THE RELATIONSHIP OF STRAIN, COPING, AND QUALITY OF LIFE

by

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CHAPTER I

INTRODUCTION

Stress has become a much spoken of concept in modern society. As people strive to adapt to their constantly changing environment they must cope with stress in order to maintain their equilibrium and sense of well-being. People's ability to prevent certain stresses and cope with those which confront them influences their adaptation to their environment, including their physical and mental health (Lazarus, 1974; Roy, 1974).

In recent decades there has been extensive research on stress, much of it occurring along two separate lines. Physiologists have focused primarily on physical and humoral stress stimuli and responses, while behavioral scientists have focused on psychological and social stress stimuli and response patterns (Mason, 1975).

This study focuses on psychological stress, specifically the perception of threat and coping with stress and strain. The relationship of these concepts to mental health and quality of life is examined. An understanding of the effect that various methods of coping have on physical and mental health is very important to mental health professionals when planning and implementing treatment strategies.

The purpose of this study is threefold: (1) to further the conceptualization of coping methods as abilities with which to meet stressful demands of the environment, (2) to measure dispositions to cope in

certain ways, and (3) to determine the relationship of coping methods with quality of life, and more specifically with psychophysiological symptoms of stress and strain.

This study is one of a cluster of studies using the Oregon Quality of Life Questionnaire (OQLQ) as a measure of mental health. Quality of life, as conceptualized by Bigelow, Brodsky, Stewart and Olson (1982) incorporates adjustment from both individual and social points of view. The Oregon Quality of Life Questionnaire (Bigelow et al., 1982) includes measures of functioning in four broad areas of adjustment: personal, interpersonal, productive, and civic. The OQLQ has been validated as a measure of mental health. It has been used as a program evaluation instrument to measure the impact of mental health services on clients' quality of life, as well as a survey instrument to measure the mental health of a community sample.

The present cluster of studies used the OQLQ with added scores to measure the relationship of several variables and mental health. A broad community sample of rural and urban residents as well as a sample of chronically mentally ill persons was interviewed. Four comparative studies were done. One studied rural and urban differences using the OQLQ as an indicator of mental health (Hardesty, Note 1). Another studied the relationship of the use and availability of opportunities and mental health of rural and urban residents (Mikesell, Note 2). A third studied the relationship of the way individuals utilize leisure time and mental health, using a sample of chronically mentally ill clients and a community sample (Shank, Note 3), and this study examined

the relationship of coping methods and mental health, comparing a sample of chronically mentally ill clients and a community sample.

This study has attempted to further the conceptualization of coping as an integral aspect of the Quality of Life theory by examining the relationship of coping abilities and other mental health variables assessed by the OQLQ.

Theoretical Formulation and Review of Literature

The literature review begins with a brief historical overview of the stress literature and presents the theoretical foundation which is used for examining the dependent and independent variables. Selected literature on each variable is reviewed, presenting theoretical formulations and relevant research for each concept. Throughout the review the relationship of each concept to nursing theory and practice is examined.

The two dependent variables for this study are quality of life, which reflects an individual's mental health, and strain, defined as the reported level of psychophysiological symptoms of stress. The two independent variables are coping methods the individual uses to deal with the stress and strain, and known group status, chronically mentally ill vs. community sample.

Stress, Strain, and Coping

In this section a description of the dependent variable strain and the independent variable coping methods is presented within a review of the historical development of the concepts of stress, strain, adaptation, and coping. A model of the stress process based on psychological stress and nursing theory is presented.

Stress-strain theories. Although this study focuses on psychological stress, it is necessary to review some of the major developments in the physiological study of stress since these advances have had a major impact on the understanding of the phenomenon of stress. While the terms stress and strain have been commonly used for centuries to describe nervous or mental tension, the first empirical work on stress did not appear until the early 1900s. Cannon (1914) first used the term stress in a physiological sense when he demonstrated the effects of emotional stress stimuli on the sympathetic-adrenal medullary system. He identified the physiological changes that occur in all animals when confronted with the threat of physical harm, or stress. This instinctual response to threat includes increases in blood pressure, heart rate, respiratory rate, metabolism, and blood flow to the muscles, all of which prepare the organism to fight or escape from the threat. Cannon (1929) labeled this phenomenon the "fight-or-flight response." In early man this instinctual adaptive mechanism was necessary for survival. In modern society the fight-or-flight response is only adaptive when the individual is faced with the threat of physical harm. Current thinking about the physiological and psychological aspects of the fight-or-flight response is that it is now a maladaptive response to psychological or social stress, which is so prevalent in modern society (Brown, 1975). Since social constraints often block fighting or fleeing from psychological and social stressors, elicitation of this response does not alter the threat or stress. The stimulus is still present, but the result to the individual is

unrelieved muscle tension and negative emotions such as frustration and anxiety (Brown, 1975).

Cannon's early psycho-endocrine work on the emergency functions of the fight-or-flight response led to his theoretical formulation of a homeostatic model of stress. In 1935 Cannon introduced the use of an engineering concept of stress and strain within a physiological context. In physics and engineering, stress is defined as an external force directed at some physical object. The result of this force is strain, which is a temporary or permanent alteration in the structure of the object (Appley & Trumbull, 1967). Cannon's early systems model of stress allows for physical stimuli such as cold, oxygen-deprivation, blood loss or injury, as well as emotional, social, and environmental stimuli to be considered stresses. Cannon viewed stress in terms of homeostatic principles in which a stress is some stimulus condition that causes disequilibrium in the system. This disequilibrium, or dynamic strain, is a change in the system against which mechanisms of homeostasis are activated. Cannon (1935) defined homeostasis as the continual tendency of the human system to return to a steady state after a disturbance within the system. The adaptive functions of the sympathetic-adrenal medullary system were seen as part of a complex system of buffers and feedback mechanisms stimulated to restore homeostasis in response to stress and strain. Cannon suggested that ego defenses also function as an adaptive mechanism to restore homeostasis.

More recently, Cannon's concept of homeostasis has been expanded using general systems theory. Schrodinger (1967) notes that the human system is a dynamic or changing system which is capable of acquiring

free energy and information from the environment. The human system influences and is influenced by interaction with the environment.

Human systems are obviously never in a completely steady state, since they continually change due to forces upon and within the system from their interaction with the environment. Human characteristics such as identity, personality, and habit most clearly resemble steady state factors, since these are generally considered to be relatively enduring characteristics. Although human systems do change, the concept of dynamic equilibrium means that the system shifts to a new position of balance after a disturbance, rather than returning to the original steady state. The human characteristics of learning, growth, and "personality change" are dynamic characteristics, changing as a result of interaction with the environment. Therefore, neither concept completely describes human systems, since people have both steady state and dynamic, or changing, characteristics. It would appear that people, as systems, fall somewhere between a steady state and a dynamic equilibrium.

In summary, the concept of homeostasis has developed from Cannon's original idea of an internal steady state to that of a dynamic, equilibrious exchange between the human system and the environment (Hinkle, 1974).

Nursing theory supports the concept of human beings as systems in interaction with the environment. Roy (1974) proposes an Adaptation Model which views the person as a unit of interlocking and interacting biological, psychological, and social systems that are in constant interaction with the environment and subject to change. Increased force

within the system or from the environment produces strain to which the human system must adapt.

Although this model includes the social system as one of the interlocking systems of human beings, it would not be logical to view the social system as a discrete entity. Social implies interaction with others, so as a system, a social system could not stand alone. According to the Roy Adaptation Model, social system is included as a level of analysis for viewing people's interaction with the environment.

Chrisman and Riehl (1974) propose a similar systems model of stress and adaptation with the added dimension of development, whereby people are conceptualized as a set of dynamic systems interacting within an environment and along a developmental continuum.

Although Cannon's early formulations laid important theoretical foundations for stress research, it was the work of Selye (1956, 1974) that had the greatest effect on the stress field. Beginning in the 1930s and continuing to the present, Selye's research and writings have popularized the term "stress," as well as stimulated an enormous volume of research (Mason, 1975). Whereas Cannon and others (Helson, 1964; Lazarus, 1966; Mason, 1975) define stress as a stimulus to which the human system responds, Selye (1966) defined stress as a general response to any noxious stimuli.

Selye (1956) developed his General Adaptation Syndrome (G.A.S.) theory of stress out of endocrine experiments with rats. He found that the introduction of virtually any noxious stimuli into tissue elicited a response syndrome of morphological changes including adrenal-cortical enlargement, atrophy of the thymus, and bleeding ulcers of the stomach

and duodenal lining. Selye concluded that this syndrome represented a nonspecific response of the organism to any demand made upon it, and termed this response "stress."

The development of more sophisticated methods of measuring adrenal-cortical hormones in plasma and urine of humans in the 1950s added further evidence of this nonspecific response of the pituitary-adrenal-cortical system to diverse stimuli. Although Selye included virtually all noxious stimuli, including emotional stimuli, as stressors capable of eliciting the General Adaptation Syndrome, current research is questioning Selye's absolute nonspecificity concept of stress (Mason, 1975).

Early research on stressful life events followed closely on Selye's formulations. Holmes and Rahe (1967) proposed that if an individual is confronted with enough stressful events, desirable or undesirable, the likelihood of physical or emotional illness is increased. This would lend support to Selye's concept of stress as a nonspecific response to any demand.

Further research on stressful life events has shown that the degree of change or adaptive behavior required by an individual in response to an event (Dohrenwend & Dohrenwend, 1970; Froberg, Karlsson, Levi, & Lindberg, 1971; Holmes & Rahe, 1967), as well as the desirable or undesirable nature of the event are more predictive of symptomatology and illness than simply the number of stressful events (Dohrenwend, 1978; Myers, Lindenthal, & Pepper, 1971; Mueller, Edwards, & Yarvis, 1977). These concepts of degree of change and degree of undesirability would indicate specificity both in perception of stress and response to stress

(Mueller et al., 1977), thereby lessening support of Selye's nonspecificity concept.

Selye's work has challenged investigators in the field of psychology. Researchers are studying the psychological mechanisms of stress in relation to the physiological responses he identified.

Lazarus (1966, 1969, 1977) and other researchers in the area of psychological stress (Mason, 1971; Monat et al., 1972) view stress as both situation-specific and individual-specific. In any situation, the capacity for the production of a stress reaction is dependent upon the characteristics of the individual (Lazarus, 1966). It has been shown that one individual may react to the same situation differently than another. A stress reaction from one individual does not predict that a stress reaction will be elicited from the next individual in the same situation or, if elicited, to the same degree. When individuals are presented with an event, they respond in a variety of ways and in greater or lesser degrees. The same appears to be true for an individual who is presented the identical event at different times and responds differently each time. Stress is thus defined in terms of transactions between the individual and the environment. Stress then must have an individual component with the individual's personality as a factor.

Mason (1971), Lazarus (1977), and McGrath (1977) agree that psychological processes such as cognitive appraisal of threat and coping actions mediate the physiological response to stressor conditions. They suggest further that the essential mediator of Selye's General Adaptation Syndrome is psychological. The intervening variable between a

stress stimulus and response is the cognitive process by which meaning is given to an event or situation. Stress occurs when an individual in a given situation makes the cognitive appraisal that he or she is going to be harmed or that there is the possibility of harm. Harm occurs when available resources are inadequate for coping. Appraisal depends on the particular interpretation the individual places on what is known or believed. It is based on past experiences and learning, and on what may be communicated from others to the individual about the situation. Stress, then, must have three components: (1) the stimulus, (2) appraisal of the situation, and (3) the response to the stimulus based on appraisal of the situation (Lazarus, 1966).

According to psychological stress theory, cognitive appraisal of threat or harm via cerebrally-controlled processes is necessary to initiate the General Adaptation Syndrome. In laboratory experiments with monkeys Mason (1971) found that the G.A.S. was not elicited in a nonspecific fashion when the animal was not consciously aware of the noxious stimulus. When animals were anesthetized they did not exhibit the G.A.S., nor did they when the psychological significance of starvation was controlled by feeding them placebo food with no nutritional value.

Laboratory experiments utilizing human subjects have also demonstrated the significance of psychological processes mediating the response to stressor conditions. Monat et al. (1972) conducted experiments using low-voltage electric shocks. Subjects who knew when electric shock would occur became increasingly more stressed as the time approached. Those subjects who did not know when to expect the shock

immediately began coping behaviors that led to less stress as the time approached for the shock. It was suggested that those who knew when to expect shock evaluated the situation as being safe during the first two minutes, but recognized the increasing threat by demonstrating increasing anxiety. Those subjects who were not informed when to expect the shock judged there were only certain things they could do to prepare, so began doing them immediately, decreasing their stress throughout the waiting period.

In summary, stress has been defined in both physiological and psychological terms. The early work of Cannon (1929, 1935) identifying the fight-or-flight response led to Selye's (1956) discovery of the nonspecific stress response, which he labelled the General Adaptation Syndrome. Cannon's (1935) stimulus-responses definition of stress causing disequilibrium or strain in the system has been further refined through the development of general systems theory (Chrisman & Riehl, 1974; Hinkle, 1974; Roy, 1974; Schrodinger, 1974). Psychological stress theory has identified the intervening psychological processes of cognitive appraisal of threat and coping as mediators of stress responses (Lazarus, 1966; McGrath, 1977; Mason, 1971; Monat et al., 1972).

Coping methods. According to psychological stress theory stress is not experienced until it is appraised as threatening. Coping begins with that appraisal. Freud's (1894) early work on identification of the ego mechanisms of defense was the first theoretical work on psychological mechanisms of stress, coping, and adaptation. Freud identified the ego-defenses as primarily unconscious coping processes employed to protect the individual from intolerable amounts of anxiety which would

otherwise be experienced from such stressful experiences as sudden life crises, changes in biological drives, unresolvable conflicts with people, and major conflicts with the conscious (Vaillant, 1977).

More recently, psychological stress research has focused attention on stress as a psychological and physiological process, with coping behavior identified as an intervening variable affecting both the perception of and the outcome of potentially stressful experiences (Lazarus, Averill, & Opton, 1974; Monat & Lazarus, 1977).

Early research on coping concentrated on studying behavior under relatively adverse conditions, such as during or after acute crisis. The naturalistic research of Cobb and Lindemann (1943) identified coping responses of 101 relatives and survivors of the Coconut Grove Nightclub fire disaster. The investigators determined that denial is adaptive for the immediate management of overwhelming acute grief, but is maladaptive if it continues and interferes with the normal grieving process.

Friedman, Chodoff, Mason, and Hamburg (1963) studied coping behaviors of parents of children with malignant diseases. They found that any coping behavior that allowed the parent to deal effectively with the reality of the situation and protected the parent from experiencing disruptive anxiety or depression was considered effective coping regardless of whether the behavior was socially desirable. Common coping modes included isolation of affect, intellectualization, overconcern about details of the child's treatment, denial, and increased motor activity. Janis (1958, 1968) studied preoperative fear and postoperative adjustment in 23 patients facing major surgery. Results indicated that patients who exhibited a moderate amount of anticipatory

fear, asking for and receiving realistic information and reassurance, were less likely to display emotional disturbance such as anxiety, anger, and resentment than patients who exhibited high or low anticipatory fear. These findings led to the concept of the "work of worrying" which emphasizes the potentially positive value of anticipatory fear as a coping device. These findings supported other research on community disasters, severe illness, and combat dangers (Cobb & Lindemann, 1943; Friedman et al., 1963; Grinker & Spiegel, 1945).

The above studies suggest that if a normal person is given accurate prior warning of impending threat, together with sufficient reassurance so that fear does not mount to a high level, he or she will be less likely to develop acute emotional disturbances. The above studies also provide implications for nursing intervention at times of acute crisis or stress, since two major functions of nursing are patient and family education and giving supportive reassurance.

Although the studies on coping behaviors in times of acute crisis have provided a foundation for studying modes of coping, they are limited in their explanation of the mediating role coping plays in dealing with everyday stresses of living, due to the unusual populations studied.

Lazarus (1966, 1974, 1980) has added greatly to the theoretical and empirical knowledge of coping processes. Lazarus proposed the concept of threat as the key intervening variable between a stress stimulus and the subsequent response of the system. Threat, or the anticipation of physical or psychological harm, involves both perception of and cognitive appraisal of the stressor. A stressor causes stress only when the

cognitive processes appraise it as potentially harmful. This cognitive appraisal process does not necessarily imply conscious awareness, good reality testing, or adaptiveness. It only implies that thought processes are involved. Lazarus agrees with Freud that ego-defenses are mobilized unconsciously in response to some stress perceived below the level of awareness. Appraisal of threat is influenced by motivational characteristics of the individual, belief systems, expectations, past experience, intellectual resources, education, and sophistication (Lazarus, 1966).

The coping process proposed by Lazarus involves primary and secondary appraisals. Primary appraisal consists of conscious or unconscious perception of impending harm. Primary appraisal assesses how much the individual is in danger from a situation. Secondary appraisal involves assessing the consequences of coping actions mobilized to deal with the threat. Factors contributing to secondary appraisal include the degree of threat, viability of alternative coping actions, the location of the agent of harm, situational constraints, motive strengths and patterns, ego resources, and coping dispositions. The cues for secondary appraisal concern the estimated consequences of any action tendency generated to cope with the threat, such as how much is the individual in danger from anything he or she does about the threat, or to what extent will any particular coping action relieve the danger.

