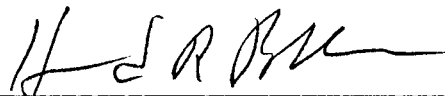


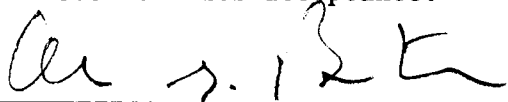
To the Graduate Council:

I am submitting herewith a dissertation written by Bruce Ray Erdmann entitled "Living with Chronic Pain." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.



Howard R. Pollio, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Vice Provost
and Dean of The Graduate School

LIVING WITH CHRONIC PAIN

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Bruce Ray Erdmann

December 1987

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This work is dedicated to my parents, Henry and Ruth Erdmann, and to my wife, Maureen O'Leary, as a measure of gratitude and appreciation.

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ABSTRACT

The purpose of this study was to examine the experience of chronic low back pain from the perspective of the person suffering it. Fifteen individuals with chronic low back pain participated in an open-ended interview concerning their experiences of chronic pain. Participants represented a broad range of low back pain sufferers, with some participants being unable to work because of pain, while others were employed. An empirical phenomenological procedure was used to reduce each interview transcript to thematic units. The thematic units were analyzed to formulate qualitative descriptions, and to identify key themes that captured essential aspects of the experience of chronic pain.

Three major themes were found to adequately and reliably describe the experience of chronic pain. Each major theme was described by additional sub-themes and experiential foci. The first theme--Experiencing Pain--described the more immediate bodily and emotional concomitants of participants' experiences. Sub-themes and foci, initially proposed by Parks (1987), were modified for this study and included "Hurting/Being Hurt," "Frustrating/Being Frustrated," "Shocking/Being Shocked," "Lacking/ Being Deprived," "Straining/Being Strained," and "Confusing/Being Confused." Foci included "Body/Self," "Others," and "World."

The second theme--Dealing with Chronic Pain--described participants' attempts to cope with or master the effects of chronic pain. Three sub-themes were identified: "Accepting/Facing,"

"Maintaining/Tolerating," and "Escaping/Avoiding." A sub-theme could involve one of three foci: "Reflective," "Bodily," and "Interpersonal."

The third theme--Impact of Chronic Pain--described the long term effects of chronic pain on participants. Two sub-themes--"Damaging" and "Valuable"--and three foci--"Body/Self," "Others," and "World"--were modified from those initially described by Parks (1987).

The three themes and associated sub-themes and foci were used to describe the experience of people with chronic low back pain. Two small subgroups were identified among the participants: those who were employed or engaged in work-like activity, and those receiving treatment in a pain clinic. Tentative hypotheses about differences between these two group were discussed using the themes, sub-themes, and foci. Implications for treatment of pain patients and suggestions for further research were formulated.

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CHAPTER I

INTRODUCTION

Pain is a problem of immense proportions. Over \$900 million is spent annually on analgesic pills, powders, and soothing salves (Turk, Meichenbaum, and Genest, 1983); over 70 million work days are missed annually because of pain (Chronic Pain, 1980); and the estimated total cost due to chronic or recurring pain exceeds \$70 billion yearly in medical and pharmaceutical costs, lost working days, and compensation (Wallis, Galvin, and Thompson, 1984).

Low back pain is a major factor in the overall cost of pain. Approximately 70 million residents of the United States are partly or totally disabled for a period of days, weeks, months, or years by intermittent or persistent chronic low back pain (Wallis et al., 1984). Roughly 1.25 million people in the U.S.A. sustain back or spinal injuries annually, with 25 million having permanent back or spine impairment due to injury (Beals and Hickman, 1972). The hospitalization related costs in the U.S.A. due to low back pain have been estimated to be nearly \$1.4 billion annually (Loeser, 1980).

These statistics describe the monetary cost of pain to our society, but do not help us understand the factors contributing to chronic low back pain. Recent developments in pain theory have suggested a person's experience of pain involves a complex relationship between bodily, psychological, and social-environmental aspects of human functioning (Melzack and Wall, 1982). Although the

division of human experience into these categories is artificial, they provide a useful starting point for understanding a person's experience of chronic pain.

The Gate Control Theory of Pain

The contemporary conceptualization of pain can be traced to the introduction of Melzack and Wall's gate control theory of pain in 1965. Although the gate control theory has shortcomings (Kruger and Kroin, 1978; Nathan, 1976; Sinclair, 1981), its current version remains the most comprehensive approach to understanding the puzzling problem of acute and chronic pain. The following discussion will present the major highlights of the theory as presented most recently by Melzack and Wall (1982).

The gate control theory is easiest to understand as an explanation of acute pain arising from peripheral injury. The theory states that nerve endings are specialized, i.e., the receptors are most sensitive to particular types and ranges of stimulation, but may also react to other kinds of stimulation at sufficient intensities. A receptor preferentially sensitive to noxious (painful) or potentially noxious stimuli is referred to as a nociceptor. Other specialized receptors account for the other cutaneous experiences of heat, touch, and cold. Nerve fibers are also somewhat specialized by size although there is considerable redundancy.

Receptors are special sections of a nerve fiber and a nerve fiber may branch out so as to have different kinds of receptors. The

activity within a nerve fiber follows a pattern which is influenced by (a) activation of different receptors, (b) the activation of multiple receptors attached to the same fiber, (c) different combinations of stimuli, (d) changing conditions within either a single fiber or all fibers innervating a given area, and (e) alterations in the chemistry of the tissue surrounding a receptor. For example, a single receptor specialized for touch may send signals more rapidly when cooled, while the activity in a similar nearby fiber may be reduced resulting in different temporal and spatial patterns. Different patterns may emerge when the area around the fiber is located in or near damaged tissue. When the pattern is "right," acute pain is more likely to be experienced.

Understanding the complexity at the periphery is only the beginning. Melzack and Wall (1982) suggest that fibers from the skin, viscera and other structures converge on specialized transmission cells (T-cells) located in the substantia gelatinosa of the spinal cord. Output from the T-cells results from all the inhibitory and excitatory activity associated with the convergence. Thus, the T-cells and cells that influence them act as a "gate control system" which controls the pattern of information sent to higher central nervous system (CNS) centers.

Activity in the gate is influenced not only by the converging peripheral stimulation, but also by activity higher in the CNS. For pain to be perceived, activity must occur in areas of the brain primarily related to somato-sensory activity (which helps in pain

localization), limbic system activity (which is involved in affective experience), and general cortical activity especially in the frontal cortex (which is involved in discerning the meaning of an activity in the context of all other activity within the system and thus the environment). All these areas are connected to descending fibers, some of which converge on the gating mechanism and influence the kind of information relayed.

The limbic system and general cortical areas are active when psychological processes such as attention, memory, anxiety, or depression are present. These psychological processes can affect gate activity through descending systems, or by influencing the meaning assigned to the signals when they reach the cortical level. These processes can alter the experience of acute pain in ways ranging from blocking it (e.g., injury during an athletic event) to enhancing or magnifying it.

Chronic pain is best accounted for by examining higher CNS influences on the gate control system. Chronic conditions often include spontaneous phenomena such as pain spreading, spatial and temporal summation of sensory input, and persistence of pain after healing. Spontaneous pain can arise in the absence of obvious peripheral stimulation. It may occur when there is some limited fiber loss combined with other conditions which changes the pattern of incoming signals. Psychological processes may give rise to spontaneous pain by affecting the gate via either descending controls or through functioning of the limbic or reticular systems higher in

the CNS. The latter condition could affect different portions of the body. Similarly, these processes could account for conversion symptoms such as glove anesthesia by closing the gate to all inputs from a selected body area.

Melzack and Wall propose a third mechanism that may play a role in chronic pain. They note the body has both a fast and slow system for conducting information. They suggest the slow system serves to provide a platform of nervous system activity, or a ground, against which activity in the fast system becomes figural and meaningful. In part this is accomplished by keeping some synaptic channels closed or inoperative by delivering various peptides to the synaptic junctions. A shift in the slow system activity may alter the overall functioning of the gate control system and contributes to chronic pain experience.

One important area of research stimulated by the gate control theory is in the treatment of chronic pain. The theory is both a physiological and a psychological theory. It provides a model that can be used to explain acute pain associated with an injury as well as more puzzling phenomena such as how anxiety may amplify the pain experience (through affective enhancement or opening the gate via descending controls); how a hysterical conversion such as glove anesthesia may occur (closing the gate to all input from an area); or how factors such as cultural heritage, religious beliefs, ethnicity, and past learning affect the pain experience. It opens the way to conceptualizing the body, not as a machine attached to a brain attached to a mind, but as an aspect of a person for whom events

affecting one aspect of existence affect all others. For this reason, the gate control theory is useful in understanding chronic pain.

A Taxonomy of Pain Experience

The range of pain experience can be divided into three broad categories: acute, malignant, and chronic. The lines dividing these categories are not easily distinguished. Many models have been proposed to aid in understanding these types of pain. By combining the work of several authors, a comprehensive summary of the various classification systems can be constructed.

Acute Pain

In the usual course of events, pain signals injury in the body. A person reacts to injury and pain with some degree of inactivity and protection of the injured tissue. Unless reinjury occurs, the pain gradually lessens as the wound heals. When the pain ceases the wound is thought to be healed. As such, acute pain holds a meaning for the injured person: it teaches preservation and the limits of physical activity. Acute pain generally has a strong pathogenic or physiological component, defined as a painful perception sustained by readily identified nociceptive stimulation (Brena, 1983b). Pain is rarely experienced as purely pathogenic since learning always plays some part. The following forms of acute pain can be identified.

1. Experimentally induced pain. Pain due to nociceptive activity produced in a laboratory setting for the purpose of studying

pain, e.g., radiant heat, icewater submersion, or electric shock (Turk et al., 1983).

2. Acute pain. Pain due to nociceptive activity usually resulting from tissue damage which endures for no more than a few days and ceases with healing (Crue, 1983b).
3. Subacute pain. Pain with an origin and course similar to acute pain, but which endures from a few days to a few weeks (Crue, 1983b).

Chronic Pain Due to Malignant Processes

Some chronic pain is related to an ongoing disease process or to identifiable transient bodily changes. This type of pain is classified as acute by some authors, chronic by others, and is ignored by most. Two categories can be identified.

1. Ongoing pain. Pain that is secondary to an underlying malignant disease, e.g., cancer. This pain is not problematic until the later stages of the disease and is treated with appropriate medication and surgical procedures, especially when the disease process is fatal (Crue, 1983b). Although this kind of pain can be chronic, the learned component is minimal.
2. Chronic recurrent pain. Pain that arises from flare-ups of peripheral tissue pathology due to chronic processes such as rheumatoid arthritis, degenerative joint and disk disease, migraine headaches or trigeminal neuralgia (Turk et al., 1983). Many authors classify these as recurrent acute pains (e.g., Crue,

1983b). Although predominantly pathogenic in nature, there may be a large learned component.

Chronic Benign Pain

In chronic benign pain, the process often begins with an injury and concomitant acute pain. Although the initial injury heals, the pain continues as a "meaningless message" that is not useful to the person in any way (Sternbach, 1974). The continuation may depend on such diverse person-dependent factors as (a) an alteration of the peripheral or central nervous system that perpetuates activity perceived as pain (e.g., neuralgia or sensory epilepsy, see Crue, 1983a); (b) skeletal changes that result in impingement of nerve trunks; (c) soft tissue changes that lead to a buildup of scar tissue, calcification, or fibromyositis; and (d) psychological (e.g., depression, anxiety or both) or social-environmental (e.g., family role or daily routine) changes.

Chronic pain is often viewed as having a strong learned component (Brena, 1983b). Learned pain, in its relatively pure form, is experienced as a tonic or steady pain which may arise either from a nonprogressive, noninvasive pathological nociceptive focus; or in the absence of identifiable nociception (Brena, 1983b). It is inaccurate to view chronic pain as either pathogenic or learned. Chronic low back pain in particular is best viewed as involving both elements (Brown, Nemiah, Barr, and Barry, 1954).

Chronic pain patients are generally classified by how they cope with the pain. Two patient categories are discussed.

1. Chronic pain with adequate patient coping. This is pain that endures for more than six months (Crue, 1983b). Two subtypes of patients have been identified.
 - a. Objective pain patients. These patients had a good premorbid psychological and sociological adjustment and have etiological factors that are unknown or not readily identified. These patients may currently be experiencing psychological problems secondary to pain (Hendler, 1981).
 - b. Subchronic phase pain patients. These are people who have "learned to live with the pain" and resumed productive lives. This phase may take as long as three or more years after the onset of pain to achieve (Hendler, 1981).
2. Chronic pain with poor patient coping. These individuals may be completely disabled, and often seek and are subjected to multiple nerve blocks, surgeries, and medications, with none achieving lasting success (Crue, 1983b). Further subdivision of this group has been suggested.
 - a. Exaggerated pain patients. These patients may have a pathogenic cause for their pain, but the degree of disability is out of proportion to the physiological pathology. The premorbid characteristics include psychological problems such as personality, anxiety, and neurotic disorders. The problems may extend to psychotic disorders and brain pathology. The pre-existing disorders are frequently denied (Hendler, 1981).

- b. Affective or associative pain patients. These patients had premorbid psychological problems which are denied. They attribute all their problems to pain. Current psychological symptomology often includes an affective disorder, or disturbed thought processes. The pathogenic basis for the pain is limited, nonexistent, or not identifiable (Hendler, 1981).

This type of classification system appears to be useful to practitioners who treat chronic pain patients. It allows classification based on the response to treatment and psychological qualities which might complicate treatment. This taxonomic system, however, has one major limitation. It is a taxonomy generated by professionals to make sense of their own experience in treating chronic pain patients. Although the endeavor provides a way of understanding patients, it is doubtful people in pain categorize their experience this way.

Understanding a person's experience is not easily accomplished. It is impossible to enter another person's life and experience it as she or he does. The difficulty of this task does not mean it should not be attempted. The task of this investigation is to attempt such an understanding. To do this, a methodology that approximates "entering another person's life" must be found.

A Methodology for Describing Human Experience

A methodology for understanding how people experience chronic pain ideally should approximate their point of view. It should be concerned with how people live and function in the context of a wider world. The interactions between person and world allow the person (and others) to make sense of her or his experience. Our initial experiences are in the world, and aspects of the world stand out from a broader context as a figure stands out from its ground. Aspects of the world are also anticipated by its inhabitants and the anticipation gives a shape and direction to the actions and choices the inhabitants make (intentionality). For example, a refrigerator would look different (have a different meaning) to a starving person than it would to a person making repairs.

Much of a person's life, especially initially, involves a direct experience of the world. Experiences are differentiated, one from another, and imbued with meaning. One of the hallmarks of being human is the ability to contemplate direct experience consciously, i.e., to think about it. This is called reflected experience. Reflecting about experience is itself a direct, unreflected experience.

These ideas suggest life experience is always personal. We move through a world laden with implications, making choices based on our own status and what is available around us. The world is different for a hungry person than for a person who is hot and tired. Different aspects will be figural, noteworthy, and selected. The hungry person may follow the scent of food to its source and drool, while the hot

person may hear the sound of air conditioning fans, seek their source, and become cool. Both may arrive at the same place (McDonald's?), but with a very different anticipation and through a very different experience.

People generally are not objective about living in the world. Objectivity is a special form of reflective experience that purports to avoid distortion due to personal experience. No form of reflective experience can strip away the personal aspect since all reflective experience is personal. Objectivity has been the goal of much of contemporary scientific psychology. The "objectivity" is accomplished by removing the person from the context of the world, and asking him or her to perform in an artificial setting. This represents an "artificialization" of human functioning accomplished by pretending important aspects of person's life are unimportant or do not exist. This is not to say the information garnered from "objective" research is without value, but its importance is often overrated. It would be more beneficial to our understanding experience in general to begin with observations or accounts of experience. Fortunately, reality eventually intrudes upon objective theoretical constructions and practices, and forces change in the direction toward a more personal, inclusive, and accurate view (Kuhn, 1970; Manicas and Secord, 1983).

A typical approach to objectively understanding chronic pain might include the administration of standardized tests, use of a questionnaire, review of medical history, and an interview to gather a general impression of personality or psychological variables. Results

from such investigations can be of great help to the practitioner in formulating a description of the patient. Unfortunately, the description does not necessarily produce an understanding of the patient's experience of pain. It may well prove useful in comparing and contrasting patients with each other, or with people who have other kinds of problems, but it is not the pain sufferer's experience. Another methodology would seem to be more appropriate.

How does one person understand the experience of another? One method increasingly recognized as viability is to simply ask the person about his or her experience. Cognitive psychology is a field where such an approach has gained general recognition. Ericsson and Simon (1980) reviewed the use of verbal reports as data in cognitively oriented psychological experiments and identified several different procedures. The major feature common to all of them was that the subject responded orally to an instruction or probe from the experimenter. The verbal description could be offered concurrently with a task or be a retrospective account of the experience. The verbalization could be a description of an event primarily nonverbal in nature (e.g., a perceptual-motor task) or one more directly involving language by formulating rules (e.g., solving a puzzle).

The probe has been found to have an effect on the verbal report. The more directed or closed the probe, the more likely the subject is to attempt to tailor the verbalization to the perceived expectations of the experimenter. For example, a highly directed probe might be phrased, "Did you go through a period of blaming yourself for the

pain?" A less directed probe might be, "Did you go through different phases of understanding the pain?" An undirected probe might be, "Tell me about your experience of pain." The information provided in response to the undirected probe would seem closer to the subject's ordinary way of thinking about the event and should be less influenced by situational demands than information provided by more directed probes. Undirected probes may also lead to problems when their general nature fails to elicit the information sought (Ericsson and Simon, 1980).

Specific probes may alter the way in which subjects describe their experience, either to meet the demands of the experimenter or because the verbalization alters the personal understanding of the experience. This latter complication is not a factor with concurrent verbalization, but may play a role (albeit a weak one) when the retrospective account is taken long after an event (Ericsson and Simon, 1980). These alterations are less likely with general probes. However, the descriptive process itself can lead to a new understanding of experience.

The Ericsson and Simon (1980) review suggests subject verbalizations can be useful when used in conjunction with a specific task in an experimental situation. Such a methodology is not conducive to understanding the experience of a person in pain. The person with pain does not go through a simple experimental regimen in which a problem is worked on or solved. Understanding his or her experience will depend on a retrospective account of recent to

relatively distant past events; not a concurrent account of the immediate situation. For this endeavor, the experimenter cannot remain distant and aloof but must actively attempt to understand the subject so as to capture, as closely as possible, the person's own experience of pain.

This discussion suggests an interview would provide a useful means of investigating the experience of chronic pain provided the interviewer uses a nondirective approach to gather initial impressions and then attempts to have the participant elucidate his or her intended meaning. The interview provides a basic source of information which can be reduced to important and dominant themes and concepts as experienced by the participant. Comparisons across individuals could be used to look for thematic commonalities among pain patients.

This approach to understanding the experience of the person in pain comes from the phenomenological research literature. For example, Colaizzi (1978) suggests collecting a verbal protocol using interview questions that cover important aspects of an experience. Participants simply need to have experience with the topic under investigation and to be articulate enough to describe the experience. For this method of research, analysis of the interview protocol is accomplished by following several procedural steps:

1. Review the entire protocol to obtain a sense of what the person is communicating.
2. Identify significant units of the text eliminating duplications.

3. Formulate the meaning(s) represented by the units, using the individual subject's language as much as possible.
4. Group meanings or themes together in experientially related clusters that cut across subjects--as much as possible--with validation of the clusters established through reference to original protocols. Some clusters may be contradictory to each other, or appear unrelated.
5. These results can be integrated into a full description of the topic under investigation. This can be further integrated to form a statement summarizing the fundamental nature of the experience.
6. A validating step can be used at any or several of the above steps. Subjects may be provided with a description of the results and asked to comment on how well they fit with his or her experience. (Paraphrased from Colaizzi, 1978, pp. 59-62).

The steps Colaizzi outlines are in agreement with the four "hermeneutic" rules proposed by Ihde (1977) as a guide to phenomenological research:

1. Attend to the phenomena of experience as they appear.
2. Describe, do not explain.
3. Equalize or horizontalize the phenomena by not making a priori judgments as to which are important and which are not.
4. Seek out and identify the structural or invariant features of the phenomena as being those that are important (Paraphrased from Ihde, 1977, pp. 34-39).

The procedure--a protocol reduction--is somewhat analogous to the statistical procedure known as hierarchical cluster analysis. This procedure takes numerical data that describe some entity (e.g., the scale scores from a personality test) and reduces the data to an index of similarity or dissimilarity (e.g., Pearson product moment correlation coefficient). The entities are then combined into

clusters or groups based on their similarity to other entities as indicated by their statistical similarity. At subsequent steps, other entities are added to existing clusters, or clusters are combined to form larger clusters, until all are combined into one large group. An error statistic, computed at each step indicates which step has the best defined clusters. (See Bentler, Lettieri, and Austin, 1976, for a brief discussion of this procedure).

The similarity between hierarchical cluster analysis and text analysis is readily apparent. According to Jones (1984), text analysis involves the careful identification of thematic units (the entities of cluster analysis), followed by the collection of units into groups based on repetitive use of the same word, synonyms, antonyms, or words representing a conceptual class (e.g., names of colors) in the various verbal units (the similarity index of cluster analysis). When the "clusters" give a fitting description of what the individual has said, the process can stop for that individual. When these processes have been carried out on a number of individuals, themes that cut across individuals may be identified in a similar manner.

This discussion indicates that rigorous procedures for analyzing interview protocols exist and these procedures can readily be applied to chronic pain sufferers. The following section discusses the research questions such an application is suited to answer.

Purpose of the Study

People in pain make choices, initiate action, react to the actions of others, and think about their experience as it relates to the world in which they live. The nature of that experience, from the perspective of the pain sufferer, is not generally examined in the literature on chronic pain. The purpose of this study is to examine the experience of chronic low back pain from the perspective of the person suffering it. To appreciate this perspective, a number of other objectives must be achieved.

Objectives

The following objectives were established for the study to allow as full an understanding of the chronic pain experience as possible.

1. To provide a forum for the pain sufferer to discuss what he or she believes are the most important aspects of his or her experience in an open ended, minimally structured interview.
2. To obtain information about perceived interactions between pain and (a) emotion or mood, (b) thinking or reflective activity, (c) bodily functioning and movement, (d) time, (e) family and friends, and (f) job or occupation.
3. To determine what actions or thoughts the person in pain has found to be helpful in coping with the pain.

Organization of the Study

The first chapter of this report contained introductory information relating to chronic low back pain. A contemporary theory of pain—the gate control theory—was discussed, followed by a description of a taxonomic scheme. The next sections contained a description of a methodology appropriate for understanding human experience, a rationale for the study, a statement of objectives, and, finally, a description of this study's organization.

Chapter II contains a review of the literature relevant to understanding people with chronic low back pain. It is divided into three major sections which are concerned with the onset of health problems, adjustment to chronic health problems, and implications for the present study. The second section is divided into five major subsections. The first examines time and the adjustment process. The second reviews the adaptive tasks and influences on adaptation as relates to bodily adaptation. The next two sections parallel the second but review literature related to psychological adaptation and social and environmental adaptation respectively. The fifth and final subsection of section two reviews the literature on coping skills and strategies.

The third chapter is divided into three sections and describes the methodology. The procedures used in the recruitment of participants and participants' demographic characteristics are described in the first section. The second section focuses on the nature of the interviews and collection of the data. This is followed

by a section describing the methods used in the analysis of the interviews and includes a brief description of how thematic units were derived, the themes and foci which emerged from the thematic units, procedures used to checking reliability of the themes and foci, and comparisons between two small subgroups of participants.

Chapter IV presents results of the study in six sections. The first section describes salient aspects of the experience of chronic pain. The next four sections discuss the themes or meanings of the chronic pain experience that emerged from the interviews. The sixth section reports the comparisons between pain clinic and working participants.

The fifth and final chapter contains a discussion of results in nine sections. The first section discusses the salient aspects of the experience of chronic pain. The next five sections discuss implications of the themes that emerged from the interviews. The seventh section discusses implications of the comparison between two groups of participants. The eighth section discusses the implications of findings for treatment of chronic pain patients. The ninth and final section contains recommendations for further research.

CHAPTER II

REVIEW OF THE LITERATURE

Chronic low back pain is a member of a larger class of chronic health problems that includes problems such as multiple sclerosis, diabetes, and chronic lung and heart disease. Although the literature on pain is very extensive, not all of it is pertinent to pain viewed as a chronic health problem. This review focuses on chronic low back pain as a chronic health problem while bypassing the remainder of the pain literature. The reader interested in other pain phenomena are referred to thorough reviews appearing in Melzack and Wall (1982) or Sternbach (1968).

The focus on pain as a chronic health problem was chosen for several reasons. The purpose of this investigation is to examine the experience of people having chronic low back pain. People do not view their pain in terms of receptors, fibers, CNS activity, or in terms of a pain theory. They experience it in terms of how they live their lives in a day to day fashion. The onset of chronic pain represents and necessitates a change in the way they live. Somehow, they must learn to adjust and adapt to the change. The literature on how people live with a chronic health problem is the most relevant to the topic of concern.

This review is concerned with the process of adjustment to chronic health problems in general, with chronic pain serving as a specific focus. For the sake of discussion, this section is divided

into several major sections. Initially, the transition from relative health to acute illness is discussed considering the implications this transition poses for chronic problems. The process of adjustment to chronic health problems is reviewed next. This section is divided into subsections within which (a) the influence of time, (b) bodily adaptation, (c) psychological adaptation, (d) social and environmental adaptation, and (e) coping skills and strategies are reviewed. These divisions do not reflect the way people actually live. They are created here for convenience and ease of organization. Finally, implications and conclusions of the review for the study are discussed.

The Onset of Health Problems

Chronic health problems are not initially chronic in nature. The first symptoms are often ignored and only after a period of delay, are the symptoms seen as serious enough to warrant treatment. The decision to seek treatment is influenced by many factors including the number of different symptoms, their severity, and persistence; background factors such as social class, age, sex, and ethnicity; the meaning assigned to the symptoms; the perceived social dangers and cost of seeking or not seeking treatment; the social context within which the symptoms appear (e.g., treatment is sought more quickly if the person is at work or in the company of others than if she or he is alone at home); and the availability of resources related to treatment such as proximity to facilities, money, and relationship with the

helping professionals (Cowie, 1976; DiMatteo and Friedman, 1982; Mechanic, 1966; Robinson, 1971; Turk et al., 1983).

The person accepts the existence of an acute problem when the seriousness of the symptoms is validated by friends with similar experiences, or by a physician or other professional. This acceptance may precede or follow the act of seeking treatment (Cowie, 1976; DiMatteo and Friedman, 1982).

Acceptance of the fact that an acute health problem exists leads to changes in the person's psychological world. There is a narrowing of his or her world to fewer social contacts (dominated by health-care providers and family) and fewer, more immediate concerns (rest, comfort, food, pain reduction), which leads to a narrowed range of interests capable of eliciting responses. A focus on self is fostered by release from duties and responsibilities of the "normal" world, and increased attention from others (in a manner characteristic of infancy) which encourages regression, selfishness, and intolerance. Another change is an increased focus on bodily processes and changes (perhaps to the point of seeming hypochondriacal). Finally, there are numerous psychological and emotional changes (Barker, Wright, Meyerson, and Gonick; 1953).

The initial reaction to a health problem that becomes chronic (such as chronic low back pain) is the same as the reaction to an acute one. If the acute reaction pattern persists, however, the patient is unlikely to make the kinds of changes and adjustments that are necessary for coping with a chronic problem (Ireys and Burr,

1984). As the chronicity of a problem becomes evident, i.e., as a considerable amount of time passes, the patient must adjust to the new condition, and adapt to and cope with concomitant changes inherent in a chronic health problem. In the next section, the process of adjustment to chronic health problems will be examined, with an emphasis on the problems associated with chronic low back pain.

Adjustment to Chronic Health Problems

Chronic health problems affect about 50% of the U.S. population with about 40% of those affected experiencing some degree of limitation due to the problem. Approximately 2% of the total U.S. population experience major limitations in vocational, avocational, or educational activity as a result of chronic health problems (DiMatteo and Friedman, 1982).

Chronic health conditions have several elements in common. DiMatteo and Friedman (1982) identified four commonalities: (a) the condition is permanent, (b) some disability is involved, (c) nonreversible pathological change or bodily deterioration are seen as causing the condition, and (d) the person often must learn new self-care techniques. These characteristics necessitate change as a person tries to come to grips with her or his problem.

Time and the Adjustment Process

Time is a strong influence on the adjustment process. Strategies used early in the development of chronic health problems will differ

from those used later. Moos and Tsu (1977) suggest grieving for a loss,

... whether of a person, a body part or function, or a cherished ideal . . . [is a sequential] progression from an initial reaction of numbness or disbelief to a growing awareness of pain, sorrow, and often anger and a preoccupation with the lost object, and gradually to a reorganization in which the loss is accepted and equilibrium is restored (p. 18).

Sequences of adjustment have been suggested by several authors. Weller and Miller (1977) identified stages of adjustment to a rapid onset chronic health problem—spinal cord injury—as: (a) shock (usually a short-term physiological or psychological reaction), (b) denial (a more prolonged reaction with protective aspects), (c) anger (reaction to the sense of loss, deprivation, and unfairness), (d) depression (hopelessness, helplessness, and perhaps guilt over one's own role in the onset, or guilt over the expression of anger), and (e) adjustment (a positive or negative resolution). This model is rather similar to the well known stages related to death and dying proposed by Kubler-Ross (1969): denial and isolation, anger, bargaining, and acceptance. Many people with chronic low back pain experience a sudden onset through an accident or injury.

Matson and Brooks (1977) proposed a four stage adjustment process for a chronic health problem having a slow onset (multiple sclerosis): denial (concealing symptoms, seeking a different diagnosis, refusing help); resistance (search for information, cure or treatment, seeking support from and giving support to other patients, reluctant acceptance of help); affirmation (facing it, grieving for loss of former self, public identification of health problem, reordering the

priorities of life); integration (accepting the reality of the problem, broadened life interest, acceptance of necessary help, integration of new values into life style). Some people with chronic low back pain have experienced a slow onset of the condition.

Buytendijk (1943/1962) identified three rough stages of adjustment to pain: an acute action stage in which the boundaries between self and world are altered by the intrusion of pain from which the person seeks relief and release; the passive endurance stage in which the person suffers and the sense of action is lost in light of senseless, meaningless chronic pain; and a third stage in which a person adopts an accepting, enduring, humble attitude that allows her or him to face pain and life with composure after having developed a personal answer to chronic pain that recognizes the limits of what one can do, and that one's choice of action has consequences.

Most authors who write about stages or phases to the adjustment process indicate that the phases are not rigidly linear. Many people move back and forth through the different stages at different times. Not everyone reaches or consistently maintains the final stage of acceptance or integration.

When a person's reaction to a chronic health problem is examined or studied, knowledge of the stages of adjustment are not sufficient for understanding the total adjustment process. Adjusting to chronic health problems involves adapting to concomitant bodily, psychological, and social-environmental changes. These adaptive tasks are influenced by numerous social-environmental, personal, and health

problem characteristics. Adjustment is attained through the application of coping strategies, coping mechanisms, and defense mechanisms to the person's specific situation (Kieley, 1972; Moos and Schaefer, 1986; Moos and Tsu, 1977; Verwoerd, 1972). The remainder of this section examines the problems of adapting and adjusting to chronic health problems, factors that influence the process, and the mechanisms and strategies by which it is accomplished.

Bodily Adaptation

Adaptive task. Bodily adaptation can involve actions ranging from taking medication (e.g., oral insulin) to use of a wheelchair to compensate for a major loss of mobility (e.g., paraplegia) and in many ways are problem specific. These actions can best be described by the term "self care."

Self care tasks are associated with nearly all chronic health problems. They involve adapting to physical discomfort and complying with the prescribed treatment regimen. Coping with either the disease process or the associated physical discomfort may have several requirements: (a) trust in health care providers over an extended period of time; (b) controlling symptoms and the progress of the condition (as opposed to being cured); (c) use of various self care procedures; (d) the ability to differentiate among symptoms, their severity, and their implications; (e) self monitoring for indications of changes in health status; and (f) a life-long adjustment in daily routine to accommodate the changes (DiMatteo and Friedman, 1982;

Miller, 1983; Moos and Tsu, 1977). The range of adjustment may extend from extreme noncompliance to exuberant incorporation of treatment guidelines into a more extensive self-directed program.

