEN  
ADULT ROLE VOCATIONAL FUNCTIONING**

- (5) This client has competitive employment 20 or more hours per week; or is managing housekeeping responsibilities including parenting or care of another person; or is a full time high school, college or technical student; or is retired from a competitive career.
- (4) This client has competitive employment less than 20 hours per week; or is in school part time; or is a volunteer for 20 hours or more per week; or is in supported employment for 20 or more hours per week.
- (3) This client is in supported employment for less than 20 hours per week; or is a volunteer for less than 20 hours per week; or is in a sheltered workshop 20 or more hours per week.
- (2) This client is in a sheltered workshop less than 20 hours per week; or is in a pre-vocational program; or is actively job searching; or is doing self directed prevocational activity.
- (1) This client has no structured or planned daily activity.

**NOTE:** The following are accepted definitions for this scale:

**Competitive Employment:** Paid employment without job-site vocational coaching.

**Supported Employment;** Paid competitive employment in a community based setting. Support is provided on site through vocational rehabilitation or psychosocial agency or other vocational related agent. Includes clients in the Transitional Employment Program (TEP).

**Sheltered Workshop:** Paid employment in specified workshops for adults with vocational handicaps.

**Pre-Vocational:** Unpaid training either work or classes specifically for people with vocational handicaps.

ID. No. \_\_\_\_\_

**COMMUNITY LIVING ADAPTATION SCALE  
(CLAS)  
ANSWER SHEET**

<b>ITEMS:</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>
<b>SCORE:</b>													

## SELF PROFILE SCALE

INSTRUCTIONS: There are no right or wrong answers since people differ in their situations and conditions from time to time during their lives. This is not a test. Please read the entire sentence all the way across. First, decide which one of the two parts of each statement best describes you; then, go to that side of the statement and check whether that is just sort of true for you or really true for you. You are asked to check only ONE of the four boxes for each statement.

Sample question:

REALLY TRUE FOR ME:	SORT OF TRUE FOR ME:				SORT OF TRUE FOR ME:	REALLY TRUE FOR ME:
<input checked="" type="radio"/>	<input type="radio"/>	Some adults enjoy attending school or training programs.	BUT	Others do not enjoy attending school or training programs.	<input type="radio"/>	<input type="radio"/>

If you are in an educational program or have been in the past three months, you will need to see which of the two choices on the left side of the statement apply to you. If you enjoy attending school or a training program, the one of the circles on left side will need to be filled.

.....

	REALLY TRUE FOR ME:	SORT OF TRUE FOR ME:				SORT OF TRUE FOR ME:	REALLY TRUE FOR ME:
1.	<input type="radio"/>	<input type="radio"/>	Some adults live independently in their own apartment or home.	BUT	Others live in foster care homes, temporary shelters, or on the streets.	<input type="radio"/>	<input type="radio"/>
2.	<input type="radio"/>	<input type="radio"/>	Some adults attend and participate in social activities of their own choice with persons other than paid mental health workers.	BUT	Other adults <u>do not</u> attend and participate in activities of their choice with persons other than mental health workers.	<input type="radio"/>	<input type="radio"/>
3.	<input type="radio"/>	<input type="radio"/>	Some adults can manage activities of daily living (meal preparation, shopping, dressing etc.) without any help.	BUT	Other adults depend on others to manage their activities of daily living (meal preparation, shopping, dressing, etc.).	<input type="radio"/>	<input type="radio"/>
4.	<input type="radio"/>	<input type="radio"/>	Some adults have friends, relatives, and other people who give them emotional and material support.	BUT	Other adults lack friends, relatives and other people who give them emotional and material support.	<input type="radio"/>	<input type="radio"/>

(OVER)