In summary, Lazarus proposes a model of coping involving cognitive appraisals of threat--the perception of a situation as stressful or not and the utility of alternative coping activities in dealing with the threat.

Definitions of coping are varied, but there does seem to be general agreement among researchers that coping refers to efforts to master conditions of harm, threat, or challenge when a routine, innate, or automatic response is not readily available (Folkman & Lazarus, 1980; Lazarus et al., 1974; Mechanic, 1962; Menninger, 1963; White, 1974).

Classifications of coping processes are also varied, but generally coping actions are categorized according to function. Pearlin and Schooler (1978) propose three functions of coping actions: (1) to change the situation from which the stressful experience arises, or directly alter the environment, (2) to control or change the meaning of the stressful event after it occurs but before the emergence of strain, and (3) to control or reduce the strain itself after it has emerged.

Lazarus (1974) suggests a taxonomy of coping, including two major categories of coping behaviors according to function. Direct action coping includes behaviors, such as the innate fight-or-flight response, that are attempts to try to alter or master a troubled interaction with the social or physical environment. Direct actions include attempts to destroy, avoid, alter, or flee the harmful agent, somehow prepare to meet the danger, or remove the stress directly. These actions offer the potential of mastering a stress before it causes strain. Problem solving methods or other acquired abilities to deal directly with the source of stress are considered direct modes of coping (Gurin, Veroff, & Feld, 1960; Mechanic, 1962; Pearlin & Schooler, 1978).

Palliative modes of coping is the second category of coping function proposed by Lazarus. Palliative modes refer to thoughts or actions whose goal is to relieve the emotional impact of stress, which is

defined as strain. Strain is often experienced as bodily or psychological disturbances and occurs when direct action is not possible, not appropriate to the situation, or not effective at altering the stressful situation. Palliative modes of coping are focused on ways of reducing the affective, visceral, or motor disturbances that are distress, or strain, within the individual. The term palliative indicates that these methods do not actually alter the situation causing stress, but they make the individual feel better. Palliative modes of coping are the most frequently used and include intrapsychic processes such as ego defenses and selective ignoring of stimuli, as well as somatically-oriented actions such as taking tranquilizers, alcohol, food, using muscle relaxation techniques, or meditation. Palliative modes may be damaging when their use prevents essential direct action, but may be extremely useful in helping the individual maintain a sense of well-being, integration, or hope under conditions that otherwise might result in psychological disintegration (Monat & Lazarus, 1977).

Classifying coping methods according to function and process does not imply that one form or another is used exclusively. Complex combinations of direct actions and palliative methods are used to cope with stress and strain. The particular combinations of coping methods chosen by the individual depend upon the conditions being faced, perception and appraisal of threat, the options available to the individual, past experiences, and personality (Lazarus & Launier, 1978; Monat & Lazarus, 1977).

The effectiveness of any coping behavior is judged by how well it prevents life's problems from resulting in psychological or

physiological disorder due to strain. Since it is not possible to remove or prevent all stressors from causing strain, it is important to focus on the combinations of coping strategies the individual uses to adapt to the forces impinging on his or her system.

A model of the stress-strain-coping process (Figure 1) was developed for use in this study, drawing from nursing and systems theory (Chrisman & Riehl, 1974; Roy, 1974) and from psychological stress theory (Lazarus, 1974). According to this model, the stress process includes a stressor, stress, strain, coping, and adaptation.

A stressor is any internal or external event that has the potential of producing threat or harm. Stress is a force that produces strain or disequilibrium within the system and is a function of qualities of the stressor itself and the cognitive activity of primary appraisal of threat. Perception of threat is dependent upon the degree of danger of the stressor and qualities of the individual such as physical, intellectual, and emotional abilities, prior experience, and the level of strain already existing within the system.

If no threat is appraised, the process is stopped. If threat is appraised, stress occurs, which produces strain or disequilibrium within the system. Strain in the system requires some action to reduce it. Secondary appraisal occurs as a result of this strain and the conscious or unconscious selection of a coping method or methods occurs to allow the organism to adapt to the strain.

Direct action coping methods may effectively remove the source of stress and restore the dynamic equilibrium of the system. Coping methods that alter the perception of the event may remove the threat

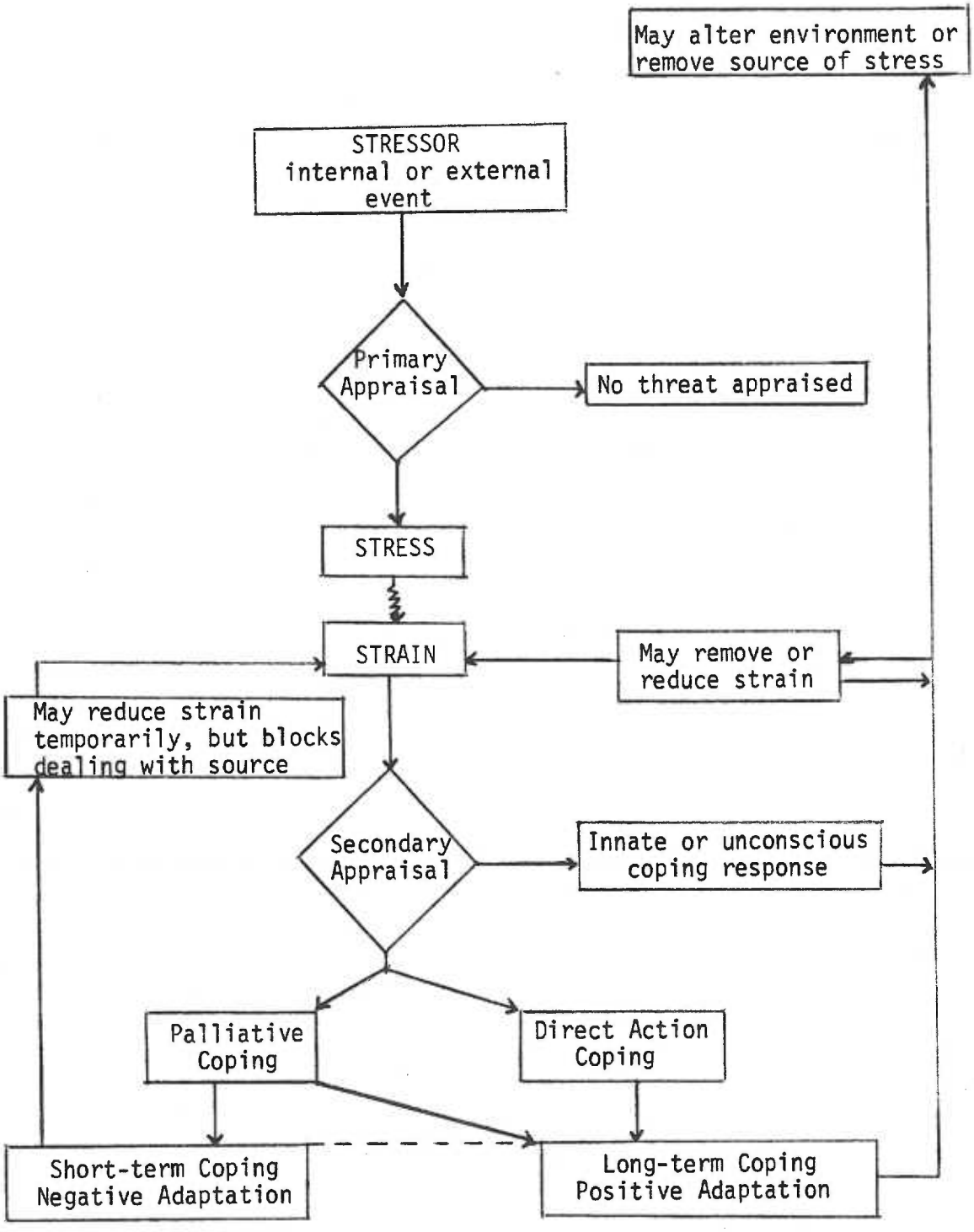

Figure 1. The stress-strain-coping process (adapted from Chrisman & Riehl, 1974; Lazarus, 1966, 1974; Roy, 1974).

of the stressor and thus prevent the stress cycle from continuing. Palliative coping methods aimed at reducing the affective, visceral, or motor manifestations of strain may provide long-term or short-term adaptive results. Palliative coping methods that provide immediate relief of discomfort from strain, allow continued effective functioning in the individual's various roles, and provide realistic, goal-oriented ways of dealing with stress and strain are identified as long-term coping methods. Direct action coping methods also provide long-term relief from the source of stress. Palliative coping methods that relieve discomfort from strain, but block realistic efforts to deal more directly with the source of stress are identified as short-term coping methods. Short-term coping methods such as narcotizing discomfort or denying or distorting reality may, if carried on for long periods of time, have a destructive or detrimental effect on the individual, because they do not remove the stressor and they do have their own negative consequences, which in turn may become stressors.

Coping methods and adaptation occur on a continuum, with short-term coping methods and negative adaptation at one end and long-term coping methods and positive adaptation at the other end. Adaptive coping efforts to deal with a particular disturbance may fall at any point on the continuum. The more the coping method provides long-term, constructive, and realistic relief of stress and strain, the more positive the adaptation. Promoting positive adaptation to system and environmental changes is the goal of nursing activity (Chrisman & Riehl, 1974; Roy, 1974). Assisting individuals to learn and utilize long-term, and theoretically more effective, methods of coping with stress

and strain encourages positive adaptation, a sense of well-being, and promotes health and individual growth (Bell, 1977; Chrisman & Riehl, 1974).

Bell (1977) conducted a nursing research study comparing types of coping methods used with measures of stress and illness behaviors. Using the Social Readjustment Rating Scale (Holmes & Rahe, 1967) and an 18-item Coping Methods Scale divided into long-term and short-term determinations of effectiveness, Bell compared a sample of 30 diagnosed mentally ill hospitalized patients with 30 matched "normal" controls. Stressful life events scores for the mentally ill sample were twice those of the community control sample. Mentally ill persons used a lower total number of coping methods and a higher percentage of short-term methods than the community sample. Bell concluded that inadequate coping, in adapting to life changes, might increase the probability of mental illness behaviors. Other researchers support this hypothesis that an individual's ability to cope with stressful events influences the quality and quantity of stressful events experienced, and resulting psychiatric symptomatology (Fontana, Dowds, Marcus, & Rakusin, 1976; Vaillant, 1977).

Fontana et al. (1976) found that post-hospitalization adjustment was better in psychiatric patients who learned realistic coping skills. They experienced fewer stressful events and exhibited fewer psychiatric symptoms when faced with unavoidable stressful events, supporting the concept that realistic coping skills reduce the negative effects of life event stress. Reduced illness behavior in the face of stressful events by the use of mature ego-defensive coping styles has been reported by

Vaillant (1977). In a forty-year longitudinal study of 100 males, Valliant found that men who habitually used mature ego-defenses to deal with developmental and environmental crises experiences less physical illness, no psychiatric illness, much higher career and social adjustment, and success. Valliant concluded that mature or realistic ego-defensive styles provide increased resistance to stress and more positive adaptation to the stress that does occur.

Studies examining the types of coping methods used to deal with everyday stresses of life rather than those employed during acute crisis or disaster reveal differences in coping dispositions according to sex, education, and socioeconomic status. In a nationwide survey on mental health, Gurin et al. (1960) found that men are more likely to use direct methods of coping, such as thinking the situation through, and taking direct action to alleviate the problem. Women were more likely to turn to prayer, turn to someone else for help, and utilize more passive methods. Higher level of education and income were positively correlated with using more direct rather than passive coping methods. No difference was noted according to rural or urban place of residence.

In a community sample of middle-aged men and women, Folkman and Lazarus (1980) found that the context of an event and how it is appraised are the most potent influencing factors on coping. Work contexts favored problem-focused coping methods, and health contexts favored emotional-focused coping methods. No effects were associated with age; however, men were found to use more problem-focused coping than women. No gender differences were found in use of emotional-focused coping methods.

In summary, the dependent variable strain and the independent variable coping methods have been shown to be aspects of a broad concept, the stress-strain-coping process. A dynamic model of stress and strain with the intervening process of coping based on the cognitive appraisal of threat has been presented.

Quality of Life

The second dependent variable in this study is Quality of Life. The concept of quality of life as developed by Bigelow et al. (1982) incorporates aspects of earlier studies on quality of life (Bateson, 1972; Bradburn, 1969; Campbell & Converse, 1972; Cantril, 1965; Dalkey, 1972; Gurin et al., 1960) within the framework of Maslow's hierarchy of needs. According to quality of life theory, mental health is seen as the degree of adjustment between an individual's abilities and needs, and the demands and opportunities of the environment. Adjustment is viewed as an interaction between satisfaction of needs through opportunities within the environment and performance using one's abilities to meet the demands of the environment.

Quality of life theory views human beings in interaction with their environment, a concept compatible with nursing models based on systems theory (Chrisman & Riehl, 1974; Roy, 1974). Within the quality of life framework stress may be defined as a demand to which the individual must respond by using his or her abilities. Strain occurs when the demands are perceived as threatening or when opportunities are perceived as not available to meet needs. Coping methods are abilities with which the individual deals with strain. Ineffective coping results in

psychological distress and diminished well-being. The effectiveness of coping methods is measured by the extent to which they assist the individual to meet the stressful performance demand and allow the individual access to the opportunity structure from which he or she may satisfy needs. Adjustment, or mental health, is influenced by the individual's abilities to cope with the stresses that confront him or her. To the extent that adequate satisfaction and performance are achieved, individuals are adjusted to their environment and enjoy a good quality of life.

Chronically Mentally Ill vs. Community Sample

The second independent variable in this study is "known group status"--chronically mentally ill clients vs. community sample.

Mental health professionals who work with chronically mentally ill or "long-term" patients note characteristics of these individuals: (1) they lack self-confidence and the social skills necessary to communicate with other people, (2) they lack sufficient ego strength to withstand pressure and to cope with the usual crises of life, and (3) they have a limited repertoire of problem-solving techniques and therefore develop severe psychiatric symptoms when confronted with only a moderate amount of life stress (Lamb, 1976; Mechanic, 1978; Test & Stein, 1978; Turner & Shifren, 1979).

Cumming (1963) notes that the primary characteristic of chronically mentally ill persons is a deficiency of abilities. Chronically mentally ill persons cannot meet the usual demands of a normal environment and therefore lose opportunities to get needs met. Consequently, according

to quality of life theory (Bigelow et al., 1982) the chronically mentally ill person experiences a very poor quality of life and may, in fact, need hospitalization simply to survive.

Limited research is available testing these assumptions that chronically mentally ill persons lack self-confidence, social skills, ego strength, and coping skills. A study by Tolsdorf (1976) investigated the social networks and coping styles of 10 hospitalized schizophrenic males and 10 male medical patients. The psychiatric subjects reported fewer persons in their social network, did not utilize their network for support when under stress, and relied more on their individual resources of problem solving and other cognitive attempts at mastery. The medical subjects viewed their networks as more supportive and sought out network members for support, advice, and feedback when individual resources failed to overcome stress. The psychiatric subjects viewed their networks as negative, unsupportive, and stressful. They did not seek network support when individual coping responses failed, which led to continued coping failure, higher anxiety, and a drop in performance and self-esteem, followed eventually by a psychotic episode. Utilizing network support is a coping ability. One major difference between chronically mentally ill persons and "normals" is this ability to mobilize and utilize a supportive network in times of stress.

Wing (1978) studied hospitalized and non-hospitalized chronic schizophrenics and identified social withdrawal as the most commonly used coping response to stress. Social withdrawal was defined as a self-protective coping reaction against the stresses of intense and

demanding social interaction on the part of chronically mentally ill persons, who were described as vulnerable and lacking adequate communication skills.

In summary, chronically mentally ill persons characteristically lack social skills, sufficient ego strength, and have a limited repertoire of coping skills with which to deal with the stressful demands of their environment. Consequently, they experience a poor quality of life and may develop severe pathology when confronted with only a moderate amount of life stress. Chronically mentally ill persons need assistance in developing skills to provide a sense of mastery and to achieve the feeling that they can cope with internal drives, symptoms, and the demands of the environment (Lamb, 1976; Test & Stein, 1978). They especially need a supportive social environment and the ability to maintain and use it (Turner & Shifren, 1979).

Summary and Purpose

Aspects of coping have been presented within a conceptual framework based on a systems model of stress, strain, coping, and adaptation. Engineering and homeostatic principles describe how man adapts to changes in the system due to stress. Quality of life theory and systems models of nursing provide a framework for viewing how physical and emotional health is dependent upon and affected by an individual's ability to cope with stressful demands of the environment.

Adaptation to stress and strain may occur through innate physiological functions or through the cognitive process of coping. Coping methods are some of the things people do to deal with stress and strain.

Coping responses may be influenced by the psychological resources of individuals as well as factors such as the actual and perceived degree of threat in a situation, other contextual stimuli present at the time a stressor is perceived, the individual's physical abilities, social support available and utilized, and the individual's past experience and learning.

It is not possible within the limits of this study to isolate the effect of each of these variables on an individual's selection of and use of specific coping methods. Since this study is neither a naturalistic nor experimental design study, but rather a survey study, it is not possible to observe the individual in actual stressful situations to determine the effect of particular coping methods used.