Influences on adaptation. Any chronic health problem can have widespread ramifications for the afflicted person. It may come to affect virtually everything the person does in his or her life. The following discussion examines factors that influence the adjustment process with a particular focus on chronic pain.

1. Severity. The severity of the chronic health problem influences the entire adjustment process. The more severe the problem, the greater the demand on individual and extra-individual (e.g., family) resources, and the more likely that a sense of powerlessness and futility will exist (Miller, 1983). The severity will also be affected by the amount of stress, which is related to social and environmental factors, and how the person copes with it. This is especially true for chronic pain problems (Keefe and Gil, 1986).
2. Course and duration. The course and duration of the chronic health problem will influence the way the person copes with pain. Matson and Brooks (1977) found that among multiple sclerosis sufferers, that the longer a patient had the disease, the more his or her self-concept improved, with most of the improvement occurring in the first ten years. Self-concept did not improve, however, when the condition became more severe. With chronic pain, the course is characterized more by inevitability than by

deterioration (Kotarba, 1983b). There is some suggestion that duration—usually meaning years—is related to more favorable adjustment or adaptation (Hendler, 1981). Empirical data is sparse concerning this area. Duration is not always related to more positive outcome as evidenced by those with a long history of pain who are referred to pain clinics for treatment (Sternbach, 1974).

3. Bodily systems affected. The bodily systems involved in a health problem influences the adjustment process in various ways (Verwoerdt, 1972). For example, the individual with chronic low back pain may have many other physiological complications that result from the pain or serve to continue it.

The bodily effects of chronic pain include the same chemical and autonomic changes that can accompany stress, depression, or anxiety (see Bakal, 1979; Beutler, Engle, Oro'-Beutler, Daldrup, and Meredith, 1986; Gross and Collins, 1981; Hammonds, 1978; Hendler, 1981; Selye, 1980, 1982; Turk and Flor, 1984). These include shorter, faster breathing; changes in blood flow; altered levels of endogenous opioids; changes in tissue chemistry; increased levels of adreneline (epinephrine); alteration of blood pressure; increased muscle tension; and generalized fatigue.

The effects of stress can lead to additional dysfunctional disorders that increase the pain experienced (Brena, 1983b) such as:

- a. Fibromyositis (also known as fibrositis, myofascitis, myogeliosis, and psychogenic rheumatism) can be experienced as vague and diffuse problems of fatigue, sleep disturbance, poor appetite, and aching pain (Cailliet, 1983).
- b. Posture and postural changes occur when a person braces him or her self in an attempt to protect the painful area. This can lead to several changes: (1) myofascial pain; (2) increased pressure on nerve trunks (Cailliet, 1983); (3) the overuse of certain muscle groups, leading to a painful muscle fatigue, tension, and spasming; (4) the underuse of certain groups which can lead to muscle wasting and weakening resulting in their being more susceptible to injury and increased pain; or (5) increased muscle tension (Hendler, 1981; Turk and Flor, 1984).
- c. Increased muscle tension is a natural concomitant of pain (Flor, Turk and Birbaumer, 1985) and may cause a decrease in muscle length (due to inadequate stretching) and strength (Turk and Flor, 1984). These changes limit the range of motion in the joints and increase the possibility of muscle or joint injury (Brena, 1983a), the development of degenerative joint disease (Cailliet, 1983), or muscle spasms (Turk and Flor, 1984) thus increasing the sources of pain (Keefe and Gil, 1986).
- d. Myofascial syndrome may develop when damage to soft tissue results in fluid build up between fascial membranes surrounding muscles. If not reabsorbed, it acts as an irritant that contributes to the formation of adhesions which inhibit the

muscles from gliding over one another. Either adhesions or fluid can lead to muscle spasms which, in turn, lead to ischemia and pain escalation (Cailliet, 1983; Hendler, 1981).

e. Sexual dysfunction is relatively common among individuals with back injuries (Unikel, 1978), chronic pain (Maruta, Osborne, Swanson, and Halling, 1981), or other chronic health problems (Block, Boyer, and Imes, 1984; Rustad, 1984). Men with chronic pain often lose erections during copulatory movements. Women with chronic pain frequently become less active during copulation. Their partners may become cautious or inhibited due to reluctance to induce more pain.

f. Sleep disturbance is another common concomitant of chronic pain. Maintenance of one position or posture for any length of time is difficult for those having chronic pain. During sleep, the maintenance of a posture results in increased pain which may be sufficient to disrupt sleep. When a person does sleep, it is rarely sound or for any length of time (Eland, 1978). Sleep disturbance is also a hallmark of depression and is frequently associated with anxiety problems. The presence of a sleep disturbance along with chronic pain does not necessarily indicate these other problems are present.

The existence of a chronic health problem changes the way a person relates to his or her body. Often the afflicted person must learn new ways of caring for one's physical self and must accept new limits on what the body can do. Severe chronic pain is a chronic

health problem that causes drastic changes in the way a person experiences the body.

Psychological Adaptation

The psychological tasks of adaptation are intertwined with the physical problems. Perceiving or experiencing the body as changed has important psychological ramifications. Adaptive tasks important to the process of adjustment, and psychological aspects that influence adaptation will be examined here.

Adaptive tasks. The process of adaptation is likely to continue as the chronic health problem and its ramifications unfold. The tasks discussed here include the personal meaning of the problem, maintaining a sense of identity, and managing or modulating affective reactions.

1. Meaning. People give meaning to their symptoms. The meaning assigned to a chronic health problem may change over time as more information is gathered and further implications are perceived and assimilated (Matson and Brooks, 1977; Moos and Schaefer, 1986). It is difficult to assign a meaning to chronic pain. Acute pain means the body is threatened and needs attention, we have done something we might have avoided, we are being punished for carelessness or wrongdoing. Chronic pain has no such meaning: it is an "undeserved" experience for which previous experience provides no preparation. Chronic pain is a long-term, yet immediate, threat without a focus that allows a person to

fantasize or create its implications and meanings. (Kotarba, 1983b; Sternbach, 1974). Pre-existing beliefs and later alterations in the belief system provide a perspective on chronic problems such as pain that can foster or hinder adequate adjustment (Kotarba, 1983b; Turk and Rudy, 1986). With chronic pain, the challenge is to accept its inherent meaninglessness while "listening" to its implications for living.

2. Identity. The individual needs to preserve or develop a self-image that maintains a semblance of continuity, security, competence, mastery, and autonomy in how life is lived despite changes wrought by the chronic problem. Adjustments will be made in the self-image across time as the meaning of the condition is adjusted and "identity crises" are weathered (DiMatteo and Friedman, 1982; Matson and Brooks, 1977; Miller, 1983; Moos and Schaefer, 1986). One challenge involves limiting the spread of feelings of "weakness" or inferiority associated with the problem to other aspects of self (Lindemann, 1981; Nerenz and Leventhal, 1983; Wright, 1960).
3. Affective modulation. Life crises are likely to arouse many powerful emotions such as a sense of failure, self-blame, anxiety, anger, fear, loss, grief, isolation, or inadequacy. These strong emotions can either act to inhibit the adjustment process, or be managed and used to enhance adaptation (Ireys and Burr, 1984; Johnston, 1984; Miller, 1983; Moos and Schaefer, 1986; Pearlin and Schooler, 1978; Wright, 1960).

Psychological adjustment to chronic health problems requires an afflicted person to re-interpret bodily functioning in ways meaningful for both the health problem and the new relationship such a problem creates with one's perception of self and the world. Altering the framework of meaning, redefining one's identity, and modulating concomitant affect are primary tasks in making necessary psychological adjustment.

Influences on adaptation. Reaction to chronic health problems may involve withdrawal from interpersonal contacts, excessive dependency and helplessness, and/or a bitter resignation and depression when the challenge posed by the problem seems overwhelming (Verwoerdt, 1973). Although some people maintain such an adjustment (Barker et al., 1953; Markson, 1971; Shuval, Antonovsky and Davies, 1973), for others it represents a temporary phase on the way to a more adaptive personal adjustment.

The process by which adaptive tasks will be accomplished is influenced by several psychological factors. The factors considered here in detail relate to sex role, place in the life cycle, personality, cognitive and emotional maturity, and experience of the body.

1. Gender. Gender and sex roles have been extensively studied.

Although gender no longer decides destiny, within our culture it still exerts a strong influence on elements of identity (Feldman, 1982). This suggests the same health problem may have a different meaning for men than for women. Problems associated

with physical helplessness which limit physical activity such as low back pain may be more threatening to men, while health problems affecting physical attractiveness (e.g., mastectomy) or child bearing capacity may be more threatening to women (Kiely, 1972; Verwoerd, 1972). Some of these differences are probably due to socialization and traditional divisions of labor, e.g., male dominance in jobs requiring physical labor. Gender may also influence the type of coping strategies that are utilized in the adjustment process (Viney and Westbrook, 1982).

2. Life Cycle. The timing of an illness in the life cycle (and the age at which it occurs) will often influence the adjustment process and selection of coping strategies (Johnston, 1984; Moos and Tsu, 1977). Chronic health problems that arise while a person is attempting to establish her or his family and job security are likely to have a different meaning than the same problem arising near retirement age (Singer, 1974; Sutkin, 1984; also see Eisenberg, Sutkin, and Jansen, 1984; Golan, 1981; or Ireys and Burr, 1984; for an overview of individual life cycle tasks or Carter and McGoldrick, 1980, for an overview of the family life cycle).
3. Personality Style. Personality is an important influence on coping and adjustment (McCrae and Costa, 1986). Personality includes long standing patterns or styles of perceiving and responding to people and the environment that serve an organizing and stabilizing function for a person (Shapiro, 1965). Stability

and organization are fostered by developing preferred coping strategies that make functioning easier while limiting the range of responses available and by systematically attending to certain types of information or stimuli while systematically excluding other types.

An individual confronted with a chronic medical problem will likely use a preferred coping style, and more extensively rely on a preferred pattern of sorting information. Where personal style is more flexible, the person is more likely to adjust better, either spontaneously or with useful suggestions and prompting from others. Where the style is more rigid, the adjustment is likely to be less adaptive and the person is less likely to make use of suggestions or prompting (Wright, 1960). Such individuals may be able to make short term gains in response to environmental manipulation, but the habitual patterns are likely to reemerge over time unless a fundamental alteration in the personality style has occurred.

4. Belief System. Beliefs, attitudes and the way a person interprets events, i.e., the personal belief system, are powerful influences on how one adapts to a chronic health problem. Cognitive distortions derived from inaccurate or distorted interpretations are common among people who are depressed (Noles, Cash, and Winstead, 1985) or who experience chronic pain (Keefe and Gil, 1986). Many of the strategies used in pain treatment centers are aimed at altering the belief system and concomitant

distortions which complicate adjustment to chronic pain (Keefe and Gil, 1986; Turk et al., 1983).

5. Intelligence and Cognitive Maturity. This factor is likely to be an indirect influence on the adjustive process. Cognitively more mature or sophisticated people can symbolically represent information and concepts and perceive interrelationships among them. This ability should make it easier to accept limitations imposed by the problem. This factor is also related to educational and vocational achievement which may allow greater latitude in vocational changes (Block, Boyer, and Imes, 1984).
6. Emotional Maturity and Response. Emotional maturity may be a more important factor than cognitive maturity in the adjustment process. The ability to differentiate, manage, use, and appropriately express emotion or affect is a hallmark of emotional maturity. Learning to recognize one's own affective state increases the ability to delay acting upon it and to use the information to one's advantage. Chronic pain patients and other chronically ill individuals are often less able to differentiate affective experience, recognize the cognitive components and subsequently make use of their experience (Beutler et al., 1986; DeGood, Buckelew, and Tait, 1985; Sifneos, 1973).

Emotional change is one of the most pervasive, and difficult to manage, concomitants of chronic health problems. The alteration in bodily functioning together with environmental changes precipitates a series of psychological losses. The

present is compared to the past evoking a sense of a loss of physical ability, autonomy, personal effectiveness, and functional independence. The pain has not been lessened by the medical treatments, consultations and therapies. The person's own efforts to control and master the situation often are not effective, which engenders feelings of loss of control (Krueger, 1984).

Some people react to this loss of physical functioning by surrendering functions in other realms. They act as if inability to do well in one part of their lives prevents them from doing well in all others. This belief is often encouraged by the actions of treatment personnel who ask questions about the nature of their pain, its duration, its quality, and the presence of accompanying symptoms. The patient is assigned a passive role of "receiving" treatment. Important decisions for the course of action lie with the treatment staff, e.g., physicians and nurses; not with the patient. Thus, the person feels a sense of hopelessness and helplessness, in addition to loss, in response to the pain.

Depression is an emotional condition that often accompanies chronic health problems (Block et al., 1984; and Krueger, 1984) and chronic pain (Devine and Merskey, 1965; Fordyce, 1976; Keefe, Wilkins, Cook, Crisson, and Muhlbaier, 1986; Merskey, 1965; Romano and Turner, 1985). Reactive depression frequently is associated with complaints of pain, and chronic pain experience

often leads to a reactive depression (Sternbach, 1974). The two conditions may involve similar physiological mechanisms (Beutler et al., 1986; Sternbach, 1974). In some individuals, chronic low back pain may represent a masked depression where the pain symptoms are more acceptable than those usually associated with depression (Hendler, 1981). Other individuals may develop depressive symptoms after the onset of pain, while others may have both sets of symptoms arise simultaneously (Romano and Turner, 1985).

The diagnostic criteria for depression are quite similar to changes observed with chronic pain and include disturbed sleep patterns, social withdrawal, dysphoria, low activity and energy level, agitation, impaired concentration and attention, loss of self esteem, hopelessness, helplessness, and worthlessness (American Psychiatric Association, 1980). Depression is likely to accentuate and amplify the experience of chronic pain.

Anxiety is another affective state that exacerbates the pain experience. It frequently coexists with depression (Beck, Rush, Shaw, and Emery, 1979; Sternbach, 1974) and pain (Gross and Collins, 1981; Swanson, 1984). Anxiety plays a significant role in acute exacerbations of pain within the chronic pain condition. Pollio (1982) suggests anxiety is evidenced by an increased focus on the body as an object, apprehension, worry about the future, and failure to meet the past expectations of others—all conditions characteristic of chronic pain. Diagnostic criteria

for a generalized anxiety disorder include motor tension, autonomic nervous system hyperactivity, apprehensive expectation, and vigilance and scanning (American Psychiatric Association, 1980). Anxiety and apprehension are concomitant with chronic pain when (a) the episodes seem unpredictable, (b) future environmental events are unpredictable (e.g., job or income), and (c) there is a potential for future loss in all areas of one's life.

7. Body Image. Chronic health conditions have potentially powerful effects on the way a person perceives the body (Orbach and Tallent, 1965). Body image is a concept closely linked to self image and is determined in part by both physiological functioning and physical ability. It originates in bodily movements and meaningful acts performed beginning at birth (Merleau-Ponty, 1962; Moss, 1978). Although deep dissatisfaction with one or more aspects of one's body is almost universal (Wright, 1960), the body is generally discussed as a personal possession: It is my body as opposed to being a body or the body (Moss, 1978). General acceptance of the body breaks down under certain conditions such as severe psychopathology (depersonalization), extreme obesity (Moss, 1978), or pain and illness (Buytendijk, 1943/1962; Cassell, 1976). When this occurs, the body is viewed as an object external to the person.

MacGillivray (1985) found the body-as-object to be but one way in which people experience their bodies. Based on

extensive interview data, he proposed three pairs of interrelated categories. The "body as object" and "body as instrument" are experiences of corporeality. Both include the body viewed as an object with describable and measurable qualities, limits, and capacities. The "body as object" is an it that reacts to events and becomes figural especially through illness or pain. The "body as instrument" is a tool that can be used to accomplish certain ends, or that can be trained to skillfully perform actions.

Another category pair encompasses experiences of engagement wherein the body is not central to one's perception. The "body as vitality" includes experiences of well-being, enlivenment, or absorption in the world while the "body as activity" is more the experience of the body being in or moving through the world. The final category pair includes experiences of interpersonal meaning in which the "body as self" is the figural aspect: the "body as expression of self" refers to aspects of character, identity or lifestyle (e.g., "I am a runner"); and "body as appearance" refers to how the body looks (or is believed to look) to others.

These aspects of the body can greatly influence the adaptive process. Perhaps the key concept here is that the body is a very important component of how the person views him or her self, is viewed by others, and moves through the world. It exerts a great influence on behavior and the overall adaptive process (Barker et al., 1953; Wright, 1960).

Chronic pain sufferers experience a change in bodily functioning that is attributed to the pain, but this change does not necessarily alter the body viewed as an "expression of self" (Murphy and Fischer, 1983). If the person has a few days during which little or no pain is experienced, she or he may act as if the pain problem is over and may attempt to engage in activities usually precluded by the pain such as yardwork or heavy house cleaning. A common result is exacerbation of pain with the person being forced to seek bed rest, the physician's office, an emergency room, or brief hospitalization. The reaction to pain-free days suggests that many pain patients have not altered their body/self-image, but have altered their level of activity in the presence of pain. The body, however, has in fact changed. It cannot adapt to rapid escalations in activity levels as it once did without a subsequent increase in pain. The alteration in physical functioning means there is a new relationship to the body. The body/self-image may have included beliefs about physical ability and endurance that are no longer true (Murphy and Fischer, 1983).

In summary, there are many factors that effect the course of psychological adaptation to chronic health problems. Gender, everyday experience, and the socialization process invest the body with meanings that frequently cannot be maintained in light of a specific health problem. Personality, place in the life cycle, and cognitive

maturity are three important elements that effect adaptation and the psychological reaction to it. Perhaps the most dramatic changes wrought by onset of a chronic health problem are in emotional functioning. Loss in functioning, and feelings of depression and anxiety, complicate the adaptation process and, in the case of chronic pain, may actually worsen the condition. The changes indicate a need for developing a new relationship to the body which allows the person to function to the best of his or her ability. Successful psychological adaptation is related to successful physical adaptation.

Social and Environmental Adaptation

Adjusting to and making changes in the social environment are necessary accompaniments to chronic health problems. The environment one experiences is frequently changed by the development of such problems (Barker, 1978; Moos and Tsu, 1977), and chronic health problems threaten a person's relationship to the environment. Frequently, the person loses or alters her or his role in the family, social network, and workplace, while substituting roles of help seeker and patient (Miller, 1983). It may become difficult to accept comfort and support from others even though such comfort and support would be helpful (Moos and Schaefer, 1986). Developing or sustaining social relationships that facilitate adaptation to the health problem and its aftermath is a challenge (Moos and Schaefer, 1986). This subsection will examine some of those challenges and tasks before reviewing factors influencing the process.

Adaptive tasks. Social and environmental adaptation to chronic health problems calls for adapting to changes in the relationship with family, peers, professionals, and work. The nature of these changes will vary in conjunction with physical and psychological adaptation across time.

1. Family. Roles and relationships within the family frequently change as a result of chronic health problems. The adaptive process may result in an adjustment ranging from a maladaptive marital relationship, ending in divorce, to an acceptable interdependence and complementary existence (Ireys and Burr, 1984; Turk and Kerns, 1985).
2. Peers. The people who constitute peers are likely to change as the person's daily routine changes. Whereas coworkers or neighbors may have previously provided social interaction, the major source of contact may now be other patients. The range of adjustment may extend from interpersonal isolation to the establishment and/or maintenance of close, warm, supportive, relationships with others (Ireys and Burr, 1984).
3. Professionals. Treatment professionals such as psychologists, physicians, nurses, physical therapists, occupational therapists, or social workers may be a source of extensive social interaction. The qualitative nature of this interaction is likely to be quite different from what existed before. The person becomes a "patient," a role often defined as a dependent help seeker (Miller, 1983). Professionals are likely to act

authoritatively, expecting the patient to be passive and compliant. This role is often in conflict with what the person needs to maintain self-esteem and a sense of control over his or her life. The relationship to professionals can range from maladaptive passivity, dependence, passive-aggressiveness, and/or overt anger and hostility; to an adaptive retention of decision making responsibility (Ireys and Burr, 1984).

4. Work. Chronic health problems often affect the type of work a person can do. Whether it be work in the home, a job for pay, or a hobby, work provides a source of satisfaction and self-esteem that is hard to replace. Finding a way to satisfy this need is a challenge that may result in adjustment ranging from resignation to the "disability," to the development of creative alternatives.

Influences on adaptation. The ways and means by which a person will adapt are influenced by many factors. This subsection will review the role of cultural traditions, family, friends, medical treatment, vocational and avocational adjustment, and aspects of the physical environment.

1. Cultural influences. Families with different cultural and/or socioeconomic backgrounds teach or promote different interpretations of experience; hold different attitudes and expectations regarding past, present, and future; and have different definitions of acceptable behavior (DiMatteo and Friedman, 1982; McGoldrick, 1982; Schwartzman, 1982; Suchman,

1965; Viney and Westbrook, 1982). These influences form a broad environmental and social milieu against which behavior emerges.

The reaction to pain is one area in which these differences have been investigated. The classic study was done by Zborowski (1952, 1969) who observed Jewish (Eastern Europe), Italian (Southern Italy), and Irish male immigrant patients and contrasted them with male "old American" patients whose families went back several generations. To the hospital staff (composed mostly of old Americans), the Jewish and Italian patients appeared to be quite similar—very emotional, often complaining loudly of pain, groaning, moaning, gesturing, reluctant to be alone, and eliciting sympathy and assistance from family and friends. The Irish and old American groups were also seen as similar—suffering in private, minimizing the pain experience, not complaining, reluctant to bother staff, and believing in the physician.

Zborowski (1952, 1969) discovered the similarities between Jew and Italian, and old American and Irishman were only apparent, that the observed similarities in hospital behavior were actually due to quite different beliefs and interpretations of the overall experience. The Jewish patient focused on the meaning of the pain, was pessimistic about its implications, was anxious and worried about his future health and his position in the family, and viewed pain medication with skepticism (symptomatic relief does not get at the cause of the pain, and

medication might be addictive). He also believed purely symptomatic relief implied physician incompetence, while demonstrative pain behavior led others to worry and give better care.

The Italian patient used pain behavior to communicate distress and provoke sympathy for his suffering, was concerned with the immediate pain, and sought immediate pain relief. He was joyful and happy when the pain was relieved and believed pain relief implied physician and staff competence (Zborowski, 1952, 1969).

The Irish patients minimized pain, avoided emotional displays of it, resisted discussion of pain, and viewed it as synonymous with suffering (which was to be borne alone, but was easier to talk about). They endured pain (because one has to) without doing anything to relieve it, frequently felt guilty for needing or receiving pain relief, and often ignored pain or illness until it interfered with work. They tried to trace the cause to insignificant sources or to an external injury (as if from sports or fighting), and consulted physicians only as a last resort (at which time the physician became the boss and the patient dependently followed orders) (Zborowski, 1969).

The old American patients also preferred to suffer in private, were reassured by the hospital environment (very scientific), were optimistic about treatment, were reassured by diagnostic tests, and were concerned with the symptomatic meaning

of the pain. They saw the pain itself as an unnecessary side effect that should be relieved if possible, but if it was part of the natural course of things, it was to be ignored (Zborowski, 1952, 1969).

These marked differences in reaction to pain can only be attributed to differences transmitted by the culture in which the person was raised since the differences in attitudes diminished with succeeding generations (Zborowski, 1952). Cultural traditions are passed along through the family of origin which will be reviewed next.

2. Family of origin. The family into which a person is born and/or raised will serve as the first "training ground" as to acceptable versus undesirable behavior. The family provides the initial context for relationships involving trust, dependency, shame, doubt, autonomy, power, compromise, secrecy, openness, loyalty, roles, problem-solving, intimacy, dominance, submission, fear, love, affective expression, etc. (Erickson, 1963). Family relationships are the prototype that will be modified in future relationships and interpersonal contacts. Different families have different codes and rules about the elements of relationships listed above. Some of the differences can be seen by looking at families with different cultural heritages (Sutkin, 1984).

Beliefs about, and attitudes toward, illness are taught and communicated directly and indirectly. The adjustment to a

chronic health problem is affected by these beliefs and attitudes, and by those relating to dependence, autonomy, self-control, and power. Thus, family patterns established early in life can strongly affect the development course, and adjustment to chronic health problems (Flor and Turk, 1985).

3. Contemporary family. The formation of the contemporary family begins a series of tasks closely linked to individual developmental tasks (Carter and McGoldrick, 1980). McGoldrick and Carter (1982) indicate these tasks include formation of the marital system, realignment of pre-existing family relationships and friendships, accommodating to partner's conflicting needs, and addition of the parental role when children enter the family. As children mature, the tasks of parenthood change to allow children more responsibility to help them eventually leave the family. This overall process is so complicated that 38% of all first marriages and 44% of remarriages end in divorce (Carter and McGoldrick, 1982).

The development of a chronic health problem will have a differential effect on family members depending on the family's place in its life cycle (Turk and Kerns, 1985; Rustad, 1984; Sutkin, 1984). Family issues influencing the adjustment process include the extent and nature of marital discord, the quality of parental functioning, the nature of the relationships with children and in-laws, and the nature of other cross-generational conflicts. Family organizations in which generational boundaries

are clear, individuation is tolerated, role flexibility is encouraged, and direct consistent communication is fostered, seem to facilitate the process of adjustment (Olsen, 1970).

A chronic health problem often leads to an alteration in the family system alignment. For example, when one family member has chronic pain, his or her autonomy and self-reliance decrease as dependence on others increases. The limitation in physical ability, along with vocational changes, alters the roles of family members. When pain affects the principal housekeeper, other family members, especially the spouse, take on duties and responsibilities they may not have previously held. If there are younger children in the home, patterns of child care and of adult-child interactions change with the affected parent being forced to reduce activity levels. Dependence on the spouse increases as he or she is forced to assume more responsibility within the family. If the pain sufferer was the principal wage earner while the spouse worked at home, the spouse may need to find employment. If the spouse was working previously, she or he may feel pressured to seek a higher salary or a second job (Rustad, 1984). These changes increase the stress on the spouse (Mohamed, Weisz, and Waring, 1978; Shanfield, Heiman, Cope, and Jones, 1979) and may lead to bodily changes (Block, 1981).

A reallocation of family resources is necessitated by the loss of income and/or the cost of medical treatment. Financial resources are often shifted away from the family toward the

person in pain to meet the cost of physician appointments, consultations, medical tests, and surgeries. When the normal medical channels fail to offer relief, the person resorts to "complementary health care" modalities, which may include chiropractic, meditation, biofeedback, autogenic training, acupuncture, or pain clinics (Kotarba, 1983a).

Chronic health problems also may affect family unity. It has been hypothesized that threats perceived to originate from outside the family tend to increase family unity and cohesion, while threats from inside the family increase the likelihood of dissolution (Rustad, 1984). Family unity and cohesion will increase when the development of symptomatology decreases levels of overt conflict or encourages increased involvement among family members. Waring (1977) has suggested a symptom such as chronic pain can stabilize a family system and preserve the status quo by providing an excuse for avoiding conflict. Flor and Turk (1985) indicate high levels of unity and cohesion can facilitate the development and continuation of a chronic health problem. Such families are characterized by "(a) emotional overinvolvement, enmeshment, collusion of family members, (b) rigidity, lack of flexibility, (c) contagion or vicarious learning, (d) reinforcement" (p. 264).

A chronic health problem, such as chronic pain, can play a divisive role in a family. When viewed as a threat from inside the family it can increase family conflict and decrease marital

adjustment (Mohamed et al., 1978). The person in pain often appears self-centered by using family resources, contributing less, making demands on others, acting more irritably, and becoming increasingly despondent and discouraged. The pain sufferer may feel guilty as a result of the extensive demand on resources, may use the pain to manipulate and dominate others (Fordyce, 1976; Sternbach, 1974), or may be ostracized and/or resented by other family members. Sometimes the tensions created are too strong, the bonds holding the family together break, and the marriage dissolves (Heinrich, Cohen, and Naliboff, 1982).

4. Social network. Those experiencing chronic pain often feel controlled both by the pain (which is objectified and externalized) and by "external forces" such as physicians, nurses, lawyers, and insurance companies (Brena, 1983b). This contributes to a loss of self-esteem and alters the nature of day to day contacts with others. Instead of meeting with coworkers and peers, contact is with authorities who exert control over their lives. Since it is important to communicate distress to these "social" contacts, a dramatization of complaints is often a component of the social interactions of chronic pain patients and those with other chronic health problems. Dramatization may have several goals: to communicate distress, to get others to feel sorry for the patient, and to elicit support and encouragement. The dramatization also (perhaps unintentionally) serves to maintain a suffering identity, prevents others from encouraging

self-help skills, and prevents the person from facing unpleasant aspects of their life (Sternbach, 1974).

Dramatization can result in another frequently unwanted corollary. The person may be stigmatized as different from "normal" people. The difference often elicits second looks from others, creates difficulties in negotiating public places (buildings without elevators, doors that resist opening, use of toilet facilities) and establishes a role in which one is expected to be mournful and submissive. Others may react by failing to understand or accept the chronic condition, may terminate social contact and may assign the "different" person a lower social status. Responses to perceived social stigma range from denying the existence of the health problem, to anger and rage, to self-deprecation, to hiding the condition from others, or to an acceptance and accommodation to it (Barker et al., 1953; DiMatteo and Friedman, 1982; Miller, 1983; Singer 1974; Wright, 1960). The reaction of others may also act as a reinforcement and aid in creating what is known as "the sick role" (Johnston, 1984).

5. The sick role. Twaddle (1972) states that normally "illness can be defined as a form of deviant behavior, meaning that the individual fails to conform to the expectations held for him by himself and others" (p. 164). At some point, the ill person abandons the "good health-role" and takes on a "sick role." Parsons (1951) developed the concept of the sick role indicating

that it exempts a person from normal social responsibilities and increases dependence on others (sometimes enforced by others—"You should be home in bed"), relieves the person of responsibility for the illness (one cannot be expected to overcome it by will power), suggests the first two elements are conditional upon the person's wanting to get well, and requires the person to seek professional help (usually from a physician) commensurate with the severity of the illness.

Some individuals may attempt to continue the sick role even though some of the role requirements are violated (e.g., not getting well). There are frequently rewards or associated with the sick role ranging from temporary leave from work and social obligations to long-term financial compensation (DiMatteo and Friedman, 1982; Markson, 1971; Shuval et al., 1973). Others may resist fitting expectations consistent with the role. They may find aspects of the sick role to be unpleasant or find other "life roles" interfere by calling for behavior inconsistent with the illness role (Murphy and Fischer, 1983). Behavior associated with the sick role is likely to be different for individuals from different ethnic groups, cultures, or social strata (Imboden, 1972; Robinson, 1971; Twaddle, 1972).

The process of defining oneself as sick elicits behavior consistent with being sick (DiMatteo and Friedman, 1982; Markson, 1971). Individuals with a chronic health problem face difficulty in either abandoning the role (because symptoms persist) or fully

assuming it (they are not "sick" as with the flu or pneumonia). Since no half-sick role has been defined, they are constantly faced with problems of balancing the two noncomplementary roles (Robinson, 1971). The way this is accomplished is an important factor influencing adaptation.

6. Treatment and medical settings. Inherent in the structure of hospitals and in physicians' offices and procedures is a depersonalization that works against both the preservation of self-esteem and the maintenance of autonomy (Fagerhaugh and Strauss, 1977). Medical treatment of patients with chronic health problems, especially chronic low back pain, does not eliminate the problem. Symptomatic relief and arresting deterioration often are all that can be done.

Physicians are generally more comfortable treating acute problems as opposed to chronic conditions that involve a broad spectrum of factors. Chronic pain patients often describe their problem in global, nonspecific terms; and frequently demonstrate poor localization and poor temporalization for the presence of pain (Brena, 1983b). The pain often cannot be attributed to a clear physical problem, and when it can, medical intervention may fail to relieve it.

The nature of medical examination fosters increased attention to bodily processes, almost to hypochondriacal levels (Barker et al., 1953; Sternbach, 1974). These vague and nonspecific problems are frustrating for the physician. The

structure and system within which medical care is delivered fosters dependency and a sense that important decisions are made by others while the person in pain is helpless and passive (Fagerhaugh and Strauss, 1977).

Drug treatment is one of the most potent and effective tools at a physician's disposal. Unfortunately, drugs useful for treating acute pain and pain secondary to other disease processes, are frequently abused by chronic pain patients. In fact, drug abuse is a common feature of the chronic intractable benign pain syndrome (Brena, 1983b). Patients use, and often over use, drugs such as general and peripheral analgesics, sedatives, and antianxiety agents. Many of these agents interact with each other to create undesirable effects, or they may cause bodily damage when used for long periods of time. Some drugs, with prolonged periods of use, perpetuate the pain they were intended to reduce (Brena, 1983b; Chapman, 1983).