	REALLY TRUE FOR ME:	SORT OF TRUE FOR ME:				SORT OF TRUE FOR ME:	REALLY TRUE FOR ME:
5.	<input type="radio"/>	<input type="radio"/>	Some adults are able to get help from social and legal services without any help.	BUT	Others need someone like a guardian to get help from social and legal services.	<input type="radio"/>	<input type="radio"/>
6.	<input type="radio"/>	<input type="radio"/>	Some adults manage personal finance (paying bills, living within a budget, etc.) without help from others.	BUT	Others are unable to manage personal finances (paying bills, living within a budget, etc.).	<input type="radio"/>	<input type="radio"/>
7.	<input type="radio"/>	<input type="radio"/>	Some adults take responsibility for their own feelings.	BUT	Others have major limitations in taking responsibility for their own feelings.	<input type="radio"/>	<input type="radio"/>
8.	<input type="radio"/>	<input type="radio"/>	Some adults <u>do not</u> use drugs and alcohol to the extent that they interfere with daily activities and role functioning (parenting, dating, etc.)	BUT	Others use drugs and alcohol to the extent that they interfere with daily activities and role functioning (parenting, dating, etc.).	<input type="radio"/>	<input type="radio"/>
9.	<input type="radio"/>	<input type="radio"/>	Some adults are able to recognize and identify recurring symptoms of mental illness when they happen.	BUT	Others never recognize and identify symptoms of mental illness when they happen.	<input type="radio"/>	<input type="radio"/>
10.	<input type="radio"/>	<input type="radio"/>	Some adults accept needed changes in their treatment from mental health workers.	BUT	Others usually refuse to accept any changes in their treatment from mental health workers.	<input type="radio"/>	<input type="radio"/>
11.	<input type="radio"/>	<input type="radio"/>	Some adults take medications as prescribed by a psychiatrist.	BUT	Others <u>choose not to</u> take medication as prescribed by a psychiatrist.	<input type="radio"/>	<input type="radio"/>
12.	<input type="radio"/>	<input type="radio"/>	Some adults <u>have not</u> spent much time in a psychiatric hospital in the last three months.	BUT	Others have spent much time in a psychiatric hospital in the last three months.	<input type="radio"/>	<input type="radio"/>
13.	<input type="radio"/>	<input type="radio"/>	Some adults are employed full or part time on a regular basis.	BUT	Others are unemployed on a regular basis.	<input type="radio"/>	<input type="radio"/>

Please be sure only one circle per item has been darkened.  
Thank you

## APPENDIX C

### Introductory Letter to Clients of Pilot Study

\*\*\*\*\*

DEAR PARTICIPANT,

Thank you for agreeing to read this letter of introduction. I am requesting you voluntarily fill out a one page questionnaire about yourself for a research project. The questionnaire will only take about 5-10 minutes to complete. The questions may be read to you, if you prefer. Your name will not appear on the questionnaire.

This research project will indicate how you rate your level of functioning in various areas. You are asked to compare yourself to other adults in this county. There are no risks to you. Your responses will remain confidential.

Today I will be checking with you to determine if this questionnaire is clear to read and easy to understand. Your feedback is important!

Returning a completed questionnaire indicates your willingness to assist in this research project. I will be available if you have any questions or comments. You are free to withdraw your consent at any time. Your withdrawal or nonparticipation will not affect care you receive from your case management agency. You will receive a token of my appreciation for your cooperation.

Thank you,

Jane Morris, researcher

<p><b><i>INSTRUCTIONS FOR ADMINISTRATION OF THE SELF PROFILE SCALE</i></b></p> <p><b><i>(SPS)</i></b></p>
---

**1. Assess the comprehension and literacy level of the client receiving the SPS.**

Choose one of the levels listed and follow instructions below.

**High** - able to read introductory letter and questions with minimal assist,

**Medium** - needs some guidance or prompting to finish SPS,

**Low** - needs both letter and questionnaire read to them.

**2. General instructions:**

Determine if the client has a guardian. If he/she has a court appointed guardian, then the guardian will need to be present or give consent in order for the information to be completed. The formal consent form will be on the top of the packet of materials to be given to each client.

- Give packet to client,
- Ask them to complete the consent, demographic sheet and questionnaire during the visit,
- On completion count darkened circles to insure one answer per item,
- Place packet of materials into the envelope,
- Seal envelope,
- Give token of appreciation to client from this researcher,
- Return the packet to the receptionist at your case management agency.