This study necessarily focuses on an individual's disposition to cope in various ways based on his or her own perception of situations that are stressful to him or her. This study has also relied on reported psychophysiological symptoms as the indicator of the presence of strain. Strain is the temporary or permanent alteration within the system due to disequilibrium caused by stress. Therefore, psychophysiological symptoms of discomfort or strain are a reflection of and a measure of disorder due to stress.

The purpose of this study is threefold: (1) to further the conceptualization of coping methods as abilities with which to meet stressful demands of the environment, (2) to measure dispositions to cope in certain ways, and (3) to determine the relationship of coping methods and quality of life, and, more specifically, with psychophysiological symptoms of strain.

Hypotheses

1. The chronically mentally ill report higher levels of strain than the general community.

2. The chronically mentally ill report less use of long-term coping methods than the general community.

3. The chronically mentally ill report greater use of short-term coping methods than the general community.

4. The chronically mentally ill report lower quality of life than the general community.

5. Within each group, strain is negatively related to quality of life.

6. Within each group, strain is positively related to short-term coping methods.

7. Within each group, strain is negatively related to long-term coping methods.

8. Within each group, short-term coping is negatively related to quality of life.

9. Within each group, long-term coping is positively related to quality of life.

10. Individuals whose overall coping methods are composed of higher proportions of long-term coping methods report lower levels of strain and higher quality of life.

CHAPTER II

METHODS

Design

This study is a descriptive survey with a correlational design. Descriptive data were obtained about psychophysiological symptoms of strain, types of coping methods used, and quality of life for a chronically mentally ill sample and for a general community sample. A structured personal interview using the Health Opinion Survey, a Coping Methods Scale, and the Oregon Quality of Life Questionnaire was conducted with each subject. The study tested the concept of coping methods as a measurable variable affecting quality of life. The role of coping methods was examined by comparing the chronically mentally ill with the general community on types of coping methods used, psychophysiological symptoms of strain, and on quality of life. The relationship between types of coping methods used, strain, and quality of life scales was also examined for each group.

Community Sample

Setting. The 60 members of the community sample for this study were selected from the city of Portland and from rural Linn County, Oregon. Data for the sample of 30 residents of rural Linn County were obtained by another investigator in this cluster of studies. Thorough methodologies for sampling subjects in rural areas are described by Mikesell (Note 2). The city of Portland was the setting for the

sample of 30 urban residents. Data for these 30 sample subjects were gathered by this investigator. The city of Portland is the major urban center of the state of Oregon, and is located in the northernmost section of the Willamette Valley. The metropolitan Portland area, including the three counties, Multnomah, Clackamas, and Washington, accounts for almost one-half the population of the state. The 370,000 residents within the city limits of Portland represent 15% of the 2.54 million residents of the state of Oregon, according to 1979 population estimates (Center for Population Research and Census, 1979).

Sample and Procedure. For the city of Portland sample of community persons, census tract information and a city street map were utilized in sample selection.

Within the city of Portland there are 100 census tracts. Thirty census tracts were randomly selected. The first tract was selected from a table of random numbers. Then the selection proceeded with every third, then every fourth tract until 30 tracts were selected. One interview was conducted in each census tract.

The specific household selected for interview within a tract was selected in the following manner. A street within the census tract was chosen by pointing to a spot on the street map, and a mark was placed on the map. Cross streets were marked, thereby limiting the selected street to one-to-three city blocks in length. The specific address to be approached was selected prior to driving to the area.

The following is an example of the selection process for a specific address. Knapp St. with cross streets 39th Ave. and 42nd

Ave. was marked on the map. Approaching from 39th Ave. heading East, the interviewer went to the sixth house or apartment on the right side of Knapp St. If the house or apartment was obviously vacant, no building was standing at that location, or if a business was at that location, the interviewer backtracked one house on the same side of the street. The interviewer repeated backtracking as necessary until an obvious occupied residence was located.

The interviewer approached the residence. If no one answered, the interviewer returned again after 6:00 p.m., and on a weekend day, if necessary. The interviewer did not consider abandoning a selection until three attempts had been made to locate a member of the household. If the address was an apartment building or duplex, the interviewer used a die strategy for randomly selecting a household or householder for interview, as developed for use with the Oregon Quality of Life Questionnaire (see Appendix A).

If a householder was at home the interviewer introduced herself and the purpose of the visit. She inquired as to how many adults between the ages of 18 and 65 years lived at the address. If more than one person fit the criteria she used the die strategy to randomly select the person to be interviewed.

Once a subject was selected, the interview was conducted or an appointment made to conduct the interview at a time and place convenient to the subject. The subject was asked to sign a consent form explaining the purpose of the study and any possible risk to the subject, prior to commencing the interview (see Appendix B). The

interviews averaged about 60 minutes in length and ranged from 45 minutes to 120 minutes.

All investigators in this cluster of studies were trained and monitored for interviewing using the questionnaires by the Program Impact Monitoring System (PIMS) Project of the Oregon Mental Health Division (Bigelow et al., 1982). The training and monitoring resulted in administration and recording data with a 95% accuracy on a comprehensive performance checklist.

A similar procedure for random selection of subjects and conducting interviews was followed for the rural Linn County sample (Mikesell, Note 2).

Chronically Mentally Ill Sample

Definition. Oregon law defines a chronically mentally ill individual as (a) having at least two psychiatric hospitalizations within a 24-month period and (b) demonstrating a need of residential or support services for an indefinite duration to maintain a stable adjustment to society (Oregon Revised Statutes, 1979). This definition was used for selection of the chronically mentally ill sample for the cluster studies.

Setting. The chronically mentally ill population for this study included residents of Clackamas County who were active clients in the Transitional Program of the Clackamas County Mental Health Center and who fit the definition of chronically mentally ill.

Sample and Procedure. Data for the chronically mentally ill (CMI) sample were obtained by another investigator in this cluster of studies (Shank, Note 3). The random sample was composed of 30 persons meeting the above criteria. Interviews were conducted in the same fashion as for the community sample. Demographic characteristics of the community sample and the chronically mentally ill sample are presented in Table 1.

Instruments

The Oregon Quality of Life Questionnaire (OQLQ) with added scales measuring psychophysiological symptoms of strain and coping methods were utilized as data collection instruments.

Oregon Quality of Life Questionnaire. The OQLQ, as developed by Bigelow and Brodsky has been used to evaluate mental health program services as a part of the Oregon Program Impact Monitoring System (Bigelow et al., 1982). The instrument is based on the concept that mental health is the degree of adjustment between the individual's abilities and needs, and the demands and opportunities of the environment. Application of the instrument has been primarily in the evaluation of effectiveness of mental health programs. The OQLQ includes measures of functioning in four broad areas of adjustment: intrapersonal, interpersonal, productive, and civic.

The OQLQ divides the four broad areas of adjustment into more specific subareas, each being a set of items or a scale to assess the individual (see Appendix C). The intrapersonal adjustment area explores psychological distress, well-being, lack of tolerance of

Table 1

Demographic Characteristics of the Chronically Mentally Ill Sample (CMI) and the Community Sample (C)

Characteristic	CMI (N=30)	C (N=60)
Age		
Mean (years)	45	38
Range (years)	21-73	18-65
Sex		
Female	53%	62%
Male	47%	38%
Ethnic Group		
Caucasian	100%	90%
Black	0	5%
Other	0	5%
Living Situation (Social)		
Head of House or Alone	27%	30%
Live with parent(s)	13%	3%
Live with spouse	27%	55%
Live with friend(s)	13%	12%
Live with relative(s)	7%	0
Other	13%	0
Living Situation (Physical)		
Single family dwelling	63%	80%
Apartment	20%	18%
Group home	17%	2%
Income (Annual for Household)		
0 - 999	13%	0
1000 - 4999	34%	6%
5000 - 4999	30%	7%
10000-24999	17%	70%
25000 or greater	6%	17%
Education		
Less than 7 years	17%	0%
Junior high	13%	2%
High school	43%	52%
College	27%	46%
Occupation		
Professional	3%	25%
Sales	3%	10%
Clerical	3%	7%
Craft	13%	23%
Unskilled	7%	9%
Homemaker	13%	13%
Unemployed	53%	3%
Retired	3%	5%
Student	0	3%
Other	0	2%

stress, basic need satisfaction, and independence. The interpersonal adjustment area explores friend roles, spouse role, parent role, social isolation, and social support. Adjustment to productivity explores work at home, employability, job or school performance, and other productive activities, including leisure activities. Civic adjustment explores legal contacts, negative consequences of alcohol and drug use, and the use of community resources. The questionnaire also explores changes in each of the above areas as noted by the client, if involved in a mental health program.

The OQLQ is a self-report instrument in the form of questions with fixed alternative responses (see Appendix C). The questions are asked and the responses are presented, chosen, and recorded in a standard format to maintain uniformity.

The OQLQ has been administered to various community subjects, as well as mental health program clients. Psychometric analyses currently published focus on investigation of three properties of the instrument: (1) validity, (2) internal consistency, and (3) reliability (Bigelow et al., 1982). Face validity of the scales is considered to be the strength of the questionnaire. The known-groups technique is used to establish construct validity. A high degree of concurrent validity of measures in the four areas of adjustment is indicated. The scale scores are able to discriminate between client intake and follow-up samples, as well as between client and community samples. Internal consistency varies among the scales, with Psychological Distress having the highest degree of internal consistency.

Homogeneities are adequate, but substantial improvement is possible. The interrater accuracy consistently exceeded 95%.

For this study the internal consistency of the OQLQ scales was examined using Cronbach's alpha. Only the community sample was included in the reliability analyses due to potential deviant responses by the chronically mentally ill sample. To obtain homogeneous subscales for data analysis, a criterion was established of 0.5 as the lower limit of acceptability for the coefficient alpha of each scale. Several scales were deleted from further analysis due to not meeting the criterion. Several other scales had selected items deleted to improve the reliability. Table 2 lists the eight OQLQ scales used in this study, the specific items in each scale, and the coefficient alpha for each scale. The Psychological Distress scale of the OQLQ was considered separately for this study as a measure of strain.

The score for the different scales on the OQLQ were determined by summing the values of the valid responses and then dividing by the number of items comprising the scale. Valid cases were determined by respondents answering at least 66% of the items included in the scale. Subjects answering less than 66% of the items on a scale were considered to have a missing score for that scale. Descriptive statistics of the OQLQ scales for both the general community and chronically mentally ill groups are summarized in Appendix D.

Brief descriptions of the eight scales used in this study are as follows:

Lack of tolerance of stress. This three-item scale measures difficulty in handling unpleasant feelings. The scale score

Table 2

Reliability of Oregon Quality of Life Questionnaire (OQLQ) Scales

Scale	Number of Items on Scale	Items on Scale	Cronbach's alpha
Lack of Tolerance of Stress	3	02-01,02-02,02-03	.70
Need Satisfaction	4	03-01,03-02,03-03,03-04*	.64
Independence	3	04-01,04-02,04-03	.55
Confidence	5	04-04*,04-05*,04-06*,04-07, 04-08*	.60
Friend Role	5	05-01,05-02,05-03*,05-04*, 05-05*	.65
Spouse Role (N=36)	3	08-01*,08-03,08-04	.80
Social Support	4	10-01,10-02,10-03,10-04	.68
Employability	4	12-02,12-04,12-07*,12-09	.79

N=60 unless otherwise noted, for computation of Cronbach's alpha.
*=reversed items.

ranges from 0-3 with 3 reflecting the lowest tolerance of anxiety and depression.

Total basic need satisfaction scale. This 4-item scale measures satisfaction in living situation and income. The scale score ranges from 1-4 with 4 reflecting the highest degree of satisfaction.

Independence scales. This 3-item scale measures ability to meet day-to-day responsibilities. The scale score ranges from 1-4 with 4 reflecting the greatest independence.

Confidence scale. This 5-item scale measures ability to deal with conflict, make decisions, and be assertive. The scale score ranges from 1-4 with 4 reflecting the highest level of confidence.

Friend role scale. This 5-item scale measures frequency of interaction with casual social contacts and the degree of pleasure or uneasiness experienced. The scale score ranges from 1-4 with 4 reflecting the best adjustment to the friend role.

Spouse role scale. This 3-item scale measures the frequency of conflict and degree of enjoyment in the marital relationship. The scale score ranges from 1-4 with 4 reflecting the best adjustment to the spouse role.

Social support scale. This 4-item scale measures the frequency of sharing and the amount of help available from family and friends. The scale score ranges from 1-4 with 4 reflecting the greatest amount of social support.

Employability. This 4-item scale measures job locating skills and ability to relate to coworkers. The scale score ranges from 1-4 with 4 reflecting the greatest employability.

The Psychological Distress Scale of the OQLQ and the Health Opinion Survey (HOS) were used to measure the construct strain.

According to the stress-strain-coping model used in this study, strain is identified as a temporary or permanent alteration within the system as a result of stress. Coping may or may not be activated before strain is experienced as discomfort. When stress has not been removed or reduced through innate or unconscious responses or if these responses are not available or appropriate, stress produces disequilibrium in the system that can be identified as signs or symptoms of strain. Symptoms of strain may include psychological or physiological disturbances in affect or function.

Psychological Distress Scale. The Psychological Distress Scale of the OQLQ includes 12 items measuring psychological, affective, and physical symptoms of distress, or strain. The scale encompasses anxiety, depression, hostility, feeling strange and alien, gastric disturbances, and inability to sleep. An example of a distress item is "In the past week how often have you felt very restless, unable to sit still, or fidgety? 4 - all the time, 3 - often, 2 - several times, 1 - none of the time." (See Appendix C)

The scale score ranges from 1-4 with 4 reflecting the greater frequency of distress. Internal consistency was measured using Cronbach's alpha. In this study internal consistency of the Psychological Distress Scale was computed using the community sample, and resulted in a coefficient alpha of .77 which can be considered very adequate for research purposes. Table 3 lists the specific items on the

Table 3

Reliability of Strain Scales

Scale	Number of Items on Scale	Items on Scale	Cronbach's alpha
Psychological Distress	12	01-01,01-03,01-05,01-07, 01-09,01-11,01-13,01-14 01-16,01-18,01-20,01-22	.77
Health Opinion Survey	17	130,131,132,133,134,135 136,137,138,139,140,141, 143,144,145,146,147[a]	.77

N=60 for computation of Cronbach's alpha.

[a] Items 142,148,149 deleted.

Psychological Distress Scale and the coefficient alpha.

Health Opinion Survey. The Health Opinion Survey (HOS) was used as an additional measure of strain. The HOS has become one of the more thoroughly validated instruments available to assess the presence of psychophysiological manifestations of mental upset. The HOS looks at the physical and mental manifestations of a stressed and emotionally upset human organism (Timmreck & Stratton, 1981).

The 20-item HOS is an established measure of strain and a viable mental health screening instrument. It was developed by MacMillan (1957) to provide a standardized screening instrument that could be applicable to both sexes across a broad age range. The HOS has been validated by use in numerous studies of client and community samples. The psychophysiological symptoms measured by the HOS correlate highly with clinical diagnoses of neurotic disorders, affective disorders, and character disorders. The HOS is considered to be a highly reliable questionnaire for screening emotionally disordered individuals from a general population (Leighton, Harding, Macklin, Hughes, & Leighton, 1963; MacMillan, 1957).

The use of the HOS in numerous epidemiological studies has validated it as a tool for discriminating among psychiatrically impaired persons and those persons not impaired. Studies offering such validation include a nationwide survey of mental health (Gurin et al., 1960), the New Haven Psychiatric Census (Hollingshead & Redlich, 1958) and a ten-year followup study of the New Haven Census (Myers & Bean, 1968), a survey of three predominately rural counties in North Carolina (Edgerton, Bentz, & Hollister, 1970), a survey of rural and

urban areas of a Southeastern United States county (Schwab, Warheit, & Holzer, 1972), and a very large sample of Navy psychiatric patients and active duty enlisted men and officers (Gunderson, Arthur, & Wilkins, 1968).

Wording of HOS items used in this study is essentially the same as has been used in previous studies (see Appendix E). Guidelines were written to clarify the intent of each item, with a rewording of each item offered for respondents with low verbal activities. The guidelines served to facilitate uniformity among interviewers (see Appendix F). Scoring of items range from 1-4 and correspond with the Psychological Distress Scale scoring range. An example of an HOS item is "Are you troubled by headaches or pains in the head? 4 - almost all the time, 3 - often, 2 - sometimes, 1 - never."

Although the HOS has been reported to be a highly reliable instrument based on inclusion of all 20 items, early reliabilities of its use in this study were poor. Two items were deleted from the scale because conceptually they appeared to be measuring different variables. The majority of items measure psychophysiological symptoms that are either present to a certain degree or not. The two items that were deleted were -yes or -no response questions requiring interpretations by respondents as to their current state of health. These items presented coding difficulties, in that they had a 1-2 response range rather than the 1-4 range of other items on the scale, and they appeared to be measuring something other than psychophysiological symptoms of strain.

An additional item "Do you smoke a lot?" was deleted from the scale since it weakened the internal consistency of the scale and measured a behavior or habit rather than a psychophysiological symptom.

The resulting 17-item HOS had a coefficient alpha of .77 (see Table 3), which is identical to that of the Psychological Distress Scale of the OQLQ. This indicates a good degree of reliability in the HOS allowing for comparisons to be made among groups and for correlations to be obtained with scales measuring coping methods and quality of life. Descriptive statistics of the two strain scales are summarized in Appendix G.