7. Vocational and avocational activities. Chronic health problems not only effect social relationships, they also require change in vocational and avocational activities. Work settings and job requirements often are not receptive to changes needed to allow those with chronic health problems to return to work. For many people with chronic conditions (especially chronic pain), physical labor, such as lifting or prolonged maintenance of any posture, may be markedly limited by pain. This often eliminates a return to the job as previously structured. For those who

return to a different or modified job, the job not only may be less demanding, but also less prestigious (Block et al., 1984; Weighill, 1983). This may necessitate accepting a job with fewer hours and lower pay (Ireys and Burr, 1984), and/or a limiting of vocational options (Glueckauf and Quittner, 1984). For the person who cannot or does not return to work, work activity and its network of social contacts has often ended resulting in considerable social and economic loss.

Disability status is often assigned to individuals who cannot continue in their old jobs, especially when they are injured at work. Brena (1983b) defines this status as a dependency on a source of income that is contingent upon continuation of pain and its concomitant sick role. Compensation for injury is frequently seen as a factor in the maintenance of pain as the person essentially gets paid only if he or she is suffering (Weighill, 1983).

The daily routine is also altered for the person who works in the home as a housekeeper. The tasks of maintaining a home are mostly physical, involving pushing, reaching, bending, and twisting. It is precisely these activities that are limited by chronic low back pain and which may be affected by other chronic health conditions as well. Under our present system, such individuals are usually ineligible for disability status.

Avocational activities, which often add to the quality of life, are also affected by the changes in physical endurance and

capability, and by changes in financial status (Flor and Turk, 1985). Chronic health problems may restrict or curtail activities previously pursued, necessitating the cultivation of new pursuits or the modification of old ones. The range of adjustment may vary from resigned acceptance of unemployment and inactivity to a satisfactory vocational retraining and modification of avocational activity such that life remains productive and enjoyable.

8. The architectural environment. Architectural designs and structures impose unnecessary obstacles to some people with chronic health problems. Structures have different meanings and appearances for a person who is in a wheel chair, uses a walker, or has limited physical endurance than for a fully ambulatory person (Barker et al., 1953; Wright, 1960).

In summary, the environmental factors influencing the adjustment process include changes in vocational activity, avocational activity, daily schedule, social contacts, and role in family life. The pain patient often receives financial compensation for his or her disability, absorbs more of the family resources, is increasingly more dependent on others, is faced with increased family conflict, may dramatize their pain complaints, and is forced to a new style of interacting with the world. These elements tend to make the process more difficult.

These adaptive challenges will be encountered with most crises or chronic health problems (Moos and Tsu, 1977). Different individuals

will adopt different strategies and use different skills in an effort to meet the adaptive challenge posed by the change in their life (Moos and Schaefer, 1986). The next section will examine the skills and strategies that are frequently used in making the adaptation.

Coping Skills and Strategies

Attempts to adapt to the challenge of chronic health problems often lead people to utilize various coping skills or strategies. These skills and strategies share many common characteristics: (a) they can be taught or learned, (b) they are useful in mastering a variety of difficult situations, (c) their use improves with practice, (d) they have a spontaneous developmental aspect in that previous experience improves later coping, (e) they are not inherently either adaptive or maladaptive, i.e., they may be very appropriate at one time or in one situation while being totally inappropriate at or in others, and (f) they can be overly relied upon, with overuse of too few strategies being maladaptive (Keefe and Gil, 1986; Moos and Schaefer, 1986; Moos and Tsu, 1977). The accurate application of these skills or strategies often depends on good judgmental ability, accurate reality testing, and the presence of sufficient physical, emotional, cognitive and environmental tools (Sutkin, 1984).

Coping strategies also may be habitual, long standing patterns which are used automatically in various situations (Shapiro, 1965). Vaillant (1971) and Verwoerdt (1972) call these patterns "defense mechanisms" that are unconsciously applied to situations in which psychological danger and anxiety are present. These terms are most

applicable to coping patterns originating in intrapsychic conflict and are used to manage emotional threats (White, 1974).

This subsection will review literature which addresses both kinds of strategies as they have been applied to adjustment processes of individuals with a chronic health problem. Many of these strategies are equally applicable to social units such as couples and families (Rustad, 1984). Although not discussed directly, such an application is a logical extension of this discussion. For the purposes of discussion and review, coping strategies have been divided into three categories reflecting qualities that are predominantly cognitive, behavioral, or emotional in nature.

Cognitive coping. The first set of skills are important to a person's attempts to find meaning in the chronic condition and understanding its implications (Kiely, 1972; Moos and Schaefer, 1986). This set includes five major subsets.

1. Logical analysis. This strategy consists of breaking large problems or tasks into smaller components that are more easily managed or accomplished. This can help a person to establish a sense of control and to assign a cognitive meaning to the chronic condition (Moos and Schaefer, 1986; Moos and Tsu, 1977). Usefulness of logical analysis depends on a realistic ability to foresee consequences. Deficits related to reality testing and judgment may lead to anxiety or the perception of threat which increases the chances of maladaptive results (Kiely, 1972).

Defense mechanisms associated with logical analysis may be seen as either adaptive (by aiding the development of mastery and control), or maladaptive (by limiting the range of problems examined). These include intellectualization (thinking about problems, usually without affect) and isolation (the separation of ideas from the associated painful feelings) (Vaillant, 1971; Verwoerdt, 1972).

2. Seeking information. This strategy consists of gathering information about the problem and possible future demands that might be helpful in anticipating later developments, treatments, and action strategies (Moos and Schaefer, 1986). It tends to be used more often by people of higher socioeconomic status and educational levels (Viney and Westbrook, 1982).

Defense mechanisms related to seeking information would include obsessive/compulsive and counterphobic defenses (the patient moves into the area of danger perhaps by reading or gathering information) which might be behaviorally manifested as hypervigilance, sharply focused attention to detail, narrowing self-focus, rigidity of opinion, and inflexibility when confronted with the unexpected (Kiely, 1972; Vaillant, 1971; Verwoerdt, 1972).

3. Goals. Plans, values, beliefs, goals, ideals, and intentions make an important contribution to a person's behavior (Fishbein and Ajzen, 1975; Wright, 1960). They also establish the framework within which meaning is given to many of our actions

and perceptions. For example, many disabled people tend to idolize "normal" standards and try to act "as if" the disability did not exist. As a result, they set themselves up for feelings of failure and inferiority. Nondisabled people usually set their goals or aspirations at or near the top of their ability with the nature of the goal adjusted upward or downward in response to success or failure. The idolization of what is "normal" may mean attempting to attain the unattainable (Wright, 1960).

For example, it is as unrealistic for a "normal " person to base his or her self worth on running as fast as an antelope as it is for a paraplegic to run like a marathon runner. It is not unrealistic for the paraplegic to participate in a marathon where wheelchairs can be used. The idolization of normal standards may be useful to motivate action, but it is likely to be maladaptive when not eventually altered to form attainable goals that do not foster a continuing sense of inferiority, guilt and dismay (Wright, 1960).

4. Mental preparation. This strategy includes scanning past experience for useful coping cues, fantasy rehearsal of alternative outcomes, and anticipation of the consequences associated with an action (Moos and Schaefer, 1986).
5. Cognitive redefinition. This technique comes into play after those described above have been used and involves a reconstruing or restructuring of the problem. In the adaptive sense, it involves finding something favorable in the situation such as

recognizing things could be worse, seeing oneself as well off in comparison to other people, altering values and priorities in light of changing reality, and realizing that something good might grow out of a crisis (Moos and Schaefer, 1986). It can also involve an alteration or reorganization of how the person views their problem in relation to their body, self, or environment.

Cognitive reorganization allows greater differentiation of perception of, and response to, the health problem. Chronic pain patients in treatment seem less able to differentiate painful experiences than individuals without pain. Those who benefit most from treatment seem to be those who develop greater skills for differentiating between bodily states (Malow and Olson, 1981; Schmidt, 1985). These skills are important to finding a general purpose or pattern of meaning in the events (Moos and Tsu, 1977) and to encourage the maintenance of self-esteem.

Failure to redefine one's understanding of the problem could act to inhibit a healthier adjustment. For example, defining a chronic problem as temporary and curable (by the right physician) would forestall acceptance of the chronic reality (Murphy and Fischer, 1983).

6. Minimizing. The appropriate use of this set of skills, perhaps more than those of any other category, is highly dependent upon the person's place in the overall adjustment process. Minimizing or constraining recognition of the implications of an event or

chronic condition may be highly adaptive when the news is first received since it allows time to implement other coping mechanisms. Minimizing may be highly maladaptive when there is a need to assimilate and use information that instead is avoided or denied (Krueger, 1984; Moos and Schaefer, 1986; Wright, 1960).

The defense mechanisms associated with this category includes a range of elements. The term denial refers to a clearly inaccurate perception of external reality that is likely to draw on fantasies about that reality. Distortion is a gross reshaping of external reality to suit inner needs. Rationalization is a process of reasoning in which realistic causal relationships are ignored, minor aspects of a situation are disproportionately emphasized, or major aspects are minimized. Repression is usually directed toward an affect or need that is discomfoting or threatening (crying but not knowing why). Supression is a conscious or semiconscious decision to delay attending to certain thoughts or feelings that eventually are acted upon (Vaillant, 1971; Verwoerd, 1972). Behavioral manifestations of these mechanisms may range from "doctor shopping," treatment noncompliance, and repression of the implications of the chronic condition; to avoidance of the topic, to suspended judgment on new promises for a "cure" (DiMatteo and Friedman, 1982).

In summary, cognitive coping strategies include deliberate ways of thinking about one's condition to improve adaptation. Gathering

information about one's condition is often a first step in coping. Logically analyzing the information can provide a framework for future analysis, action, or goals formulation. Cognitive redefinition and mental preparation are useful in implementing plans or striving to reach one's goals. Implementation of goals and plans involves the use of behavioral strategies. Cognitive and behavioral strategies are used concomitantly.

Behavioral coping. These strategies are used in concert with the cognitive strategies to gather information and to act according to the implications and resulting plans. Adaptive use of these strategies is dependent upon the important abilities of judgment and reality testing (Moos and Schaefer, 1986).

1. Social support. Social support is derived from relationships with family, friends, neighbors, coworkers, acquaintances, and the community at large. These contacts often provide information about a chronic health problem that aids an individual in reducing his or her sense of isolation, offers reassurance, reconfirms self-worth, provides advice on what to do in response to the problem, and suggests possible sources of treatment. The more extensive the social support, the less debilitating health problems seem to be (DiMatteo and Friedman, 1982).

Social support may be avoided or may prove detrimental. Seeking help from others unfortunately conflicts with some people's needs for autonomy and independence. They may react by keeping feelings "bottled up" or withdrawing from contact with

others (Moos and Schaefer, 1986; Moos and Tsu, 1977). Some social contacts do not provide support, instead, they act to increase the stress with which the person must cope. This type of interaction impairs the ability to meet the demands of a chronic health problem such as chronic pain.

2. Taking action. Taking action is often the last component of a series of coping strategies. Appropriate action is therefore dependent upon accurate analysis and planning. The actions may include such things as initiating needed self care activities, implementing planned day-to-day activity, asserting oneself, negotiating and/or compromising with other people, minimizing the behavioral display of the problem, and prioritizing both the tasks of daily living and the meaningful aspects of life (Kiely, 1972; Moos and Schaefer, 1986; Moos and Tsu, 1977; Wright, 1960). Inappropriate action may involve avoidance of realistic constraints, noncompliance with treatment recommendations, or capitulating self-direction in favor of overdependence on others (Kiely, 1972). Action strategies are more likely to be used by cooperative people with more education and with a higher socio-economic status (Viney and Westbrook, 1982).
3. Alternate rewards. This set of maneuvers has a strong cognitive component in addition to a behavioral one and builds upon planning and looking objectively at one's situation. Chronic health problems, especially pain, can lead to curtailment or abandonment of many vocational, avocational, and interpersonal

activities (Moos and Schaefer, 1986). Recognizing the most rewarding aspect of those activities facilitates discovering alternate ways of achieving those rewards. For example, if the most rewarding aspect of gardening was being outside and visibly accomplishing something, alternate styles of gardening might be explored that would not necessitate bending pushing and digging.

The pursuit of alternate rewards can help replace those lost due to the alteration in one's activities. These compensatory actions can give new meaning to one's life. When the substitutes are not consciously recognized and chosen, the chances for maladaptation increase. The "role" associated with the illness may be more secure and rewarding than the one previously held. The person may have less responsibility, have other people actively care for him or her, and have previously unmet emotional needs fulfilled.

Failure to identify alternate sources for reward may encourage a belief that only the premorbid condition could be rewarding as an expression of one's values, identity, and sense of self (Murphy and Fischer, 1983). This situation can lead to the establishment of inappropriate goals and actions taken in attempts to reach them.

In summary, behavioral coping strategies are actions taken in an attempt to adapt to a chronic health problem. Such actions include using social contacts for gathering support and information; acting on

the information, plans, and goals one has established; and finding activities that provide alternate rewards so as to enhance one's life. The use of behavioral coping techniques depends on the use of both cognitive and emotional strategies.

Emotional coping. Affect or emotion is a part of virtually all human activities, although this component is frequently unrecognized unless it is very strong, negative, or disruptive. When "affective coping" is discussed, involvement of negative and disruptive emotions is implied. Emotional coping strategies are equally as important as those that focus on cognition or behavior in the adaptive process (Moos and Schaefer, 1986).

1. Affective regulation. A useful adaptation is generally considered to be one in which a person anticipates a hopeful, meaningful future. To accomplish this, the emotions of anger, anxiety, and depression must be modulated, neutralized, or used to encourage continuing life despite current loss or disappointment. Affective regulation can be achieved through strategies that encourage a delay of gratification, withholding immediate action, toleration of ambiguity, maintenance of pride and self esteem, and working through current affect to a more realistic yet hopeful adjustment.
2. Emotional discharge. Another set of strategies related to emotions involves open expression of feelings. The strategies may be behaviorally manifested as crying, appropriate expression

of anger or despair, or the use of humor (Moos and Schaefer, 1986).

More potentially maladaptive forms may be identified. The defense of displacement is said to operate when feelings are redirected toward another person or object which is usually less important than the the person or situation eliciting the affect. Among those with chronic health problems, the disability or problem can be made the "scapegoat" for anxieties and concerns in other areas of life through the use of displacement (Wright, 1960). Dissociation is suggested in its milder forms by a drastic but temporary modification of one's character or "identity" that may allow expression of emotion with less distress ("I do not know what came over me!"). Acting out may include (a) impulsive or delinquent acts, (b) episodes of temper, (c) self injury, or (d) other tension reduction strategies such as tobacco, drug and alcohol use. Acting out implies a giving in to an emotional impulse or need so that the tension that would result from delay can be avoided (Moos and Schaefer, 1986; Vaillant, 1971).

3. Acceptance. Acceptance implies a coming to terms with the situation. The adaptive elements include a recognition of what is beyond one's control, what actions a person has the power to take as well as a letting go of the fantasy aspects of identity that engender continuing disruption. It also involves the courage to make choices, a tolerance of ambiguity and the ability

to maintain self-esteem and a sense of self-control despite the chronic health problems (Kiely, 1972; Wright, 1960).

A maladaptive acceptance might result in surrender to hopelessness, believing nothing can be done to change things, viewing the previous way of life as the only acceptable way, or avoiding as the best policy (Murphy and Fischer, 1983). A fatalistic belief that life is unpredictable and disaster inevitable may develop in response to what appear to be overwhelming odds and an uncontrollable health problem. Although such a resigned acceptance of fate does not necessarily preclude problem-solving activities, it may contribute to apathy (Moos and Schaefer, 1986). Such resigned acceptance is more common among older, less educated individuals with lower occupational status (Viney and Westbrook, 1982).

Coping strategies and skills play an important role in the process of adjusting to chronic illness. They are the means by which adaptation is accomplished. The process of adjusting has been discussed in considerable detail in this section with a specific focus on chronic pain. This discussion suggests the adjustment process involves an interrelationship among aspects of the body, self, environment, and world of others across time.

Implications for the Present Study

A review of the literature pertaining to chronic illness reveals the existence of an extensive amount of information. Each aspect of

human functioning is undoubtedly important in understanding what a person with a chronic health problem may experience, and each may be important in designing treatment or intervention strategies. A disadvantage of such an approach lies in a fragmentation of experience which obscures relationships among aspects and the whole experience. Another disadvantage is that such a framework may not be meaningful to the person experiencing a chronic health problem for whom some aspects are consistently more figural while others consistently remain in the background.

The broad scope of this review has important implications. It reveals that few if any attempts have been made to understand the chronic pain experience from the point of view of the person suffering it. The wide range of factors suggests any attempt to understand how a person experiences a chronic health problem such as chronic low back pain must be broad enough to allow all relevant aspects to stand out. Although factors are numerous, a reasonable number of salient aspects can be indentified in the literature.

The literature review provides a framework that suggests which aspects of a person's experience of chronic pain can be used to formulate questions for an open-ended interview. Five aspects of human experience emerged from the review: time, bodily adaptation, psychological adaptation, social and environmental adaptation, and coping skills and strategies.

Time factors were described as being important in the development of chronic health problems. Diagnosis of many conditions includes

temporal duration as one of the criteria, e.g., low back pain is defined as chronic if it endures for six months or more (Sternbach, 1974). The literature pertaining to adjustment sequences indicates time is also crucial as a person adjusts to a developing chronic condition. What seems important in such sequences is change and continuity across time.

Change and continuity combine to form one aspect of the way in which people experience time, according to Dapkus (1982). Two additional aspects were identified as being limits and choices, and tempo. Questions related to these three aspects may help clarify the temporal aspects of the chronic pain experience.

Pain is usually viewed as a bodily phenomenon. The literature indicates adapting to bodily changes is important. Bodily adaptation involves tasks related to self care since bodily functioning often changes as a chronic health problem develops. The changes and course of adaptation are influenced by the severity of the problem, its course and progression, and the bodily systems affected. Questions related to bodily experience should reveal which aspects are most salient to the person.

Psychological processes are affected when the body becomes an object of concern. Specific psychological tasks of adaptation include assigning meaning to the problem, incorporating bodily changes into one's identity, and modulating concomitant affect. The course of adaptation was seen as being influenced by gender, life cycle characteristics, personality style, beliefs and values, cognitive and

emotional maturity, and emotional response. Information about these factors and influences is likely to emerge from the discussion during an interview. Questions could be formulated to elicit descriptions of relevant psychological processes such as thinking and emotions.

Social and environmental changes occur concomitant with bodily and psychological ones. Adaptive tasks that can be identified in the literature include adjusting roles and relationships with family members, peers, and treatment professionals; and making needed vocational and avocational changes. The course of adaptation could be influenced by cultural factors, one's family, the social network, one's role in relation to others, vocational and avocational interests and abilities, and the architectural environment. Information about the importance of the architectural environment and vocational and avocational aspects of the chronic pain experience are likely to emerge from the general discussion during the course of the interview. Question about family and friends should tap important aspects of the social environment.

What people do in response to chronic pain has been addressed in the literature. Three categories of coping skills and strategies were used in reviewing the literature: cognitive (e.g., seeking information), behavioral (e.g., taking action), and emotional (e.g., acceptance). This area could be examined through questions about what the person does and/or finds helpful in dealing with, and living with, chronic pain.

CHAPTER III

METHODS AND PROCEDURES

Participants

Participation in this research was sought from individuals who had experienced low back pain for at least six months prior to the time of the interview. The only additional requirement for participation was an ability to be articulate about the chronic pain experience. Participants were sought from people entering a pain clinic for treatment of chronic pain as well as through a newspaper advertisement asking for volunteers. All participants had similar rural to small city backgrounds.

The pain clinic was an inpatient unit affiliated with a hospital in a large Midwestern city. Upon admission, a pain clinic staff member asked patients with an history of low back pain about their willingness to participate in a research project. If the person had questions prior to making a commitment, they were contacted by telephone and their questions were answered.

Interviews were conducted either in the evening of the day of admission or on the following morning before the staff conducted an orientation session. By the time of the interview, the participant had met other patients on the unit and probably had exchanged information with them. Prior to involvement in the pain center, all patients had met with staff and visited the pain center for at least part of a day. Eight volunteers were recruited from this source. One

(Participant 5) was eliminated from the study due to a malfunction in the tape recorder and loss of interview data. No data is reported for this participant. One (Participant 14) had pain for less than six months but had a chronic pain condition two years previously. The remaining six participants met the criteria of pain lasting over six months and are identified as belonging to the pain clinic group in Table 1. One member (Participant 4) had been treated at the same pain clinic several years before.

A newspaper advertisement was placed in a newspaper serving a small Midwestern city and a larger rural area. Seven volunteers were interviewed from among those who responded. One volunteer (Participant 13) had pain for less than three months while another (Participant 16) was retired and had not worked for seven years. The five remaining participants were engaged in work type activity and are identified in Table 1 as the Working Group. Two of the five (Participants 6 and 10) had previously received pain center treatment. One volunteer was interviewed at a public library and one in her home. The remaining five were interviewed in the investigator's home.

One additional volunteer (Participant 12) was recruited with the assistance of a neurologist in the same small city. He was interviewed in his home.

Information from all fifteen participants was used to formulate descriptions of the experience of chronic pain. A pain clinic group with six members and a working group with five members were identified to permit comparisons that will be described later.

Table 1
Demographic Information

Participant	Sex	Age	Education	Duration of Pain ¹	Surgeries	Units
1 ²	Male	52	16	14	0	19
2 ²	Male	45	10	28	3	29
3 ²	Male	32	12	25	0	44
4 ²	Female	57	12	456	8	26
6 ²	Female	42	16	75	1	41
7 ²	Female	43	18	76	0	29
8 ²	Female	39	12	252	0	25
9 ²	Male	49	13	116	0	14
10 ²	Female	46	12	54	2	24
11 ²	Female	36	10	11	0	23
12	Male	42	12	52	3	24
13	Male	51	12	3	0	17
14	Female	41	12	2	1	27
15 ²	Male	43	12	117	2	15
16	Female	63	10	88	4	19
Mean		45.4	12.67	91.27	1.53	25.07
Standard Deviation		8.0	2.25	119.57	2.26	8.52

¹ Number of Months

² Pain Clinic Group Members

³ Working Group Members

Demographic information was collected using a questionnaire administered subsequent to the interview. This information revealed the onset of pain was attributed to a variety of factors. The most commonly identified precipitant of pain was a fall or injury at work: three developed pain subsequent to a fall, four after a lifting injury, one subsequent to his truck hitting a bump and failure of the air cushion to hold his weight, and one after her foot was crushed by a falling object. Other participants described various precipitants. One fell down steps at home. One was involved in an auto accident. One woman ruptured a disk while not involved in any activity. One woman reports having had periodic bouts of pain since having back surgery twenty years previously, but the current pain just began and was attributed to scar tissue growth. Two participants report their pain began for no apparent reason. Across all participants, the average age was about 45, the modal educational level was high school or general equivalency degree (eight participants), the average duration of pain was over ninety months, and the number of operations averaged over one although the mode was zero (seven participants). The demographic information for each participant and the mean and standard deviation for each variable are presented in Table 1.

The fifteen participants cannot be considered to be a random sample of people with low back pain. The range of experience among individuals, however, is broad and appears representative of the experiences people have when living with low back pain.

Interviews

Each participant was given an informed consent form which described the nature of the research, its risks and benefits, guarantees of confidentiality, and several levels of permission for the use of the interview. A copy of the form is presented in Appendix A. All participants agreed to all levels of permission.

The interview was designed to sample important aspects of a person's life experience in the face of chronic pain. The flow of the interview was guided by each subject's response to general questions with the interviewer non-directively probing incomplete statements, inconsistencies, or extreme statements. This was done to gain a more complete understanding of the subject's experience. Additional questions probed for information not spontaneously produced by the participant. Direct questioning was avoided when a participant covered a topic without prompting. Prompts utilized the language of the participant as much as possible. Interview questions are listed in Appendix B.

All interviews were tape recorded and ranged in length from about thirty minutes to two hours. Each person was asked the first question and allowed to proceed as made sense to him or her. Over the course of the interviews, questions about time and family members (questions 6, 6a, 6b, 6c, and 7c in Appendix B) seemed confusing to the participants and were omitted or de-emphasized.

Analysis

Reduction to Thematic Units

Interview transcripts were made and texts were reduced to dominant themes describing each individual's experience of pain. The method used is an adaptation of the procedure suggested by other phenomenological investigators (Dapkus, 1982; Ihde, 1977; Jones, 1984; MacGillivray, 1985; and Parks, 1987). A full transcript of one interview, edited to delete identifying information, is presented in Appendix C. Transcripts were reduced to a more compact, manageable length by deleting immediately redundant or non-essential background information about the person or the situation. This step was guided by carefully reading the transcript to observe how the person experienced pain in his or her life. The first reduction of a sample transcript is presented in Appendix D.

Statements from the first reduction were reorganized into groupings consistent in regard to one or more content areas. These groupings were edited to form thematic units summarizing important aspects of the person's experience. The goal of editing was to present the idea or description as concisely as possible while retaining the person's original phraseology. Where needed for the sake of clarity, pronouns, especially "it," were changed to their referent. On rare occasions, introductory or summary phrases were substituted for more lengthy material. Although the groupings originally were organized to preserve a semblance of the order in which themes were introduced by the participant, no attempt was made

to preserve that sequence in the final reduction. The final reduction of the sample transcript is presented in Appendix E.

Accuracy of the final reductions was checked by examining original transcripts and by sending a copy of the reduced transcript, along with two introductory summary paragraphs, to the participant. No inaccuracies in the final units were noted. One participant requested a unit be deleted as it involved information she believed to be too personal. The number of thematic units for each transcript is presented with the demographic summary in Table 1 (see page 76).

Salient Aspects of the Chronic Pain Experience

The derivation of thematic units, such as are presented in Appendix E, provided a description of the experience of chronic pain from the perspective of the person suffering it. Thus, it fulfills the purpose of the investigation but does not meet all the objectives established in Chapter I. To meet the other objectives, thematic units were examined for salient aspects of the chronic pain experience. Narrative summaries were formulated to describe each person's experience with pain. Information pertaining to interactions between pain and emotion, thinking, bodily functioning, time, family and friends, and occupation across all participants was described. That description will meet Objective 2, which pertains to those interactions.

The final objective, pertaining to what actions or thoughts the person in pain found helpful in coping with pain, required analysis

across all thematic units and individuals. Initial attempts at doing this revealed many thematic units contained information unrelated to coping. A phenomenological investigation of emotional pain conducted by Parks (1987), however, provided a schema that allowed the investigator to expand the scope of the study and retain all information contained in thematic units.

Examining the Experience of Chronic Pain

Contents of thematic units indicated the experience of chronic pain may be described by three broad aspects of experience:

Experience, Dealing with Pain, and Impact. Guidelines for identifying the three components were developed and are presented in detail in Appendix G. The guidelines can be summarized. Experience involves descriptions of the chronic pain experience in bodily and emotional terms. Dealing with Pain involves efforts at coping with or achieving mastery over pain and its concomitant effects by doing (or not doing) something bodily, reflectively, or interpersonally. Impact involves the ongoing to long-range impact or effect of chronic pain on a person's life as identified by changes in the way she or he relates to the body/self, others, or the world.

Reliability. The reliability of coding the three components of this thematic system was evaluated. Two independent raters used the system to code thirty thematic units with two units selected randomly from each interview. Raters were given copies of reduced interviews, biographical paragraphs, and summaries of the pain experience. Raters

were trained on exemplary units used in Appendix G and on other selected units until high levels of agreement were established. All units rated were identified by number, and raters were encouraged to review as much of the participant's protocol they thought necessary to clarify the context of any unit.

Experiencing Pain: A Detailed Examination

A more detailed examination of the Experience theme was accomplished by applying Parks' (1987) descriptive system to data derived from the present study. This application will undoubtedly help us better understand this aspect of the chronic pain experience even though such an examination is not a primary focus of the remaining investigation.

Parks (1987) identified six themes or meanings emotional pain has and found each to have a physical analogy. The meanings and analogies are:

1. Hurting or being hurt by being injured or wounded emotionally or bodily.
2. Frustrating oneself or being frustrated by being cramped or blocked.
3. Shocking or being shocked or stunned.
4. Lacking or being deprived by being weak or physically deprived, or through loss of function or a limb.
5. Straining or being strained by inability to relax, excessive demands, or over exertion.
6. Confusing oneself or being confused as if falling or being disoriented. (Paraphrased from Parks, 1987, p. 51).

Parks also identified three perceived sources or foci of pain. The "self" may be identified as the source through inadequacies, inabilities, actions, or thoughts that affect it. For the present study, this focus was modified to include the body since preliminary attempts to establish a separate bodily focus were unsuccessful in dealing with the present set of data. The second focus is in the perceived actions of other people. The third source lies in the nature of the world in general. Parks (1987) constructed a matrix (see Appendix G, Figure G-1, page 252) to describe relationships between meanings and foci. She also wrote a detailed description of each combination with examples extracted from her interviews. These examples were consulted in applying her descriptive system to the units identified as pertaining to Experience in the examination of the experience of chronic pain described above. Since the goal of this part of the investigation was expository, no reliability check of these codings was conducted. Parks determined reliability ratings for the system and found them to range between about 80% and 90%.

Dealing with Chronic Pain: A Detailed Examination

The Dealing with Pain theme was of particular interest to the investigator as it addressed a major objective of the study. Parks (1987) provided a sketch of this aspect of how people cope with emotional pain. Examination of the thematic units from the present study indicated a more detailed description was required.

A description of how people deal with chronic pain was developed by sorting and re-sorting pertinent thematic units. The results are

described in Chapter IV and Appendix H, but will be summarized here. Three meanings or themes were identified: Accepting/Facing, Maintaining/Tolerating, and Escaping/Avoiding. Accepting/Facing implies accepting the pain and its concomitant limits as a part of oneself and one's life, and a coming to grips with it by meeting it "face-to-face." Maintaining/Tolerating implies a putting up with the pain, establishing a stasis or status quo, and resisting giving in to the pain. Escaping/Avoiding implies viewing the pain as alien or "not-me," pushing it away, or attempting to get rid of it.

Each theme has a primary focus or "arena" of experience in which it is played out. Three foci were identified. These foci are Reflective, Bodily, or Interpersonal activity. Reflective activity involves a focus on reflection or thought as a means of dealing with the pain. Bodily activity implies a person is doing something to master pain by focusing on the body. Interpersonal activity refers to a focus on other people in attempting to come to terms with the pain. For each focus, the action could also be coded as representing engagement in or disengagement from activity. Engagement refers to an active involvement with one of the foci. Disengagement is always a special type of engagement where the emphasis is on not thinking something, not doing something, or not being with others.

Reliability. The reliability of identifying the Dealing with Pain sub-themes and foci was evaluated using two independent raters to code fifty randomly selected (without replacement) units. To ensure

greater variability, no more than five units were selected from any one reduced interview. The procedure paralleled the reliability procedure described above.

Impact of Chronic Pain: A Detailed Examination

The Impact aspect of the chronic pain experience was not originally a focus of this investigation. It was added to the procedure to provide a more complete examination of the chronic pain experience. Parks (1987) developed a descriptive system of the way people experienced the impact of emotional pain on their life. Her system contained two themes and three foci. In terms of themes, the impact could be viewed as highly valued and worth while, or as damaging and providing an ongoing source of pain. The focus of the impact could be on one's relationship to oneself, to others, or to the world at large. The descriptive system developed was modified slightly to describe the effects of chronic pain. A figure describing the relationship between the meanings and foci can be found in Appendix G, Figure G-2, page 256. The system was applied to units the investigator identified as pertaining to Impact in the first analysis. Since the goal of this part of the investigation was expository, no reliability check was conducted. Parks does not report any inter-rater reliabilities for her description.

Comparison between the Pain Clinic and Working Group

Use of the various themes, sub-themes, and foci to describe thematic units derived from the interviews provided a series of

frequency counts which were used to compare two small subgroups identified earlier. The Pain Clinic Group was composed of six pain clinic patients who had chronic pain for more than six months. The Working Group was composed of five participants who were working or had full time work-like obligations. These groups were compared based on the mean number of times each theme, sub-theme, and focus occurred for members of each group.