(Instructions continued on the back side of this paper!)



If the client has a high comprehension level, complete general instructions.

If the client has a medium comprehension level, some suggestions to assist are listed:

<u>Behavior</u>	<u>Intervention/Action</u>
Frustration or increased anxiety	Take a break to chat, have coffee, tea, etc.,
Pausing a long time on one question	Ask them to read the question aloud, or help them to rephrase the question. For example, #8 - I do not drink alcohol or use street drugs vs. I do drink alcohol.....
Confused about time frames	Restate choices - Really true for me can be Always true for me. and Sort of true for me can be Sometimes true for me.

If the client has a low comprehension level, use suggestions above and below:

<u>Behavior</u>	<u>Intervention/Action</u>
Unable to read	Read information to client.
Confused or states, " I don't know"	Restate question in a "real-life" situation which applies to their life. For example, #5 - Would you be able to go to FIA and complete a Medicaid application without assistance?
States, "Oh, I did that before".	Ask client if their behaviors were in the <u>last 3 months</u> .
States, "Will you do this for me? or passive attitude.	Empower client to fill in circles and make a decision.

Thank you for your energy and time!

## Global Assessment of Functioning (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.

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

- |                |  |
|----------------|--|
| 100<br> <br>91 | Superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his or her many positive qualities. No symptoms.   |
| 90<br> <br>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<br> <br>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<br> <br>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<br> <br>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 peers or co-workers).   |
| 50<br> <br>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<br> <br>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<br> <br>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<br> <br>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<br> <br>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.  |
| 0              | Inadequate information.  |

The rating of overall psychological functioning on a scale of 0-100 was operationalized by Luborsky in the Health-Sickness Rating Scale (Luborsky L: "Clinicians' Judgments of Mental Health." *Archives of General Psychiatry* 7:407-417, 1962). Spitzer and colleagues developed a revision of the Health-Sickness Rating Scale called the Global Assessment Scale (GAS) (Endicott J, Spitzer RL, Fleiss JL, Cohen J: "The Global Assessment Scale: A Procedure for Measuring Overall Severity of Psychiatric Disturbance." *Archives of General Psychiatry* 33:766-771, 1976). A modified version of the GAS was included in DSM-III-R as the Global Assessment of Functioning (GAF) Scale.

## **Global Assessment of Functioning Scale**

(GAF)

Identification No.: \_\_\_\_\_

**Please indicate a GAF score for the community mental health client with this identification number. This score should represent their level of functioning for the past 3 months. After completion of the GAF, you may return this score to me by placing this information in the envelope provided. It may be placed in my mailbox at this agency. I will pick up results on Wednesday and Friday. Thank you.**

**GAF Score: \_\_\_\_\_**

## APPENDIX F

ID. No. \_\_\_\_\_

### Case Manager Demographic Data

Your cooperation in providing the following information is appreciated. The information will help to give meaning to results of the study.

1. Gender (Check one) 1. Male \_\_\_\_ 2. Female \_\_\_\_
2. Level of Education (Check the highest level achieved)  
\_\_\_\_1. Associate Degree  
\_\_\_\_2. College Degree  
\_\_\_\_3. Masters  
\_\_\_\_4. Doctorate
3. Experience as a case manager (Write number on blank below)  
\_\_\_\_1. Years  
\_\_\_\_2. Months
4. You have known the client you are rating (Write number on blank below)  
\_\_\_\_1. Years  
\_\_\_\_2. Months
5. How often did you contact this client in the last month? \_\_\_\_\_
6. Case manager status (Check which applies).  
\_\_\_\_1. Primary  
\_\_\_\_2. Team member  
\_\_\_\_3. Team supervisor
7. Professional status (Check which title(s) apply)  
\_\_\_\_1. Registered Nurse  
\_\_\_\_2. Masters in Social Work  
\_\_\_\_3. Activity Therapist  
\_\_\_\_4. Psychologist  
\_\_\_\_5. Registered Social Work  
\_\_\_\_6. Occupational Therapist  
\_\_\_\_7. Recreational Therapist  
\_\_\_\_8. Other (List title) \_\_\_\_\_
8. How confident are you of your knowledge to accurately complete this CLAS?  
(Check one descriptor)  
\_\_\_\_1. Very  
\_\_\_\_2. Moderately  
\_\_\_\_3. Slightly  
\_\_\_\_4. Not at all