Coping Methods Scale. The OQLQ does not include a scale measuring specific ways in which individuals cope with perceived stress. The 3-item Lack of Tolerance of Stress Scale of the OQLQ asks how much difficulty the respondent has had handling uncomfortable feeling states such as depression and frustration. None of the items question how the individual actually handles, or copes with, these difficulties.

The Coping Methods Scale was added by this investigator to determine the relationship between the ways individuals cope with perceived stress, their level of strain, and overall quality of life.

The literature indicates that the type of coping methods an individual uses has an effect both on the amount of psychophysiological strain the person experiences and on the individual's overall mental health (Bell, 1977; Gurin et al., 1960; Pearlin & Schooler, 1978).

The literature further indicates that coping methods function to: (1) alter the environment so as to prevent further stress, (2) alter the meaning of the stressful event so as to prevent strain, or (3) keep the strain experienced within tolerable limits (Pearlin & Schooler, 1978). Long-term coping methods are those which involve direct actions aimed at altering the environment or altering the meaning of the stressful event so as to deal more directly with the source of stress. Long-term methods also include palliative methods which reduce the discomfort, but also allow for continued necessary functioning, and offer potential for learning, growth, or a sense of well-being (Bell, 1977; Lazarus, 1974; Pearlin & Schooler, 1978). Short-term coping methods are those palliative methods aimed only at reducing the discomfort of strain, do not encourage dealing directly with the source of stress, and which, if carried on for long periods of time, may have a destructive or detrimental effect on the individual (Bell, 1977; Lazarus, 1974; Pearlin & Schooler, 1978).

The 18-item Coping Methods Scale (see Appendix H) developed for use in this study was derived from existing scales reported in the literature. The scale included two subscales of 9 items each measuring long-term coping methods and short-term coping methods. An 18-item scale developed by Bell (1977) served as the basis for the Coping Methods Scale. The Bell Scale was developed from other existing scales (Menninger, 1963; Sidle, 1969) and is divided into long-term and short-term methods. Of the Bell items, 16 were used in the Coping Methods Scale, with the wording of items the same. Two items of the Bell Scale were deleted because in her study they did not

accurately measure the variable they were intended to measure and were weakly supported in the literature. The deleted items were the short-term method of daydreaming and the long-term method of belief in a supernatural power. One method described by Bell as a short-term method, seeing the humor of a situation, was changed to a long-term method since humor is considered to be a positive adaptive ego-defense mechanism (Valliant, 1977). The Bell items used in the Coping Methods Scale included 9 short-term and 7 long-term methods. In addition, 2 items were added to the scale due to their judged importance as effective long-term coping methods (Andrews, Tennant, Hewson, & Valliant, 1978; Lazarus, 1974; Pearlin & Schooler, 1978; Robbins & Tanck, 1978). These items included the use of relaxation, yoga or some other meditative technique, and trying to analyze the problem.

The resulting Coping Methods Scale including 9 long-term and 9 short-term coping methods was examined for face validity by several researchers and professionals in psychiatric nursing. Content validity was assumed to be high since all the items except the long-term method of using relaxation techniques were selected from scales used in other studies. Detailed guidelines were written to clarify the intent of each item and to facilitate uniformity among interviewers (see Appendix I).

The Coping Methods Scale has two subscales representing long-term and short-term coping methods used by the individual when he or she is under stress. The responses range from 1-4 with the following values assigned: 1 = "never," 2 = "sometimes," 3 = "often," 4 = "always." The values of the responses for each item within a

scale were averaged to obtain the scale score. Each scale score ranged from 1-4 with 4 reflecting the greatest use of a certain type of coping method, long-term or short-term. As an introduction to the Coping Methods Scale respondents were asked to identify a situation which causes them to feel under stress and then were asked "When you are under stress how likely are you to . . . ?" An example of a long-term coping item is "Talk with others about the problem? - never, - sometimes, - often, - always."

Data Analysis

Psychometric properties of the Coping Methods Scale were examined since it was a new, derived scale. Internal consistency was determined by computing the coefficient alpha of each subscale. Construct validity was evaluated by use of the known-groups technique, in which the general community and the chronically mentally ill are expected to differ on the critical attribute because of known characteristics of each group. Validity of the Coping Methods Scale would be questioned if differences in scores between groups did not occur. Construct validity was also determined by comparing the correlation coefficients between subscales with the reliability coefficients of the subscales. Tests of the hypotheses provide further construct validity of the Coping Methods Scale.

Hypotheses one through four were tested by comparing the two groups, the chronically mentally ill and the general community on the two strain scales, long- and short-term coping methods, and the eight quality of life scales. Hypotheses five through ten were tested by

examining the relationships between the two groups on the various scales. Correlation coefficients were computed for both groups on each study variable, and tested for statistical significance at the $\underline{p} \leq .05$ level of significance.

CHAPTER III

RESULTS

This chapter consists of two sections. The first section is a report of the reliability and validity of the Coping Methods Scale. The second section is a report of the testing of the ten hypotheses of this study.

Reliability and Validity

The Coping Methods Scale consists of two 7-item subscales, one measuring long-term coping methods and one measuring short-term coping methods. Descriptive statistics for the Coping Methods Subscales are summarized in Appendix G. The reliability of the Coping Methods Scale was determined by obtaining the Cronbach's coefficient alpha for each of the subscales. Two items were deleted from each subscale which raised the internal consistency, and therefore, reliability of the scales. Table 4 lists the two coping methods subscales with the seven specific items on each, and the coefficient alpha for each scale. The long-term coping methods scale had the highest coefficient alpha at .76. The short-term coping methods scale had a coefficient alpha of .63. The correlation between long-term coping methods and short-term coping methods was .08 ($N=60$, $p = .27$) for the community group and was .00 ($N=30$, $p = .50$) for the chronically mentally ill.

One aspect of construct validity was determined by comparing the correlation coefficients between the coping subscales with the

Table 4

Reliability of Coping Methods Scales

Scale	# of Items on Scale	Items on Scale	Cronbach's alpha
Long-term Coping Methods	7	150,152,155,157,160, 162,167[a]	.76
Short-term Coping Methods	7	151,153,158,159,161, 163,165[b]	.63

N=60 for computation of Cronbach's alpha.

[a] Items 154 and 164 deleted.

[b] Items 156 and 166 deleted.

reliabilities of the subscales. To the extent that the reliability coefficients exceed the correlation between subscales, each subscale can be considered distinguishable (Scott, 1968). Because both subscales have reliability coefficients (.76 and .63) higher than the correlation between subscales (.08 and .00), they can be considered to measure distinguishable types of coping methods. Tests of the hypotheses provide further construct validity of the Coping Methods Scale and the other scales used in this study.

Test of the Hypotheses

Ten hypotheses were tested. The first four hypotheses dealt with comparisons between the two groups, the general community and the chronically mentally ill. All four hypotheses were supported. Hypotheses five through ten dealt with the relationships of strain, coping methods, and quality of life for each group. These hypotheses were also supported; however, hypotheses seven and eight were weakly supported.

The first hypothesis is that the chronically mentally ill report higher levels of strain than the general community. The hypothesis was tested by computing *t*-tests to compare the means of the two samples on the two strain scales, the Health Opinion Survey (HOS), and the Psychological Distress Scale. Table 5 summarizes the findings. The chronically mentally ill reported significantly ($p \leq .05$), more strain than the community sample on the HOS. Significance was not reached on the Psychological Distress Scale; however, the results did occur in the predicted direction of the chronically mentally ill

Table 5

Summary of t-tests Comparing the General Community (C) and the Chronically Mentally Ill (CMI) on the Strain, Coping Methods, and Oregon Quality of Life Questionnaire (OQLQ) Scales

	C (N=60)		CMI (N=30)		
Scale	Mean	SD	Mean	SD	t
			Strain		
Health Opinion Survey	1.41	.26	1.57	.41	-1.93*[a]
Psychological Distress	1.62	.39	1.78	.51	-1.63
			Coping		
Long-term	2.60	.49	2.30	.55	2.59**
Short-term	1.67	.41	1.88	.51	-1.97*
			OQLQ		
Lack of Tolerance of Stress[b]	1.43	.50	1.81	.61	-2.85**
Need Satisfaction	3.27	.44	3.07	.60	1.61
Independence	2.79	.53	2.81	.68	-0.13
Confidence	3.09	.33	2.80	.41	3.62***
Friend Role	3.60	.41	2.96	.62	5.05***[a]
Spouse Role[c]	3.34	.59	3.33	.41	.04
Social Support	3.36	.52	2.96	.68	3.02**
Employability	3.14	.55	2.54	.68	4.47***

[a] Separate variance estimate was used in the denominator of t-test because the homogeneity of variance assumption was violated.

[b] (C) N=55, (CMI) N=23

[c] (C) N=36, (CMI) N=9

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

reporting higher levels of Psychological Distress. The groups can be said to differ on the variable strain.

The second hypothesis is that the chronically mentally ill report less use of long-term coping methods than the general community. A t-test showed a significant ($p \leq .01$) difference between the two groups with the chronically mentally ill reporting less use of long-term coping methods than the general community. Table 5 summarizes the findings for this hypothesis and the third hypothesis, that the chronically mentally ill report greater use of short-term coping methods than the general community. A t-test showed a significant ($p \leq .05$) difference between the two groups in the expected direction.

The fourth hypothesis is that the chronically mentally ill report a lower quality of life than the general community. This hypothesis was tested by using t-tests to compare the means of the two groups on the eight OQLQ Scales. Table 5 summarizes the results. No differences were noted for the two groups on the scales measuring Need satisfaction, Independence, and Spouse Role. The groups differed on the scales measuring Lack of Tolerance of Stress ($p \leq .01$), Confidence ($p \leq .001$), Friend Role ($p \leq .001$), Social Support ($p \leq .01$), and Employability ($p \leq .001$).

The fifth hypothesis is that strain is negatively related to quality of life. This hypothesis was tested by calculating the correlation coefficients for the two strain scales and the eight OQLQ scales, and comparing them for the community and the chronically mentally ill groups. Table 6 lists the results of these correlations. Of the sixteen tests of significance for each strain scale, eleven

Table 6

Correlation of Strain Scales and Oregon Quality of Life (OQLQ) Scales for the General Community (C) N=60 and the Chronically Mentally Ill (CMI) N=30

OQLQ Scales		Health Opinion Survey	Psychological Distress
Lack of Tolerance of Stress[a]	C	.28*	.68***
	CMI	.43*	.60***
Need Satisfaction	C	-.07	-.18
	CMI	-.39*	-.52**
Independence	C	-.34**	-.27*
	CMI	-.53***	-.40*
Confidence	C	-.35**	-.33**
	CMI	-.49**	-.61***
Friend Role	C	-.33**	-.40***
	CMI	-.59***	-.50**
Spouse Role[b]	C	-.13	-.31*
	CMI	.27	-.06
Social Support	C	-.08	-.03
	CMI	-.20	-.10
Employability	C	-.35**	-.19
	CMI	-.30*	-.31*

[a] (C) N=55, (CMI) N=23

[b] (C) N=36, (CMI) N=9

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

were significantly ($p \leq .05$) negatively related to quality of life on each scale. Lack of Tolerance of Stress, Independence, Confidence, and Friend Role were significantly correlated with both strain scales for both groups. Need Satisfaction was significantly correlated with both strain scales, only for the chronically mentally ill. Spouse Role was significantly related to strain as measured by the Psychological Distress Scale, only for the community group, but was not significantly related to the HOS for either group. Employability was significantly correlated with the HOS for both groups, and with the Psychological Distress Scale for only the chronically mentally ill.

Hypotheses six and seven compare the relationship of strain and coping methods. These hypotheses were tested by calculating the correlation coefficients for long-term and short-term coping methods and the two strain scales, and comparing them for the community and chronically mentally ill groups. Table 7 lists the results of these correlations. For both groups, the two strain scales were positively correlated with short-term coping methods ($p \leq .001$). However, strain was negatively correlated with long-term coping methods only for the community sample, and only on the HOS.

Hypotheses eight and nine focus on the relationship of coping methods and quality of life. These hypotheses were tested by calculating the correlation coefficients of the short-term and long-term coping methods scales with the eight OQLQ scales for both the community and chronically mentally ill groups. See Table 7 for the results of these correlations. Hypothesis eight states that short-term coping is negatively related to quality of life. Of the

Table 7

Correlation of Short-term Coping Methods, Long-term Coping Methods, and Proportion of Long-term Coping Methods to Total (LT/total) with Strain Scales and Oregon Quality of Life Questionnaire (OQLQ) Scales for the General Community (C) N=60 and the Chronically Mentally Ill (CMI) N=30

Scale		Short-term Coping	Long-term Coping	LT/total
		Strain		
Health Opinion Survey	C	.31**	-.29*	-.27*
	CMI	.59***	-.28	-.53***
Psychological Distress	C	.47***	-.20	-.47***
	CMI	.59***	-.24	-.53***
		OQLQ		
Lack of Tolerance of Stress[a]	C	.38**	-.28*	-.42***
	CMI	.34	-.49**	-.32
Need Satisfaction	C	-.28*	-.01	.29*
	CMI	-.48**	-.03	.33*
Independence	C	.21	.27*	-.19
	CMI	-.23	.04	.19
Confidence	C	-.19	.21	.10
	CMI	-.28	.34*	.35*
Friend Role	C	-.21	.48***	.14
	CMI	-.32*	.39*	.39*
Spouse Role[b]	C	-.38*	.25	.26
	CMI	.40	.21	-.46
Social Support	C	-.27*	.22*	.36*
	CMI	.02	.47**	.13
Employability	C	-.04	.27*	.09
	CMI	-.04	.51**	.14

[a] (C) N=55, (CMI) N=23

[b] (C) N=36, (CMI) N=9

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

sixteen tests of significance, six showed a significant negative correlation ($p \leq .05$) of short-term coping methods with quality of life. Thirteen of the sixteen tests were in the predicted direction. Need Satisfaction was the only OQLQ scale significantly related to short-term coping for both groups. Lack of Tolerance of Stress, Spouse Role, and Social Support were significantly negatively related to short-term coping for the general community. Friend Role was the only other significant correlation ($p \leq .05$) for the chronically mentally ill. Hypothesis nine states that long-term coping is positively related to quality of life. Ten of the sixteen tests of significance indicated that long-term coping methods were positively related to quality of life ($p \leq .05$). Lack of Tolerance of Stress, Friend Role, Social Support, and Employability were significantly related to long-term coping for both groups. Independence was significantly related to long-term coping only for the general community, and confidence was significantly related to long-term coping ($p \leq .05$) only for the chronically mentally ill.

The tenth hypothesis is that individuals whose overall coping methods are composed of higher proportions of long-term coping report lower levels of strain and higher quality of life. A new variable, the proportion of long-term coping methods to total coping methods (LT/total), was computed for each individual by dividing the long-term coping methods score by the total coping methods score. The hypothesis was tested using the correlation of the proportion LT/total with the two strain scales and with the eight OQLQ scales. These

correlations were computed for both the community and the chronically mentally ill groups. Table 7 lists the results of these correlations. For each group, persons who use a higher proportion of long-term coping methods report significantly ($p \leq .001$) lower levels of strain than do persons who use a lower proportion of long-term coping methods. On the eight OQLQ scales, only the correlation between the Need Satisfaction scale and the proportion of long-term coping methods was significant ($p \leq .05$) for both groups. Community persons who use a higher proportion of long-term coping methods also report increased Tolerance of Stress ($p \leq .001$) and more Social Support ($p \leq .05$) than community persons using a lower proportion of long-term coping methods. Chronically mentally ill persons who use a higher proportion of long-term coping methods report increased Confidence and Friendship ($p \leq .05$) compared to chronically mentally ill persons using a lower proportion of long-term coping methods.

CHAPTER IV

DISCUSSION

A major premise of this study was that the types of coping methods an individual uses influences the degree of strain experienced as well as overall quality of life experienced. The relationship of coping methods and strain will be discussed first, followed by a discussion of the relationship of coping methods and quality of life. Psychometric qualities of the Coping Methods Scale will be discussed last.

Ten hypotheses were tested in this study and all were supported. The first four hypotheses dealt with comparing the two groups on the study variables. The remaining six hypotheses examined the relationship between the study variables within each group.

Coping Methods and Strain

According to the Stress-Strain-Coping model developed for this study, coping methods are employed to decrease strain within the human system. Strain is a function of the type and number of stressors acting upon the system, and the degree of effectiveness of coping methods employed by the individual. Theoretically, a greater use of long-term coping methods helps the individual deal more effectively with the source of strain, thereby decreasing residual strain within the system. Short-term coping methods may help decrease strain temporarily, but do not deal effectively with the source of strain.

If one used only short-term coping methods, residual strain would eventually outweigh one's ability to decrease it by short-term means and negative adaptation or illness is then likely to occur.

The results of this study indicate that greater use of short-term coping methods is related to higher levels of psychophysiological symptoms of strain for both the general community and the chronically mentally ill. The use of long-term coping methods, in and of themselves, is not significantly related to lower levels of strain; however, the use of a blend of coping methods, specifically with a higher proportion of long-term methods, is strongly associated with lower levels of strain for both groups. These findings would support the theory that excessive use of short-term coping methods eventually produces residual strain within the system resulting in a total level of strain which is experienced as psychophysiological symptoms. The finding that a blend of short-term and long-term coping methods, with a higher proportion of long-term methods, is related to lower levels of strain lends support to the theoretical framework of this study. The use of some short-term methods is likely to be effective at decreasing strain to a manageable limit, but greater use of long-term methods is likely to be more effective in preventing residual strain. It is not absolutely clear, however, whether the presence of lower levels of stress and strain simply allow the person to use long-term coping methods more frequently or whether the use of a greater proportion of long-term coping methods actually decreases strain. It may be that as an individual is confronted with increased stressors, short-term coping methods may be more readily available to the individual rather than

long-term coping methods, and as the number and type of stressors decrease more long-term coping methods may be employed.