CHAPTER IV

RESULTS

Chapter IV presents results of the study in six major sections. The first major section contains seven subsections that describe salient aspects of the chronic pain experience. The first subsection reports the formulation of narrative summaries of each participant's experience. The remaining six sections address interactions between chronic pain and emotion, thinking, bodily functioning, time, family and friends, and occupation.

The next major section examines the three themes that encompass the experience of chronic pain: Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain. The next three major sections examine each theme separately in greater detail.

The sixth major section addresses comparisons between pain clinic and working participants. This section includes comparisons based on demographic variables, on the three major themes (Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain), and on each theme separately.

Salient Aspects of the Chronic Pain Experience

This section contains a qualitative examination of the data taken from several vantage points. The first subsection describes salient aspect taken from the point of view of each participant. The remaining six subsections describe salient aspects emerging when the

topic is viewed from six different vantage points (emotion, thinking, bodily functioning, time, family and friends, and occupation).

Narrative Summaries of the Chronic Pain Experiences

Participants were asked to describe their experiences with chronic pain and to tell what it was like for them. Their comments and subsequent exchanges with the investigator were tape recorded. The recordings were transcribed and reduced to thematic units. The thematic units were used to summarize each participant's experiences from a third person perspective. The summary from Participant 7 is presented as an example:

Ms. G experiences the pain as a part of her that affects her bodily functioning. As the pain becomes more severe, it becomes more separate and is viewed as threatening like a monster or poison. She seems to have forgotten much of what she was like before the pain, and views pain as a challenge to be met from day to day. Physical treatments such as acupuncture, acupressure, and keeping active are used extensively. The pain implies an unwanted and feared future of increased dependence concomitant with a worsening physical condition.

Answers to a demographic questionnaire were combined with information from the interview to compose a brief biographical sketch of each participant. The sketch prepared for Participant 7 is presented as an example.

Ms. G is a single woman in her early forties who volunteered for the study in response to a newspaper advertisement. She is a college graduate with an advanced degree in education. Her pain began six and a half years ago subsequent to a lifting and pushing injury in the factory where she works. She has not had any surgery for the pain, but reports extensive relief from acupuncture, and some relief from chiropractic treatment, heat therapy, and bed rest. Medication is used once a week or less often and consists of Tylenol with codeine, or aspirin. No financial compensation has been received as a result of her pain.

Biographical sketches and summaries of the pain experience for all participants are presented in Appendix F. The sketch and associated summary paragraphs were mailed to participants along with thematic units from the interview (see Appendix E for an example). Ten participants returned the summaries as requested. None of the participants raised objections to the summary. Five participants corrected some factual information contained in the sketch.

Emotions and Chronic Pain

All fifteen participants stated the pain had strong emotional concomitants, especially feelings of anger and/or depression. Sometimes emotional reactions, such as anger, were directed against the pain. Participant 10, for example, comments:

You go through an absolute horrendous inner anger. I was hurt in August, four years ago, and I went twelve or thirteen months hating everything, yourself, the people around you. I would do really bizarre things. The pain would increase and I would increase my activity with things that I knew would make it worse. You kind of want to outrun it, just play harder.

For other participants, pain and the concomitant emotional reaction were difficult to separate. Participant 12 described it as follows:

It's not only the pain that will do a person in, it's depression that does a person in. You can control the pain better. Depression is the not being very useful, boring frustration. It's like having nothing forward to look to.

Some participants described a complex relationship between pain and emotions. Participant 14 described such an interaction:

Living with the continual pain directly hits the moods and emotions. . . . The three key words that would describe me right now are angry, frustrated, and depressed. The depression helps me get angry, the anger makes me frustrated, I get mad at myself when I lose my temper, then I get depressed because I've lost my

temper. It's just a vicious circle. I feel all three are connected.

The emotional concomitants to chronic pain lead to actions inconsistent with a participant's sense of self. Participant 2 described it as follows:

I think the pain makes you grouchy, irritable, and I get very tense and on edge real easy. I am bitter because I can't do things that I've always done before. . . . I never was like that before. It's not me. I have a hard time accepting it. Now I say things that I shouldn't, something sharp or sarcastic like a smart-aleck. They're an innocent bystander and that hurts me and it hurts other people's feelings too.

This comment describes a common reaction pattern in which pain leads to affective changes; emotional outbursts are directed at other people who, in turn, are hurt; and hurting others is experience as hurting the self.

Some participants indicated the effects of emotional concomitants were attenuated but still present. Participant 8 commented:

Anger doesn't have anything to do with my pain. Anger is my attitude when I do something dumb because I didn't have the patience to wait for somebody else to do it. If I'm upset or I'm angry with somebody, I may decide to do something that is going to hurt.

Later, she added:

Some days I'm not as tolerant and easy doing as others. If the pain is very intense, I do become short. More with my own family who recognize the signs, but don't do what is expected. I'm more short with people early in the morning because the pain is greater. But I'm not angry at anybody and I don't try to take it out on the world. It's not their fault.

Reflection and Chronic Pain

All participants indicate they think about their pain to some degree or another. Eight participants (53%) made comments concerning pain's effect on the thinking process. Participant 2 stated, "It's hard to think of something besides the pain and carry on a conversation and be open and jolly . . . when I'm hurting or feel bad." Participant 8 indicated the pain is, "something you learn to live with, an adjustment you have to make, your attitude toward the pain can make you or break you." She also stated, "I'm sitting here now with pain in both legs and across the back and I don't think that's affecting my attitude or my way of thinking." The pain may be confusing, as Participant 11 indicated:

I don't understand the pain. . . . I wish I did, if I understood the pain, I'd understand how to treat it. If you cut your finger you know what to do about it. You can treat an illness that's there but you don't know what to treat the pain with. You don't know how to act with the pain, you don't know whether to go to bed, to lay down, to sit down. But you think about what to do to make it better and not make it worse.

Thinking about the pain is used extensively when people attempt to cope with their experience of pain. The nature of this activity will be examined in greater detail when the topic of "Dealing with Chronic Pain" is discussed.

Bodily Functioning and Chronic Pain

The experience of the body is quite different for people with chronic pain than for those without such pain. Usually, a person experiences the body as part of the ground. Chronic pain makes the

body very figural. All participants reported bodily changes.

Participant 12, for example, stated:

I can take a lot of pain. But I can't ride in the car very long times cause if I sit long, my legs go to sleep on me. Then when the feeling comes back in my feet it's like they're on fire. The pain is a different pain, it's deeper inside, more intense that way.

The altered experience of the body can extend beyond the pain.

Ms. G, Participant 7, described it this way:

Physically, I'm like a board. I'm all knotted up. I get popping and grinding noises that I don't know what they are, it never used to be there. . . . There's a noise in the base of my skull like something grating. I use a cane when I do a lot of walking, but I have to sit down so often because it's like a grinding. When I hurt, I hardly pick up my feet, I shuffle. Up to then I might be limping. I've ground my own teeth to where they fall apart. I'll catch myself not knowing that I'm doing it. And the hands and fingers sometimes are so bad you can't even bend them, lift anything, hold anything. Sometimes you can't even sit comfortably in a chair, and to lower yourself to recline is difficult. . . . I have lost a lot of my muscle motion. My arms will not go up like they used to. A certain way you move, something you do, and I get muscle spasms in my back. It's unreal.

Most participants reported the pain was with them most of the time. Three reported the pain was more intermittent. Participant 13 described it as:

Sometimes I don't feel the pain. That feels a whole lot better. That's what you used to feel, that's normality. You feel like it's going to go away. . . . But then you get up maybe a little bit too fast and it tells you, "I'm still here, I was just going to let you rest a while."

Days with no pain or reduced pain pose a special problem. They often encourage a person to engage in physical activity. Participant 16 stated, "once in a while I'll try to run the sweeper. Maybe I can get half of a room done and then it starts hurting real bad, so I'll

have to stop. I'm almost in tears." Several participants reported they periodically engage in activity that puts them in bed for one or more days.

Time and Chronic Pain

Seven participants (47%) directly commented about time, and most comments were in response to specific questions about time.

Participant 3 stated a theme that several others shared, "This pain . . . just slows you down and gave me time to stop and think. I sit and think a lot about the past really. Sometimes I dwell on it a little too much, I believe. It makes me feel bad."

The past, and what the past meant for the future, was very important for some participants, but past and future often seemed lost forever. Participant 1 stated, "It's almost like a bandit that has come into my life and stuck a gun--the pain--in my face and says, 'Hey, give me your future.'"

Pain had effects on the experience of time other than estranging one from the past and future. Pain rooted some participants in a seemingly interminable present. Participant 14 described her experience of time:

Pain makes the days seem forever long. You can't wait for night to come so maybe you can sleep, and then the nights are longer because you can't sleep. And then you can't wait for the daylight to come. I've lost track of time. I have to keep asking what day it is because the days and nights are so filled with the pain all the time that I've lost track of time. I don't know why.

For some participants, the present offered some solace.

Participant 4 stated:

The past doesn't seem to make that much difference to me because I can't really change what happened. Forget the past. . . . I just take one day at a time. . . . I don't think about tomorrow. I'm not going to think about how to handle it until it's here. Then I'll deal with it. I find it's more relaxing than thinking about next week or two days from now. . . . I keep going from day to day. When you live for today, you start out new.

Family, Friends, and Chronic Pain

Twelve participants (80%) reported considerable change in relationships within the family. Participant 11 was characteristic of these changes:

My husband and the girls sacrificed doing a lot of things they'd like to do because they know I can't do it. I don't feel it's fair to them. It's just been that way within the last year. When I was working we could do more. But now we pay our rent, buy our groceries, and we hope any money we have left lasts until the end of the week. We live day-to-day.

Participant 3 was similar:

It's hard on the whole family. My kids are going without when they shouldn't have to because of me. There's things I want for them that I can't afford, and things that I want to do that money can't buy. I want to remedy that situation. It's put a strain on my marriage. I'm cross with my wife but she's done her fair share. I don't feel like I'm doing my fair share. I'm not able to do things for her I'd like to do. I'm kind of useless. I'm sharp with my wife and the kids and I hate being that way. It makes you feel mean, less of a man.

Participant 1 has a different experience:

The pain and its unpredictability change relationships with family and friends. Your family looks at you and you begin to wonder, "They don't believe I'm constantly in pain." Trust within the family begins to deteriorate. They hear you say, "My back's killing me," for a year and they begin to shut you off. It's the same with friends. Relationships are more guarded. I feel I'm liable to have an outburst of anger, so I stay to myself. . . . Now I walk with a limp and people look at me like I'm not whole. They might wonder, "What's the matter with that guy, why is he doing that." I don't want anybody to feel sorry for me, I want to be accepted for the way I am myself, not my condition.

Maintaining relationships with friends became difficult for some participants. Participant 2, for example, stated:

If somebody comes to see you, you hate to say, "I got to go lie down," and leave Mr. X sitting there with two ladies. I'm sure it wouldn't bother whomever as much as it bothers me. I get embarrassed. I don't want to hurt anybody or make them feel uncomfortable or unwelcome. And that cuts your activities down to nothing.

Other participants found the experience helped them discover the value of friendships. Participant 12 stated:

I got more time for more friends now. Now you're lonely and you need friends. I like to have friends and be able to help them, they've helped me when we was down and out. I thought them people was long gone, I thought everybody was for their self like me. And they help in dealing with pain too. You can be feeling bad and somebody come by and visit me, it breaks the monotony, takes your mind off things.

Occupation and Chronic Pain

Chronic pain often alters the type of work a person can do. Bodily activity usually must be decreased which often means the person cannot work at his or her old job. Participant 2 described some of the problems involved:

I'd learned a trade, the do's and don'ts of the trade. . . . I concentrated on the mechanical end of the manufacturing and I felt I'd conquered it to the point I could figure out how to fix anything that went wrong. I've tried to think of some other career that I could do that didn't take physical effort, but I can't read very well. . . . If you can't read you can't do a whole lot. . . . Before, it didn't bother me because I had the mechanical ability to do things. That's what my whole life has been built around. It's gone, twenty some years. . . . I got to get myself oriented to something else, some other goal. I haven't figured out exactly what it's going to be yet. . . . I don't think it'll be in printing although I'd like to do that again, someday. . . . Experience-wise, I still got it in my memory, but I can't do it. And no one will give you a job to tell someone else how to do it.

Men talked about their job or career more extensively than women. Women, however, composed the majority of the working group. Participant 8 quit her job as a secretary due to pain, but found work taking care of others. She takes care of three children at night and stays with an elderly woman during the day. She stated, "I am able to give somebody a little happiness, or encourage somebody one day. I am able to help three little boys get up and ready for school so therefore I'm helping."

Participant 9 is not employed, but engages in work-like activity on a full-time basis. He explained:

Whether or not I can earn a living, at least I am helping do what needs to be done. I was the church treasurer for six years, and I volunteer at a mission. I get satisfaction from that. I'm able to give something back. I've received a lot of help materially and there's been things like food stamps and other help. . . . This gives me some way of giving back something, still producing something. I don't feel that I'm just a taker.

Participant 7 is employed full-time in the factory where she was first injured. She seemed to equate her workplace with pain, commenting:

It would be interesting at times to think, I don't have to get up and go to work where it's pain to stand on concrete, pain to move, pain to do this and that. It's revulsion, you hate it because that's the source of the pain. But if you don't do it, how would you exist?

Examining the Experience of Chronic Pain:

The Emergence of Three Themes

Examination of thematic units indicated three broad themes were adequate to describe the experience of chronic pain reported by

participants. This section begins by examining these themes. Results of a reliability check will be reported next. Finally, the frequency with which the various themes were identified among thematic units derived from each interview will be reported together with totals across all units.

The Three Themes

Chronic pain was experienced by participants in terms of three major themes: the experience of pain and its concomitants, experiences in which participants attempted to deal with chronic pain, and participants' experience of the impact of chronic pain on their lives. For the sake of convenience, the three themes are called Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain. Detailed descriptions of each theme, together with relevant examples, are presented in Appendix G. Each theme will be described briefly in this section.

Experiencing Pain is usually described by participants as the way in which they experience pain. For example, they may describe hurting; being frustrated or in shock; and/or a sense of loss, tension, or confusion. Participant 4, for example, stated, "The pain is something that's pretty hard to live with. Since I was in here before, the intensity of it has got extremely worse. It's twenty-four hours a day." This thematic unit emphasizes the intensity of her hurting.

Participant 3 described a different kind of experience with chronic pain:

Pain has not been very enjoyable. It's put a damper on my life. I've not been able to enjoy life, my wife, or any of that. Money-wise, everything has been rough. It makes a fellow stop and think about the things that you had and was able to do and it takes things away from you. A hell of a lot's changed and it takes a hell of a lot of adapting to get used to it.

This participant emphasizes his lack of enjoyment and the loss of what his life had been before.

Dealing with Chronic Pain relates to what people do in response to what they experience in attempting to come to terms with their situation. They may do something by moving or adjusting their bodies, by not moving, by relaxing; they might seek out others; or they might reflect on their situation, try to understand it in a new way, distract themselves from it, or engage in a fantasy. Participant 8 described how other people helped her deal with pain, "I've always been people oriented. . . . And my obligations to other people have kept me going that I haven't given up and just let the pain take over."

Participant 15 describes a belief that helps him cope with his experience:

This body is going to be buried in the ground and destroyed. Pain and suffering is of this world. As long as I'm here I'm going to have it. The pain belongs to this body but it don't belong to my soul. Pain has no part in the here-after.

Impact of Chronic Pain involves the ongoing personal impact of chronic pain on a participant's life. Impact may be experienced as valuable (leading to beneficial changes) or as damaging (leading to

detrimental changes). Participant 7 described the damaging impact of pain as:

My whole life was changed, I'm a different person, and I don't want to be. I was an active person, I enjoyed doing a lot of things before pain and after pain you're limited in what you enjoy and how you enjoy it.

Participant 3 recognized some valuable aspects of the experience:

Before, I never stopped to think about anything. . . . Sometimes, I sit around and examine my feelings. It put my priorities where they should be, I reckon. It's let me stop and look around at things I've done and wish I hadn't done and things I would like to do. It's kind of balanced itself out. Of course, the pain's bad. It's not good for you. But I think a lot more now than I used to. . . . I think I've got more in touch with myself. The frustrations were probably there before but I didn't have the time to sort them out.

Reliability of Codings

Detailed descriptions of the three major themes--presented in Appendix G--were used by two independent raters and the investigator to code a sample of thirty thematic units. No efforts were made to select easy-to-code units. The codings obtained from each rater were compared with each other and with those of the investigator. The percentage of agreement between each pair of raters was calculated, with the number of units rated (30) serving as the denominator. Codings were in agreement if the two raters assigned the same code(s) to a given unit. The percentage of agreement also was calculated for concurrence among all three raters. A third measure of agreement was calculated: in this procedure, the three rater's codings were examined for units on which at least two of the three raters agreed on

the coding. Percentages of agreement range from 70% to 90% and are reported in Table 2.

The errors were examined and a pattern was observed. Rater 1 identified an "Impact" theme (in addition to one of the other two themes) on four units when the investigator did not. The same pattern was true for Rater 2 who added four extra Impact codings in comparison with the investigator. No instances of the reverse (investigator adding an Impact coding when Rater 1 or 2 did not) were found suggesting Impact was more figural for the raters than for the investigator. No other systematic differences were observed.

Frequency of Themes

Thematic units derived from all interviews were coded for the three major themes. Codings were tabulated for each participant and are presented in Table 3. Most of the 377 units received only one coding (72%), many (28%) received two or three codings since no limit was imposed. Single and multiple codings are reported separately in the table, with parenthesized numbers representing how often a theme appeared in units with multiple codings.

For example, Participant 1's interview was reduced to 19 thematic units, 8 units pertained only to Experiencing Pain; and 4 units pertained to "Experiencing" as well as to one or both of the other two themes. In a similar way, 2 units pertained only to the Dealing with Chronic Pain theme, while 2 pertained to "Dealing" and one or both of the other two themes. For the Impact of Chronic Pain theme, 3

Table 2
Three Themes of the Experience of Chronic Pain:
Agreement among Raters

Source of Agreement	Percent ¹
Investigator and Rater 1	70
Investigator and Rater 2	77
Rater 1 and Rater 2	83
Three Raters	70
Two of Three Raters	90

¹ Based on thirty units.

Table 3

Three Themes of the Experience of Chronic
Pain: Frequencies of Occurrence

Participant	Number of Thematic Units	Experiencing Pain ¹	Dealing with Chronic Pain ¹	Impact of Chronic Pain ¹
1 ²	19	8 + (4)	2 + (2)	3 + (4)
2 ²	29	3 + (6)	11 + (4)	6 + (9)
3 ²	44	7 + (10)	17 + (6)	8 + (9)
4 ²	26	5 + (3)	16 + (4)	1 + (3)
6 ²	41	10 + (10)	20 + (8)	0 + (4)
7 ²	29	7 + (9)	9 + (10)	2 + (2)
8 ²	25	2 + (4)	15 + (5)	2 + (3)
9 ²	14	4 + (2)	8 + (2)	0 + (0)
10 ²	24	3 + (4)	11 + (8)	1 + (4)
11 ²	23	9 + (4)	9 + (4)	0 + (2)
12	24	6 + (7)	7 + (9)	1 + (4)
13	17	2 + (3)	11 + (4)	0 + (1)
14	27	10 + (5)	9 + (5)	1 + (2)
15 ²	15	3 + (3)	7 + (3)	2 + (0)
16	19	8 + (3)	7 + (4)	0 + (1)
Total	377	87 + (77)	159 + (78)	27 + (48)
Total Number of Codings	476	164	237	75

¹ Frequency of single coding is followed by frequency of appearance with other ratings (parenthesized).

² Pain Clinic Group Members.

³ Working Group Members

pertained only to this theme, while four pertained to "Impact" and one or both of the other two themes.

Units relating to more than one theme lead to there being more codings (476) than there were total units (377). In terms of multiple themes, Experiencing Pain and Dealing with Chronic Pain co-occurred most often (51 times), while "Dealing" and Impact of Chronic Pain co-occurred 23 times while "Experiencing" and "Impact" co-occurred 22 times. All three themes co-occurred in four units. Four units did not contain any theme (one each for Participants 1, 7, 10, and 14). When single and multiple codings were combined, "Dealing" was the most frequently occurring theme (237 of 476, or 50%) followed by "Experiencing" (164 of 476, or 34%) and "Impact" (75 of 476, or 16%).

A Detailed Examination of Theme One:

Experiencing Pain

Experiencing Pain is the first major theme examined in detail. This section begins with a brief description of sub-themes that comprise this theme. Following this, frequencies of occurrence for each sub-theme will be presented.

Experiencing Pain: Sub-Themes and Foci

The major theme--Experiencing Pain--was described by six sub-themes. These sub-themes are:

1. Hurting or being hurt.
2. Frustrating oneself or being frustrated.
3. Shocking or being shocked.

4. Lacking or being deprived.
5. Straining or being strained.
6. Confusing oneself or being confused.

Three foci could be perceived as the source of the pain: Body/Self, Others, and World. The body/self was identified as a focus when participants saw personal inadequacies, inabilities, actions, and/or thoughts as being a source of pain. Other people and their actions were perceived as a second source of pain when participants saw others as criticizing, blocking, betraying, violating, abandoning, and/or confusing them. The inanimate world was perceived as the third focus when participants saw it as attacking, blocking, betraying, violating, abandoning, and/or confusing them.

Experiencing Pain: Frequency of
Sub-Theme/Focus Combinations

The 164 thematic units pertinent to the Experiencing Pain theme were examined and the frequency of each theme/focus combination was tabulated. These frequencies are presented in Table 4. Although a given unit may be related to more than one combination, the vast majority pertained to only one sub-theme/focus combination (145 or 88%). Two theme/focus combinations were assigned to fifteen units (9%), three combinations to three units (2%), and four to one unit (1%). Thus, a total of 184 theme/focus combinations were identified.

An examination of Table 4 reveals that the most frequently occurring sub-theme (summed across foci) is "Hurting/Being Hurt"

Table 4

Experiencing Pain: Frequencies for Sub-Themes and Foci

Sub-Theme	Focus			Total
	Body/Self	Others	World	
Hurting/Being Hurt	63	8	5	76
Frustrating/Being Frustrated	33	1	0	34
Shocking/Being Shocked	8	1	1	10
Lacking/Being Deprived	9	4	7	20
Straining/Being Strained	19	4	5	28
Confusing/Being Confused	13	1	2	16
Total	145	19	20	184

accounting for 76 to the 184 (41%) sub-theme occurrences. This was followed by "Frustrating/Being Frustrated" (34 of 184, or 19%), "Straining/Being Strained" (28 of 184, or 15%), "Lacking/Being Deprived" (20 of 184, or 11%), "Confusing/Being Confused" (16 of 184, or 9%), and "Shocking/Being Shocked" (10 of 184, or 5%). The most frequently occurring focus was "Body/Self" accounting for 145 of the 184, foci occurrences (79%). This was followed by "World" (20 of 184, or 11%) and "Others" (19 of 184, or 10%).

Examination of all frequencies reveals three theme/focus combinations accounted for 62% of all codings. The focus for all three was "Body/Self": the sub-themes were "Hurting/Being Hurt" (34%), "Frustrating/Being Frustrated" (18%), and "Straining/Being Strained" (10%).

A Detailed Examination of Theme Two:

Dealing with Chronic Pain

Dealing with Chronic Pain is the second major theme examined in detail. This section begins with a brief description of three sub-themes and three foci related to this theme. Results from a reliability check are reported next. Finally, frequencies of themes and foci are presented.

Dealing with Chronic Pain: Sub-Themes and Foci

Units describing participants attempts to deal with chronic pain were used to identify sub-themes. As units were sorted and organized, three sub-themes were identified: Accepting/Facing, Maintaining/

Tolerating, or Escaping/Avoiding. The sub-theme of Accepting/Facing implies a participant accepts the pain and its concomitant limits as a part of oneself and one's life as well as a coming to grips with it by meeting it "face-to-face." The sub-theme of Maintaining/Tolerating is present when a person puts up with the pain, establishing a stasis or status quo, and resists giving in to the pain. The sub-theme of Escaping/Avoiding implies a person with pain views it as alien or "not-me," pushes it away, or attempts to get rid of it.

Each sub-theme could have one of three foci as an "arena" in which it was experienced as being played out: Reflection, Bodily, or Interpersonal activity. A Reflective focus implies the participant focused on thinking or reflecting about the pain as a means of dealing with it. A Bodily focus implies the person did something to master pain by using his or her body. An Interpersonal focus implies the person involved other people in his or her attempts to deal with the pain.

Participants emphasized refraining from activity in a small but significant number of units. In the case of reflective activity, they might mention not thinking about something; in regard to bodily activity, slowing down might be mentioned; withdrawing from others might be mentioned in regard to interpersonal activity. These emphases appeared to be variations of activity occurring within each focus, and suggested the participant was disengaging from (rather than engaging in) the activity. These variants were noted in the context of a focus as follows: Reflective Engagement or Disengagement, Bodily

Engagement or Disengagement, and Interpersonal Engagement or Disengagement. It should be noted that disengagement is always a special type of engagement.

Combination of sub-themes with foci form a matrix with nine components. This matrix is presented in Figure 1. Each sub-theme will be described in turn as it relates to a particular focus. The "Disengagement" aspect of each combination will not be described in this section, it is dealt with in detail in Appendix H.

The first cell in Figure 1 describes the theme of "Accepting/Facing through Reflective Engagement," which means a person thinks about his or her self in relation to the pain, the world, or other people in ways that help him or her accept and face the pain. The person may make the pain figural, or may be unaware of it in the way one is unaware of one's arms or legs. Participant 13 stated:

Pain is part of your whole being, it's with you constantly. It's another dimension within your body, like having three legs instead of two, you learn how to deal with it. It's not going to go away so you work with it, know your limitations, and know it's there.

The second cell, "Maintaining/Tolerating through Reflective Engagement," describes a situation in which a person emphasizes maintaining him or her self, or tolerating the pain, by making sense of it, engaging in fantasy, or devising rules for living. Participant 11 stated:

Now, I take one day at a time instead of a week at a time. It's kind of a disadvantage. Before what today brought, it brought. Now, you wonder what kind of day you're going to have tomorrow.

Sub-Theme			
Focus	Accepting/ Facing	Maintaining/ Tolerating	Escaping/ Avoiding
Reflective Engagement	: 1. I can : have pain and : still find : life to be : worthwhile. : :	: 2. I keep : myself going : by using : fantasy, : rules, or by : making sense : of the pain.	: 3. I can : block out the : pain through : fantasy, : watching TV, : or reading a : good book.
Reflective Disengagement	: 1D. I can let : go of some of : my awareness : of the pain : experience. :	: 2D. I should : not dwell on : or think about : the pain or : its meaning. :	: 3D. I try not : think about : it, I try not : dwell on it. : I block it : out.
Bodily Engagement	: 4. Being : active is : important to : me, helps me : cope, and : makes life : worthwhile. :	: 5. I do : what I have to : do to get : through the : day, e.g., : stand up, sit : down, or move : around.	: 6. I over do : things to : spite the : pain, to try : to break : through it. : But it ends up : hurting more.
Bodily Disengagement	: 4D. I can do : calming, : relaxing : things that : let me : function and : accept the : pain.	: 5D. I can : passively do : things to my : body to get : some relief, : e.g., use a : heating pad or : medication.	: 6D. I try to : block out or : put the pain : aside with : medication, or : get rid of it : through : surgery.
Interpersonal Engagement	: 7. Involvement : with others : helps me feel : good and makes : my life : worthwhile.	: 8. Being : involved with : other people : helps me deal : with my pain.	: 9. Other : people might : help me get : rid of the : pain.
Interpersonal Disengagement	: 7D. Sometimes : I need to : withdraw from : others to face : my pain.	: 8D. Getting : away from : people helps : me cope with : my pain.	: 9D. With- : drawing from : other people, : prevents added : pain.

Figure 1. Dealing with Chronic Pain: A Matrix of Sub-Themes and Foci

The third cell, "Escaping/Avoiding through Reflective Engagement," describes the situation in which a person attempts to block out pain by thinking about something else such as a fantasy, or by watching television, or reading a book. Participant 7 commented:

When I'm really hurting, I'll think what I would do if I hit the lottery and that makes me block that pain so I can get some sleep. Or I think of something that you'd enjoy doing. You try to ignore it.

The fourth cell, "Accepting/Facing through Bodily Engagement," describes a participant's using the body with acceptance of both physical limitations and the consequences of exceeding those limits. For example, Participant 6 stated:

I have gotten to where I go for walks nearly every day, about two miles. I do some stretching exercises or ride the stationary bike when my pain level is moderate to low. Whatever I can do comfortably, I do. But I do not go beyond that.

The fifth cell, "Maintaining/Tolerating through Bodily Engagement," implies the person uses bodily activity to hold the pain in check or keep it from increasing. Such activity is more necessary and is experienced more as drudgery. Participant 14 stated:

About the only thing that changes the intensity of it is by me arranging my body--getting up and walking, sitting in the chair for a little while or laying on the couch for a little while. At night time, wandering around, that eases it--doesn't make it go away. Makes it so that I can get a little more comfortable at times.

"Escaping/Avoiding through Bodily Engagement," the sixth cell, describes a situation in which a person tries to escape from the pain by out doing it, by beating it in a physical contest, by not accepting the changes in one's physical condition. Participant 2 reported, "I

tried [doing] everything, but ended up getting hurt more or end up in bed for a week."

The seventh cell, "Accepting/Facing through Interpersonal Engagement," describes a situation in which being-in-relationship with others people is important in helping the person live, accept, and face the pain. Participant 4 stated:

When I start getting down, I focus on other people and help people in the hospital, who have terminal cancer, or are in the nursing home. . . . Even though I feel rotten, it helps you feel good about yourself.

"Maintaining/Tolerating through Interpersonal Engagement," the eighth cell, relates to situations in which the participant's ties to other people help her or him hang on and keep going. Participant 8 stated, "I've always been people oriented. . . . And my obligations to other people have kept me going that I haven't given up and just let the pain take over."

The ninth and final cell, "Escaping/Avoiding through Interpersonal Engagement," emphasizes a participant's seeking out other people who may help her or him escape or avoid the pain. The other person is seen as having the power or ability to help reduce or get rid of some aspect of the chronic pain experience. Participant 11 sought treatment from pain center professionals and stated:

If I know of a way to make it better, I'd be all for it, that's the reason I'm here at the pain center. I haven't got nothing to loose--I've got everything to gain. I've made my mind up there's no way I'm going to live like this for the rest of my life. . . . I'm going to get over this.

Dealing with Chronic Pain: Reliability of Codings

Detailed descriptions of the sub-theme/focus combinations--presented in Appendix H--were used by two independent raters and the investigator to code a sample of fifty units. Units were randomly selected from among all pertinent units. To insure greater variability, no more than five units were selected from any one interview. No effort was made to select easy to code units. Raters were trained through the use of Appendix H and other selected units until fairly consistent codings were obtained between and among the raters. Raters were asked to code the dominant theme and focus for each of the fifty units. Where two or more themes or foci seemed of equal importance, more than one code was allowed.

Codings were examined for agreement on sub-themes. The percentage agreement between the investigator and each of the raters, and between the two raters, is presented in Table 5 under the heading "Agreement on Sub-Themes" and ranges from 68% to 74%. Disagreements were examined and two types were noted: the first occurred when one rater identified an additional sub-theme while the second type occurred when the raters disagreed on the sub-theme. The first type did not occur in any meaningful pattern (Escaping/Avoiding was added five times, Accepting/Facing twice, and Maintaining/ Tolerating once). The second type--rater disagreement--was more systematic and predominantly involved disagreement between the first and second sub-themes (Accepting/Facing and Maintaining/Tolerating, 12 times), and between the second and third sub-themes (Maintaining/Tolerating and

Table 5
Dealing with Chronic Pain: Percentage
Agreement Among Codings

Rater	Percent ¹
<u>Agreement on Sub-Themes</u>	
Investigator and Rater 1	68
Investigator and Rater 2	70
Rater 1 and Rater 2	74
<u>Agreement on Foci</u>	
Investigator and Rater 1	78
Investigator and Rater 2	86
Rater 1 and Rater 2	84
<u>Agreement on Sub-Themes and Foci</u>	
Investigator and Rater 1	54
Investigator and Rater 2	62
Rater 1 and Rater 2	68
Two of Three Raters	86
Three Raters	48

¹ Based on fifty units.