Thank you

Jane Morris, Researcher

## APPENDIX G

ID. No. \_\_\_\_\_

### Client Demographic Data

Your cooperation in providing the following information is appreciated. The information will help to give meaning to results of the study.

1. Age (Check which category applies)
  - ☐ 1. 20-29 years
  - ☐ 2. 30-39 years
  - ☐ 3. 40-49 years
  - ☐ 4. 50-59 years
  - ☐ 5. 60-69 years
  - ☐ 6. over 70 years
2. Gender (Check one) 1. Male ☐ 2. Female ☐
3. Education Level (Check the highest level achieved)
  - ☐ 1. Elementary School
  - ☐ 2. High School
  - ☐ 3. Technical/Special Training
  - ☐ 4. College (partial)
  - ☐ 5. College (degree)
  - ☐ 6. Masters
4. Race (Check the blank which applies)
  - ☐ 1. Black
  - ☐ 2. Caucasian
  - ☐ 3. Hispanic
  - ☐ 4. American Indian
  - ☐ 5. Asian/Pacific Islander
  - ☐ 6. Other
5. Residential status (Check which best describes your current situation)
  - ☐ 1. Apartment/Home
  - ☐ 2. Living with family
  - ☐ 3. Foster Care
  - ☐ 4. Boarding Home
  - ☐ 5. Streets (Homeless)
  - ☐ 6. Hotel
  - ☐ 7. Residential Treatment Home

Thank you

Jane Morris, Researcher



APPENDIX H

1 CAMPUS DRIVE • ALLENDALE MICHIGAN 49401-9403 • 616/895-6611

April 8, 1997

Jane Morris  
3453 Keswick  
Belmont, MI 49306

Dear Jane:

The Human Research Review Committee of Grand Valley State University is charged to examine proposals with respect to protection of human subjects. The Committee has considered your proposal, "*Evaluation of the Community Living Adaptation Scale*", and is satisfied that you have complied with the intent of the regulations published in the Federal Register 46 (16): 8386-8392, January 26, 1981.

Sincerely,

A black rectangular box redacting the signature of Paul Huizenga.

Paul Huizenga, Chair  
Human Research Review Committee

KENT COUNTY

APPENDIX I

# COMMUNITY MENTAL HEALTH

728 FULLER NE • GRAND RAPIDS, MICHIGAN 49503

ADMINISTRATIVE SERVICES • (616) 336-3765 FAX (616) 336-3593

CORNERSTONE 24-HOUR CRISIS CARE • (616) 336-3909



February 3, 1997

Ms. Jane Morris  
3453 Keswick  
Belmont, MI 49306

Dear Ms. Morris,

The Research Committee of Kent County Community Mental Health has reviewed your proposal to validate the Community Living Adaptation Scale. The Committee has recommended that your proposal, as revised, be approved.

All details regarding access to recipients and records will be arranged with the agency.

It is understood that participation by recipients is voluntary with their informed consent. It is also understood that all records and information obtained are confidential and may not be released by you to anyone.

Congratulations. We hope your study yields new information for us all.

Sincerely,

A black rectangular box redacting the signature of Bonnie M. Huntley.

Bonnie M. Huntley, Executive Director  
Kent CMH

A black rectangular box redacting the signature of Ted Masterton.

Ted Masterton, Executive Director  
Harbinger of Grand Rapids, Inc.

BMH:TM/jsk

## APPENDIX J

### CONSENT FORM

I understand that this is a study which will indicate how I would rate my level of functioning in 13 different areas, such as: management of daily living responsibilities, assessment of financial management, adult role vocational functioning, etc., on a questionnaire. I understand that a case manager will complete a similar questionnaire. Responses from both questionnaires will be compared to determine how closely answers are to one another. The main purpose of this study is to evaluate the Community Living Adaptation Scale.