To better understand the role of strain and coping for the general community and the chronically mentally ill, the two groups were compared on strain and coping to determine if they did, indeed, differ on these characteristics as suggested by the literature.

The two groups differed on the strain variable, although not to the degree that was expected. The chronically mentally ill reported significantly more strain than the general community on the Health Opinion Survey, but the difference failed to reach significance on the Psychological Distress Scale. One possible reason for this is that the chronically mentally ill individuals were all involved in a treatment program, and therefore may have attained enough symptom control so as not to be experiencing psychophysiological symptoms to a high degree at the time of the interviews.

The two groups differed quite significantly on the Coping Methods subscales. The chronically mentally ill reported using more short-term and fewer long-term coping methods than the general community. These findings are similar to others reported in the literature. When these findings are considered with the findings that the chronically mentally ill report higher levels of strain as well as significantly lower quality of life on most of the OQLQ scales, one can recognize that the chronically mentally ill sample represent a population at risk. According to the literature, the chronically mentally ill typically have a limited repertoire of coping skills with which to meet the

stressful demands of daily living and may become symptomatic when coping efforts fail.

The two groups were found to differ on strain, coping methods, and quality of life, and a relationship was found between the use of a greater proportion of long-term coping methods and lower levels of strain for both groups. These findings have implications for nursing in terms of assisting individuals to learn and utilize more long-term, constructive methods of coping to promote positive adaptation to stress and illness. It is important for mental health professionals to recognize that assisting clients to learn more long-term coping methods may influence positively the degree of strain experienced as clients face the stresses of daily living as well as major life crises.

Strain and Quality of Life

It was hypothesized that strain would be negatively related to quality of life for both groups. This hypothesis was strongly supported for both groups for both measures of strain.

For the general community higher levels of strain are negatively related to the ability to tolerate stress, a sense of independence and confidence, the ability to form and maintain close friendships, and self-impression of ability to obtain employment.

For the chronically mentally ill, higher levels of strain are associated with lower quality of life as reflected by six of the eight OQLQ scales. The only two OQLQ scales not significantly correlated with strain for the chronically mentally ill were Spouse Role and Social Support. Since only 27% of the chronically mentally ill were

married and correlations were weak, it is not possible to state whether higher levels of strain have any association, positively or negatively, with the marital relationship for the chronically mentally ill.

No relationship between strain and Social Support was found for either group. It was expected that a negative relationship would exist. Correlations were in the predicted direction, but since they did not reach significance it is possible that social support is perceived as either available or not, despite the level of strain one is experiencing.

Coping Methods and Quality of Life

A primary focus of this study was to examine the relationship of coping methods and quality of life. Eight scales from the OQLQ were utilized to examine this relationship.

It was hypothesized that the chronically mentally ill report a lower quality of life than the general community. It was further hypothesized that within each group short-term coping is negatively related, and long-term coping is positively related, to quality of life. Additionally, it was hypothesized that individuals whose overall coping methods are composed of a higher proportion of long-term methods report higher quality of life.

The two groups differed substantially on five of the eight OQLQ scales, with the chronically mentally ill reporting lower quality of life than the general community.

With regard to coping and quality of life, the strongest pattern of results indicated that for both groups a greater use of long-term

coping methods is significantly related to higher quality of life. A somewhat weaker pattern of relationships was found between a greater use of short-term coping methods and lower quality of life, and between the proportion variable (LT/Total coping methods) and higher quality of life.

For the general community it was found that a greater use of short-term coping methods is negatively related to an individual's ability to tolerate stress, satisfy needs, utilize social support, and gain satisfaction from a marital relationship. The chronically mentally ill who use more short-term coping methods have greater difficulty satisfying needs and in forming and maintaining close friendships.

For both groups, those who use more long-term coping methods report a greater ability to tolerate stress, maintain friendships, utilize social support, and feel confident about their ability to obtain employment. Community persons also report increased independene, and chronically mentally ill persons report increased confidence. These findings are of interest in that many of the long-term coping items deal with utilizing support from others or drawing upon self confidence in handling difficult situations, characteristics which are measured throughout the OQLQ scales.

For both groups in this study there is a strong relationship between the types of coping methods individuals use and their resulting reported quality of life. Since it was found that a greater use of long-term coping methods may positively affect many aspects of quality of life for both, some implications can be seen for health care providers. Exploring alternative coping strategies and techniques with

clients and assisting them to choose methods that provide longer-term relief can impact both the prevention of illness as well as positive adaptation when illness occurs.

Coping Methods Subscales

For the purpose of this study the reliability of the two Coping Methods subscales can be considered adequate. The subscales appear to have face validity, content validity, and adequate construct validity. All hypotheses dealing with the Coping Methods Scale were supported, thereby lending additional construct validity to the instrument.

Further evidence for the validity of the coping subscales is provided by the similarity of results from this study and the findings of Bell (1977) from which the majority of coping methods items were taken. Bell described similar differences between the two groups in the use of short-term and long-term coping methods.

The same interrater reliability test used for the OQLQ was not performed for the Coping Methods Scale; however, the three interviewers did practice administration of the instrument and all three had the same guidelines available for rewording of questions, if necessary. It would be desirable to improve the short-term coping methods subscale beyond its alpha coefficient of .63. As further research is conducted in this relatively new field of the assessment of coping methods, it is likely that more discriminating measures of coping will be developed.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Stress and strain affect all individuals in modern society. The degree to which negative consequences result from strain is to some extent dependent upon the ways in which individuals cope. One's quality of life is influenced by the individual's ability to cope with the stressors which confront him or her. Nursing activities are aimed at promoting positive adaptation to change and illness by assisting individuals to learn and utilize effective methods of coping with stress and strain.

This research effort was aimed at examining how individuals cope with perceived stress, and the relationship of coping to one's quality of life. A concept of stress and strain was formulated, with the mediating psychological process of coping added to determine how coping is associated with strain and overall quality of life. It was predicted that the more an individual uses long-term coping methods than short-term coping methods, the individual will report lower levels of strain and higher quality of life. It was further predicted that chronically mentally ill individuals would use less long-term coping methods and more short-term coping methods, report higher levels of strain, and express lower quality of life than the general community.

In general, the results of the study supported all of the predictions. The most important conclusion of this study is that a greater use of long-term coping methods is related to decreased strain and higher quality of life for both groups.

Suggestions for Further Research

Further research utilizing the instruments employed in this study should be conducted to determined if the relationships found in this study among strain, coping, and quality of life generalize to other subgroups, including those based on race, religion, income, level of education, male vs. female, and rural vs. urban populations. Naturalistic or longitudinal research would be an ideal framework in which to observe the relationship of actual strain-producing events and the specific coping methods employed to deal with the strain. Naturalistic and longitudinal research is very costly, however, both in terms of time and money. An interview format such as the type utilized in this study could be made more realistic by presenting the respondents with hypothetical strain-producing situations such as loss of a job or death of a spouse, and then ask them to identify how they would cope. It would be important to describe these situations as realistically as possible so as to evoke an emotional response to which the individual must attempt to cope.

Implications for Nursing

Since nurses most often come into contact with clients experiencing at least some degree of strain, it is recommended from the results of this study that nurses evaluate their client's current as

well as usual methods of coping. Client teaching can be aimed at assisting the client to learn and utilize greater proportions of long term coping methods. The Coping Methods Scale could be utilized as an assessment tool during health screenings and especially in mental health settings. Combined with either of the Strain Scales this could provide a quickly administered assessment of a client's current psychophysiological symptoms of strain and his or her usual methods of coping with stress and strain.

Assessment of this type coupled with an assessment of the current stressful situations confronting the individual could quickly and accurately identify problem areas, weaknesses, and strengths of the individual to consider when developing a plan of care.

REFERENCE NOTES

1. Hardesty, F. Comparative study of the mental health of rural and urban residents. Unpublished research, Oregon Health Sciences University, 1981.
2. Mikesell, J. Study relating environmental opportunities to the mental health of rural and urban residents. Master's thesis proposal, Oregon Health Sciences University, 1980.
3. Shank, K. The meaning and measurement of leisure as an aspect of quality of life among the chronically mentally ill. Master's thesis, Oregon Health Sciences University, 1983.

REFERENCES

Andrews, G., Tennant, C., Hewson, D. M., & Vaillant, G. E. Life event stress, social support, coping style and risk of psychological impairment. Journal of Nervous and Mental Disease, 1978, 166, 307-316.

Appley, M., & Trumbull, R. Psychological stress: Issues in research. New York: Appleton-Century Crofts, 1967.

Bateson, G. Steps to an ecology of the mind. San Francisco: Chandler Publishing Co., 1972.

Bell, J. M. Stressful life events and coping methods in mental-illness and mental-wellness behaviors. Nursing Research, 1977, 26, 136-140.

Bigelow, D. A., Brodsky, A., Stewart, L., & Olson, M. The concept and measurement of quality of life as a dependent variable in evaluation of mental health services. In N. W. Tash & G. Stahler (Eds.), Innovative approaches to mental health evaluation. New York: Academic Press, 1982.

Bradburn, N. The structure of psychological well-being. Chicago: Aldine, 1969.

Brown, B. New mind, new body. New York: Harper & Row, 1975.

Campbell, A., & Converse, P. (Eds.), The human meaning of social change. New York: Russell Sage Foundation, 1972.

Cannon, W. B. The interrelations of emotions as suggested by recent physiological research. American Journal of Psychology, 1914, 25, 256-282.

Cannon, W. B. Bodily changes in pain, hunger, fear, and rage. Boston: C. T. Branford Co., 1929.

Cannon, W. B. Stresses and strains of homeostasis. American Journal of Medical Science, 1935, 189, 1-14.

Cantril, H. The pattern of human concerns. New Brunswick, N.J.: Rutgers University Press, 1965.

Center for Population Research and Census, Portland State University, 1979.

Chrisman, M., & Riehl, J. P. The systems-developmental stress model. In J. P. Riehl & Sr. C. Roy (Eds.), Conceptual models for nursing practice. New York: Appleton-Century-Crofts, 1974.

Cobb, S., & Lindemann, E. Coconut Grove burns: Neuropsychiatric observations. Annals of Surgery, 1943, 117, 814-824.

Cumming, J. The inadequacy syndrome. Psychiatric Quarterly, 1963, 37, 465-481.

Dalkey, N. Studies in the quality of life: Delphi and decision making. Lexington, Mass.: Lexington Books, 1972.

Dohrenwend, B. S. Social stress and community psychology. American Journal of Community Psychology, 1978, 6, 1-14.

Dohrenwend, B. S. & Dohrenwend, B. P. Class and race as status related sources of stress. In S. Levine & N. A. Scotch (Eds.), Social stress. Chicago: Aldine, 1970.

Edgerton, J. W., Bentz, W. K., & Hollister, W. G. Demographic factors and responses to stress among rural people. American Journal of Public Health and the Nation's Health, 1970, 60, 1065-1071.

Folkman, S., & Lazarus, R. S. An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 1980, 21, 219-239.

Fontana, A. F., Dowds, B. N., Marcus, J. L., & Rakusin, J. M. Coping with interpersonal conflicts through life events and hospitalization. Journal of Nervous and Mental Disease, 1976, 162, 88-98.

Friedman, D., Chodoff, S., Mason, J. W., & Hamburg, D. Behavioral observations on parents anticipating the death of a child. Pediatrics, 1963, 32, 610-625.

Froberg, J., Karlsson, C. G., Levi, L., & Lindberg, L. Physiological and biochemical stress reactions induced by psychosocial stimuli. In L. Levi (Ed.), Society, stress and disease. New York: Oxford University Press, 1971.

Grinker, R. R., & Spiegel, J. P. Men under stress. Philadelphia: Blakiston, 1945.

Gunderson, E., Arthur, R. J., & Wilkins, W. L. A mental health survey instrument: The health opinion surveys. Military Medicine, 1968, 133, 306-311.

Gurin, G., Veroff, G., & Feld, S. Americans view their mental health: A nationwide survey. New York: Basic Books, 1960.

Helson, H. Adaptation-level theory: An experimental and systematic approach to behavior. New York: Harper and Row, 1964.

Hinkle, L. E. The concept of stress in the biological and social sciences. The International Journal of Psychiatry in Medicine, 1974, 5, 335-357.

Hollingshead, A. B., & Redlich, F. C. Social class and mental illness. New York: Wiley, 1958.

Holmes, T. H., & Rahe, R. H. The social readjustment rating scale. Journal of Psychosomatic Research, 1967, 11, 213-218.

Janis, I. L. Psychological stress: Psychoanalytic and behavioral studies of surgical patients. New York: John Wiley and Sons, 1958.

Janis, I. L. When fear is healthy. Psychology Today, 1968, 46, 60-61.

Lamb, H. R. Guiding principles for community survival. In H. R. Lamb (Ed.), Community survival for long-term patients. San Francisco: Jossey-Bass Publishers, 1976.

Lazarus, R. S. Psychological stress and the coping process. New York: McGraw-Hill, 1966.

Lazarus, R. S. Patterns of adjustment and human effectiveness. New York: McGraw-Hill, 1969.

Lazarus, R. S. Psychological stress and coping in adaptation and illness. International Journal of Psychiatry in Medicine, 1974, 5, 321-333.

Lazarus, R. S., Averill, J. R., & Opton, E. M. The psychology of coping: Issues of research and assessment. In G. V. Coehlo, D. A. Hamburg, & J. E. Adams (Eds.), Coping and adaptation. New York: Basic Books, 1974.

Lazarus, R. S., Kanner, A., & Folkman, S. Emotions: A cognitive phenomenological analysis. In Plutchik, R., & Kellerman, H. (Eds.), Emotion: Theory, research and experience, Vol. 1: Theories of Emotion. New York: Academic Press, 1980.

Lazarus, R. S., & Launier, R. Stress-related transactions between person and environment. In Pervin, L. A. & Lewis, M. (Eds.), Perspectives in interactional psychology. New York: Plenum Press, 1978.

Leighton, D. C., Harding, J. S., Macklin, D. B., Hughes, C. C., & Leighton, A. H. Psychiatric findings of the Stirling County study. American Journal of Psychiatry, 1963, 1021-1026.

Leighton, D. C., Harding, J. S., Macklin, D. B., Macmillan, C. C., & Leighton, A. H. The character of danger. New York: Basic Books, 1962.

Macmillan, A. M. The health opinion survey: Technique for estimating prevalence of psychoneurotic and related types of disorder in communities. Psychological Reports, 1957, 3, 325-339.

Mason, J. W. A reevaluation of the concept of non-specificity in stress theory. Journal of Psychiatric Research, 1971, 8, 323-333.

Mason, J. W. A historical view of the stress field--part one. Journal of Human Stress, 1975, 1, 6-12.

Mechanic, D. Students under stress: A study in the social psychology of adaptation. Glencoe, Ill.: The Free Press of Glencoe, 1962.

Mechanic, D. Alternatives to mental hospital treatment: A sociological perspective. In L. I. Stein & M. A. Test (Eds.), Alternatives to mental hospital treatment. New York: Plenum Press, 1978.

Menninger, K. The vital balance. New York: Viking Press, 1963.

Monat, A., Averill, J. R., & Lazarus, R. S. Anticipatory stress and coping reactions under various conditions of uncertainty. Journal of Personal and Social Psychology, 1972, 24, 237-253.

Monat, A., & Lazarus, R. S. Stress and coping. New York: Columbia University Press, 1977.

Mueller, D. P., Edwards, D. W., & Yarvis, R. M. Stressful life events and psychiatric symptomatology: Change or undesirability? Journal of Health and Social Behavior, 1977, 18, 307-317.

Myers, J. K., & Bean, L. L. A decade later: A followup of social class and mental illness. New York: John Wiley and Sons, 1968.

Myers, J. K., Lindenthal, J. J., & Pepper, M. P. Social class, life events and psychiatric symptoms. In B. S. Dohrenwend & B. P. Dohrenwend (Eds.), Stressful life events: Their nature and effects. New York: John Wiley and Sons, 1974.

Oregon Revised Statutes, Chapter 784. Approved by the Governor, State of Oregon, 1979.

Pearlin, L. I., & Schooler, C. The structure of coping. Journal of Health and Social Behavior, 1978, 19, 2-21.

Robbins, P. R., & Tanck, R. H. A factor analysis of coping behaviors. Journal of Clinical Psychology, 1978, 34, 379-380.

Roy, Sr. C. The Roy adaptation model. In J. P. Riehl & Sr. C. Roy (Eds.), Conceptual models for nursing practice. New York: Appleton-Century-Crofts, 1974.

Schrodinger, E. What is life? The physical aspect of the living cell: and mind and matter. London: Cambridge University Press, 1967.

Schwab, J., Warheit, G., & Holzer, C. Mental health: Rural-urban comparisons. Proceedings of the 4th International Congress of Social Psychology, 1972, 237.