Escaping/Avoiding, 12 occurrences). Disagreement was rarely noted between the first and third sub-themes (Accepting/Facing and Escaping/Avoiding, 4 times). The pattern of disagreements suggests that the second theme, Maintaining/Tolerating, lies between the first (Accepting/Facing) and the third (Escaping/Avoiding), and that the three form a continuum on which lines of differentiation can be recognized.

Codes were examined for agreement on foci. The percentage agreement is presented in Table 5 under the heading "Agreement on Foci," and ranges from 78% to 86%. Two types of disagreement were noted: the first occurred when one rater identified an additional focus, and a second occurred when raters disagreed on the focus. The first type did not occur in any discernable pattern (Interpersonal Activity was added five times, Bodily Activity three times, and Reflective Activity was not added). The second type of disagreement occurred when raters disagreed on the focus. Disagreement occurred equally between the first and second foci (Reflective Activity and Bodily Activity, 4 times), and between the first and third foci (Reflective Activity and Interpersonal Activity, 4 times), while disagreement between the second and third foci was infrequent (Bodily Activity and Interpersonal Activity, 1 time). No systematic pattern was discerned in these cross-focus differences.

Combinations of sub-themes and foci were examined next. The percentage of agreement is reported in Table 5 under the heading "Agreement on Sub-Theme and Focus" and ranges from 54% to 68%. The

percentage of units on which two of three rates agreed was 86%. The percentage of units on which all three raters agreed on the code(s) was only 48%.

Dealing with Chronic Pain: Frequency
of Sub-Theme/Focus Combinations

The 237 thematic units pertinent to the Dealing with Chronic Pain theme were examined and the frequencies of each sub-theme/focus combination was tabulated. These frequencies are presented in Table 6. Although a given unit may pertain to more than one combination, the vast majority pertained to only one theme (172 of 237 units, or 73%). Two themes were related to 52 of 237 units (22%), three themes to 12 units (5%), and four themes to one unit (0%) yielding a total of 316 thematic codings.

Examination of Table 6 shows the most frequently occurring sub-theme was Maintaining/Tolerating (169 of 316 combinations, or 54%), with both Accepting/Facing (71 of 316, or 22%) and Escaping/Avoiding (76 of 316, or 24%) occurring at about equal frequency. The most frequently occurring focus is Reflective Engagement (130 of 316, or 41%), followed by Bodily Engagement (65 of 316, or 41%). Bodily Disengagement (51 of 316, or 16%) and Interpersonal Engagement (50 of 316, or 16%) both occurred at approximately the same frequency and were the next most frequently occurring foci. Interpersonal Disengagement (13 of 316, or 4%) and Reflective Disengagement (7 of 316, or 2%) occurred infrequently.

Table 6
Dealing with Chronic Pain: Frequency of
Sub-Theme/Focus Combinations

Focus	Sub-Theme			Total
	Accepting/ Facing	Maintaining/ Tolerating	Escaping/ Avoiding	
Reflective Engagement	41	67	22	130
Reflective Disengagement	1	2	4	7
Bodily Engagement	24	34	7	65
Bodily Disengagement	3	27	21	51
Interpersonal Engagement	1	29	20	50
Interpersonal Disengagement	1	10	2	13
Total	71	169	76	316

A Detailed Examination of Theme Three:

Impact of Chronic Pain

Impact of Chronic Pain is the third major theme derived from the interviews. This section begins with a description of the sub-themes and foci describing this theme. The second part of the section presents frequencies of occurrence for the various sub-themes and foci.

Impact of Chronic Pain: Sub-Themes and Foci

The last major theme—Impact of Chronic Pain—is described by two sub-themes and three foci. The two sub-themes are Damaging and Valuable. The "Damaging" sub-theme implies the participant experiences his or her present situation as not being as good as it was before his or her pain began. The pain experience has left the person weaker or less competent, isolated from others, or in an emptier, bleaker world. The "Valuable" sub-theme implies the person experiences his or her present situation as one in which he or she is stronger, more able to survive, more understanding, more open to others, or as having an increased understanding of personal limits and possibilities in the world. Three foci of experience are relevant to the impact of chronic pain: Body/Self, Others, and World. Sub-themes and foci combine to form six combinations. Those six will be described and examples provided.

The first combination, Damaging toward Body/Self, implies the person experiences her or his self as weaker, less able to do things,

less competent, out of control, more uncertain, or less confident. She or he may feel ashamed of her or his condition, or feel less valuable and useful. Participant 7 commented:

My whole life was changed, I'm a different person, and I don't want to be. I was an active person, I enjoyed doing a lot of things before pain and after pain you're limited in what you enjoy and how you enjoy it.

Damaging of Relationships with Others, the second combination, suggests the person experiences his or her self as more withdrawn, isolated, and reclusive in relationships with others. The person believes the quality of previous relationships will not be found again. Participant 2 described such a situation:

There have been very few things I couldn't do myself or figure out how to do them. I don't like to ask for help. I feel I'm too young to have to ask somebody to open a door, haul me around, or carry a bag of groceries. I just never imagined me being like that. . . . I feel guilty to have to ask you to do something that I should be able to do. . . . I asked a friend to put a water pump on my car. All I could do is hand him the tools. It's hard to stand there, forty-five years old, and this friend in his early sixties and he's doing the work and I'm standing there watching. It should be the other way.

The third combination, Damaging to One's World implies the person experiences the present world as being empty and untrustworthy, and the future is unacceptable. Participant 12 commented:

I got things to look forward to, my kids and watching them, but as far as for yourself, there's kind of an empty spot there. . . . You lose all purpose in life. . . . You're not being very useful. I don't want to live like this for the rest of my life. I'd rather be dead. . . . This ain't living. If you don't think it's going to be better, it's hard to go on living.

The fourth combination, Valuable toward Body/Self, describes a situation in which the person feels stronger, more competent, more able to survive as a consequence of the pain experience. The person

experiences an increased understanding and awareness of him or her self. Participant 3 stated:

Sometimes, I sit around and examine my feelings. It put my priorities where they should be, I reckon.... Of course, the pain's bad. It's not good for you. But I think a lot more now than I used to. I don't feel sorry for myself.... I think I've got more in touch with myself. The frustrations were probably there before but I didn't have the time sort them out.

Valuable for Relationships with Others, the fifth combination, suggests the participant experiences more understanding of others, or more openness with, and toward, others. Participant 12 commented, "I think there's been some change for the good. I get to spend time with my family.... I'm softer in a lot of ways, more tender, more gentle, more understanding with my kids."

The sixth and final sub-theme/focus combination, Valuable to One's World, implies the person experiences an increased understanding of limits and possibilities of life and of the world. Participant 10 indicated:

[Before] I think I internalized everything. I might not have made the move to free myself from this situation [bad marriage] if I hadn't started becoming aware that there's no guarantees. . . . I'm more aware of the quality of life. I try to live for today because there's no guarantees that there will be tomorrow. You take each day as it comes. You don't do a lot of living in the future.

Impact of Chronic Pain: Frequency of Sub-Theme/Focus Combinations

The 75 thematic units pertaining to the Impact of Chronic Pain theme were examined and the frequencies with which each theme/focus combination occurred were tabulated. These frequencies are presented

in Table 7. Although a given unit may pertain to more than one combination, the vast majority pertained to only one (66 of 75 units, or 88%). Two themes pertained to each of the remaining units (9 of 75, or 12%) yielding a total of 84 codes.

The most frequently occurring sub-theme (summed across foci) was "Damaging" which accounted for 66 of 84 (79%) occurrences. The sub-theme "Valuable" accounted for 18 occurrences (21%). The most frequently occurring focus (summed across sub-themes), "Body/Self," accounted for 49 of 84 (58%) occurrences. It was followed by "Other" (31%) and "World" (11%).

An examination of Table 7 reveals three sub-theme/focus combinations accounted for 70 of the 84 combinations (83%). The combination "Damaging to Body/Self" was most prevalent (38 of 84, or 45%) followed by "Damaging Relationships with Others" (21 of 84, or 25%) and "Valuable toward Body/Self" (11 of 84, or 13%). The other three combinations were rather infrequent ("Damaging to One's World," 7 of 84, or 8%; "Valuable for Relationships with Others," 5 of 84, or 6%; and "Valuable to One's World," 2 of 84, or 2%).

Comparison between Pain Center and Working Participants

This section contains five parts. The first part reports comparisons between the pain center and working groups on demographic variables. The next four parts compare the two groups in terms of the three major themes, followed by the sub-theme/focus combinations for each of these major themes.

Table 7
Impact of Chronic Pain: Frequency
of Sub-Theme/Focus Combinations

Focus	Sub-Theme		Total
	Damaging	Valuable	
Body/Self	38	11	49
Others	21	5	26
World	7	2	9
Total	66	18	84

Comparisons between groups are made with caution. Since the number of participants in each group is small--six in the Pain Clinic Group, five in the Working Group--and participants were not selected randomly, only trends or tentative conclusions can be drawn from what group members presented. Each group's mean number of occurrences for the various themes, sub-themes, and foci are presented in this section. Differences between the means are discussed, and values for statistical tests of significant mean differences (t -tests when variances are homogeneous, and t' statistic or Wilcoxon rank sum test [Fergusun, 1981] when they are not) are reported only when significant.

Comparison between Groups: Demographic Variables

Two small subgroups were identified among participants. The Pain Clinic Group was composed of four men and two women who were pain clinic patients not currently employed. The Working Group was composed of four women and one man who were working or had full time work-like obligations. Members of both groups reported experiencing pain for more than six months. The two groups were tested for differences between means using a t -test on five demographic variables. No significant differences were found ($p > 0.1$) for Age, Duration of Pain, Number of Surgeries, Number of Thematic Units, or Educational level. Means and Standard Deviations for these variable are listed in Table 8. (Frequencies for individual group members can be found in Table 1, page 76).

Table 8
Comparison between Groups: Means and Standard
Deviations for Demographic Variables

Demographic Variable	Pain Clinic Group		Working Group	
	Mean	Standard Deviation	Mean	Standard Deviation
Age	44.17	9.41	43.80	3.83
Education	12.00	2.19	14.20	2.68
Duration of Pain (Months)	108.50	174.77	114.60	80.02
Number of Surgeries	2.17	3.13	0.60	0.89
Number of Thematic Units	26.00	10.12	26.60	9.76

Comparison between Groups: Three Major Themes

The two groups were compared for differences in the way they described the experience of chronic pain in terms of the three major themes (Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain). The number of times each theme occurred was tabulated for each member of both the Pain Clinic and Working Group. The mean number of occurrences of all themes for both groups was calculated and is presented in Table 9. Examining the means suggested the groups might differ both in terms of the "Dealing" and "Impact" themes. The "Dealing" theme occurred more frequently among Working Group members than among Pain Clinic group members. The reverse was true for the "Impact" theme, with Pain Clinic group members having a higher frequency. Results from respective t-test comparisons, however, were not significant. (Frequencies for group members can be found in Table 3, page 102).

Comparison between Groups: Experiencing Pain

The two groups were compared for differences in the way they described the more immediate experience of pain. Mean number of occurrences for the Experiencing Pain sub-themes and foci are presented in Tables 10 and 11, respectively. One meaningful difference was noted. Pain Clinic Group members were more likely to report experiences related to the "Frustrating/Being Frustrated" theme than were Working group members ($t(9) = 3.59, p < .01$). No other differences can be observed in either table.

Table 9

Comparison between Groups: Mean Number of Occurrences
for Three Themes of the Experience of Chronic Pain

Sub-Theme	Pain Clinic Group	Working Group
Experiencing Pain	10.80	11.00
Dealing with Chronic Pain	14.17	19.20
Impact of Chronic Pain	7.80	3.60

Table 10

Comparison between Groups: Mean Number of Occurrences
for Experiencing Pain Sub-Themes

Sub-Theme	Pain Clinic Group	Working Group
Hurting/Being Hurt	4.17	6.40
Frustrating/Being Frustrated	2.83	1.00
Shocking/Being Shocked	0.67	0.60
Lacking/Being Deprived	1.33	0.60
Straining/Being Strained	2.00	2.40
Confusing/Being Confused	1.67	1.20

Table 11

Comparison between Groups: Mean Number of
Occurrences for Experiencing Pain Foci

Focus	Pain Clinic Group	Working Group
Body/Self	10.67	9.00
Others	1.50	1.40
World	0.50	1.80

Comparison between Groups: Dealing with Chronic Pain

The two groups were compared for differences in the way participants described Dealing with Chronic Pain. Frequencies for sub-themes and foci are presented in Tables 12 and 13, respectively. Mean differences in the use of two sub-themes is strong with Pain Clinic Group members being less likely than Working Group members to report situations related to Accepting/Facing and more likely to report situations related to Escaping/Avoiding. Mean differences were not statistically significant using the t -test, but the Wilcoxon rank sum test was significant for the Accepting/Facing theme ($R_1 = 18$, $p < .05$). Differences also are apparent in the use of foci (engagement and disengagement frequencies are combined in the table). The patterns indicate Pain Clinic Group members are less likely to report experiences with either a Reflective focus (not statistically significant) or a Bodily focus ($t'(9) = -3.57$, $p < .05$) than Working Group members. The Interpersonal focus is used equally by both groups.

Comparison between Groups: Impact of Chronic Pain

The two groups were compared for differences in the way they described the Impact of Chronic Pain. Mean number of occurrences of sub-themes and foci are presented in Table 14. Visual inspection of the frequencies reveals important differences between groups. When Working Group members described situations related to "Impact," they involved the "Damaging" sub-theme ($\underline{M} = 2.0$) about as often as they did the "Valuable" sub-theme ($\underline{M} = 1.80$). The Pain Clinic Group, on the

Table 12

Comparison between Groups: Mean Number of Occurrences
for Dealing with Chronic Pain Sub-Themes

Sub-Theme	Pain Clinic Group	Working Group
Accepting/Facing	1.50	9.00
Maintaining/Tolerating	9.17	15.40
Escaping/Avoiding	5.67	4.40

Table 13

Comparison between Groups: Mean Number of Occurrences
for Dealing with Chronic Pain Foci

Focus	Pain Clinic Group	Working Group
Reflective Focus	8.00	12.00
Bodily Focus	4.50	11.80
Interpersonal Focus	3.83	5.00

Table 14

Comparison between Groups: Mean Number of Occurrences
for Impact of Chronic Pain Sub-Themes and Foci

Source	Pain Clinic Group	Working Group
<u>Sub-Theme</u>		
Damaging	7.83	2.00
Valuable	1.00	1.80
<u>Focus</u>		
Body/Self	4.30	3.20
Others	3.50	0.20
World	1.00	0.40

other hand, described situations involving the "Damaging" sub-theme ($\underline{M} = 7.83$) almost eight times as often as they did the "Valuable" sub-theme ($\underline{M} = 1.0$). Comparison of the two groups for mean differences suggests the Pain Clinic group described situations involving "Damaging" more frequently than did the Working Group (but without statistical significance). The two groups described situations involving "Valuable" with about equal frequency.

The most frequent focus of both groups' descriptions was "Body/Self." It was used with roughly equal frequency by members of both groups. "Others" was used by Pain Clinic Group members more often ($\underline{M} = 3.50$) than by Working Group members ($\underline{M} = 0.20$), although the difference was not statistically significant. "World" was used as a focus least frequently (and about as often) by both groups.

The differences between the groups suggest Pain Clinic Group members describe the Impact of Chronic Pain as "Damaging" to both their "body/self," and to relationships with other people, with about equal frequency. Working Group members experience "Impact" as primarily affecting their "body/self" and it is about as likely to be described as "Valuable" as it is "Damaging," although both were relatively low frequency events.

CHAPTER V

DISCUSSION

Chapter V contains a discussion of results of the study in nine major sections. The first section contains seven subsections describing salient aspects of the chronic pain experience. The first subsection discusses qualitative aspects of participants' experiences. The remaining six subsections discuss interactions between chronic pain and emotion, thinking, bodily functioning, time, family and friends, and occupation.

The next major section discusses the three themes (or meanings) that encompass the experience of chronic pain: Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain. The next three major sections discuss each theme (and its associated sub-themes and foci), separately. The sixth major section summarizes the experience of chronic pain by using all themes, sub-themes, and foci.

The seventh major section examines the comparisons between pain clinic and working participants. The implications of differences between the two groups are discussed.

The eighth major section examines implications of the study for treating people with chronic pain. The ninth and final section contains recommendations for further research.

Salient Aspects of the Experience of Chronic Pain

The Experience of Chronic Pain:

A Qualitative Description

The primary goal of this study was to examine the experience of chronic low back pain from the perspective of the person suffering it. To meet this goal, participants were asked to describe their experiences with chronic pain. Their descriptions were tape recorded, transcribed, and reduced to thematic units. The thematic units were used to summarize each participant's experiences in narrative form. These summaries are presented in Appendix F.

The narrative summaries indicate pain is a personal experience that is both part of the self and separate from the self. Pain is not in-the-world outside our bodies, but neither is it wholly "me." Chronic pain is experienced as an invasion of (or at least a change within) the personal sphere of experience (part of "me") that alters and reorganizes all aspects of personal experience. It is not an invasion from outside oneself. It is a violation of self by what previously was experienced as self (the body). It is a violation of the order in a person's life that subsequently reorders all other relationships in his or her life.

It may be helpful to look at what participants said that lead to this formulation. The following quotes were selected to illustrate the "me/not-me" experience of chronic pain. Participant 1 stated, "My life isn't real, it's like a nightmare, a dream world." Later, he added, "There's no way you can separate pain from any other portion of

life." Participant 2 noted, "It's something you have no control of. I never was like that before. It's not me. And I have a hard time accepting it." Participant 3 echoed these thoughts with, "Everything that's went on the last two years is not me."

Some participants personified the not-me aspect of pain while recognizing it was still "part-me." Participant 4 stated, "Accept the pain as you would a child, treat it with respect, but don't let it take over. Look at it as an individual you have to deal with, you can't throw it out. You have it until you die." Participant 6 noted an advantage in seeing the pain as separate. She stated:

I refuse to believe that this pain is a part of me. I think it is just there. It just is a consequence of my falling. Feeling that it isn't a part of me makes it easier to deal with on a day to day basis. It's easier to see it as a physical thing that's happening.

Participant 7 recognized the relationship between pain and self, and stated:

The pain is probably part of me now, because it's ever present and I don't think it's going to end. It's not a welcome part or a part that's comfortable. It's like a limb that's gone but it's always there.

Some participants worked to see it as part of themselves at times, and as separate at other times. Participant 8 stated:

I don't let my life revolve around the pain, but pain is a part of my life now. You have to take control of it, you can't let it control you. The pain's there, accept it. Your hand's there, accept it, appreciate it. You have to accept the pain, it's a part of you.

.
The pain is from within and it is not caused by a person, a place, an atmosphere. Pain is a part of you and yet it's a separate entity, like your children. They're a part of you but they're a separate individual. You try hard to make it like a separate entity.

Participant 13 described it more in terms of his body. He stated, "Pain is part of your whole being, it's with you constantly. It's another dimension within your body, like having three legs instead of two, you learn how to deal with it."

Pain was described by many participants as being like an invasion of personal experience, even though they recognized it as part of "self." Participant 1 commented, "It's almost like a bandit has come into my life and stuck a gun--the pain--in my face and says, 'Hey, give me your future.'" Participant 4 stated, "It's kind of like the pain is some foreigner in my body, a pain man who's come in and give me a problem." Participant 10 remembered, "At first, I was this really angry horrible person and my pain was this awful evil monster that just totally ruined everything." Participant 11 recognized the essential difference between pain and an intrusive person. She said:

Right now I feel the pain is ruling my life. It seems like that pain has a voice that tells you what to do and what not to do. You carry that person or thing with you twenty-four hours a day, you can't walk out the door and it's going to stay behind. You wish you could push it off a cliff, or pull it out and say, "I'm putting you in a closet or a box, you're not going to bother me no more."

Participant 14 noted the advantage of seeing pain as a "not-me" invader:

The pain feels like it's a foreign part or an object that has attacked my body. It's an "it" that doesn't belong there and I want it to go away. I've been invaded by an alien. [Laughs]. Thinking about it that way, I can think it's going to separate from my body and be gone. Where if I think about it as part of my body, then I'm stuck with it and I don't want to be stuck with it. It's like it's a shoe, and I want to get rid of that shoe, I want to throw it out.

Pain was also seen as changing how a person lives. Support for this statement can be found in participants' statements. Many noted wide ranging effects. Participant 1 stated:

Pain is devastating and debilitating. There's not many areas in your life that the pain doesn't seem like it devastates. My whole life is totally different. The pain becomes a major portion of your life.

.....
Pain used to be predictable. Pain from an appendectomy, cutting your finger, breaking a leg, or even pain from open heart surgery is acceptable because it is predictable. . . . But, when you expect the pain to go away and it doesn't, that is the ultimate kick in the teeth. Being pain free is the goal of anyone's life. With this pain, you never know when it's going to increase, you never know what to expect.

Participant 2 observed, "Pain just ruined everything I had my mind set on. It ruined my life from a working point and it's ruined a lot of goals I had set." Participant 6 commented, "The pain is miserable, absolutely miserable. It interferes with anything you plan on doing." Participant 7 noted limitations, "My whole life was changed, I'm a different person, and I don't want to be. After pain you're limited in what you enjoy and how you enjoy it."

Relationships with others were also reordered. Participant 3 observed:

I can't get out and bring home the bacon. Now my wife is out working and I'm setting at home taking care of the kids. It takes away from me and puts more on her. She sounds like the man of the house, and I'm like the woman of the house. It's a role reversal.

Participant 15 described a different kind of change. He said, "The pain has made it so I can't do much. There's no dignity in having to ask somebody for help, for even menial tasks. That's hard. I feel

helpless." Participant 1 stated, "The pain and its unpredictability change relationships with family and friends."

Some participants noted their relationship to work was reordered. Participant 11 stated, "I've worked since I was 14 years old. I love to work. I love being around people. I can't do that now because I can't be on my leg."

Most participants experience themselves as being different because of pain. Participant 16 stated, "When my back hurts, my mood changes, I'm just a different person." Participant 2 noted similar changes. He said, "I think the pain makes you grouchy, irritable, and I get very tense and on edge real easy." Participant 4 commented, "Even though the pain hasn't caused you to lose an arm or a leg or anything like that, it has changed you inside and it has changed you mentally if you let it." Participant 8 discussed a reordered relationship with her body. She said, "You take your body for granted before. With pain, you're more conscious of what your body will do because that's what affects it."

This discussion supports Buytendijk's (1943/1962) analysis of chronic pain. He saw the "painfulness" of chronic pain as being related to distress at the violation of the order of a person's life. Chronic pain brought much "painfulness" because it disordered so many aspects of existence. The distress and pain are inseparable.

Emotions and Chronic Pain

All fifteen participants stated the pain had strong emotional concomitants. They described emotional experiences using words such

as grouchy, irritable, tense, on edge, angry, frustrated, bitter, short, or depressed. Participant 10 experienced anger. She comments:

You go through an absolute horrendous inner anger. I was hurt in August, four years ago, and I went twelve or thirteen months hating everything, yourself, the people around you. I would do really bizarre things. The pain would increase and I would increase my activity with things that I knew would make it worse. You kind of want to outrun it, just play harder.

Many participants found pain and concomitant emotional reactions were difficult to separate. Participant 12 described it as follows:

It's not only the pain that will do a person in, it's depression that does a person in. You can control the pain better. Depression is the not being very useful, boring frustration. It's like having nothing forward to look to.

Some participants described a complex relationship between pain and emotions. Participant 14 described such an interaction:

Living with the continual pain directly hits the moods and emotions. . . . The three key words that would describe me right now are angry, frustrated, and depressed. The depression helps me get angry, the anger makes me frustrated, I get mad at myself when I lose my temper, then I get depressed because I've lost my temper. It's just a vicious circle. I feel all three are connected.

The emotional concomitants to chronic pain lead to actions inconsistent with a participant's sense of self. Participant 2 described it as follows:

I think the pain makes you grouchy, irritable, and I get very tense and on edge real easy. I am bitter because I can't do things that I've always done before. . . . I never was like that before. It's not me. I have a hard time accepting it. Now I say things that I shouldn't, something sharp or sarcastic like a smart-aleck. They're an innocent bystander and that hurts me and it hurts other people's feelings too.

This comment describes a common reaction pattern in which pain leads to affective changes; emotional outbursts are directed at other

people who, in turn, are hurt; and hurting others is experience as hurting the self.

Some participants indicated the effects of emotional concomitants were attenuated but still present. Participant 8 commented:

Anger doesn't have anything to do with my pain. Anger is my attitude when I do something dumb because I didn't have the patience to wait for somebody else to do it. If I'm upset or I'm angry with somebody, I may decide to do something that is going to hurt.

.
Some days I'm not as tolerant and easy doing as others. If the pain is very intense, I do become short. More with my own family who recognize the signs, but don't do what is expected. I'm more short with people early in the morning because the pain is greater. But I'm not angry at anybody and I don't try to take it out on the world. It's not their fault.

These examples suggest participants often noticed emotional concomitants of chronic pain in the context of interactions with other people. They described situations such as being sarcastic with co-workers to being short or angry with family members who would not do what they "should" to help the participant. After such an interaction, participants reported feeling "bad" or "hurt" by the way they acted toward others, i.e., they experienced more emotional "pain."

Participants also experienced emotional concomitants of chronic pain when they were alone. When they described situations in which they were cut off or isolated from other people, they reported feeling depressed, useless or full of self pity. These aspects of emotional experience were described as being more difficult to cope with than the pain was.

The results and discussion of interactions between emotions and chronic pain suggests that emotional concomitants of pain are a major aspect of the overall experience of chronic pain. Pain is described as increasing with bodily movement, emotional pain arises from how participants interact with others or think about themselves in the world. Both pain and emotion are aspects of being in pain. Pain changes how life is experienced. Living with a different (perhaps unknown) organization is emotionally hurtful. Both pain and emotions give rise to actions (doing) necessary for living (coping or dealing). Thus, emotions and chronic pain appear to be inseparable, immediate aspects of the experience of pain. Additional information about emotions and chronic pain will be discussed when the theme of Experiencing Pain is discussed.

Reflection and Chronic Pain

Pain, according to Buytendijk (1943/1962), forces a person to reflect on how he or she relates to the world of experience. All participants in the present study indicated they think about their pain to some degree or another. Eight participants (53%) made direct comments concerning pain's effect on the thinking process. Participant 2 stated, "It's hard to think of something besides the pain and carry on a conversation and be open and jolly . . . when I'm hurting or feel bad." Participant 8 indicated the pain is, "something you learn to live with, an adjustment you have to make, your attitude toward the pain can make you or break you." She also stated, "I'm

sitting here now with pain in both legs and across the back and I don't think that's affecting my attitude or my way of thinking."

How pain affects a person's thinking is not always the focus of reflective activity. Participant 11 tried to understand the implications of her pain. She said:

I don't understand the pain. . . . I wish I did, if I understood the pain, I'd understand how to treat it. If you cut your finger you know what to do about it. You can treat an illness that's there but you don't know what to treat the pain with. You don't know how to act with the pain, you don't know whether to go to bed, to lay down, to sit down. But you think about what to do to make it better and not make it worse.

This (reflective) statement describes the participant's feelings of confusion and her attempts to deal with the pain.

Reflection may relate to assessing the impact of chronic pain. For example, Participant 7 stated, "Pain has made me dependent and I don't want to be dependent, I live alone, I'm a single person. I don't think I could handle another person being around. They can't understand."

Thinking about the pain is used extensively when people attempt to deal with their experience of pain, i.e., to help them understand how to live with pain. Whereas emotions and pain relate to "being," reflection relates to "doing." The relationship between reflection and what participants do is examined more fully when the theme of Dealing with Chronic Pain is discussed. It might be helpful to look at an example of "reflection as doing" to illustrate the relationship between reflection and chronic pain.

Five of the participants described a belief that seemed helpful to them in dealing with pain. Participant 8 described it most clearly when she said:

I feel very fortunate that I'm able to get out and move. I was told that it would get worse as I got older. I believe in the future I won't be able to keep going and I want to keep active as long as I can. I think that will postpone the time that I won't be able to do it. I'm foreseeing this possibility but I'm not dwelling on it. When that day hits, it will hit. There's nothing I can do to change it. I can't do anything I want today and hope they're going to find something next week to cure whatever damage I do. But you always think positive that maybe eventually they'll find something before it gets to that point and you won't have to worry about it. Seeing a change point somewhere in the future probably makes me cram in everything I can right now the way I do. And that keeps me happy, keeps me active.

This participant sees herself in a context of time extending into the future. The present is seen as having advantages over the future. The present is also where she can act to postpone the undesirable aspects of the future for as long as possible. The belief gives meaning to activity which creates immediate distress; i.e., physical activity and concomitant pain are beneficial because they postpone the inevitable day of physical incapacitation. The contrast between the present and the future allows the present to appear full while the future (which is postponed) appears relatively bleak and empty.

This attitude toward the present and future has a precedent in Norse Mythology. The Norse believed:

. . . a time would come when all the visible creation, the gods of Valhalla and Niffleheim, the inhabitants of Alfheim, and Midgard, together with their habitations would be destroyed (Bulfinch, 1978, P. 348).

The day of destruction was known as the Ragnarok, or the twilight of the gods. One of the tasks of the gods was to delay that day for as long as possible. To achieve this, they made compromises with fate, trading certain physical assets for other advantages. Tyr--god of war for whom Tuesday is named--gave up a hand so that a fierce wolf could be bound. Odin--foremost of the gods for whom Wednesday is named--surrendered an eye to gain wit and wisdom. Thor--the god of thunder for whom Thursday is named--took his hammer before it was finished so he might use it in defense of the gods. Other gods made other choices that helped delay the Ragnarok. In the final battle, the consequences of these choices contributed to their undoing. Yet, the choices were made knowing the final battle inevitably would be lost.

The capacity to postpone the inevitable--to postpone the "Ragnarok" of the self wrought by pain (Buytendijk, 1943/1962, describes it as the "destruction of self in the body of agony," p. 148)--gives meaning to choices made in the present. Participant 8 engages in activities that increase pain believing it means less pain in the future. The meaning frees her to act and "do" as a way of dealing with her pain.

Participant 12 provides a contrast to this experience. He stated:

Before, you had something to live for--vacation, work. And you knew what you had to do all week. But now, you've got nothing to look forward to. I can really get thinking I'm going to be all right, able to get back into the mainstream. Then you get down for two or three days. The longer it goes, the more doubt and depression set in and it's like you're fooling yourself. Deep inside you, you quit looking ahead, you think, "It ain't going to

get no better, it's going to get worse. I'm going to have that pain again." And that brings you down.

This participant also sees himself in a context of time, but the time extends from past, through present, to future. He finds meaning for his current activity by comparing it with the past. By comparison, his present seems empty and meaningless. His future appears likely to be an extension of the present, only emptier and less meaningful.

The reflective activity described by these two participants provided a context of meaning for them. The activity is an action they took to try and make sense of their experiences, an action to deal with chronic pain. Thus, reflection and chronic pain are inter-related aspects of one experience. Pain reorders (experienced as disorganizing) relationships between aspects of experience, and reflection works to discover and/or create order once again so that a person can live with meaning.

The use of reflective activity in coping with chronic pain and its concomitants will be examined in more detail when the topic of Dealing with Chronic Pain is discussed.

Bodily Functioning and Chronic Pain

The experience of the body is quite different for people with chronic pain than for those without such pain. Usually, a person experiences the body as part of the ground of experience. Chronic pain makes the body figural. All participants reported bodily changes. Participant 12, for example, stated:

I can take a lot of pain. But I can't ride in the car a very long time cause if I sit long, my legs go to sleep on me. Then

when the feeling comes back in my feet, it's like they're on fire. The pain is a different pain, it's deeper inside, more intense that way.

The altered experience of the body can extend beyond the pain.

Ms. G, Participant 7, described it this way:

Physically, I'm like a board. I'm all knotted up. I get popping and grinding noises that I don't know what they are, it never used to be there. . . . There's a noise in the base of my skull like something grating. I use a cane when I do a lot of walking, but I have to sit down so often because it's like a grinding. When I hurt, I hardly pick up my feet, I shuffle. Up to then I might be limping. I've ground my own teeth to where they fall apart. I'll catch myself not knowing that I'm doing it. And the hands and fingers sometimes are so bad you can't even bend them, lift anything, hold anything. Sometimes you can't even sit comfortably in a chair, and to lower yourself to recline is difficult. . . . I have lost a lot of my muscle motion. My arms will not go up like they used to. A certain way you move, something you do, and I get muscle spasms in my back. It's unreal.