I also understand that:

1. my name will not appear on either questionnaire.
2. participation in this study will only involve completion of a questionnaire.
3. questions may be read to me if I am not able to read them.
4. completion of the questionnaire is estimated to take from 10 to 20 minutes.
5. I have been selected because I am a client with Kent County Community Mental Health who is serviced by a case management team.
6. it is not anticipated that this study will lead to physical or emotional risk to myself.
7. the information I provide will be kept confidential and the data will be coded so that the identification of individual participants will not be possible.
8. a summary of the results will be made available to me upon my request.

I understand that:

"I have been given an opportunity to ask questions regarding this research study, and that these questions have been answered to my satisfaction."

"In giving my consent, I understand that my participation in this study is voluntary and that I may withdraw at any time."

"I allow the investigator to release the information obtained in this study to scientific literature. I understand that I will not be identified by name."

"I understand that I may contact Jane Morris, researcher, at (616) 458-8900 or Paul Huizenga, chairman of the Grand Valley State University Human Subject Review committee, at (616) 895-2472, if I have questions."

I have read and understand the above information and agree to participate in this study.

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Participant Signature

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Witness Signature

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Date

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Date



## APPENDIX K

### Introductory Letter to Case Manager

Dear Case Manager,

Thank you for agreeing to read this introductory letter. I am requesting you voluntarily complete a Community Living Adaptation Scale on one of your mental health clients. Returning this completed scale within one to two weeks would be appreciated.

The information collected will be used to evaluate the CLAS. With the advent of managed care which is propelled by insurance reimbursement, community support agencies need to make wise decisions regarding the deployment of human resources. Functional status scales can be helpful in determining the intensity of service needs for the community mental health clients.

Clients will be asked to complete a brief and simplified version of the CLAS. The primary case manager will complete the original CLAS. Finally, the monitoring psychiatrist will be asked to complete a Global Assessment of Functioning Scale. The data will be statistically analyzed. All forms will be identified by the case number. You are free to withdraw consent at any time. Each individual's responses will remain confidential.

Completion of the attached information indicates your willingness to assist in this research project. I will be available if you have any questions at the following telephone number: (616) 458-8900 extension 17. Paul Huizenga, chairman of the Grand Valley State University Human Subject Review Committee, will also be able to answer questions. He may be contacted by telephone at the following number: (616) 895-2472.

Research results will be available through Kent County Community Mental Health upon completion of this project. You will receive a token of my appreciation (a coupon to McDonald's) when the CLAS is completed and returned.

Please, return information in the envelope provided to the mailbox designated by your agency for this researcher. The envelopes will be collected on Wednesday and Friday of each week.

Thank you,

Jane Morris, researcher

## APPENDIX L

### Introductory Letter to Psychiatrist

Dear Psychiatrist,

Thank you for agreeing to read this introductory letter. I am requesting you voluntarily fill out a Global Assessment of Functioning (GAF) scale on one of your mental health clients. Returning this completed score within 1-2 weeks would be appreciated.

This score is necessary to evaluate the Community Living Adaptation Scale (CLAS). With the advent of managed care which is propelled by insurance reimbursement, community support agencies need to make wise decisions of human resource deployment. Functional scales can be helpful in determining the intensity of service needs for the community mental health clients.

Clients will be asked to complete a brief and simplified version of the CLAS. The primary case manager will complete the original CLAS. Finally, the GAF score will be compared to the CLAS score. This data will be statistically analyzed. All forms completed will be identified by the client case number only. Your response will remain confidential. You are free to withdraw consent at any time.

Completion of the attached form indicates your willingness to assist in this research project. I will be available at (616) 458-8900, or you may contact Paul Huizenga, chairman of the Grand Valley State University Human Subject Review committee, at (616) 895-2472, if you have any questions. Research results will be available through Kent County Community Mental Health upon completion of this project.

Thank you,

Jane Morris, researcher

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