Scott, W. Attitude measurement. In G. Lindzey & E. Aronson (Eds.), Handbook of social psychology (Vol. 1). Reading, Mass.: Addison Wesley Publishing, 1968.

Selye, H. The stress of life. New York: McGraw-Hill, 1956.

Sidle, A., Moos, R., Adams, J., & Cady, P. Development of a coping scale. Archives of General Psychiatry, 1969, 20, 226-233.

Test, M. A., & Stein, L. I. Community treatment of the chronic patient: Research overview. Schizophrenia Bulletin, 1978, 4, 350-364.

Timmreck, T. C., & Stratton, L. H. The health opinion survey translated into Spanish as a measure of stress for hispanic cultures. Journal of Psychiatric Nursing and Mental Health Services, 1981, 19(1), 9-13.

Tolsdorf, C. C. Social networks, support, and coping: An exploratory study. Family Process, 1976, 15, 407-417.

Turner, J. E. C., & Shifren, I. Community support systems: How comprehensive? In L. I. Stein (Ed.), Community support systems for the long-term patient. San Francisco: Jossey-Bass, 1979.

Vaillant, G. E. Adaptation to life. Boston: Little, Brown and Company, 1977.

White, R. Strategies of adaptation: An attempt at systematic description. In G. V. Coehlo, D. A. Hamburg, & J. E. Adams (Eds.), Coping and adaptation. New York: Basic Books, 1974.

Wing, J. K. The response of severely ill chronic schizophrenic patients to social stimulation. In L. C. Wynne, R. L. Cromwell, & S. Matthysse (Eds.), The nature of schizophrenia: New approaches to research and treatment. New York: John Wiley and Sons, 1978.

APPENDIX A

Random Selection of Interviewee

Instructions for Randomly Selecting a Householder to be Interviewed for the OQLQ Community Sample Study

Use a single die in a cup

1 person in the household	and they will be interviewed if they agree
2 persons in the household	even = first person odd = second
3 persons in the household	1 or 6 = first, 2 or 4 = second, 3 or 5 = third
4 persons in the household	don't use 5 or 6 on the die, assign 1-4 to 4 persons select the person corresponding to the number which is rolled
5 persons in the household	don't use 6 on the die, assign 1-5 to the 5 persons and select the person corresponding to the number which is rolled
6 persons in the household	assign 1-6 to the 6 persons and select the person corresponding to the number which is rolled
7 or more persons for 7 divide 4 and 3 for 8 divide 4 and 4 for 9 divide 5 and 4 and so on	divide into two groups even = first group odd = second throw the die and select a group assign numbers to the persons in the group selected and follow the instructions for the number as shown above

APPENDIX B

Consent Form

UNIVERSITY OF OREGON HEALTH SCIENCES CENTER
SCHOOL OF NURSING

Consent Form for OQLQ

I, _____, agree to serve as a subject in the research survey named "A Study of Quality of Life" by Dr. Douglas Bigelow and Dr. Florence Hardesty, principle investigators. The study is aimed at better understanding and measuring people's quality of life. I agree to participate in an interview which will take approximately one hour, and will ask questions regarding:

How I am feeling.
How I am getting along with family and friends.
How I am spending my time.
Whether I am having any difficulties with alcohol and drugs.
Whether I have had any recent contact with the law.

Participation in this interview is completely voluntary.

I understand I am free to refuse to answer any question I do not wish to answer.
I understand I can stop the interview if I wish.
The information obtained will be kept confidential by the use of code numbers.
Information will not be released to anyone for purposes other than research.
I may benefit from my participation in this study by becoming more aware of my quality of life.

"It is not the policy of the Department of Health, Education and Welfare, or any other agency funding the research project in which you are participating, to compensate or provide medical treatment for human subjects in the event the research results in physical injury. The University of Oregon Health Sciences Center, as an agency of the state, is covered by the State Liability Fund. If you suffer injury from the research project, compensation would be available to you only if you establish that the injury occurred through the fault of the Center, its officers or employees". If you have further questions please call Dr. Michael Baird at (503) 225-8014.

Sandie McAllister has offered to answer any questions I might have about my participation in this study.

. . . . . .

I have read or listened to the above information regarding the interview and I am willing to proceed. I give my permission to allow the information collected in this interview to be used for research purposes only.

Date_____

_____ _____
Witness Signature

APPENDIX C

Oregon Quality of Life Questionnaire

Oregon Quality of Life Questionnaire (1979)

Department of Human Resources

These questions ask about how you have been feeling in the past week. Pleasant and unpleasant feelings of several different kinds are covered.

In the past week, how often have you felt very restless, unable to sit still, or fidgety?	4 all the time 3 often 2 several times 1 none of the time	01-01
In the past week, how often have you enjoyed your leisure hours (evenings, days off, etc.):	4 all the time 3 often 2 several times 1 none of the time	01-02
In the past week, how often have you felt preoccupied with your problems (can't think of anything else)?	4 all the time 3 often 2 several times 1 none of the time	01-03
In the past week, how often have you been pleased with something you did?	4 all the time 3 often 2 several times 1 none of the time	01-04
In the past week, how often have you felt unpleasantly different from everyone and everything around you?	4 all the time 3 often 2 several times 1 none of the time	01-05
In the past week, how often have you felt proud because you were complimented?	4 all the time 3 often 2 several times 1 none of the time	01-06
In the past week, how often have you felt fearful or afraid?	4 all the time 3 often 2 several times 1 none of the time	01-07
In the past week, how often have you felt that things were "going your way"?	4 all the time 3 often 2 several times 1 none of the time	01-08
In the past week, how often have you felt sad or depressed?	4 all the time 3 often 2 several times 1 none of the time	01-09
In the past week, how often have you felt excited or interested in something?	4 all the time 3 often 2 several times 1 none of the time	01-10

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In the past week, how often have you felt angry?	4 all the time 3 often 2 several times 1 none of the time	01-11
In the past week, how often have you felt that life was going just about right for you?	4 all the time 3 often 2 several times 1 none of the time	01-12
In the past week, how often have you felt mixed-up or confused?	4 all the time 3 often 2 several times 1 none of the time	01-13
In the past week, how often have you felt tense (uptight)?	4 all the time 3 often 2 several times 1 none of the time	01-14
In the past week, how often have you felt good about decisions you've made?	4 all the time 3 often 2 several times 1 none of the time	01-15
In the past week, how often have you had trouble sleeping?	4 all the time 3 often 2 several times 1 none of the time	01-16
In the past week, how often have you felt like you've spent a worthwhile day?	4 all the time 3 often 2 several times 1 none of the time	01-17
In the past week, how often have you had trouble with poor appetite, or inability to eat?	4 all the time 3 often 2 several times 1 none of the time	01-18
In the past week, how often have you felt serene and calm?	4 all the time 3 often 2 several times 1 none of the time	01-19
In the past week, how often have you had trouble with indigestion?	4 all the time 3 often 2 several times 1 none of the time	01-20
In the past week, how often have you found yourself really looking forward to things?	4 all the time 3 often 2 several times 1 none of the time	01-21
In the past week, how often have you had trouble with fatigue?	4 all the time 3 often 2 several times 1 none of the time	01-22
Did _____ make any difference to the way you feel?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-01

Everybody has unpleasant feelings sometimes: we wake up depressed, get upset or frustrated or frightened. These questions ask how much difficulty you have had recently in handling these unpleasant feelings.

How much difficulty have you had handling feelings of depression?	3 great difficulty 2 some difficulty 1 no difficulty	02-01
How much difficulty have you had handling being upset?	3 great difficulty 2 some difficulty 1 no difficulty	02-02
How much difficulty have you had handling frustration?	3 great difficulty 2 some difficulty 1 no difficulty	02-03
How much difficulty have you had handling being frightened or shaken up?	3 great difficulty 2 some difficulty 1 no difficulty	02-04
Has _____ made any difference to how you handle unpleasant feelings?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-02

These questions ask about your living situation, eating, income, transportation, and medical care. The purpose is to see if these needs are met to at least a minimum level of satisfaction.

How satisfied are you with your home--its state of repair, amount of room, furnishing, warmth, lighting, etc.?	4 very satisfied 3 satisfied 2 dissatisfied 1 very dissatisfied	03-01
How satisfied are you with your home, considering the amount of privacy, your neighbors, security, etc.?	4 very satisfied 3 satisfied 2 dissatisfied 1 very dissatisfied	03-02
Did _____ affect your living situation?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-03
This question asks about how well your income covers things you must have--food, medicine, clothing, etc. How adequate is your present income for your present needs?	4 very adequate 3 adequate 2 inadequate 1 very inadequate	03-03
Are you worried about your future income covering the things you must have?	4 terribly worried 3 quite worried 2 slightly worried 1 not at all worried	03-04
Did _____ affect the adequacy of your income?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-04
Can you get around town as you need for work, shopping, medical appointments, visiting, etc. ?	4 can't get around at all 3 with much difficulty 2 with little difficulty 1 with no difficulty	03-05

Did _____ affect your ability to get around the community?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-06
In the last month, have you had difficulty getting medical care?	2 yes 1 no	03-06
Do you have a regular or family doctor?	2 yes 1 no	03-07
Do you have medical insurance?	2 yes 1 no	03-08
Do you know where to get emergency medical help?	2 yes 1 no	03-09
Did _____ affect your medical care?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-07

These questions ask how you handle making decisions, dealing with conflict, asserting yourself, etc.

In the last week, how did you find shopping, paying bills, preparing meals, and generally looking after your basic necessities?	4 very easy 3 fairly easy 2 rather difficult 1 very difficult	04-01
...and how enjoyable was it?	4 very enjoyable 3 fairly enjoyable 2 fairly unpleasant 1 very unpleasant	04-02
In the last week, how often did you go out?	4 more than 3 times 3 2 or 3 times 2 once 1 never	04-03
When you receive broken merchandise, poor service, or are overcharged, how hard is it for you to complain to the store, dealer or company?	4 can't do it at all 3 very hard 2 a little hard 1 not hard at all	04-04
When you want to join a conversation (e.g., at a party) how hesitant do you feel about doing so?	4 can't do it all 3 very hesitant 2 slightly hesitant 1 not at all hesitant	04-05
When you are treated unfairly by someone you know well (family, close friend) how difficult is it for you to tell them so?	4 can't do it at all 3 very difficult 2 slightly difficult 1 not difficult	04-06
How confident are you in the decisions you make for yourself (what to buy, where to live, what to do, etc.)?	4 quite confident 3 some confidence 2 little confidence 1 no confidence	04-07
How often do you put off making important decisions until it is too late?	4 always 3 often 2 occasionally 1 never	04-08

Did _____ affect your ability to make decisions, deal with conflict, and assert yourself?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-08

These questions ask how you have been getting along with people in the last week.

In the past week, how many times have you spoken with neighbors?	4 more than 3 times 3 2 or 3 times 2 once 1 never	05-01
In the last week, how often have you spoken with people you saw at work or school or other daily activity?	4 more than 3 times 3 2 or 3 times 2 once 1 never	05-02
Do you feel that people avoid you?	4 all the time 3 often 2 occasionally 1 never	05-03
Do you feel that people are not nice to you?	4 all the time 3 often 2 occasionally 1 never	05-04
How comfortable do you feel being around people?	4 very uncomfortable 3 uncomfortable 2 comfortable 1 very comfortable	05-05
Last week, how often did you get to places where you could meet new people?	4 every day 3 several times 2 once 1 not at all	05-06
Did _____ affect how you get along with people?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-09

These questions ask how you have been getting along with your close friends recently.

How easily do you make close friendships?	4 can't do it at all 3 with much difficulty 2 with a little difficulty 1 quite easily	06-01
Do you have any close friends?	2 yes 1 no	06-02
(If "yes") In the last week, how much of your free time did you spend with close friends talking or doing things together?	4 almost all 3 about half 2 very little 1 none	06-03
In the last month, how many times have you had contact by visit, phone, or mail with friends who live outside _____?	4 quite often 3 several times 2 once 1 not at all	06-04

How much trouble have you had in your close friendships?	4 a great deal 3 quite a bit 2 a little 1 none	06-05
Did _____ make a difference in your close friendships?	5 greatly improved them 4 improved them 3 no effect 2 made them worse 1 made them much worse	20-10

These questions ask how you have been getting along with your family recently.

What is your marital situation now?	6 living together as married 5 married and living together 4 separated 3 divorced 2 widowed 1 never married	07-01
How many people live in the household with you? (give numbers)	__ ages 0-5 __ 6-17 __ 18-64 __ 65+	07-02
Are there any children living with you for whom you are responsible (by birth or otherwise)?	2 yes 1 no	07-03
In the last week, how much of your free time did you spend with the people with whom you live, talking or doing things together?	4 almost all 3 about half 2 very little 1 none	07-04
In the last month, how many times have you had contact by visit, phone, or mail with family members who do not live with you?	4 more than 3 times 3 2 or 3 times 2 once 1 not at all	07-05

(If married or living as married)

In the last week, how often have you gotten very angry with your spouse?	4 every day 3 often 2 once or twice 1 never	08-01
In the last week, how often did you go out of your way to be nice to your spouse?	4 all the time 3 often 2 several times 1 never	08-02
In the last month, how much have you enjoyed your spouse's company?	4 a great deal 3 quite a bit 2 a little 1 not at all	08-03
How well are you getting along with your spouse?	4 very well 3 well 2 poorly 1 very poorly	08-04
Did _____ affect your relationship with your spouse?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-11

(If living with and responsible for children)

How much have you been involved with your children's activities recently?	4 a great deal 3 a lot 2 a little 1 not at all	09-01
How much difficulty have you had meeting your children's demands for your attention recently?	4 a great deal 3 a lot 2 a little 1 none at all	09-02
In the last week, how many conversations did you have with your children?	4 more than 3 3 2 or 3 2 one 1 none	09-03
How much have your children annoyed you recently?	4 a great deal 3 a lot 2 a little 1 not at all	09-04
How much have you enjoyed your children's company recently?	4 a great deal 3 a lot 2 a little 1 not at all	09-05
Did _____ make any difference in the way you get along with your children? ___	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-12

There are some things we share with family and friends; some things we can count on them for. These questions ask about your family and friends, as you see them now.

When something nice happens to you, do you want to share the experience with your family?	4 always 3 often 2 sometimes 1 never	10-01
When something nice happens to you, do you want to share the experience with your friends?	4 always 3 often 2 sometimes 1 never	10-02
How much would your family be of help and support if you were sick, or moving, or having any other kind of problem?	4 a great deal 3 a lot 2 a little 1 none	10-03
How much would your friends be of help and support to you if you were sick, or moving, or having any other kind of problem?	4 a great deal 3 a lot 2 a little 1 none	10-04
How much would anyone in the community, other than family and friends, be of help and support to you if you were sick, or moving, or having any other kind of problem?	4 a great deal 3 a lot 2 a little 1 none	10-05
Did _____ affect the help and support you feel you can count on from family, friends, and others?	5 greatly increased it 4 increased it 3 no effect 2 made it worse 1 made it much worse	20-13

These questions are about your experience with work at home, on the job, and in school.

In the last week, how well have you kept up with your share of the housework (cleaning, laundry, shopping, errands)?	4 completely done 3 quite well 2 fairly well 1 not at all	11-01
How much of the household money management (paying the bills, budgeting) do you do?	4 all 3 most 2 a little 1 none	11-02
How much of the shopping for the household do you do (groceries, furnishings, supplies)?	4 all 3 most 2 a little 1 none	11-03
In the last month, how much time did you spend fixing or changing things connected with your home (roof, redecorating, yard work, plumbing) or car?	4 several days 3 a day or so 2 an hour or so 1 none	11-04
About how many hours per day do you usually spend preparing meals for the household?	4 more than 3 3 1 to 3 hours 2 an hour or less 1 none	11-05
Did _____ affect your work in the home?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-14

These questions concern looking for a job. Even if you are not looking for a job, the questions ask about how you would feel.

Do you feel you have any of the responsibility for getting an income for your household?	2 yes 1 no	12-01
(If "yes") How good an impression do you feel you would make in a job interview?	4 very good 3 good 2 poor 1 very poor	12-02
How serious are any emotional problems you may have which would make it hard for you to find work?	4 very serious 3 pretty serious 2 slightly serious 1 not at all serious	12-03
How comfortable do you feel going out to look for a job?	4 completely 3 quite 2 fairly 1 not at all	12-04
How hard is it for you to stick to a job when it becomes unpleasant or boring or stressful?	4 can't do it at all 3 very hard 2 a little hard 1 not at all hard	12-05
If you had a chance to get more job training, how willing would you be to get it?	4 not interested 3 slightly willing 2 fairly willing 1 very willing	12-06

How comfortable do you feel working with other people?	4 not at all comfortable 3 fairly 2 quite 1 completely	12-07
This question is about activities that you especially enjoy. Please name some of your hobbies and special interests.	4 more than 3 3 2 or 3 2 one 1 none	12-08
Please name some of the ways you would look for a job.	4 more than 3 3 2 or 3 2 one 1 none	12-09
Did _____ make a difference in how easy it would be for you to get a job?	5 made it much easier 4 made it easier 3 no effect 2 made it harder 1 made it much harder	20-15

These questions ask about your work on the job.