Most participants reported the pain was with them most of the time. Three reported the pain was more intermittent. Participant 13 described it as:

Sometimes I don't feel the pain. That feels a whole lot better. That's what you used to feel, that's normality. You feel like it's going to go away. . . . But then you get up maybe a little bit too fast and it tells you, "I'm still here, I was just going to let you rest a while."

Days with no pain or reduced pain pose a special problem. They often encourage a person to engage in physical activity. Participant 16 stated, "once in a while I'll try to run the sweeper. Maybe I can get half of a room done and then it starts hurting real bad, so I'll have to stop. I'm almost in tears." Several participants reported they periodically engage in activity that puts them in bed for one or more days.

The essence of the experience of chronic pain, according to Buytendijk (1943/1962), "lies in the subject's being separated from the body yet at the same time chained to it" (p. 151). Participants in the present study described themselves as being more aware of their bodies, and as having a different relationship with them. The body-in-pain was described as having object-like qualities, but pain and body were not synonymous. Instead, the pain was seen as afflicting a body that was seen both as separate from the self and as part of the self.

MacGillivray (1985) found that people experience their bodies in terms of three broad categories: Corporeality, Engagement, and Interpersonal Meaning. Corporeality included two themes: body-as-object and body-as-instrument. The "body-as-object" included bodily experiences occurring when a person was ill or in pain. The second theme of corporeality involved experiences of "body-as-instrument" or as a tool for performing various activities. For participants in the present study, the experience of body-as-instrument is readily apparent when they use the body to deal with chronic pain. Thus, the participants in this study viewed the body-in-pain as an object and used the body-as-instrument to deal with pain.

A second category of bodily experience was noted by MacGillivray (1985) called "engagement" and indicated it included two themes: vitality and activity. Vitality related to experiences of well-being, enlivenment, or absorption in the world. "Activity" referred to experiencing the body as being in or moving through the world.

"Activity" was more salient in the present study. Participants engaged in bodily activity (using the body-as-instrument) to deal with chronic pain. The combination of body-as-activity and body-as-instrument is in accordance with MacGillivray's descriptions. He found such combinations common among his participants. One significant difference is apparent when the current study is contrasted with his results. MacGillivray stated that with experiences of "engagement":

The person's focus is primarily on the world, and attention and concentration are absorbed in the pursuit of a goal. The person may report no particular experience of the body, or there may be a "curious" absence of the experience of the body. (MacGillivray, 1985, p. 105).

Among participants in the present study, the body remains figural when they are engaged in activity directed toward dealing with pain. This can be understood, using MacGillivray's terminology, as the participants combining the body-as-instrument and body-as-activity to attend to the body-as-object. In the terminology of the present study, these three themes are descriptive of one aspect of how participants dealt with pain by focusing on bodily engagement.

MacGillivray (1985) described the third category of bodily experience as related to experiences of interpersonal meaning. Two themes were associated with this category: body as expression of self and body as appearance. These themes are sometimes contradictory for people in pain. The participants experienced their bodies as being impaired, but recognized that to others they appeared unimpaired. Acting in a way that communicates the impairment to others created

problems in interpersonal relationships. For example, Participant 1 stated:

Now I walk with a limp and people look at me like I'm not whole. They might wonder, "What's the matter with that guy, why is he doing that." I don't want anybody to feel sorry for me, I want to be accepted for the way I am myself, not my condition.

Hiding the impairment from others is difficult and may require extra effort. Participant 10 stated:

I don't tell anyone, because it's what you have to do to be normal. You don't want to get in a position where you look different than anybody else, so you learn to not be obvious and nobody is ever even aware. You have to think a little bit more. And you have to manipulate situations so that nobody knows why you're doing it.

Not communicating the impairment may create problems. Participant 6 said:

There are people who insist I can do something even though I know it's not wise for me to do it. I think they are very disrespectful, discourteous people who are not trying to understand and are not realizing the uncomfortableness I'm in.

The difficulty in part is created by the peculiar relationship between a person's body-in-pain and his or her experience of self. The person experiences his or her body as changed (usually in a negative direction, i.e., the body is now defective or diminished), but the "essence" of oneself remains unchanged. Yet to others, oneself is presented as one's body. Three types of choices (not mutually exclusive) can be made:

1. To present a changed body is to present a changed self (which is undesirable).

2. To present the body/self as unchanged is to act contrary to what one experiences (i.e., this would be living a lie, which is undesirable).
3. To be changed, i.e., to present a different self/body (what would the different self/body be?) which is to "live" in a different ordering of relationships (which is threatening).

The resolution is not as easy as this analysis makes it seem. For a person to change (or accept a change in) her or his relationship to the body requires changes in many other aspects of experience as well. As Participant 3 said, "A hell of a lot's changed and it takes a hell of a lot of adapting to get used to it." This analysis suggests that the relationship a person has to his or her body becomes more complex with chronic pain. The salient aspects can be identified, but are fully appreciated only when the overall context of relationships are considered.

Time and Chronic Pain

Seven participants (47%) commented directly about time, and most of these comments were in response to specific questions about time. Participant 3 stated a theme that several others shared, "This pain . . . just slows you down and gave me time to stop and think. I sit and think a lot about the past really. Sometimes I dwell on it a little too much, I believe. It makes me feel bad."

The past, and what the past means for the future, can appear to be very important but often seems lost. Participant 1 stated, "It's

almost like a bandit that has come into my life and stuck a gun--the pain--in my face and says, 'Hey, give me your future.'"

For some participants, the present offered some solace.

Participant 4 stated:

The past doesn't seem to make that much difference to me because I can't really change what happened. Forget the past. . . . I just take one day at a time. . . . I don't think about tomorrow. I'm not going to think about how to handle it until it's here. Then I'll deal with it. I find it's more relaxing than thinking about next week or two days from now. . . . I keep going from day to day. When you live for today, you start out new.

The word "chronic" suggests time would be important in the experience of chronic pain. Closer examination of participants' experiences indicated time was important to them, but was not a particularly figural aspect of experience. It was embedded in what they discussed, forming one ground against which other aspects of personal experience became figural.

A good example of how time was experienced can be found in the discussion of the "Ragnarok." Participant 8 foresaw a time of incapacitation and used actions in the present to postpone that time. Time was very important in her description, but what was salient for her was the doing and enjoying in the present. Time provided a context that established a meaning for what she did.

The context time provides can be described. Many participants indicated their lives were moving in a certain direction (had an expected order) before the onset of pain. The onset of pain changed that direction irrevocably. Participant 1 said:

My dream, the American dream, was to own my car, home, and be financially secure. My wife and I were proceeding toward the

goal in an orderly fashion, the kids were grown, we were saving money, making investments, taking vacations, making plans, and enjoying each other. . . . Then this came along and puff! It seems like an impossible dream because I can't work.

Some participants did not accept the change in direction.

Instead, they viewed a return to the previously expected life line as the only acceptable future and experienced the present as empty, bleak, and painful. Participant 12 said:

I got things to look forward to, my kids and watching them, but as far as for yourself, there's kind of an empty spot there. You're not being very useful. I don't want to live like this for the rest of my life. I'd rather be dead. I'll start crying here in a minute. This ain't living. If you don't think it's going to be better, it's hard to go on living.

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The only things that's important for me now is to be able to get back out and do what I used to do. I'd like to be able to have my old job back. I'd love to be able to get up and go when I wanted to and enjoy life a little more, and be able to support my family right.

Those who could accept a new trajectory for their life coped better with their pain and found their present life more satisfying.

Participant 8 said:

It's something you learn to live with, an adjustment you have to make. . . . You have to decide whether you're going to let the pain win and rob you of the precious things you can do in life or if you accept it and say, "It's there but I'm going to take it and do what has to be done." I feel you have to adjust your way of thinking. I don't let my life revolve around the pain. But pain is a part of my life now. You have to take control of it, you can't let it control you. You have to think positive. The pain's there, accept it. Your hand's there, accept it, appreciate it.

Many participants described a third possible future in addition to returning to the past and accepting the present--a feared life line portending increased debilitation, pain, and dependency on others. The image was one of being in a wheel chair, being confined to a bed,

and having to depend on others for many basic needs. When the feared life line seemed imminent, participants were more likely to experience suicidal ideation, as the above quote from Participant 12 indicates. The feared life line was discussed in hushed tones except by those who ascribed to the "Ragnarok" of a self wrought by pain. For the latter group of participants, the feared life line could be kept distant, in the future, by remaining active in the present.

A theme related to this experience of time is change and continuity. Dapkus (1982), in a phenomenological investigation of the experience of time, noted that "Change and Continuity" composed one of three themes that described the way people experience time. She indicated this theme "refers to the fact that things (people, nature, etc.) are constantly changing and yet have continuity in time" (p. 40). The other two themes were "Limits and Choices" and "Tempo." Limits and choices referred to "the fact that people choose to spend their time on certain activities and are limited in what they can do because of the amount of time that they have" (p. 40). Tempo, the third theme, referred to "the speed or pattern of movement in time, whether fast or slow, regular or irregular" (p. 40).

Limits and choices imposed by time were not mentioned by participants in the present study. Time was not the limiting factor, pain was. Participant 7 stated, "After pain, you're limited in what you enjoy and how you enjoy it." Participant 14 observed, "The pain has made it so I can't do much." Participant 10 said, "I know my limits and I try not to exceed them." The consequences of exceeding

the limits imposed by pain are immediate and, therefore, figural. The consequences of exceeding limits imposed by time are considerably less immediate and, therefore, not figural. Perhaps what is important for a person is learning that limits exist and one must, for the most part, live within them.

The third theme related to the experience of time identified by Dapkus (1982) is "Tempo." A change in the pace of time was noted by several participants. Participant 14 described her experience of time:

Pain makes the days seem forever long. You can't wait for night to come so maybe you can sleep, and then the nights are longer because you can't sleep. And then you can't wait for the daylight to come. I've lost track of time. I have to keep asking what day it is because the days and nights are so filled with the pain all the time that I've lost track of time.

Tempo of life was affected by pain, but the change in tempo was not as salient in comparison to experiences related to the "Change and Continuity" theme.

The experience of time, for participants in the present study, was primarily as a ground for experiencing chronic pain. Time provided a context against which the meaning of the participants' current experiences became figural.

Family, Friends, and Chronic Pain

Chronic pain has been described as reordering relationships among the various aspects of a person's experience (Buytendijk, 1943/1962). It was suggested, in the section titled "Emotions and Chronic Pain," that participants often noticed themselves being sarcastic, or angry

to friends and family members. This indicates interpersonal relationships were changed by the experience of chronic pain. The literature review (see pp. 43-45) suggested the social adaptive tasks included re-defining roles and relationships within the family, with peers, and with professionals. This subsection examines and discusses, in greater detail, how these relationships changed for participants in this study.

Twelve participants (80%) reported considerable change in roles and relationships within the family. Participant 11 was characteristic of these changes:

My husband and the girls sacrificed doing a lot of things they'd like to do because they know I can't do it. I don't feel it's fair to them. It's just been that way within the last year. When I was working we could do more. But now we pay our rent, buy our groceries, and we hope any money we have left lasts until the end of the week. We live day-to-day.

Participant 3 noticed similar changes:

It's hard on the whole family. My kids are going without when they shouldn't have to because of me. There's things I want for them that I can't afford, and things that I want to do that money can't buy. . . . It's put a strain on my marriage. I'm cross with my wife but she's done her fair share. I don't feel like I'm doing my fair share. I'm not able to do things for her I'd like to do. I'm kind of useless. I'm sharp with my wife and the kids and I hate being that way. It makes you feel mean, less of a man.

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I can't get out and bring home the bacon. Now my wife is out working and I'm setting at home taking care of the kids. It takes away from me and puts more on her. She sounds like the man of the house, and I'm like the woman of the house. It's a role reversal.

These two participants describe several changes. Participant 3 experiences a role change within his family: he now sees himself as

not contributing his fair share. Participant 11 sees her contribution as being diminished, thus, hurting family members.

Participant 14 identified a different problem. She said, "It makes me feel guilty that I am making more bills again, I can't go out to work to help pay them. It doesn't make the pain any worse, it makes me feel worse." Seeking treatment for pain meant making demands on her family's financial resources while pain prevented her from contributing financially to the family.

Changing the relationships within a family can have effects ranging from an improved relationship, to increased interpersonal tension, to divorce (Ireys and Butt, 1984; Turk and Kerns, 1985). Among participants in the present study, two reported being divorced since the onset of their pain, one ended the relationship in which she was involved, and one reported a significant strain in her marital relationship. Not all changes were directly attributed to the pain, but pain was a salient aspect of their lives.

Other kinds of changes in relationships within the family may occur. Participant 1 stated:

The pain and its unpredictability change relationships with family and friends. Your family looks at you and you begin to wonder, "They don't believe I'm constantly in pain." Trust within the family begins to deteriorate. They hear you say, "My back's killing me," for a year and they begin to shut you off. It's the same with friends. Relationships are more guarded. I feel I'm liable to have an outburst of anger, so I stay to myself.

Relationships with friends became difficult as well. Participant 2, for example, stated:

If somebody comes to see you, you hate to say, "I got to go lie down," and leave Mr. X sitting there with two ladies. I'm sure it wouldn't bother whomever as much as it bothers me. I get embarrassed. I don't want to hurt anybody or make them feel uncomfortable or unwelcome. And that cuts your activities down to nothing.

Both Participants 1 and 2 experienced increased isolation because they believed friends experienced them differently. To protect others, they decided to withdraw from friendships, thus altering the nature of their respective peer groups.

Participant 12 noted his peer group changed, but for different reasons. He stated:

I got more time for more friends now. Now you're lonely and you need friends. I like to have friends and be able to help them, they've helped me when we was down and out. I thought them people was long gone, I thought everybody was for their self like me. And they help in dealing with pain too. You can be feeling bad and somebody comes by and visits me, it breaks the monotony, takes your mind off things.

Other people become important in at least one other way.

Participant 7 observed, "The pain is always there. But around other people I don't think about it. It's not consciously there unless they bring it up or talk about it." In this description, relationships with other people helped the participant deal with pain. This type relationship is discussed more fully in the section on Dealing with Chronic Pain.

In the literature review, it was suggested that treatment professionals might become a source of extensive social interaction (p. 44). Interestingly, professionals were not as salient for the participants as might be expected. Nearly all participants talked about their medical treatment, and nearly all were dissatisfied with

one or another aspect of it. Participant 14 is rather typical. She described her experience with treatment professionals:

I'm angry that the medical doctors can't push that magic button and it be gone. It was twenty years in coming. Maybe I'd have another twenty years pain free. But they don't want to do surgery because there's only a 30% chance of it helping because scar tissue has wrapped around the sciatic nerve and it's causing me the same pain as I had before I had my back surgery. Somewhere down the line I am probably going to have to have a back fusion anyway, because there's arthritic changes in my spine, it's collapsing down on itself. All these millions of doctors have poked at me in the last two months and not one of them can make that pain go away. And I'm angry and frustrated about that.

Participant 13 had a different experience:

It's hard to understand how two different doctors can see two different things in the same situation. You describe the pain fully and they examine the x-rays and they come up with the same diagnosis only one thinks maybe they can do something and the other says absolutely not, it's a difference of opinion. You think, that's the practice of medicine. They're not absolutely positive it'll work. We'll try this or that. But when they're talking about your body, you're very apprehensive about which one is right.

Treatment professionals are sought for assistance with the pain, but do not seem important in descriptions of day to day dealing with chronic pain. An exception existed when participants found someone they trusted and who seemed helpful. Frequently, these professionals were not traditional health care providers (i.e., physicians). One participant was helped by a psychologist and a holistic doctor, another by an accupuncturist, a third by a chiropractor, a fourth by a masseuse. Many sought treatment from a pain treatment center.

Results regarding interactions between family and chronic pain suggest that the roles and relationships within the family change

dramatically for people with chronic pain. Many participants lamented financial changes and concomitant hardships for spouses, children, and self. Several participants reported feeling less important within their family because they were not contributing financially and were draining financial resources for medical expenses. Some participants indicated family and friends avoided them because of their focus on pain.

Occupation and Chronic Pain

The results regarding work and chronic pain were surprising in that work did not receive as much attention from the participants as expected. Men talked about their job or career more extensively than women. Women, however, composed the majority of the working group.

Interviews with members of the Working Group (Participants 6, 7, 8, 9, 10) did not contain extensive reference to work. Participant 6 was a full time student until her graduation from college, just prior to being interviewed. She briefly discussed some of the challenges the pain created in getting around campus. Participant 8 quit her job as a secretary due to pain, but found other work: she takes care of three children at night and stays with an elderly woman during the day. She stated, "I am able to give somebody a little happiness, or encourage somebody one day. I am able to help three little boys get up and ready for school so therefore I'm helping." Few other details were provided.

Participant 7 is employed full-time in the factory where she was first injured. She seemed to equate her workplace with pain, commenting:

It would be interesting at times to think, I don't have to get up and go to work where it's pain to stand on concrete, pain to move, pain to do this and that. It's revulsion, you hate it because that's the source of the pain. But if you don't do it, how would you exist?

The workplace was more figural for her than the job itself. She spoke of it in terms of what she had to do to cope with physical problems and co-workers.

Participant 9 is not employed, but engages in work-like activity on a full-time basis. He explained:

Whether or not I can earn a living, at least I am helping do what needs to be done. I was the church treasurer for six years, and I volunteer at a mission. I get satisfaction from that. I'm able to give something back. I've received a lot of help materially and there's been things like food stamps and other help.... This gives me some way of giving back something, still producing something. I don't feel that I'm just a taker.

For him, doing something, "producing something," seems important to his self worth. This can be compared with Participant 8, whose description suggests doing in an interpersonal context is what seems important.

Participant 10, the fifth member of the Working Group, was employed as a professional. She did not mention her job other than to say the initial injury was work related.

The remaining participants were either in the Pain Clinic Group, or were not currently working. Of those ten, Participants 11 and 14 each suggested the salient aspect of work was related to whether or

not they were contributing to the financial resources of the family. Participant 16 was retired and hadn't worked for seven years prior to the interview. Participant 13 was on sick leave until his physical status becomes clearer. He did not mention work to an appreciable degree (he had experienced pain for only three months at the time of the interview). The participants who talked most about work were Participants 1, 2, 3, 12, and 14: all males. All five were injured on the job.

The five participants for whom work was most salient described it as related to their sense of identity and to their "role" in the world. Participant 2, for example, said:

I'd learned a trade, the do's and don'ts of the trade. . . . I concentrated on the mechanical end of the manufacturing and I felt I'd conquered it to the point I could figure out how to fix anything that went wrong. I've tried to think of some other career that I could do that didn't take physical effort, but I can't read very well. . . . If you can't read you can't do a whole lot. . . . Before, it didn't bother me because I had the mechanical ability to do things. That's what my whole life has been built around. It's gone, twenty some years. . . . I got to get myself oriented to something else, some other goal. I haven't figured out exactly what its going to be yet. . . . I don't think it'll be in printing although I'd like to do that again, someday. . . . Experience-wise, I still got it in my memory, but I can't do it. And no one will give you a job to tell someone else how to do it.

For Participant 2, chronic pain altered the type of work he could do. His changed relationship with his body meant he could not physically meet the demands of the job. The loss of physical ability meant loss of his job, and loss of his role as provider for his family.

Interpreting these results is not easy. It is somewhat ironic that participants for whom work was described as an important part of

their identity were injured on the job. Since the descriptions were obtained post hoc, it is possible that an on-the-job injury made the job that much more figural for the person, but this is unlikely. The importance of the job may be related to the type of work. Four of the five worked at jobs that involved bodily activity (two truck drivers, one factory mechanic, one printer-pressman, while the fifth was a chemist). The importance of body in relationship to oneself has already been discussed. Another important common aspect is that all five were the principle providers for their families. The inability to work meant an inability to provide for the other important people in their lives.

What is emerging from this discussion is that the importance of an aspect of the experience of chronic pain, such as occupation, cannot be understood in isolation from the other important relationships which are also affected (disordered) by chronic pain, such as self, body, and other people. Various aspects may be isolated, but the act of isolation artificially makes some experiences more salient, while others become part of the ground. Any attempts to examine a participant's experience of chronic pain from just one perspective--although necessary at times--does an injustice to his or her experience, and to the observer's attempt to understand the experience of chronic pain.

The Experience of Chronic Pain:

Discussion of the Three Themes

Three broad themes described the experience of chronic pain reported by participants. This section begins with a discussion of these themes. The results of the reliability check will be examined next. Finally, the frequency with which the various themes were identified among thematic units derived from each interview will be discussed.

The Three Themes

Chronic pain was experienced by participant in terms of three major themes: the experience of pain and its concomitants, experiences in which participants attempted to deal with chronic pain, and participants' experience of the impact of chronic pain on their lives. For convenience, the themes are called Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain. Detailed descriptions of each theme are presented in Appendices G and H. Each theme will be described briefly in this section.

Experiencing Pain is usually described by participants as the way in which they experience their pain. For example, they may describe hurting; being frustrated or in shock; and/or having a sense of loss, tension, or confusion.

Dealing with Chronic Pain relates to what people do in response to what they experience in attempting to come to terms with their situation. They may do something by moving or adjusting their bodies,

by not moving, by relaxing; they may seek out others; or they may reflect on their situation, try to understand it in a new way, distract themselves from it, or engage in a fantasy.

Impact of Chronic Pain involves the ongoing personal impact of chronic pain on a participant's life. Impact may be experienced as valuable (leading to beneficial changes) or as damaging (leading to detrimental changes).

The three themes are not intended to be categories. Instead, they are a way of understanding the overall experience. Although one or the other of these themes may be figural at any given time, the other two also will be present to some degree.

These three themes were also found--in slightly modified form--in a study of the experience of emotional pain (occurring in relatively well functioning adults) by Parks (1987). This should not be surprising since chronic pain shares many similarities with emotional pain. Both represent a "violation of order" (Buytendijk, 1943/1962), a change in the perceived relationships between a person and a significant aspect of his or her world. Both emotional and chronic pain have more immediate, painful qualities; both involve the person in doing something about the situation; and both mean establishing a new relationship between the person and his or her world of every day reality.

There are significant differences between emotional pain and chronic pain. The experience of chronic pain is generally broader, deeper, and more likely to penetrate to the center of personal

existence than the experience of more acute emotional pain (Buytendijk, 1943/1962). It reorders the relationships between a person and her or his body, occupation, family, friends, emotions, and sense of identity. In other words, chronic pain is more likely to become a person's world as it comes to involve nearly all aspects of experience. Emotional pain is more likely to be focused within certain aspects of experience; it can be more easily encapsulated. Emotional pain "is more likely to move from the situation of 'self' or 'other' figural, to 'world' figural" (Parks, 1987, p. 132). Rather than becoming the person's world, it expands into and pervades the life world. Emotional pain has an episodic quality in that it arises from an act, an exchange with another person, or events which occur within a limited period of time (although exceptions to this can be found). The experience of chronic pain is continuous. Thus, chronic pain is likely to be more disruptive to a person's life, and to have a more wide ranging impact. (Note: these experiential differences may diminish as emotional pain becomes more severe, e.g., clinical depression).

The fact that emotional pain and chronic pain share common themes has important implications. The experience of pain, whether of "emotional" or "physical" origin, is very similar. Support for this can be found in pain theory. The gate control theory of pain (Melzack and Wall, 1982) suggests physical pain has three components: somato-sensory, affective, and evaluative. Emotional pain clearly overlaps with two of these components: affective and evaluative. Anyone who

has experienced intense emotional pain knows it can involve a strong bodily (somato-sensory) aspect. Thus, the two types of pain, at the very least, define two similar kinds of experience with considerable overlap. From a human experiential perspective, they may be experienced on one broad continuum, with sharp demarcation between the two being impossible.

Reliability of Codings

Detailed descriptions of the three major themes--presented in Appendix G--were used by two independent raters and the investigator to code a sample of thirty thematic units. Agreement was judged on the basis of raters identifying the same theme(s) as pertinent to a given unit. Percentages of agreement ranged from 70% to 90%. These levels of agreement were considered to be sufficiently high to accept that the three themes could reliably be applied to the experience of chronic pain. Differences between raters were examined for meaningful patterns. The raters identified the "Impact" theme more often than the investigator. No instances of the reverse situation (investigator adding an "Impact" coding when the two independent raters did not) were found suggesting "Impact" was more figural for raters than for the investigator. After discussing this with the raters, it was suggested that the investigator had more extensive knowledge of the context for each statement than the raters, and this knowledge affected his ratings. A second possibility was that the investigator did not communicate the criterion for this theme as clearly as for the other themes.

The reliability check also provides, what in other contexts would be called, a validity check for the three themes. Since the investigator's descriptions of the themes could be used by independent raters to describe the experience in the same way, this suggests content or "experiential" validity exists. Convergent validity is provided by Parks (1987) describing the same three themes in her study of emotional pain.

Frequency of Themes: Meaning for
the Experience of Chronic Pain

Thematic units derived from all interviews were coded for the three major themes by the investigator. Units pertaining to more than one theme results in more thematic codings (476) than total units (377). The frequency with which each theme occurred was counted. Dealing with Chronic Pain was the most frequently occurring theme (237 of 476, or 50%), followed by Experiencing Pain (164 of 476, or 34%) and Impact of Chronic Pain (75 of 476, or 16%). Since thematic units were derived before the themes were identified and were intended to reflect the participants' experience, the proportion of occurrence for each theme should correspond to the its importance in the overall experience of chronic pain.

The high proportion of "Dealing" units suggests that much of the participants' experience with chronic pain pertains to dealing with with it by attempting to master, or cope with, their situation. The "Experiencing" theme pertains to the more immediate aspects of

participants' experience and occurred less frequently. "Impact" was the least frequently occurring theme, suggesting it constitutes a smaller portion of the participants' experience of chronic pain.

These relative frequencies may be interpreted in a number of different ways. It may be more difficult for participants to describe what they are "feeling" than it is to describe what they do. Alternately, "Dealing" may be a more important aspect of experience because it promises the most benefit: successful coping (achieving mastery) would mean less suffering to "experience" and would require less coping activity. "Experiencing" pain may elicit "Dealing" action (the two themes co-occurred quite frequently, 51 times), while successful coping action may help participants minimize or "prevent" "Experiencing" pain. Therefore, the "Dealing" theme would be more likely to appear alone (which it does, 67% of the time, compared to "Experiencing," 53%; and "Impact," 36%). "Impact" seems more related to a participant's reflecting on the meaning of pain in conjunction with some other experience. "Impact" is more likely to become figural along with one of the other two aspects (which it did with roughly equal frequency: 23 times with "Dealing," and 22 times with "Experiencing").

A Detailed Discussion of Theme One:

Experiencing Pain

The major theme--Experiencing Pain--was described by six sub-themes. These sub-themes are:

1. Hurting or being hurt.
2. Frustrating oneself or being frustrated.
3. Shocking or being shocked.
4. Lacking or being deprived.
5. Straining or being strained.
6. Confusing oneself or being confused.

Three foci could be perceived as the source of the pain: Body/Self, Others, and World. The body/self was identified as a focus when participants saw their own inadequacies, inabilities, actions, and/or thoughts as being a source of pain. Other people and their actions were perceived as a second source of pain when participants saw them as criticizing, blocking, betraying, violating, abandoning, and/or confusing. The inanimate world was perceived as the third focus when participants saw it as blocking, betraying, violating, abandoning, attacking, and/or confusing them.

This scheme of sub-themes and foci is virtually identical to the one used by Parks (1987) in her study of emotional pain. The only modification required to adapt it to the present study was to change the name of the first focus from "Self" to "Body/Self" and to adjust the corresponding descriptions of sub-theme/focus combinations to reflect the change.

Experiencing Pain: Meaning of Sub-Theme/Focus Combinations

The 164 thematic units pertinent to the Experiencing Pain theme were examined and the frequencies of each theme/focus combination was

tabulated. Since more than one sub-theme could pertain to a unit, a total of 184 theme/focus combinations were identified.

The most frequently occurring sub-theme (summed across foci) is "Hurting/Being Hurt," accounting for 76 of the 184 (41%) sub-theme occurrences. This is not surprising since the physical analogy Parks (1987) used for this theme is "Being injured or wounded." The dominant sub-theme related to Experiencing Pain reflects its bodily aspect. Parks also indicates this sub-theme is pertinent to instances where a person experiences him or her self as feeling bad for hurting another person. As discussed earlier, many participants experience themselves as hurting their family through their actions and their demands on financial resources. Parks suggests that this would be related to "guilt" as it is discussed in psychological literature.

The second most frequently occurring sub-theme was "Frustrating/Being Frustrated" (34 of 184, or 19%). Parks (1987) indicates this sub-theme is related to issues of mastery and power. The intractability and "bodiliness" of chronic pain challenged participants' sense of control and achievement. The body no longer did what they wanted it to do. Increased pain blocked them from activity and they experienced frustration as a result.

The third most frequently occurring sub-theme was "Straining/Being Strained" (28 of 184, or 15%). The related physical analogy was "Being Strained Physically, Overexertion." Parks (1987) suggested this might be related to depression. Participants in the current study described experiences related to physical tension and inability

to relax, suggesting an experience similar to anxiety. Since the experience of pain is often accompanied by increased motor tension and autonomic changes (see literature review, pp. 29-31), this theme is directly related to bodily-sensory experience. It is interesting to note that it is less salient than the more affective themes of "Hurting" and "Frustrating," suggesting the affective component may be a more salient aspect of the experience than the bodily aspect.

The fourth most frequently occurring sub-theme was "Lacking/Being Deprived" (20 of 184, or 11%). The physical analogy was "Being Weak, Physically Deprived; Loss of Function or Limb." Parks (1987) suggested this theme might relate to emotions involving shame, poor self-esteem, or self-centeredness, as discussed in the psychological literature. For participants in the present study, shame over their loss of bodily ability and poorer self-esteem subsequent to drastic changes in their life might be reflected in this theme. It is not as salient for the participants as those mentioned earlier.

The fifth most frequently occurring sub-theme, "Confusing/Being Confused" (16 of 184, or 9%), was not that frequent. The physical analogy was "Falling; Being Disoriented." The relative infrequency of this theme is somewhat surprising since it might be expected that participants would experience confusion as a consequence of their changed relationship with their world. Perhaps confusion is a relatively short lived experience that gives way to "Hurting," "Frustrating," or "Straining."

The same could be said of the least frequently occurring sub-theme, "Shocking/Being Shocked" (10 of 184, or 5%). The physical analogy for this sub-theme was "Being Shocked or Stunned." By the time chronic pain becomes "chronic," it probably loses its shock value. Its intractability and predictability probably are experiences as "Hurting" and "Frustrating."

The most frequently occurring focus was "Body/Self" accounting for 145 of the 184 foci occurrences (79%). This was followed by "World" (20 of 184, or 11%) and "Others" (19 of 184, or 10%). The dominance of the "Body/Self" focus, and the relative unimportance of world and others, suggests the experiential world of the person with chronic pain has changed. Pain and its emotional concomitants have become the dominant source of experience, with other people and the world at large shrinking by comparison.

Examination of the theme/focus combinations reveals that three combinations--all having a "Body/Self" focus--accounted for 62% of all codings: "Hurting/Being Hurt" (34%), "Frustrating/Being Frustrated" (18%), and "Straining/Being Strained" (10%). This suggests the predominant experience within the Experiencing Pain theme is that of a person hurting and suffering from injury to his or her body or self, being frustrated by his or her limited ability to control the experience, and experiencing an inability to relax and feel comfortable with his or her body.

A Detailed Discussion of Theme Two:

Dealing with Chronic Pain

Three sub-themes were identified as pertaining to the theme of Dealing with Chronic Pain: Accepting/Facing, Maintaining/Tolerating, or Escaping/Avoiding. The sub-theme of Accepting/Facing implies a participant accepts the pain and its concomitant limits as a part of his or her life as well as a coming to grips with it by meeting it "face-to-face." The sub-theme of Maintaining/Tolerating is pertinent when a person puts up with the pain, establishing a status quo, and resists giving in to the pain. The sub-theme of Escaping/Avoiding implies a person with pain views it as alien or "not-me," pushes it away, or attempts to get rid of it.

Each sub-theme could have one of three foci as an "arena" in which it was experienced as being played out: Reflection, Body, or Interpersonal activity. A Reflective focus implies the participant focused on thinking or reflecting about the pain as a means of dealing with it. A Body focus implies the person did something bodily to master the pain. An Interpersonal focus implies the person involved other people in his or her attempts to deal with the pain.

Two variations seemed to be associated with each focus. In a small but significant number of units, participants emphasized refraining from activity as opposed to engaging in activity. For example, in the case of reflective activity, they might mention not thinking about something; in regard to bodily activity, slowing down might be mentioned; in regard to interpersonal activity, withdrawing

from others might be mentioned. These emphases suggested the participant was disengaging from (rather than engaging in) the activity. These variants were noted in the context of a focus as follows: Reflective Engagement or Disengagement, Bodily Engagement or Disengagement, and Interpersonal Engagement or Disengagement. It should be noted that disengagement is always a special type of engagement. It is a withholding of an action and is, in itself, an activity.

Dealing with Chronic Pain: Reliability of Codings

Detailed descriptions of the sub-theme/focus combinations--presented in Appendix H--were used by two independent raters and the investigator to code the dominant theme and focus for each of fifty units. Where two or more themes or foci seemed of equal importance, more than one code was allowed.

Codings were examined for agreement on sub-themes. The percentage agreement between the investigator and each of the raters ranged from 68% to 74%. This appears to be sufficiently high as to indicate the sub-themes can reliably be identified as pertaining to the Dealing with Chronic Pain theme. A systematic pattern of disagreements occurred when the raters disagreed on the sub-theme. The pattern predominantly involved disagreement between the first and second sub-themes (Accepting/Facing and Maintaining/Tolerating), and between the second and third sub-themes (Maintaining/Tolerating and Escaping/Avoiding). The pattern of disagreements suggests that the

second theme, Maintaining/Tolerating, lies between the first (Accepting/Facing) and the third (Escaping/Avoiding), and that the three form a continuum on which lines of differentiation can be recognized a vast majority of the time. This supports the earlier suggestion that the themes are not separate categories. It also indicates the meaning of participants' actions can be identified, and, when disagreement arises, it is in regard to which of two adjacent themes predominates.

Codes were examined for agreement on foci. The percentage agreement ranged from 78% to 86%. No systematic pattern was discerned for disagreements between foci. The level of agreement indicates the foci pertaining to the Dealing with Chronic Pain theme were reliably recognized by independent raters.

Combinations of sub-themes and foci were examined next. The percentage of agreement ranges from 54% to 68%. The percentage of units on which two of three raters agreed was 86%. The percentage of units on which all three raters agreed on the code(s) was only 48%. The level of agreement indicates that two out of three raters can agree on sub-theme/focus combinations at a reliable rate. Discussions among raters subsequent to the coding task indicated the rater in disagreement usually accepted what the other two raters identified as predominant. This suggests the salient themes and foci are best recognized when three raters are used.

Dealing with Chronic Pain: Meaning of
Sub-Theme/Focus Combinations

The 237 thematic units pertaining to the Dealing with Chronic Pain theme were examined and the frequencies of each theme/focus combination was tabulated. Since more than one theme could pertain to a thematic unit, 316 thematic codings were identified.

The most frequently occurring sub-theme was Maintaining/Tolerating (169 of 316 combinations, or 54%), with both Accepting/Facing (71 of 316, or 22%) and Escaping/Avoiding (76 of 316, or 24%) occurring at about equal frequency. The predominance of Maintaining/Tolerating suggests that it is the primary way in which participants deal with their pain, i.e., they are primarily concerned with actions that allow them to maintain the status quo or stabilize their relationship with their experiential world. It was suggested earlier that a major effect of chronic pain is to disorder the relationships a person had established with aspects of his or her experiential world. Maintaining/Tolerating can be interpreted as an attempt to keep what order a person currently has. Both Accepting/Facing and Escaping/Avoiding suggest a change in the order that exists. Accepting/Facing implies a person is exploring a new order of relationships in the experiential world. Escaping/Avoiding suggests an attempt to alter a relationship that is existing but is unwanted.

The most frequently occurring focus was Reflective Engagement (130 of 316, or 41%). This suggests that thinking about one's situation is the primary way participants dealt with chronic pain.

Much of their coping effort involved trying to understand and come to terms with the changed reality pain represented. Buytendijk (1943/1962) suggests that the ability to reflect on his or her existential condition is what separates human beings from animals. He also states, that pain "forces man to reflect" (p. 127). It allows a person to compare present and past, and it allows the person to experience the present as a change from what was before. Reflection allows suffering to emerge. The present study suggests reflection is important in yet another way: reflective activity is the predominant way participants dealt with the suffering concomitant with chronic pain. Reflection, which allows suffering to emerge, also provides a means by which a person attempts to overcome suffering.

The second most frequently occurring focus was Bodily Engagement (65 of 316, or 21%). It was followed by Bodily Disengagement (51 of 316, or 16%). Since these two really represent a single focus, they will be considered together. Pain affects the relationship between a person's "self" and his or her body (Buytendijk, 1943/1962; MacGillivray, 1985). Buytendijk suggests it destroys a person's sense of psychophysical unity, "he no longer experiences something confronting him, but in himself" (p. 125). Such a situation would make the body a more figural experience for the person. These results suggest it also makes the body quite figural in attempts to deal with the pain, not only through active engagement of the body, but with a more passive disengagement from activity as well. The relatively high proportion of experiences related to Bodily Disengagement suggests

such disengagement is a meaningful activity. The same cannot be said for Reflective or Interpersonal Disengagement.

Interpersonal Engagement was the fourth most frequently occurring foci (50 of 316, or 16%). This suggests that, although interpersonal relationships are important to a person's attempts to deal with chronic pain, they are not as important as the more personal activities related to reflection, and one's own body.

Interpersonal Disengagement (13 of 316, or 4%) and Reflective Disengagement (7 of 316, or 2%) occurred infrequently. Disengagement from activity does not appear to be a meaningful concept in relation to reflective and interpersonal activity.

Frequencies of sub-theme focus combinations (see Table 6, p. 117) can be used to describe the way in which participants dealt with chronic pain. Most participants dealt with chronic pain by maintaining their current status or by tolerating the pain, regardless of the activity: reflective, bodily, or interpersonal. When participants accepted or faced their pain, they did so primarily through reflecting on the pain and secondarily through bodily action. When they escaped and/or avoided the pain, they were about as likely to do so through reflective engagement, or bodily disengagement, as they were through interpersonal engagement. Thus, Accepting/Facing appears to be a more personal endeavor related to oneself and one's body, and does not readily involve other people. The means by which participants accept and face their pain is through a personal endeavor that comes from "inside" them. It is not done for, or by, others.

Escaping/Avoiding, in contrast, is as likely to involve reflection, body, or others. Escaping/Avoiding though the use of the body is predominantly through disengagement or not doing things, as opposed to engagement in bodily activity.

Parks' (1987) findings in relation to emotional pain are somewhat similar to the sub-themes and foci of the present study. Parks described "what people do about emotional pain," and identified modes of "response to pain--imagining, trying to understand, relating with others, and acting--[that] can each intend either escape [and avoiding] or [facing and] acceptance" (p. 139-140). Escaping and avoiding were described as a participant's attempts to deny or avoid painful feelings or a painful situation through the use of one of the other modes. It is quite similar to the sub-theme, in the present study, of Escaping/Avoiding. Parks described "facing and accepting" as being the opposite of "escaping and avoiding," with participants allowing themselves to experience and accept their feelings, and to be changed by this experience. The similarities to the sub-theme of Accepting/Facing are apparent. Parks did not find it necessary to use a Maintaining/Tolerating theme. This suggests emotional pain was more episodic and, although it could be re-experienced by talking about it, did not have the continuing quality of chronic pain as described by the participants in the present study.

Several modes of "doing something" about emotional pain were identified. The mode of "Imagining" pertained to participants imagining themselves in a happier situation, imagining they had done

something to prevent the situation, or imagining revenge for an injury. The mode of "Making Sense" represented participants' attempts to better understand themselves or the larger world. In the present study, both "imagining" and "making sense" pertain to the "Reflective Engagement" focus.

Another mode identified by Parks (1987) is "Seeking Others and Maintaining Attachments." This was described as seeking contact with others to gain comfort, companionship, reassurance, and support. In the present study, this activity would pertain to the "Interpersonal Engagement" focus. Parks states, "[This is] one of the most frequent means of dealing with emotional pain" (p. 98). This contrasts with present findings in which interpersonal activity was the least used of the three foci. This appears to be a major difference between emotional and chronic pain: people deal with emotional pain by seeking others, while chronic pain and its emotional concomitants are dealt with privately.

The last mode identified by Parks (1987) is "Acting." This was described as involving oneself in a structured activity such as work or play, or engaging in expressive bodily action such as crying, screaming, or throwing things. Such activity would be related to the focus of "Bodily Engagement."

Parks (1987) noted an additional class of response to emotional pain: withdrawal. She indicated that participants withdrew to gain strength, to decrease vulnerability, and not to be overwhelmed by too much stimulation. This type of response was recognized in the present

study as "Disengagement," which occurred most frequently as decreased bodily activity. Perhaps withdrawal from others was not so salient among participants in the present study because it was more the norm. People with chronic pain are generally withdrawn from others and the world due to the private nature of the pain. Emotional pain may be less likely to elicit such a response.

The combinations of sub-themes and foci can be compared to more traditionally defined coping strategies such as those identified in the literature. Cognitive coping strategies--logical analysis, seeking information, setting goals, mental preparation, cognitive redefinition, and minimizing--all involve "Reflective" activity. They pertain to how a person thinks about him or her self in relation to pain. Behavioral coping strategies include social support, taking action, and pursuing alternate rewards. Social support clearly involves an interpersonal focus, while the other two involve some degree of bodily activity. Emotional coping strategies include affective regulation, emotional discharge, and acceptance. Affective regulation seems to involve reflective activity directed toward establishing a new relationship between a person and his or her world, thus changing the experience of pain. Emotional discharge pertains to a person's bodily activity and expression. Acceptance is most closely related to the sub-theme of "Accepting/Facing," but could also pertain to "Escaping/Avoiding," which would represent a "maladaptive acceptance."

The more traditionally identified coping strategies are described differently than the sub-themes and foci related to ways of dealing with chronic pain. They tend to provide a "third" person perspective since they represent observers descriptions of what someone else does to cope with a situation. They also tend to focus on activity while ignoring the meaning of a person's attempt to cope with his or her situation.

A Detailed Discussion of Theme Three:

Impact of Chronic Pain

Two sub-themes and three foci were identified as pertaining to the theme of Impact of Chronic Pain. The two sub-themes are Damaging and Valuable. The "Damaging" sub-theme implies the participant experiences his or her present situation as not being as good as it was before pain began. The pain experience has left the person weaker or less competent, isolated from others, or in an emptier, bleaker world. The "Valuable" sub-theme implies the person experiences his or her present situation as one in which he or she is stronger, is more able to survive, has more understanding, is more open to others, and/or has an increased understanding of personal limits and possibilities in the world. Three foci of experience are relevant to the Impact of Chronic Pain theme: Body/Self, Others, and World. "Body/Self" implies a person experiences a change in his or her relationship with body or self. "Others" is a focus when a person

experiences change in his or her relationships with others. "World" is the focus when change is in relationship to the experiential world.

Impact of Chronic Pain: Meaning of
the Sub-Theme/Focus Combinations

The 75 thematic units pertaining to the Impact of Chronic Pain theme were examined and the frequencies with which each theme/focus combination occurred were tabulated. Since more than one theme could pertain to a thematic unit, 84 thematic codings were identified.

The most frequently occurring sub-theme (summed across foci) was "Damaging" which accounted for 66 of the 84 (79%) occurrences. The sub-theme "Valuable" occurred 18 times (21%). This suggests that when participants examined the impact of chronic pain, it was predominantly perceived as damaging. This contrasts with the findings by Parks (1987) in her study of emotional pain. She found that changes accompanying emotional pain were valued highly among her participants. The time limited quality of emotional pain allowed the changes to be worked through sufficiently to be valued, whereas chronic pain is experienced as continuous, is more devastating, and is more difficult to put in a "valuable" perspective.

The most frequently occurring focus was "Body/Self" (79% of the 84 occurrences). It was followed by "Other" (31%) and "World" (11%). This follows the pattern of foci for the other themes and provides further evidence for the personal nature of the chronic pain experience. Participants experienced the impact predominantly as

effecting body or "self." Parks (1987) reports that most participants in her study experienced the impact in terms of "self."

An examination of sub-theme/focus combinations provides interesting information. Participants experienced the impact of chronic pain predominantly as damaging not only their "Body/Self" but also as damaging to "Others" fairly frequently. The "World" as a focus seemed unimportant. When participants saw the pain experience as having a "Valuable" impact, it was predominantly in terms of their "Body/Self," somewhat in relation to "Others" and rarely to the "World."

The Experience of Chronic Pain: A Summary

The experience of chronic pain can be described by three major themes: Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain. Each of these three themes is described in greater detail by sub-themes and foci. There is considerable overlap among the three sets of foci: all three sets involve personal, bodily, and interpersonal experiences. Two sets of themes involve "World" as a focus, although it was infrequently discussed by participants in the present study. This finding suggests that participants experience chronic pain primarily as an intensely personal experience which they dealt with in a personal way, and which has a very personal impact on them. Chronic pain changed the participants profoundly, focusing their experience of the world so it includes only themselves and a few other people. Pain fills their world, and their world becomes one of

pain, until they can find a way to define themselves-in-pain, and themselves in relation to others and the larger world.

The process by which this happens is described by the way in which participants experience themselves in pain: as hurting, as being frustrated, and as being strained. They attempt to deal with this situation by accepting their changed condition, facing the pain, maintaining themselves, tolerating the pain, or by escaping or avoiding the pain. Finally, they assess the impact of the pain on their lives.

The experience of chronic pain, however, is not linear. Pain affects everything in participants' lives and it is ever present. It does not allow them to get distance and perspective on its effects. Pain takes away the luxury of time free from pain. Since it is continuous, no final step, solution, or impact may readily be reached. Each day's experience tests the value and effectiveness of how it was dealt with, and how the impact was assessed, the day before. The three themes interact in the participants' experiences, first one being figural, followed by another. The nonfigural themes provide a ground of meaning for the figural aspect.

Despite the invasive, demanding nature of chronic pain, people do free some of themselves from the experience. Experiencing, dealing, and assessing the impact eventually allow some of those with pain to get the distance and perspective they need to live meaningful lives in spite of the continuing pain.

Comparison Between Pain Center
and Working Participants

Two small subgroups were identified among participants. The Pain Clinic Group was composed of four men and two women who were pain clinic patients not currently employed. The Working Group was composed of four women and one man who were working or had full time work-like obligations. Members of both groups reported experiencing pain for more than six months. The groups did not differ significantly on the basis of Age, Duration of Pain, Number of Surgeries, Number of Thematic Units, or Educational level. Comparisons between the groups must be made with caution. Since the number of participants in each group is small--six in the Pain Clinic Group, five in the Working Group--and participants were not selected randomly, only tentative conclusions may be drawn from what group members presented.

The remainder of this section contains five parts. The first part discusses the comparisons between the two groups based on the three major themes. The next three parts examine the comparisons between the two groups on the sub-theme/focus combinations for each of these three major themes. The final part summarizes the comparisons and discusses their possible meanings and implications.

Comparison between Groups: Three Major Themes

The two groups were compared for differences in the way they described the experience of chronic pain relevant to the three major

themes (Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain). The number of times each theme occurred was tabulated for each member of both the Pain Clinic and Working Group. A tendency was noted for Working Group members to use the "Dealing" theme more frequently than Pain Clinic group members. The reverse was true for the "Impact" theme with Pain Clinic group members using it more frequently. This would suggest Working Group members were more involved with ways of coping with pain while Pain Clinic Group members were more involved in discerning its impact.

Comparison between Groups: Experiencing Pain

The two groups were compared for differences in the way they described the more immediate experience of pain. One meaningful (and statistically significant) difference was noted. The Pain Clinic Group members reported more incidents involving frustration than did the Working Group members. Other than differences in frustration, members experienced no difference in the more immediate aspects of chronic pain, as described by the sub-themes and foci related to this theme.

Comparison between Groups: Dealing with Chronic Pain

The two groups were compared for differences in the way participants described Dealing with Chronic Pain. Differences in the use of two sub-themes suggested two tendencies. Relative to Working Group members, Pain Clinic Group members were less likely to report situations related to Accepting/Facing and were more likely to report

situations related to Escaping/Avoiding. Although neither difference was statistically significant when the $\underline{t}$ or $\underline{t}'$ test was used, the difference related to Accepting/Facing was significant when the Wilcoxon rank sum test was used.

Differences in the use of foci were also noted. The patterns indicate Pain Clinic Group members are less likely to report experiences with either a Reflective focus (not statistically significant) or a Bodily focus (statistically significant) than was the case for Working Group members. The Interpersonal focus was described equally by both groups.

Working Group members tended to describe more experiences related to dealing with their pain than Pain Clinic group members. The results from this section suggest Working Group members describe situations involving the Accepting/Facing theme more frequently, the Escaping/Avoiding theme less frequently, and both the reflective and bodily foci more frequently, than Pain Clinic Group members.

Comparison between Groups: Impact of Chronic Pain

The two groups were compared for differences in the way they described the Impact of Chronic Pain. Working Group members described situations related to the "Damaging" sub-theme about as often as the "Valuable" sub-theme. The Pain Clinic Group, on the other hand, described situations involving the "Damaging" sub-theme almost eight times as often as they did the "Valuable" sub-theme. The Pain Clinic group described situations involving "Damaging" more frequently than did the Working Group (but without statistical significance). The two

groups described situations involving "Valuable" with about equal frequency.

The most frequent focus of both groups' descriptions was "Body/Self." It was used with roughly equal frequency by members of both groups. "Others" tended to be used by Pain Clinic Group members more often than by Working Group members. "World" was used as a focus least frequently (and about as often) by both groups.

The differences between the groups suggests Pain Clinic Group members describe the Impact of Chronic Pain as "Damaging" to both "body" and "self," and to relationships with other people, with about equal frequency. Working Group members experience "Impact" as primarily affecting their "body" and "self" and it is about as likely to be described as "Valuable" as it is "Damaging."

Comparison between Groups: Summary

This summary describes the differences between the two groups. These differences should be viewed as tendencies even where statistical differences were noted. The size of the groups are too small to allow much confidence in these statements.

The two groups describe Experiencing Pain in the same way except Pain Clinic Group members reported more frustration than did the Working Group members. Frustration is experienced as being blocked or thwarted by oneself, others, or the larger world. Members of the Working Group are less likely to feel blocked or thwarted than do members of the Pain Clinic Group, perhaps because they have found ways to deal with many of the obstacles imposed by the pain.

Working Group members dealt with pain differently than Pain Clinic Group members. This involved thinking about other ways of doing things, seeing the pain as part of oneself, monitoring one's body, and/or performing activities within one's limits. Along with accepting and facing the pain, Working Group members were less likely to try to escape and avoid pain. Greater acceptance of their current status and acting within limits set by the pain probably contribute to the lower frequency of frustration reported by Working Group members in comparison with Pain Clinic Group members, who may find the limits unacceptable in comparison to how they were before.

Perhaps because pain was experienced as less frustrating, and was accepted and faced, impact was evaluated differently. Working Group members described fewer experiences related to impact in comparison to the Pain Clinic Group members. There was, perhaps, less need to examine the effects pain was having on them. When they did examine the impact of pain, they were about as likely to find the experience valuable as damaging. Pain Clinic Group members predominantly experienced the pain as damaging to themselves and others.

Implications for Treating People with Chronic Pain

Treating people with chronic pain is a challenging task for health care providers. The complexity and pervasiveness of problems concomitant with the experience of chronic pain do not respond to simple interventions. Turk et al. (1983) suggest treatment "begin by assessing the phenomenal world of patients" (p. 181). The results of

this study are meant to provide a useful means of understanding the phenomenal world of patients with chronic pain.

Several aspects of the phenomenal world of patients with chronic pain may be important in treating them. How pain is experienced is significant. The results suggest describing the pain as not being part of the self is less conducive to accepting and facing the pain than viewing it as a part of the self that cannot be excluded from experience. Bodily experience is another important aspect: a person who experiences his or her body only as an object that causes suffering is less likely be aware of subtle experiential changes of his or her body. Such awareness is important for acting within one's physical limitations. Thinking of bodily activity as way to postpone the "Ragnarok" of self suggests a person is accepting of pain in the present.

Temporal aspects of the experience of chronic pain also may be important. Experiencing the present as having meaning is related more to accepting and facing the pain than is experiencing the present as empty in comparison to the past. Living in the present is related more to accepting and facing the pain than awaiting a future which will be like the pre-pain past.

Patients' descriptions of experiences involving frustration may provide information about how blocked or stopped they feel versus how able to deal with pain they feel. Descriptions of how they deal with the pain would help determine if they experience limits within which they can act versus limits which are too constraining or confining to

permit personal action. Patients' descriptions related to reflective activity, which pertain to accepting and facing pain, may be relevant to therapeutic response. Descriptions of the impact of chronic might should also be examined. Most patients acknowledge some "valuable" aspects to the experience. These might be expanded on and provide an impetus for finding a new context of meaning for the pain.

How important these aspects of the experience of chronic pain will be in the treatment of pain patients is not known. Further research involving these experiences and how the salient aspects change during the course of treatment is needed.

The complexity of the chronic pain experience is important for treatment personnel to keep in mind. Pain changes virtually all aspects of a person's life. Treatment, if it is to be successful, requires another series of changes. Not every patient will embrace a new round of changes. Awareness of what change, or accepting pain, means to a patient, will be helpful to treatment personnel. This research suggests that chronic pain is experienced as intensely personal, that a person deals with it in a very personal way, and that a person assesses it in terms of its personal impact.

Fortunately, the approach many pain treatment centers follow is congruent with present findings. Pain specialists, for example, advocate attending to the phenomenal world of the patient, taking feelings and beliefs into account, considering the meaning an action might have, and reflecting on how one did (e.g., Turk et al., 1983). Treatment centers also focus on physical conditioning that will allow

a patient to have bodily experiences that involve aspects other than the body-in-pain. One problem with many of the treatment regimes, however, is that they emphasize a formula for dealing with pain: "Do this and this and this and you will deal better with the pain." The present research suggests that a greater emphasis on the personal meaning of the treatment experience may be helpful. It is the context of meaning that seems to sustain a person's continuing efforts to live with chronic pain and its concomitants.

Recommendations for Further Research

The current study, in many ways, is a first step in understanding the experience of chronic pain. Results suggest the experience changes with the passage of time. A longitudinal study might reveal how these changes evolve, both during the course of treatment and in the years beyond.

Pain is experienced in many different contexts. The current research focused on the experience of people with chronic low back pain. Other types of painful experiences could be explored for differences and similarities. Additional situations that should be explored include chronic pain experienced in the context of a terminal illness, such as cancer or chronic recurrent pain such as is experienced with migraine headaches. These conditions might be experienced in ways that are both different and similar to what has been described in this research. The differences and similarities

would expand our knowledge about the complex, personal experience of pain.

Comparisons between the experience of emotional and chronic pain would also be helpful. The present study contrasted the experience of chronic pain among adults who had experienced low back pain for more than six months with Parks (1987) descriptions of the experience of emotional pain among "bright, articulate adults." Many similarities and differences were noted. Other comparisons between emotional and bodily pain would improve understanding of painful experiences. Chronic recurrent pain may be more similar to what participants in Parks' study experienced. Chronic emotional pain, such as chronic depression, may have more in common with chronic low back pain than episodic emotional pain. Another interesting comparison could be made between the experience of people with chronic low back pain who also experienced depression, and people with chronic emotional pain who also experienced persistent "physical" pain. Even though persistent pain is not uncommon among psychiatric patients (Devine and Merskey, 1965; Merskey, 1965), it rarely receives much attention.

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APPENDICES

APPENDIX A

INFORMATION AND CONSENT FORM

Research Director:

Bruce R. Erdmann
Department of Psychology
University of Tennessee
Knoxville, Tennessee 37996
(615) 974-2531

Research Co-Director:

Howard Pollio, Ph.D.
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Title of Project: Chronic Low-Back Pain: A Phenomenological Study

Participant: _____

Research Purpose and Procedures:

The purpose of this research is to find out how chronic pain affects the lives of people who live with it for long periods of time. To find this out, Mr. Erdmann would like to sit down with you in a quiet place and listen to you describe your experience with chronic pain. This interview will probably take one to two hours to complete, and it will be recorded with a cassette tape recorder. The second step of the procedure is the completion of some questionnaires, which should take about another hour. You will be contacted about one or two months after the interview for the final stage of the research. At that time, you will be asked to indicate whether you agree or disagree with what seem to be the major themes or ideas in your experience of pain. A brief interpretive summary of the results from the questionnaires can be made available at your request. The information collected will be used primarily to complete the requirements for a doctoral dissertation, but may also be used for educational purposes or in a reputable publication(s) in a manner consistent with the stated purpose of the research.

The risk involved in this research is minimal, and only requires you to be thoughtful and open in discussing the topic. The benefits are also minimal, and extend no further than your satisfaction in helping to improve the understanding of pain.

Statement of Consent and Agreement:

I, _____, wish to participate in a program of research being conducted by Mr. Bruce Erdmann. I understand the purposes and procedures as they are described above, and I accept the statement that both risks and benefits are minimal. If any unforeseen problems develop as a result of this research, I agree to contact Mr. Erdmann and provide him with this information. I understand no compensation is available if any harm or injury would occur.

All information collected will be treated as confidential. Reasonable precautions will be taken to safeguard the confidentiality of information and to prevent the disclosure and misuse of this information. I will be given a code number so that my name does not appear on any records containing information. A code list which matches names and code numbers will be kept separately in a secure place available only to Mr. Erdmann or his designee.

I understand that I am free to withdraw my consent and to discontinue my participation on the project or activity at any time without penalty. If at any time I feel that the risks of taking part in this study are more than I choose to accept, I will end my participation.

I have had the study described to me to my complete satisfaction and I have read the summary of the research project. I have also had the opportunity to ask questions and obtain any additional information. I understand this agreement and freely and voluntarily consent and agree to participate in this study.

Yes _____ For the purpose of advancing knowledge, I consent to the taking of audio recordings appropriate for transcription. It is understood that these recordings will not be identified by name.

Yes _____ I consent and agree that the audio recordings may be kept and used indefinitely for educational or research purposes not explicitly described on this form provided such use is consistent with the stated purpose of the research. It is specifically understood that in any usage of this material I shall not be identified by name or otherwise, and that every reasonable effort will be made to conceal my identity. If I do not consent to this paragraph, I understand that the audio tapes will be kept until the completion of the present study at which time they will be erased.

I consent and agree that any statements I make, or the results of any questionnaire can be used for educational purposes or in any reputable publication so long as this use is consistent with the stated purpose of the research. I hereby give Mr. Erdmann the absolute right and permission of copyright for any statements. I also waive any right that I may have to inspect and/or approve the finished product incorporating such statements. It is specifically understood that in any publication or use I shall not be identified by name or otherwise, and that every reasonable effort will be made to conceal my identity.

Participant's Name: _____

Participant's Signature: _____

Witness Signature: _____

Date: _____

APPENDIX B

INTERVIEW QUESTIONS

1. Tell me about your experience of pain.
2. How does pain affect the way you think? How does the way you think affect the pain?
3. How does pain affect your mood/emotions? How do your moods or emotions affect the pain?
4. How does pain affect the things you do? How does what you do affect the pain?
5. How does pain affect the experience of your body? How does your body affect the pain?
 - a. Do you experience your body the same way when you do not notice the pain?
 - b. Is this the same as before you had the pain?
 - c. Do you move in the same way?
 - d. Does the shape of your body seem the same?
6. How does pain affect your experience of time? How does time affect your experience of pain?
 - a. When are you most aware of time? Least aware?
 - b. What has the time from the past to the present been like?
 - c. What will it be like from the present to the future?
7. How do others affect your experience of pain? How does pain affect your experience of others?
 - a. Is it the same when you are alone as when you are with others?
 - b. Are there some people with whom you are more aware of the pain than with others? Less aware of pain?
 - c. What is it like when you are around your mother? Father? Children? Friends? Spouse/partner?

8. What is helpful when you experience a lot of pain? What is helpful to you in living with the pain?
 - a. What thoughts or ideas are helpful?
 - b. What action or things you do are helpful?
 - c. What people are helpful?
9. As you have discussed your experience with pain, what aspects do you feel are the most important?
10. Are there any questions you had hoped would be asked that were not asked?
11. Are there any comments that you would like to make that you have not yet made.

APPENDIX C

TRANSCRIPT OF INTERVIEW WITH PARTICIPANT 8

I: What I'm interested in is your experience of pain. You can tell me about that?

S: Do you want to know how it started and when it started and what caused it? I guess basically it started 22 years ago. I was involved in an auto accident and I started having back problems then and I just had the pain off and on, mostly on, all the way through. It gives you a limited amount of movement at certain times, and it does get progressively get worse. I've noticed in the last three years it's been very difficult to get up in the morning and I've undergone several treatments at a chiropractor which does tend to relieve the pain for a while, but then it returns. I was told a long time ago that steam and hot water would relieve the pain more than anything and it does. So if you get up and get in the shower right away you're okay, you can keep functioning for the day. You just have to watch how you move, how you lift. It's something that you learn to live with. It can make you or break you. You have to decide whether you're going to let it get you down and you're going to self destruct and just become a nobody or if you're going to be able to handle it and keep functioning. I think a lot of it is psychological whether you feel you can handle it and keep going. I'm not saying that the pain isn't there and the pain is all in your head. I'm just saying that it's all in what you want to make yourself do. There's times that pain shoots down both legs. I guess I bring part of the pain on myself because I was told not to change the heels of my shoes, either wear flats or wear heels because the tilt of the pelvis from the different heights of the shoes would cause pain. And it does. And you can always tell if you've worn a different shoe or high heel. The next day is rough. So, that's basically all I've learned to do is just slow down a little bit and go with what they've told me.

I: Slow down a little bit?

P: Well, I've raised three boys. I was a team mother, they played baseball, they played football, I have worked full time up until the past year. I've kept a huge home, I was a wife. It just takes a lot of time and a lot of energy. The last three years I've gone from three sons to one son to consider. I've gone from a husband to no husband to consider. So I've really only had to consider one son and myself basically. So I've learned to not do as many things in such a short amount of time.

I: Is that a hard change to make?

P: Yes, yes. It is because, well the boys were very active and they were two and a half years apart. It made a big difference. But it's nice when they're old enough to help you some too.

I: You mentioned that it can make you or break you, the pain can make you or break you.

P: The pain can't. Your attitude toward the pain will.

I: Tell me some more about that.

P: About that?

I: Yeah.

P: It's an adjustment you have to make. You have to decide whether you're going to handle the pain and keep functioning or if you're going to let the pain win and say, "I can't do anything and I'm going to lay here and be an invalid and the whole world's going to take care of me. I deserve to be taken care of because I hurt." That's not true. Everybody hurts some way or another. That doesn't mean the world owes you anything. In my case I felt a little bit like I was robbed because I did not get a settlement or any, the only thing I got was the medical bills paid at the time. But they haven't paid anything after that. But I'm not out to hang anybody for it. I took the responsibility for being out on the streets that day. It was nobody else's fault. The person was careless, I'll admit that, but I'm sure they didn't do it on purpose because both of the people that hit me were hurt much worse at the time than I was. So I just feel that you have to adjust yourself in your way of thinking. You learn to make things easier for yourself. There's some things that you can't do. Running the sweeper hurts. Lifting, you learn to lift with the knees, and not bend at the waist. It's been a problem if you want to take an exercise class or aerobics: you can't because the pain is from the waist down and there's not too many exercises that you do without using the legs or the waist. And I'm not saying that's the only reason that I'm overweight, but I think that has a lot to do with it. I can walk, I can ride a bicycle. I'm thankful that I'm even able to walk. So I just feel that you have to make up your mind whether you want to let the pain win and rob you of so many precious things that you can do in life or if you want to accept it and say it's there, but I'm going to take it and go with, and do what has to be done.

I: It seems like that's conscious decision at times. To decide not to let the pain . . .

P: It is. Today for example, if I had a choice to make today, it would have been stay in bed and leave it alone. The pain is bad today. However, that isn't a choice I have to make anymore. I watch

three little boys all night and the morning starts early because I have to get up and get dressed and get ready before I can get them up and dressed and ready for school. And after I get them off for school then I have an elderly lady who needs help and attention. So my obligations are there and you can't just let it ride. You have to just go ahead and go. You move a little slower. You don't just bounce right up and go. You kind of, sometimes you want to crawl into the bathroom and get the shower going so you can get in there and get that hot water running so it will limber up and, I've been fortunate with mine. I've not had to take a lot of pain pills. There's times where I do have to take Motrin, or aspirin, or Tylenol, or something, but not a lot because, like I said, I've just learned to accept it.