Are you employed?	4 full-time 3 part-time 2 irregularly 1 not employed	13-01

(If employed)

In the last month, how much time did you miss from work?	4 several days 3 a day or two 2 an hour or so 1 none	13-02
In the last month, how much difficulty did you have in doing your work?	4 a great deal 3 quite a bit 2 a little 1 none	13-03
How did you feel about the quality of the work you did?	4 very good 3 good 2 bad 1 very bad	13-04
How much conflict have you had with people while you were working?	4 a great deal 3 quite a bit 2 a little 1 none	13-05
How interesting is your work?	4 very interesting 3 moderately 2 slightly 1 it's boring	13-06
In general, how much do you like your job?	4 really like it 3 like it 2 don't like it 1 hate it	13-07
In the last month, how many times did people complain about your work?	4 more than 3 times 3 2 or 3 times 2 once 1 not at all	13-08

In the past month, how many times did people say good things about your work?	4 more than 3 times 3 2 or 3 times 2 once 1 not at all	13-09
Did ____ affect the way your job went last month?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-16

These questions are about how things are going at school.

Are you enrolled in school, night classes, job training, etc.?	4 full-time 3 half-time 2 less than ½ time 1 no	14-01
How many hours did you spend in any other informal studying, reading for job promotion, correspondence courses, home extension, etc.?	4 20+ hours 3 8-20 hours 2 1-7 hours 1 none	14-02

(If enrolled in school)

In the last week, how many classes have you missed from school?	4 all week 3 a day or so 2 one or two classes 1 none	14-03
In the last week, how well have you kept up with your school work?	4 completely 3 quite well 2 fairly well 1 not at all	14-04
How satisfied are you with the work you did for your classes last week?	4 very satisfied 3 quite 2 a little 1 not at all	14-05
In the last week, how many times have you had problems with people at school?	4 more than 3 times 3 2 or 3 times 2 once 1 none	14-06
In the last week, how interesting was your school work?	4 very interesting 3 moderately 2 slightly 1 not at all	14-07
In general, how much do you like being in school?	4 really like it 3 like it 2 don't like it 1 hate it	14-08
In the last week, how many times did anyone complain about your school work?	4 more than 3 times 3 2 or 3 times 2 once 1 not at all	14-09
In the last week, how many times did anyone say good things about your school work?	4 more than 3 times 3 2 or 3 times 2 once 1 not at all	14-10

Did _____ help you get into, or back into, [illegible] in school?	2 yes 1 no	20-17
Did _____ affect the way school has gone for you?	5 greatly improved it 4 improved it 3 no effect 2 made it worse 1 made it much worse	20-18

These questions ask about some of the ways you spend your time when you are not working on the job, at home, or at school.

In the last week, how much time did you spend actively participating in recreation and sports?	4 20+ hours 3 8-20 hours 2 1-7 hours 1 none	15-01
In the last week, how much time did you spend on your hobbies (or creative pursuits, e.g., music)?	4 20+ hours 3 8-20 hours 2 1-7 hours 1 none	15-02
Of the TV watching you did last week, how much time did you spend on really interesting programs?	4 20+ hours 3 8-20 hours 2 1-7 hours 1 none 0 NA	15-03
In the last week, how much time did you spend window shopping?	4 20+ hours 3 8-20 hours 2 1-7 hours 1 none	15-04
Volunteer work is anything you do for someone else, on a fairly regular basis, that you don't get paid for. In the last week, how much time did you spend on volunteer work?	4 20+ hours 3 8-20 hours 2 1-7 hours 1 none	15-05
Not counting any time for which you were paid, how much time did you pass which you felt was boring and useless?	4 20+ hours 3 8-20 hours 2 1-7 hours 1 none	15-06
Regarding the activities we've just talked about, did _____ affect how you spend your time?	5 made it much more satisfactory 4 made it more satisfactory 3 no effect 2 made it less satisfactory 1 made it much less satisfactory	20-19

These questions are about any contact you, personally, may have had with police, courts, etc., in the last month. We are not interested in any wrong-doing--only in contact with legal agencies.

Have you had any contact with legal agencies?	2 yes 1 no	16-01

--(If "yes", what kind of contact did you have in each of the following areas...)

Traffic-related	2 yes 1 no	16-02
Drug-related	2 yes 1 no	16-03

Alcohol-related	2 yes 1 no	16-04
Violence-related	2 yes 1 no	16-05
Theft-related	2 yes 1 no	16-06
Civil action (being sued)	2 yes 1 no	16-07
Commitment hearing (regarding your mental health)	2 yes 1 no	16-08
Did _____ affect any of your legal difficulties?	5 greatly reduced them 4 reduced them 3 no effect 2 increased them 1 greatly increased them	20-20

These questions are about drinking alcoholic beverages.

Have you had anything alcoholic to drink in the last month?	2 yes 1 no	17-01

(If "yes")

People sometimes have problems with using alcohol. The following questions ask about problems you may have had with alcohol in the last month.

Have you had problems with controlling your drinking?	4 very severe 3 a lot	2 a few 1 none		17-02
Problems with controlling your behavior because of drinking?	4 very severe 3 a lot	2 a few 1 none		17-03
Problems with your feelings (guilt, anger, depression) because of drinking?	4 very severe 3 a lot	2 a few 1 none		17-04
Problems with your health because of drinking?	4 very severe 3 a lot	2 a few 1 none		17-05
Problems with your parents because of drinking?	4 very severe 3 a lot	2 a few 1 none	0 NA	17-06
Problems with your friends because of drinking?	4 very severe 3 a lot	2 a few 1 none	0 NA	17-07
Problems with your spouse because of drinking?	4 very severe 3 a lot	2 a few 1 none	0 NA	17-08
Problems with your children because of drinking?	4 very severe 3 a lot	2 a few 1 none	0 NA	17-09
Problems with your job or school because of drinking?	4 very severe 3 a lot	2 a few 1 none		17-10
Problems with your other activities because of drinking?	4 very severe 3 a lot	2 a few 1 none		17-11
Did _____ affect any problems you may have had with alcohol?		5 greatly reduced them 4 reduced them 3 no effect 2 increased them 1 greatly increased them		20-21

These questions are about drugs.

Have you used any drugs or medication of any kind, including prescription, over-the-counter, and street drugs in the last month?	2 yes 1 no	18-01

(If "yes")

People sometimes have problems with the use of drugs or medications. The following questions ask about problems you may have had with drugs in the last month.

Have you had problems with controlling your use of drugs?	4 very severe 3 a lot	2 a few 1 none		18-02
Problems with controlling your behavior because of drug use?	4 very severe 3 a lot	2 a few 1 none		18-03
Problems with your feelings (guilt, anger, depression) because of drugs?	4 very severe 3 a lot	2 a few 1 none		18-04
Problems with your health because of drug use?	4 very severe 3 a lot	2 a few 1 none		18-05
Problems with your parents because of drug use?	4 very severe 3 a lot	2 a few 1 none	0 NA	18-06
Problems with your friends because of drug use?	4 very severe 3 a lot	2 a few 1 none	0 NA	18-07
Problems with your spouse because of drug use?	4 very severe 3 a lot	2 a few 1 none	0 NA	18-08
Problems with your children because of drug use?	4 very severe 3 a lot	2 a few 1 none	0 NA	18-09
Problems with your job or school because of drug use?	4 very severe 3 a lot	2 a few 1 none		18-10
Problems with your other activities because of drug use?	4 very severe 3 a lot	2 a few 1 none		18-11
Did _____ affect any problems you you may have had with drug use?	5 greatly reduced them 4 reduced them 3 no effect 2 increased them 1 greatly increased them			20-22

Some of the following opportunities exist where you live. These questions ask which you have used in the last month.

(YMCA, ice pools, etc.)?	2 yes	1 no	19-01
Movie theatres, bowling alleys, and other entertainment?	2 yes	1 no	19-02
Churches?	2 yes	1 no	19-03
Social clubs?	2 yes	1 no	19-04
Community parks?	2 yes	1 no	19-05
Libraries?	2 yes	1 no	19-06
Museums?	2 yes	1 no	19-07
Welfare?	2 yes	1 no	19-08

Food stamps?	2 yes	1 no	19-09
Social Security?	2 yes	1 no	19-10
Public transportation (buses, etc.)?	2 yes	1 no	19-11
Salvation Army or other hostel and meal services?	2 yes	1 no	19-12
County health department?	2 yes	1 no	19-13
Family planning?	2 yes	1 no	19-14
Alcohol and drug abuse programs?	2 yes	1 no	19-15
Children's services?	2 yes	1 no	19-16
State hospital?	2 yes	1 no	19-17
Counseling/guidance services (doctor, church, etc.)?	2 yes	1 no	19-18
University health service (speech, hearing, etc.)?	2 yes	1 no	19-19
Single Parents' Club?	2 yes	1 no	19-20
Weight Watchers?	2 yes	1 no	19-21
Alcoholics Anonymous?	2 yes	1 no	19-22
Big Brother or other "buddy" programs? . . .	2 yes	1 no	19-23
Legal Aid?	2 yes	1 no	19-24
County Juvenile Department?	2 yes	1 no	19-25
Advocate groups (tenants' association, Consumers' Protection, Civil Liberties, Women's Rights, etc.)?	2 yes	1 no	19-26
Vocational Rehabilitation?	2 yes	1 no	19-27
Oregon State Employment Service?	2 yes	1 no	19-28
Manpower Development and Training?	2 yes	1 no	19-29
Sheltered Workshop?	2 yes	1 no	19-30
Private employment counseling/placement services?	2 yes	1 no	19-31
Community college?	2 yes	1 no	19-32
Night school?	2 yes	1 no	19-33
University classes?	2 yes	1 no	19-34
Continuing educaton?	2 yes	1 no	19-35
Business or vocational school?	2 yes	1 no	19-36
Public school?	2 yes	1 no	19-37
Experimental college?	2 yes	1 no	19-38
Special interest groups (e.g., science fiction society)?	2 yes	1 no	19-39
_____? . . .	2 yes	1 no	19-40
_____? . . .	2 yes	1 no	19-41
_____? . . .	2 yes	1 no	19-42

OQLQ

DEMOGRAPHIC DATA

INTAKE

_____
Interview Date

☐☐☐☐☐☐ Case Number

☐☐☐☐☐☐ Clinic Number _____
Admit Date

☐☐☐ Follow-up Interval (number of days since admission)

☐ Research Group

☐☐☐☐☐☐ Date of Birth (month, day, year)

☐ Sex (o = male, 1=female)

☐☐ Ethnic Group
1 = White, non-Hispanic
2 = Black, non-Hispanic
3 = American Indian
4 = Alaskan Native
5 = Asian or Pacific Islander
6 = Hispanic (Mexican)
7 = Hispanic (Puerto Rican)
8 = Hispanic (Cuban)
9 = Other Hispanic
10 = Not Specified

☐ Living Situation -- social
0 = Solitary Head of Household (1 adult and 1 or more dependents)
1 = Live alone
2 = Live with Parent(s)
3 = Live with spouse and children
4 = Live with Friend(s)/ Roommate(s)
7 = Live with Relatives
8 = Other
9 = Mandated living situation

☐ Living Situation-- physical
1 = Single Family Dwelling (house/mobile home)
2 = Apartment
3 = Group Home, Boarding Home
4 = Dormitory
5 = Hotel
6 = Hospital
7 = Jail
8 = Transient
9 = Other_____

☐ History of Long-term Hospitalization (more than 6 of the last 12 months spent in mental hospital or more than a total of 24 months out of the last 5 years in a mental hospital; 0 = no, 1 = yes)

☐ Mandated Treatment--this episode (0 = no, 1 =yes)

☐ Treatment Status 1 = Case Open and Active
2 = Case Open and Inactive
3 = Case Closed
4 = Untreated or_____

☐☐ Presenting Problem
(at admission)
1 = Mental/Emotional Disturbance--M-ED
2 = Mentally Retarded/Developmentally Disabled--MR--DD
3 = Chronic
4 = Marital Problems
5 = Family Problems
6 = Drug Problems
7 = Alcohol Problems
8 = Drug & Alcohol Problems
9 = Problems with the Law
10 = Family Member of Client
11 = Other

☐ Services Assigned
A = Individual Counseling
B = Group Counseling
C = Couple Counseling
D = Family Counseling
E = Socialization Program
F = Day Treatment Program
G = Residential Program
H = Detox (voluntary)
I = Detox (emergency)
J = Crisis Intervention
K = Training
L = Medication
M = Brokerage
N = Vocational Training
O = Informational
P = Evaluation/Assessment Only
Q = Unknown

☐☐☐ Amount of Services Received (number of days client has come for and received services)

☐☐ Income (annual for client's household)

0 = $0-999
1 = 1000-1999
2 = 2000-2999
3 = 3000-3999
4 = 4000-4999
5 = 5000-5999
6 = 6000-6999
7 = 7000-7999
8 = 8000-8999
9 = 9000-9999
10 = 10,000-10,999
and so on using same rules 99 = 99,000 and above

☐ Education

1 - less than 7 years
2 - Junior high
3 - High School
4 - College
5 - more than college

☐☐ Occupation

1 - Professional
2 - Manager, Administrator
3 - Sales
4 - Clerical
5 - Craft, Trade
6 - Transport
7 - Labor, unskilled
8 - Farmer
9 - Service worker
10 - Private household
11 - Homemaker
12 - Student
13 - Unemployed
14 - Retired
15 - Other

☐ Population of Community of Residence

1 - less than 2,500
2 - 2,500 - 15,000
3 - more than 15,000

APPENDIX D

Descriptive Statistics of Oregon Quality of Life Questionnaire

Appendix D

Descriptive Statistics of the Oregon Quality of Life Questionnaire (OQLQ) Scales for the Chronically Mentally Ill (CMI) N = 30 and the General Community (C) N = 60

Scale		Mean	Median	Mode	SD	Min-Max	Skewness	Kurtosis	Missing Cases
Lack of Tolerance of Stress	C	1.43	1.33	1.00	.50	1.00-3.00	1.18	1.43	5
	CMI	1.81	1.96	2.00	.61	1.00-3.00	.27	-.44	7
Need Satisfaction	C	3.28	3.31	3.00	.44	2.00-4.00	-.53	.18	0
	CMI	3.08	3.10	3.00	.60	1.00-4.00	-1.36	3.90	0
Independence	C	2.79	2.85	3.00	.54	1.33-3.67	-.45	.09	0
	CMI	2.81	2.96	3.00	.68	1.00-4.00	-.77	.49	0
Confidence	C	3.09	3.13	3.20	.33	2.20-3.60	-.64	.20	0
	CMI	2.80	2.80	3.20	.40	2.00-3.50	-.10	-.99	0
Friend Role	C	3.60	3.70	3.80	.41	2.20-4.00	-1.45	2.20	0
	CMI	2.96	3.10	3.40	.63	1.60-4.00	-.37	-.57	0
Spouse Role	C	3.34	3.42	3.00	.59	1.33-4.00	-1.07	2.18	24
	CMI	3.33	3.33	3.33	.41	2.67-4.00	.00	-.29	21
Social Support	C	3.36	3.40	3.25	.52	1.75-4.00	-.79	.37	0
	CMI	2.97	3.00	3.00	.68	1.50-4.00	-.19	-.55	0
Employability	C	3.14	3.11	3.00	.56	1.50-4.00	-.53	.02	0
	CMI	2.54	2.80	3.25	.68	1.00-3.50	-.69	-.20	0

APPENDIX E

Health Opinion Survey

HEALTH OPINION SURVEY

These are a few more questions about your general health. Please give the answer that best fits your present condition.

Do your hands tremble enough to bother you? 130	4 almost all the time 3 often 2 sometimes 1 never	130
Are you troubled by your hands or feet sweating so that they feel damp and clammy? 131	4 almost all the time 3 often 2 sometimes 1 never	131
Are you bothered by your heart beating hard? 132	4 almost all the time 3 often 2 sometimes 1 never	132
Do you tend to feel tired in the morning? 133	4 almost all the time 3 often 2 sometimes 1 never	133
Are you bothered by nightmares (dreams that frighten or upset you)? 134	4 almost all the time 3 often 2 sometimes 1 never	134
Are you troubled by "cold sweats"? 135	4 almost all the time 3 often 2 sometimes 1 never	135
Are you troubled by headaches or pains in the head? 136	4 almost all the time 3 often 2 sometimes 1 never	136
Does ill health affect the amount of work or housework that you do? 137	4 almost all the time 3 often 2 sometimes 1 never	137

Do you feel weak all over? 138	4 almost all the time 3 often 2 sometimes 1 never	138
Do you have spells of dizziness? 139	4 almost all the time 3 often 2 sometimes 1 never	139
Do you tend to lose weight when you have something important bothering you? 140	4 almost all the time 3 often 2 sometimes 1 never	140
Are you bothered by shortness of breath when you are not exercising or working hard? 141	4 almost all the time 3 often 2 sometimes 1 never	141
Do you smoke a lot? 142	4 almost all the time 3 often 2 sometimes 1 never	142
Do you sometimes wonder if anything is worthwhile anymore? 143	4 almost all the time 3 often 2 sometimes 1 never	143
Do you feel you are bothered by all sorts of pains and ailments in different parts of your body? 144	4 almost all the time 3 often 2 sometimes 1 never	144
Do you have any trouble getting to sleep or staying asleep? 145	4 almost all the time 3 often 2 sometimes 1 never	145
How often are you bothered by having an upset stomach? 146	4 almost all the time 3 often 2 sometimes 1 never	146

Do you have a loss of appetite? 147	4 almost all the time 3 often 2 sometimes 1 never	147
For the most part, do you feel healthy enough to carry out the things that you would like to do? 148	4 almost all the time 3 often 2 sometimes 1 never	148
Do you have any particular physical or helath problems at the present? 149	4 almost all the time 3 often 2 sometimes 1 never	149

APPENDIX F

Guidelines for Health Opinion Survey

Guidelines for Health Opinion Survey

The time frame for the HOS questions in the respondent's present perception of these symptoms as something that occurs to them: all the time, often, sometimes, or never. The last two questions are answered yes or no, and the time frame is at the time of the interview.

1. Do your hands tremble enough to bother you?

   Intent: To determine both if hands tremble and how much this bothers the person.

   Exceptions: No matter what the etiology of trembling, still determine how much this bothers the person.

   Reword: "Do your hands shake enough to bother you?"

   Low Verbal: "Do your hands shake? If yes, how often does it bother you?"

2. Are you troubled by your hands or feet sweating so that they feel damp and clammy?

   Intent: To determine how often the person is aware of hands or feet sweating so that they feel damp and clammy.

   Exceptions: None.

   Reword: "Are you bothered by your hands or feet sweating so that they feel damp and clammy?"

   Low Verbal: Do your hands or feet sweat so they feel damp and clammy? If yes, do they bother you? How often?

3. Are you bothered by your heart beating hard?

   Intent: To determine if the person is aware of heart beating hard either by feeling or hearing it, and if this bothers the person.

   Exceptions: None

   Reword: "Are you bothered by your heart pounding?"

   Low Verbal: "Can you feel your heart pounding in your chest or your head? If yes, does thid bother you? How much?

4. Do you tend to feel tired in the morning?

   Intent: To determine if the person feels tired even after having slept at night.

   Exceptions:

   Reword: "Do you have trouble getting up and going in the morning because your are just too tired?"

   Low Verbal: Do you have bad dreams? Does this bother you? How often?

5. Are you bothered by nightmares (dreams that frighten or upset you)?

   Intent: To determine how often the person has nightmares which bother him/her.

   Exceptions: None

Reword: "Are you bothered by 'bad dreams'"?

Low Verbal: Do you have bad dreams? Does this bother you? How often?

6. Are you troubled by "cold sweats"?

Intent: To determine how often the person breaks out in perspiration beads in the absence of fever, exercise, or heat.

Exceptions: None

Reword: "Do you break out in a 'cold sweat', where you feel a chill but are sweating at the same time?" If yes, how often does it bother you?

Low Verbal: "Do you break out in 'cold sweats' or sweat a lot when you are nervous?" Of no, mark 1 (never). If yes, ask "how often does this bother you?"

7. Are you troubled by headaches or pains in the head?

Intent: To determine how often the person experiences headaches or pains in the head which bothers him/her.

Exceptions: May include pains in the eyes, ears, jaw, sinuses, or back of neck.

Reword: None

Low Verbal: "Do you have headaches or pains in the head. Does this bother you? How much?"

8. Does ill health affect the amount of work or housework that you do?

Intent: To determine how often ill health interferes with work or productivity.

Exceptions: Ill health is whatever respondent determines feeling "not well"

Reword: "How often do you not feel well enough to do the work you need to do?"

Low Verbal: None

9. Do you feel weak all over?

Intent: To determine how often the person experiences the feeling of being weak throughout the body.

Exceptions: This would not just mean tired but rather a feeling of muscular weakness.

Reword: "Do you feel you don't have enough strength to do the things you need to do?"

Low Verbal: None.

10. Do you have spells of dizziness?

Intent: To determine how often the person experiences dizziness.

Exception: None

Reword: "Do you have times when you feel dizzy, or like your head is spinning?"

Low Verbal: None.

11. Do you tend to lose weight when you have something bothering you?

Intend: To determine how much the person's weight is affected by stress.

Exceptions: Can indlude not eating due to worry.

Reword: "Do you lose weight when you are worried?"

Low Verbal: None

12. Are you bothered by shortness of breath when you are not exercising or owrking hard?

Intent: To determine how often the person feels out of breath when not exerting self.

Exceptions: This does not mean having trouble catching one's breath; it means the feeling of not having enough air or the feeling of being out of breath so that the person feels he/she must hyperventilate to get enough air. Includes any respiratory disorder.

Reword: "Do you have trouble with being out of breath for no apparant reason? How often does that bother you?"

Low Verbal: None.

13. Do you smoke a lot?

Intent: To determine how often the person smokes, more than they think they should.

Exceptions: Refers to "cigarettes, cigars, or a pipe" "A lot" means "more than you think you should?"

Reword: "Do you smoke more than you think you should?"

Low Verbal: None.

14. Do you sometimes wonder if anything is worthwhile anymore?

Intent: To determine how often person feels hopeless or experiences a sense of wanting to give up.

Exceptions: This does not ask if the person has ever considered or attempted suicide.

Reword: "Do you sometimes feel like just giving up?"

Low Verbal: None

15. Do you feel you are bothered by all sorts of pains and ailments in different parts of your body?

Intent: To determine how often the person feels bad all over. This is a guage of hypochrondriacal preoccupation with body parts.

Exceptions: May include any chronic ailments or pain from sports or exercise if it is a general discomfort.

Reword: "Are you bothered by just feeling bad in different parts of your body?"

Low Verbal: Do you feel bad in different parts of your body? Does this bother you? How much?

16. Do you have any particular physical or health problems at the present?

Intent: To determine the person's perception of his/her own health status.

Exceptions: Do not take a listing of the specific problems. Include any physical or health problems respondent is aware of at time of interview.

Reword: None.

Low Verbal: None.

17. How often are you bothered by having an upset stomach?

Intent: To determine how often the respondent is bothered by problems with his/her digestive system--including ulcers, colitis, or other "conditions".

Exceptions: None.

Reword: None.

Low Verbal: How often have you felt like what you ate didn't agree with you or made you sick?

18. Do you have loss of appetite?

Intent: To determine how often the respondent wasn't hungry at a time he/she normally should have been or how often the respondent felt hungry, but couldn't force him/herself to eat.

Exceptions: None.

Reword: Do you have trouble because you don't feel hungry at mealtimes, or because you can't force yourself to eat?

Low Verbal: None.

19. For the most part, do you feel healthy enough to carry out the things you would like to do?

Intent: To determine the person's general sense of well-being, and to determine if he/she is able to do the things they would like to do.

Exceptions: None.

Reword: Do you feel good enough to do the things you would like to do?

Low Verbal: None

APPENDIX G

Descriptive Statistics of Strain Scales and Coping Methods Subscales

Appendix G

Descriptive Statistics of the Strain Scales and Coping Methods Subscales for the Chronically Mentally Ill (CMI) N = 30 and the General Community (C) N = 60

Scale		Mean	Median	Mode	SD	Min-Max	Skewness	Kurtosis	Missing Cases
				Strain					
Health Opinion Survey	C	1.41	1.35	1.29	.27	1.00-2.11	.86	.27	0
	CMI	1.57	1.42	1.29	.41	1.12-2.94	1.90	3.04	0
Psychological Distress	C	1.62	1.58	1.58	.39	1.08-2.67	.97	.39	0
	CMI	1.78	1.68	1.50	.51	1.00-3.00	.59	-.19	0
				Coping					
Long-term Coping	C	2.60	2.64	2.71	.49	1.57-3.71	.19	-.33	0
	CMI	2.31	2.16	2.00	.55	1.57-3.57	.53	-.58	0
Short-term Coping	C	1.68	1.65	1.28	.41	1.00-3.00	1.04	1.67	0
	CMI	1.88	1.79	1.57	.52	1.00-2.86	.38	-.70	0
Long-term/Total	C	66.92	63.91	63.64	12.35	36.36-100.00	.44	.65	0
	CMI	62.34	59.81	70.00	13.05	37.50-100.00	.71	1.32	0

APPENDIX H

Coping Methods Scale

COPING METHODS SCALE

These questions ask about things you do when you are under stress. Different things cause stress for different people. Think of something that causes you stress, or makes you feel tense, frustrated, or under pressure. Will you please tell me what it is?

When you are under stress, how likely are you to:

Talk with others about the problem. Friend, relative, professional person) 150	4 always 3 often 2 sometimes 1 never	150
Use alcoholic beverages. 151	4 always 3 often 2 sometimes 1 never	151
Try to find out more about the situation; seek additional information. 152	4 always 3 often 2 sometimes 1 never	152
Sleep more. 153	4 always 3 often 2 sometimes 1 never	153
Work it off by physical exercise. 154	4 always 3 often 2 sometimes 1 never	154
Try to see the humorous aspects of the situation 155	4 always 3 often 2 sometimes 1 never	155
Not worry about it; everything will probably work out fine. 156	4 always 3 often 2 sometimes 1 never	156

Take some positive action on the basis of your present understanding of the situation 157	4 always 3 often 2 sometimes 1 never	157
Use food and food substitutes (smoke more, eat more, chew gum). 158	4 always 3 often 2 sometimes 1 never	158
Use drugs 159	4 always 3 often 2 sometimes 1 never	159
Draw on your past experiences; maybe you've been in a similar situation before 160	4 always 3 often 2 sometimes 1 never	160
Be prepared to expect the worst 161	4 always 3 often 2 sometimes 1 never	161
Make several alternate plans for handling the situation. 162	4 always 3 often 2 sometimes 1 never	162
Cry. 163	4 always 3 often 2 sometimes 1 never	163
Use relaxation, meditation, yoga, self-hypnosis, or biofeedback. 164	4 always 3 often 2 sometimes 1 never	164
Curse. 165	4 always 3 often 2 sometimes 1 never	165

Become involved in other activities to keep your mind off the problem 166	4 always 3 often 2 sometimes 1 never	166
Try analyzing the problem 167	4 always 3 often 2 sometimes 1 never	167

APPENDIX I

Guidelines for Coping Methods Scale

GUIDELINES FOR COPING METHODS SCALE

We all feel under stress sometimes. Different things cause stress for different people. These questions ask about things you do when you are under stress. Think about something that causes you stress or makes you feel tense, frustrated, or under pressure.

[Help person identify one or two situations which they perceive as stressful. These may include: being yelled at by someone you think highly of (like a boss), job pressures (being asked to take on more responsibility than you can handle), having to make an important decision, having an arguement with someone.]

Exceptions: Being under stress may include feeling anxious or worried. When you are under stress, how likely are you to:

1. Talk with others about the problem (friends, relatives or professional person)?

   Intent: To determine how likely the respondent is to seek help from others.

   Exception: None.

   Reword: Find some else to talk to about the problem.

   Low Verbal: None.

2. Use alcoholic beverages (like beer, wine or hard liquor).

   Intent: To determine if person uses ETOH as a tension reducer.

   Exception: If person asks "Do you mean drink socially?", clarify that this is using alcohol when they feel under stress.

   Reword: Drink or get drunk.

   Low Verbal: "Do you drink more beer, wine or hard liquor than usual?"

3. Try to find out more about the situation, seek additional information.

   Intent: To determine how much the person uses this aspect of problem solving --information seeking.

   Exceptions: This may include asking questions, watching what is going on to help decide how to respond.

   Reword: Try to find out more about what's going on.

   Low Verbal: "Try to find out more about what's bothering you."

4. Sleep more.

   Intent: To determine if person handles stress by sleeping more than usual, even if they are not especially more tired.

   Exceptions: None.

Reword: Just go to bed and sleep, or sleep more than usual.

Low Verbal: None.

5. Work it off by physical exercise.

Intent: To determine if the person uses physical exercise to reduce strain to put self in a better position to deal with the source of stress.

Exception: May include any physical exertion, mowing lawn, chopping wood, cleaning the house, etc.

Reword: Work off stress by running, taking a long walk, swimming or some other way of working off steam.

Low Verbal: "Do you go running, take a walk or something else like that to make you feel better?"

6. Try to see the humorous aspects of the situation.

Intent: To determine if the person uses this higher level defense mechanism to express ideas and feelings without individual discomfort and without an unpleasant effect on others.

Exception: This is not simply laughing off the problem, it is a method of communicating unpleasant ideas and feelings in a more comfortable manner.

Reword: Try to find something in the situation that you or other people can laugh about.

Low Verbal: Try to find something funny about what is going on.

7. Not worry about it. Everything will probably work out in time.

Intent: To determine if the person handles stress by blocking thought and action and allow time and other circumstances to solve the problem. This is a form of rationalization.

Exceptions:

Reword: Just not think about it; everything will be all right. Or, don't worry about it...time heals all wounds.

Low Verbal: None.

8. Take some positive, concerted action on the basis of your present understanding of the situation.

Intent: To determine how often ther person deals directly with the source of the problem based on a clear understanding of the situation.

Exceptions: This question has to do with impulse control--being able to assess the situation and then act. The words "positive, concerted" may be replaced with "definite".

Reword: (1) think about what's going on, (2) what you can do, and (3) then do something about the problem.

Low Verbal: Think about what is causing the problem, what you can do about it and then go ahead and do something about the problem.

9. Use food and food substitutes (smoking, chewing gum, eating more).

   Intent: To determine how much the person uses oral gratifiers to temporatily reduce stress.

   Exception: Include whatever the respondent thinks is too much or more than usual.

   Reword: Eat too much or too often, chain smoke, or smoke too much or more than usual.

   Low Verbal: None

10. Use drugs (prescription, over the counter, street drugs).

    Intent: To determine if the eprson uses these methods of anxiety reduction and escape when under stress. This includes taking drugs by choice and in amounts that are more than usual or too much.

    Exceptions: This does not include regularly scheduled medications, but does include any medications or drugs the person uses at his/her own discretion and more than usual.

    Reword: Use tranquilizers, "uppers", "downers", street drugs or marajuana.

    Low Verbal: None.

11. Draw on you past experiences; maybe you've been in similar situations before.

    Intent: To determine how often the person is able to generalize previous learning to help with problem-solving in new situations.

    Exceptions: "Draw on" may be replaced with "think about".

    Reword: Think about what helped in the past when you have felt like this. How often does thinking about similar situations help you decide what to do now?

12. Be prepared to expect the worst.

    Intent: This is a form of rationalization. To determine how often the person uses negative expectancies to reduce the threat of further stress.

    Exceptions: None.

    Reword: None.

    Low Verbal: Think the worst is going to happen.

13. Make several alternate plans for handling the situation.

    Intent: To determine how often the person uses the problem-solving method of planning alternative strategies for handling the situation.

    Exceptions: None.

    Reword: Think of several things you could do to deal with the problem.

    Low Verbal:

14. Cry

Intent: To determine how often the person uses this affect in response to stress.

Exceptions: Include however often the respondent cries in response.

Reword: None.

Low Verbal: None.

15. Use relaxation techniques, meditation, yoga, self-hypnosis,or biofeedback.

Intent: To determine how often the person uses learned stress management strategies when under stress.

Exceptions: If the person does not know any of these techniques or any similar ones, enter "0", "N/A". If they know one or more but never use them, enter "1", "never", or the appropriate response for degree of use.

Reword: None.

Low Verbal: None.

16. Curse.

Intent: To determine how often the person uses irritable or abusive language under stress.

Exceptions: This does not include expressions wishing harm to come upon someone or something, but also includes common terms such as swear, cuss, yell or shout.

Reword: Swear, yell, cuss,or shout.

Low Verbal: None.

17. Become involved in other activities to keep your mind off the problem.

Intent: To determine how often the person uses activities to keep their mind off the problem.

Exceptions: None.

Reword: Just keep busy to keep you from thinking about the problem.

Low Verbal: None.

18. Try analyzing the problem.

Intent: To determine how often the person uses problem-solving techniques to deal with stress.

Exception: Insert "thing through" for "try analyzing".

Reword: Think about what's causing you to feel this way to help decide what to do about it.

Low Verbal: None.

AN ABSTRACT OF THE THESIS OF

SANDRA JEAN MCALLISTER

For the MASTER OF NURSING

Date Receiving this Degree: June 10, 1983

Title: The R[redacted]ty of Life

Approved: _____

Florence Hardesty, RN, Ph.D., Thesis Advisor

Coping is a conscious or unconscious activity implemented to deal with stress and strain. To the extent that one utilizes adequate coping methods, it is theorized that he or she will experience fewer psychophysiological symptoms of strain, and report a higher quality of life.

To explore this possibility, the present study was an effort to: 1) further the conceptualization of coping methods as abilities with which to meet the stressful demands of the environment, 2) measure dispositions to cope in certain ways, and 3) examine the relationship of coping methods, strain, and quality of life.

This study was a descriptive survey with a correlational design. Sixty residents from rural and urban areas, and 30 chronically

mentally ill clients were used as comparison groups. Data was collected by a structured interview using The Oregon Quality of Life Questionnaire, The Health Opinion Survey, and a Coping Methods Scale. Reliability and validity are adequate for all three instruments.

Ten hypotheses were tested by t-tests and correlation coefficients. All hypotheses were supported by the data. The general community and the chronically mentally ill differed on the level of psychophysiological symptoms of strain, the use of short-term and long-term coping methods, and on overall quality of life. Within each group, those individuals whose overall coping methods were composed of a higher proportion of long-term coping methods, reported lower levels of strain, and higher overall quality of life.

Assessment of clients' coping styles can assist health care professionals to plan and implement treatment strategies aimed at assisting clients to learn and use more long-term coping methods to improve their sense of well-being and improve their overall quality of life.