I: You've mentioned that you are very involved in taking care of other people. Before, kind of in the past you mentioned your three sons, husband, and now you mention that you are taking care of three little boys and another women that you're taking care of. Does that figure in, somehow?

P: Does it cause the pain? Is that what you're asking?

I: Does it figure in with dealing with it somehow?

P: Right now I don't think so because for twenty years I was a secretary. I think maybe my obligations to other things and other people have kept me going that I haven't given up and just let the pain take over. I could have given up and taken over a year ago when I had sciatica. And I was flat on my back for eighteen days and wasn't allowed to work for two months. That's when my mode of income had to change because I could not find a position that I was qualified for so that's when I started watching other people. I started watching the lady because I was a friend of her son's and he asked for someone to stay with her after she had open heart surgery. I think at the point I was an offer to help both of us out. Me for the income and him for someone to help out with his mother. The boys that I watch started out as extra income. I have always been involved. I've always watched, I've always been people orientated. I've worked as a sales lady, I've worked as a cashier so I've always been out in the public. Maybe if I was the type to stay home I could sit home and feel sorry for myself. But I don't think so.

I: I wonder if being around people affects the pain somehow?

P: You mean more intensifies it or lessens it?

I: Maybe there's some who do, with whom you notice one thing happening and others you notice another thing happen. Maybe you don't notice any change.

P: You mean like when I'm with the younger boys or the younger kids I have a different type of pain than with an older person? Well, the pain is there and who you are with doesn't affect it. It's what you do that affects it. I cannot lift any of them. That's definitely out. I cannot do any heavy cleaning. So you just learn to know what you can do and what you can't. Sometimes you're silly and go ahead and do what you're not supposed to. And you pay for it.

I: Is that also a decision?

P: Yes. Sometimes good and sometimes bad.

I: Sometimes good and sometimes bad. Tell me about that.

P: The decision? Depends with my case if I'm upset or I'm angry with somebody I may decide to do something that I know good and well is going to hurt worse. If I'm not angry I think about it more carefully and decide well, you know, if I do this am I going to be able to function tomorrow? Or am I going to have take time to rest before I do anything. If I'm angry I don't consider that, I just do it. And the next day you don't function for a while. And you don't have a choice on it at times. You'll say well I'm just going to get up and do it today. Well that's fine, but the legs don't move for a while to get you up to do. You have to limber them up at times before--cold weather has a lot to do. Rainy weather will cause more intensified pain. I think your tolerance of pain level has a lot to do with how you handle it too.

I: Has that changed?

P: Has my pain level tolerance changed? I'm sure it has although I haven't noticed it. I noticed that the pain has gotten worse over the last few years. But I can't say that my tolerance has increased or decreased.

I: How does pain affect your experience with other people? How does it affect the way that you're around other people?

P: I'm not sure I understand your question. How does it affect the way I'm around them. You mean the activities?

I: Do you seem to be different around different people depending on the level of pain?

P: I'm sure I am. Some days, yes I am. Some days I'm not as tolerant and easy going as others. If the pain is very intense and I do become short. Not with the public, not with an acquaintance, but maybe with my own family who know, who can recognize the signs, who just don't do what is expected. Now maybe they're not thinking that day either. Maybe they're having a bad day. But I do become short

with them more than anybody. I'm more short with people early in the morning because the pain is greater of a morning.

I: Are there some people around whom you are more aware of it than others? Do some people kind of help you not attend to it more easily than other people. Do you notice anything?

P: Do you mean people more or less do things for you that you know you can't do? Or do you mean is my pain more noticeable when I'm with certain people than with other people?

I: Yeah, perhaps that.

P: No, people do not affect my pain. My pain is from within and it is not caused by a person, a place, an atmosphere. Well maybe atmosphere is not right because if I'm relaxed and I'm more intent on saying well I'm going to relax and take it easy. You know. But if I know some things need to be done, I go ahead and do them. It just intensifies. It's always there. You always notice it. And if you forget because you become so, I don't know, nonchalant about it because it's there you just kind of ignore it at times, you'll do something and then it will remind you real quick. Like if you bend wrong and picked up a toy. You've bend wrong to pick up a shoe. Whoops, you don't bend you stoop.

I: It's very sudden.

P: Right. It jabs you, just shoots right through. But I can't say that anybody or any place intensifies it or cause it to be more prominent.

I: You mentioned earlier that sometimes you feel kind of down, or have felt down in response to the pain. Are there other ways that moods, emotions, or feelings seem related to the pain? Or is the pain related to them? Or anything?

P: I don't think so. The only thing I can say to that is if I feel really good one day and I overdue and I go out and walk 6 or 8 miles, or you get on the bicycle and it's the first spring day, and you get out and the next day you're a little stiff and sore and the pain's more prominent. But as far as knowing that I have to clean house. The pain intensifies because I don't want to do it. No. It doesn't. My pain intensifies if I overdue or do something different that I know I shouldn't. I still try to keep active because I know that if I don't I won't be able to.

I: You mentioned anger too as being, not necessarily connected, but you mentioned it in talking about things.

P: Anger doesn't have anything to do with my pain. Anger is my attitude that I'm when I do something dumb like go ahead and lift a chair, to move a piece of furniture, because I've asked somebody to do it and they won't do it. It's not the pain's fault, it's mine, my temperamental attitude at the time that I'd go ahead and do something because I didn't have the patience. Or somebody didn't follow though that, you know, like I request that you do such and such and two days later it isn't done and I get angry and just go ahead and do it. And I knew I shouldn't have lifted the chair in the first place. So therefore the pain will be there either that evening or a few hours later or the next day. It will intensify. And then you think back, what did I do that I wasn't supposed to?

I: You say, "aha."

P: You got mad and threw a fit and caused it yourself. No the anger doesn't have anything to do with it I don't think. It's just the stupidity that you do in a state of anger.

I: How about in the reverse? Does the level of pain seem to affect your mood? Or your emotions or other feelings.

P: I don't think so. Maybe other people do. I'm sitting here now with pain in both legs and across the back and I don't think that's affecting my attitude or my way of thinking. I know why I have the pain today. It was something that I have to start getting into and it does cause the problem, but I always. . . After twenty-two years I've learned what to do and what not to do. I started using the hip cycler last night. That makes a big difference. A hip cycler is a mechanism like riding a bicycle only you lay flat on your back and use it like an exercise device. I should have been using it all the way through but like everybody else I'm lax at times. I haven't been home enough lately to do it, and I did start it up. And I knew I would feel it today and I think the dampness outside always has something to do with the pain and how intense it is. But as far as my anger, no, I'm not angry at anybody because I have the pain and I don't try to take it out on the world. It's not their fault.

I: You talked about the things you do having an effect on the pain. Does that go the other direction? The pain having an effect on things that you do.

P: Yes. I would love to get out and start running, but I know I can't. I would love to be able to start an exercise program, but I know I can't. Well, I can, but not the kind I really want to get into. There's times I would love to get just up and start washing all the windows. But you have to climb and you have to lift and there's days that I'd really like to rearrange a room. But if I'm the only one around I can't do it and I won't. And sometimes it's frustrating. But I think you get over that. Didn't really want to do it today

anyway. Find something else to do. So I can't. That would be the only way that I can say the pain really affects your attitude and disposition.

I: Activity seems to be something important to. Remaining active and you talked about exercising and talked about bike riding and talked about moving, keeping going, doing your shower to get yourself going, things like that. Is that something that is important or am, am I hearing that correctly?

P: I think that should be important to everybody because if you aren't active and you don't keep moving you're going to stagnate. And I think everybody should be interested in that. So yes, it is important to me. It always has been.

I: You mentioned earlier that it has something to do almost with a conscious decision, a decision to keep going, to keep yourself moving.

P: You mean the decision, the conscious decision whether I'm going to get out of bed and walk today or if I'm going to lay here and have self pity. I think so. I think you have to. If you lay in bed and feel sorry for yourself, what's it going to accomplish. Don't get me wrong, I know there's people who aren't able to get up, the pain is so great that they can't. But I also know there's people who make their pain worse by laying and saying, "Poor me, I'm feeling sorry for myself. I hurt today, I can't do this." Sure maybe you hurt today and maybe you can't do all you want. But I'm sure you could make a stab at doing something.

I: How does pain affect the way you experience your body?

P: Explain further what you're asking me.

I: Does your body feel the same when you're experiencing higher levels of pain than when it's lower? Does it seem different somehow?

P: I don't think so. The higher level of pain is my body telling me to back off of something that I'm doing that I shouldn't be doing. Or, now I have found that my body, I don't listen to signals very well like to slow down. My body breaks down and stops me. For instance okay, I work all night and I work all day and all evening—I work 85 hours a week right now. In the process of putting all this time in I also had to move and change my place of residence. Right after Christmas which is always a rushed time and the first of the year. . . We all do things that we shouldn't at that time. But my body got to the pain level that I could not tolerate and I had to stop. So I know that I don't listen to warning signals. I just keep going 'til I can't go anymore. So I can't say that my body is any different because after all these years it's learned that I'm not going to pay

any attention anyway, I'm just going to keep going. I guess I'm too hard headed to listen to it.

I: That can be a virtue.

P: Sometimes.

I: This question might be kind of difficult to respond to, but, has the pain changed the way you've experienced your body? Was it different before the pain was there?

P: Yes. You're more conscious of your body. You're more conscious of what your body will do for you and what you can do with it.

I: As a result of the pain? Or before?

P: Afterwards.

I: Afterwards.

P: You take your body for granted before. You'll get in some twisted positions that you don't think anything about before the pain. You don't think anything of twisting sideways and bending over. There's no way with this kind of pain that you can do that. You learn to do what you can. I think from my self I have learned to take better care of my body and myself, your personal hygiene, for instance, because if you put a moisturizer lotion on your body it holds in the heat. Therefore, your body is warmer, the pain doesn't intensify as fast and as quick. You learn how to sit and it may not be the most graceful position at times, but you learn how to sit so that you don't have the pain. Where a lot of people can just come in and flop down and sit any old way and it doesn't bother them or anything. The type of bed you sleep in will make a lot of difference. You can't just flop on any bed anywhere. Well, you can, but the next morning you pay.

I: What do you look for, what type?

P: What do I look for? Something very firm. A water bed is super for mine. Unfortunately, I don't have the water bed, my son does. Sometimes I get the privilege of using it. I don't mean a rock hard surface because that does as much damage as no support. But you have to be very careful and you learn when you travel that you ask for extra firm mattresses if they have them. Sometimes you want to specify that you can't sleep on a very soft mattress and they'll give you a different room. You can't sit and ride long periods of time. It's easier to drive than it is to ride. And I think that's because the legs are extended more. And you sit up straighter and you pay more attention. Whereas if you are riding you get bored because you aren't not really doing things at times and sometimes you don't sit

properly, you pull your legs up and therefore the circulation stops and the pain starts. It makes a difference.

I: This might seem like kind of a strange question, but does the shape of your body seem the same?

P: Yes, I think so. I've always been on the heavy side. You may find this hard to believe, but I'm smaller now than I was a year ago and 17 years ago. But as far as the shape, it's more or less the same.

I: What is helpful to you in dealing with the pain?

P: What is helpful? I think keeping active, keeping involved helps a lot because your body is more mobile. You're not giving it a time to stiffen up. But you have to do it in moderation. Sitting too long at one time gives you problems when you stand up. You can't stand up straight and you walk kind of funny looking for a while until you get your parts motivated again to move. Consciously not dwelling on it. You know, subconsciously you know it's there, but you know consciously you can say, well you know, you can think of other things, you don't have to dwell on the pain and say, "I hurt so bad I just can't move or I can't do this or I can't do that because of it." I think you have to have a positive outlook on life and look for good things.

I: Is that hard to do?

P: No. I have a lot to be thankful for. I feel very fortunate that I'm able to get out and move. Because I honestly believe in the future I won't be able to with it and I want to keep active as long as I can cause I think that will postpone the time that I won't be able to do with it.

I: You mentioned that before, the possibility. . . What are your thoughts on that? About there being a time that you might not be able to get up and move about.

P: I've noticed in the last three years the limited amount of movement that I can do. And the intensive pain being more. And I was told that it would get worse as I got older. But you always think positive that maybe eventually they'll find something you know before it gets to that point and you won't have to worry about it. There's a possibility I could have had surgery and relieved part of it, but they didn't give me but a 50/50 chance. And I've got a 50/50 chance without anybody cutting on me. If I was real wealthy I could probably go to a chiropractor probably three times a week and keep going. But I was very fortunate I had a chiropractor that showed me some exercises to do and showed me a few little tricks to the trade that I could do at home that I do not have that expense. I'm foreseeing this possibility, but I'm not dwelling on it. When that day hits, it will

hit. There's nothing I can do to change it. As of this moment. Maybe in the future there will be. But right now, and I can't live to the point now where I can do anything I want today and they're going to find something next week to cure whatever damage I do today. You have to use a little bit of common sense in everyday living.

I: Does seeing a change point somewhere in the future have any effect on what you do today?

P: It probably does. It probably makes me cram everything in that I can right now the way I do. I hadn't thought of that, but that may be the reason that I do it.

I: What does the cramming a lot into the present do?

P: Keeps me happy, keeps me active, keeps me out of trouble. You just keep busy you don't worry about anything.

I: I get the impression that you're somebody who really appreciates what you are able to do during a given day, right?

P: This is true. I appreciate the fact that I was able to get up this morning and that I had the ability to find your phone number to call and tell you I'm on my way. I appreciate the fact that even though I've had hard times, there's good days out there and there are good people out there. I've seen too many people who can't function, or won't. My family is very special to me. I feel very privileged that to have three sons, one 22, one 19 and one 17, that I haven't been called to City Hall to bail them out or called to the hospital, they've been in a wreck, or they've been brought home by the officers. They're out drinking and I didn't know where they were, what hours. I just feel very thankful that I didn't have to go through that. And so I appreciate the fact that I'm able to do for them and that I was able to spend the time that I did. And I think by having something that you're thankful for, having a life that you can be involved in, you can always turn around and see somebody in a lot worse shape than you are. There's no reason to blame the world for the situation you are in.

I: Does seeing or recognizing people that are in worse shape, is that helpful?

P: Not really. It doesn't make any difference to me because I see people who are in worse shape than I am in a lot of ways. And not physical. They may not have the physical pain, but they're in a lot worse pain. And a lot of it is due to their own self infliction. I don't think that makes any difference. I just feel that you have the ability to make or break the day. You can accept it on a positive level or you can accept it on a negative level and continually go down from that time of the day on.

I: Is that a different way of looking at things than you used to look at them?

P: No.

I: That's been consistent for you?

P: U-huh.

I: How does pain affect the way you think about things?

P: I can't say that it really does affect it. Can you give me a more specific idea of what you're asking me? Like how did I think about today and the pain? It didn't bother me. I knew I had an obligation because I'd made an appointment with you and I made arrangements that I will go back and sit with the lady when I leave here. The pain is second thought to me. I don't let my life revolve around the pain. The pain is a part of my life now. I can't say, "Well pain, what are we going to do today. You tell me are you going to hurt too bad that I can't open the car door and sit down today? Or pain what's on the future for the evening. Are you going to hurt so bad that I can't continue with dinner? Or I can't enjoy the birthday party that's going to come up this weekend?" It's like, "pain, we're going, let's go." You have to take control of it; you can't let it control you.

I: In your description it almost sounds like a separate entity. Do you see it that way?

P: You try hard to make it that way.

I: Is that a helpful thing to do?

P: Does it help me? I think so. I don't want to look on this pain as a constant thorn in my side. We all know it is, but you don't want to dwell on it. You don't want . . . I guess it comes from my Christian upbringing and my relationship with God that you don't give the devil and satan in the pain the credit. Because once you give them the credit and the opening, they're going to take over. I don't have time for the pain to rule my life.

I: Was there a time that it did?

P: A different kind of pain did. A mental pain did. And there just isn't time to let pain be the ruler.

I: In learning to deal with that pain, was it then easier to deal with this pain?

P: I'm sure it has been. I really think it has been. I had a very low self esteem. I had a terrible marriage which almost ended up giving me a nervous breakdown. So that may be why you look around and you see the destruction that's going on that you say, "Hey, there's no reason for it, it has to change." You can change it. It's not easy but it can be done. So you just kind of pick up and go on. That's where you learn that you have to take control.

I: The pain and the other situation was a challenge that you overcame.

P: I think so. The physical pain came after the other. Self esteem, some people never pick up to the point that they feel they're a decent person. And I feel that has a lot to do with their upbringing, being put down a lot. I can't say that was my situation. Mine was the fact that I've always been heavy. Kids are cruel and when you're young and you're fat, they point it out to you. When you get older you find out that there's other things in life that are more important than the rest of the world's feelings. One thing that is very important is how you feel about yourself. And you learn how to take your good points and develop them. Or you work at it. Or you let the bad points destroy and take over.

I: Is there a way, well, how did you do that? If you were to see somebody just starting out with pain and feeling that the pain was in control, what would you think would be important to share with them about?

P: You have to think positive. They cannot let the pain. . . They can't dwell on the pain. Okay the pain's there, accept it. Your hand's there, accept it, appreciate it. Learn to do what you can do well. You have a talent, develop it. You have a good attitude toward something, appreciate it and build on it. Don't let all the negative and don't listen to all the negative.

I: Accepting it, accepting the pain.

P: You have to accept it. It's a part of you and it's going to be a part of you.

I: It's a part of you and yet it's a separate entity?

P: Yes. Doesn't make sense does it?

I: I think it does.

P: That's like your children. They're a part of you, but they're a separate individual. You have to accept them for what they are.

I: Pain is like a child?

P: I think so. [Laughter] It can bring you good time and bad times too. But you can say that because you know they're a part of you too but yet they have their own life to live at a certain age and you have to let go and let them go on.

I: You can't let it devour you.

P: Right.

I: Can't let it take over.

P: That's the way I feel about it.

I: Are there things that are ways that you do that? That you keep it from taking over.

P: Probably. Let's see, how can I explain that. I think it's by learning what you can do and how you can do it so that it doesn't hurt. You could probably go out here and rundown the steps and it not hurt you. I couldn't do that. You could probably stand up and kick a football and it not hurt you. I can't do that, but I can walk down the street and it not hurt me. Per se hurt. I am able to give somebody a little happiness in the daytime. That doesn't hurt me. I'm able to encourage somebody one day. That doesn't hurt. I am able to get three little boys up and ready for school while their mother is working to support them so therefore I'm helping. That doesn't hurt to do that. The physical aspect of being there to do it at times has, the pain's there and it hurts. But I think it's your attitude towards it again. If you want it to command or if you want to command.

I: What helps you to stay in command?

P: I don't always. Maybe you think that I have it all under control and I don't have bad days, but I do have bad days.

I: Can you talk about what that might be like?

P: What a bad day would be like? A bad day for me would not to be able to get up and walk. Not to be able to do something. When you lay flat on your back for 18 days. The choice was going into the hospital and you knew if you went in they was going to do surgery and they wouldn't even guarantee that you could walk out or lay at home and do exactly what the chiropractor said. You had the choice of the two. Go to a surgeon and they'd whip the knife out and take over and maybe you'll walk out and maybe you won't. Or you can turn over to the chiropractor and do what he tells you and see what happens. I chose to stay home and lay flat on my back and count the spots on my ceiling. At least I didn't have the expense and I wasn't losing anything. Cause if I didn't get well, there was always the knife to

go to. All I was doing was buying a little time. You learn that getting up and getting to move is a privilege that you don't take lightly. Bad days are when the pain hurts so bad that I have to end up on pain pills just to walk. A bad day for me would be in so much pain that I wouldn't be able to go to my son's football game or to one of their functions. Now I say football because I only have one left at home and he does play football. A bad day would be that I wouldn't be able to go to my son's weddings that will be coming eventually. I guess a bad day would be somebody call and say do you want to have lunch today and not have the ability to motivate to do it. And I've had them. And it hurts not to be able not to even get up and walk to get a drink of water when you need it. Or to need the pain relieved and you weren't able to get to the phone to call somebody for that help. So you appreciate the good days and you don't want the bad days to take over because you want them to be so far and few between so you just keep going so you don't think and again dwell on the fact that it's there. I think your state of mind has a lot to do with it. If you're confused it's hard to put the positive forward and think about the good part. The good parts of your pain is that you're able to feel it. Some people can't even able to feel pain. They can do damage to themselves and not even know it. It makes you aware that you can loose a functioning part of your body. And so you take it more careful. But you don't want to slow and down and become rigid and stiff and when you do that and let the pain take over, then your brain doesn't function on anything but the pain so therefore your mind is going to stagnate too. And I just don't feel that is a profitable way to be.

I: You've been there.

P: Yes I've been there. It doesn't accomplish anything.

I: What helped you get out of it?

P: Hard headed, stubborn. Not giving somebody the privilege of having that kind of domineering power over me. Taking control. Of saying look, if that what's you want to do that's fine, but I'm not going under too. The love of my sons saying that I'm not going to let somebody else raise them. My family loving me enough to care enough to give me the support that I needed through it. The friends.

I: I get the sense that you are talking about separating from your husband.

P: Yes. I can't say that he's a bad person. He had a lot of problems. He's an alcoholic. But when it comes to my pain and my hurt, he was always, well lately he has always been there. He has become sober. It took a lot to get there, but you can't downgrade somebody for a fault. We all have them, we all have to accept them in

other people. But when they come to destroy you, you have to make a change. And sometimes that change changes a lot of things.

I: Like them?

P: Yes, sometimes. I think your personal convictions has a lot to do with how you accept life and what you have to deal with in it.

I: You've mentioned your religious upbringing? Does that . . .

P: It wasn't my upbringing. I went to Sunday School. My parents took me to Sunday School and they picked me up, but they wouldn't go. I was not raised in a christian home. I started going to church and found Jesus Christ as my savior, well, let's see, about 15 years ago. That made a big difference in how I could handle things.

I: What was the change?

P: What was the change? Give me more strength and it gave me a more positive attitude. It teaches you how to accept things that are going on. Some things you can change and some things you can't. You learn the difference. You learn to have constructive criticism, you don't put down. I do not have bad parents. I still have both parents and they're super. I probably wouldn't have made it this long without them. I've been through two surgeries. I went through a two week hemorrhaging stage that the doctors did not know why or what caused it. They didn't know where the infection was, what was causing it. It came on as fast and it left as fast and the doctor said I don't know what it is. I had the three boys at that time and I went through it alone, per se. You know, there's always people out there that care about you and want to help. But you learn to either care about somebody else more than you care about yourself or you put yourself first and you say, well, well I can't do anything about it and I'm just going to lay here and let somebody take care of me forever. I can't do that. I just wasn't raised that way. I was raised to consider other people. And I think that has a lot to do with it. Maybe by being the oldest and the responsibilities that were put on me has something to do with it. I really don't know what made my characteristics the way they are. I just know that I can't sit back and let the pain take over. And I would have missed so many things that are important to me. And I really think it would have made my sons resentful over the fact that they couldn't do and their mother couldn't do for them because of it. Now I could blame my son for the shape I'm in because when this happened I looked in the mirror and say that the car behind me. . . Or the car behind me had stopped, but the other car coming wasn't going to and he was standing in the seat next to me. I twisted sideways to hold him and to sit him down and keep him from going through the windshield. And if I had not twisted I would not be in this shape today. But I can't say that if he'd been sitting down, this wouldn't have happened. You don't know. It would

have happened in another way maybe. If that wasn't bad enough, after we were hit and everybody was messed up and we went to rearrange then we were hit again. So there's a plan for all of us. We just have to work on it.

I: Does the pain have a meaning?

P: It means there's something messed up in there that shouldn't be. But no I don't understand really what you are saying. But as far as the pain having a meaning, no.

I: Some people go through a period of like, "Why me, why has this had to happen?"

P: No, I don't think so. Some days I say how lucky can I get, you know, that this is my day for this, but, you know, to me that's a pity party. And I'm not in to that too often at all.

I: Is the pain in any way a gift?

P: Could be, but I haven't figured that one out if it is. You know some gifts are good and some are bad. If that's the case this is a bad one.

I: I think I've covered most of the kinds of questions that I have. As you've talked about your experience today, as you've talked about it here, is there anything that you've talked or said that surprised you?

P: I don't think so. You looked a little confused at times, but I was wondering why.

I: Do you remember when those were?

P: I don't know how everybody else handles pain, so maybe I'm normal, but who's to say what normal is too. Just some of looks on your face you'd came up with when I'd answer like this isn't fitting in someplace. I just don't see any reason for letting something control you to the point that you can't function.

I: You seem very good at separating it. Is there something, anything, that you can identify as like the most important thing at helping you do that?

P: Maybe it's because I have the love and the support that a lot of people don't have. Maybe because I was privileged enough not to have to go through so much of the teenage turmoil.

I: With your sons or with yourself?

P: My boys. I hear so many people say they don't like their teenagers. And I can't even familiarize myself with that feeling. I can see why people would have problems if they haven't been liked. Maybe the pain is an escape for them. But I can't say that.

I: Are there any questions that you hoped you'd be asked that you weren't asked?

P: I had no idea what I was coming in for. You know as far as questions and what you were looking for, I did not know anything or have any idea about what you were looking for or what you were trying to obtain. So no.

I: How has it been going through this?

P: Easy. I don't see any major problems with it.

I: Are there any comments that you'd like to make that you haven't made yet.

P: I'd just to know the results when this is finished. How other people handle things and what they feel.

I: Okay. I'll do my best and get that to you. I plan on sending a summary of everything to the people who took part. I also plan on sending, giving you a summary of what we talked about to see if I got it right, to see if I understood it what you've told me. Is there anything that you'd like to say that would be helpful in understanding what it's been like for you to live with this that you haven't said yet?

P: I don't think so.

I: Okay.

APPENDIX D

FIRST REDUCTION OF INTERVIEW WITH PARTICIPANT 8

1. Basically the pain started 22 years ago. I was involved in an auto accident, and I started having back problems then, and I just had the pain off and on, mostly on, all the way through.
2. It gives you a limited amount of movement at certain times. You have to watch how you move and lift.
3. It does get progressively get worse. I've noticed in the last three years that's its been very difficult to get up in the morning.
4. I've undergone several treatments at a chiropractor which relieves the pain for a while, but then it returns. Steam and hot water relieve the pain more than anything. So if you get up and get in the shower right away, you can keep functioning for the day.
5. It's something you learn to live with, an adjustment you have to make. I think a lot of it is psychological--your attitude toward the pain can make you or break you. You have to decide whether you're going to let the pain win and rob you of the precious things you can do in life or if you accept it and say, "It's there, but I'm going to take it and go and do what has to be done." So I just feel that you have to adjust yourself in your way of thinking.
6. There's time that pain shoots down both legs.
7. I bring part of the pain on myself because I was told that changing to shoes with different heel sizes would cause pain. The next day is rough.
8. So, basically I've learned to slow down a little bit and go with what they've told me.
9. The last three years I've gone from three sons and a husband to consider to only one son and myself to consider. So I've learned to not do as many things.
10. In my case I felt a little bit like I was robbed because I did not get a settlement or any, the only thing I got was the medical bills paid at the time. But I took the responsibility for being out on the streets that day. The person was careless, but they were hurt much worse at the time than I was.
11. You learn there's things that you can't do like running the sweeper, lifting, or bending. You learn to lift with the knees, and

not bend at the waist. I can walk, I can ride a bicycle. I'm thankful that I'm even able to walk.

12. And I'm not saying that's the only reason that I'm overweight, but I think that has a lot to do with it.

13. If I had a choice to make today, it would have been stay in bed and leave it alone. The pain is bad today. However, that isn't a choice I have to make anymore. I watch three little boys all night, and I have to get up and ready before I get them up, dressed and ready for school. Then I have an elderly lady who needs help and attention. So my obligations are there, and you can't just let it ride.

14. You have to just go ahead and go. You move a little slower. You don't just bounce right up and go. You kind of, sometimes you want to crawl into the bathroom and get the shower going so the hot water will limber you up.

15. I've not had to take a lot of pain pills. There's times where I do have to take Motrin or aspirin or Tylenol sometimes, but not a lot.

16. I've always been people oriented. I think maybe my obligations to other things and other people have kept me going that I haven't given up and just let the pain take over.

17. I could have given up a year ago when I had sciatica. And I was flat on my back for eighteen days and wasn't allowed to work for two months.

18. The pain is there and who you are with doesn't affect it.

19. It's what you do that affects it. I cannot lift any of the kids. I cannot do any heavy cleaning. So you just learn to know what you can do, and what you can't.

20. Sometimes you're silly, and go ahead and do what you're not supposed to. And you pay for it.

21. If I'm upset or I'm angry with somebody I may decide to do something that I know good and well is going to hurt worse. If I'm not angry I think about it more carefully and decide, "If I do this am I going to be able to function tomorrow? Or am I going to have take time to rest before I do anything." If I'm angry I don't consider that, I just do it. And the next day you don't function.

22. Some days you don't function. You may say I'm going to get up and do it today, but the legs don't move. You have to limber them up at times.

23. Cold, rainy weather will cause more intensified pain.

24. Some days I'm not as tolerant and easy going as others. If the pain is very intense, I do become short. More with my own family who recognize the signs, but don't do what is expected. I'm more short with people early in the morning because the pain is greater of a morning.

25. My pain is from within, and it is not caused by a person, a place, an atmosphere. I can't say that anybody or any place intensifies it or causes it to be more prominent.

26. But if I know some things need to be done, I go ahead and do them. It just intensifies. It's always there. You always notice it.

27. If you forget because you become nonchalant and ignore it at times, you'll do something, and it will remind you real quick. Like if you bend wrong and picked up a toy or a shoe. Whoops, you don't bend you stoop. It jabs you, just shoot right through.

28. I try to keep active because I know if I don't I won't be able to. If I feel really good one day, and I over do it, the next day you're a little stiff and sore and the pain's more prominent. My pain intensifies if I over do or do something I know I shouldn't.

29. Anger doesn't have anything to do with my pain. Anger is my attitude when I do something dumb like lifting furniture because I didn't have the patience when somebody didn't follow though like I requested, and two days later it isn't done, and I get angry and just go ahead and do it. And I knew I shouldn't have lifted the chair in the first place. So therefore the pain will be there either that evening or a few hours later or the next day. It will intensify. And then you think back, what did I do that I wasn't supposed to? You got mad and threw a fit and caused it yourself. No the anger doesn't have anything to do with it I don't think. It's just the stupidity that you do in a state of anger.

30. But as far as my anger, no, I'm not angry at anybody because I have the pain, and I don't try to take it out on the world. It's not their fault.

31. I'm sitting here now with pain in both legs and across the back and I don't think that's affecting my attitude or my way of thinking.

32. After twenty-two years I've learned what to do and what not to do.

33. I think the dampness outside always has something to do with the pain and how intense it is.

34. I would love to do a lot of physical activity I know I can't do. And sometimes it's frustrating. But you get over that and find something else to do. That would be the only way that I can say the pain really affects your attitude and disposition.
35. Activity is important to me. If you aren't active, and you don't keep moving you're going to stagnate.
36. Sometimes it's a conscious decision whether I'm going to get out of bed and walk today or if I'm going to lay here and have self pity. I know there's people who aren't able to get up. I also know there's people who make their pain worse by laying and feel sorry for themselves. Sure maybe you hurt today, and maybe you can't do all you want. But I'm sure you could make a stab at doing something.
37. The higher level of pain is my body telling me to back off of something that I'm doing that I shouldn't be doing. I don't listen to signals very well like slow down. My body breaks down and stops me. But my body gets to the pain level that I cannot tolerate, and I have to stop. I know that I don't listen to warning signals. I just keep going 'til I can't go anymore.
38. With pain, you're more conscious of your body. You're more conscious of what your body will do for you, and what you can do with it. You take your body for granted before. You'll get in some twisted positions that you don't think anything about before the pain. There's no way with this kind of pain that you can do that. You learn to do what you can. I have learned to take better care of my body and myself. You learn how to sit, and it may not be the most graceful position at times, but you learn how to sit so that you don't have the pain.
39. It's easier to drive than it is to ride. And I think that's because the legs are extended more.
40. If you are riding you get bored because you don't sit properly, the circulation stops, and the pain starts. It makes a difference.
41. What is helpful is keeping active, keeping involved, because your body is more mobile. You're not giving it a time to stiffen up. But you have to do it in moderation.
42. Sitting too long at one time gives you problems when you stand up. You can't stand up straight, and you walk kind of funny looking for a while until you get your parts motivated again to move.
43. Consciously not dwelling on it. You know it's there subconsciously, but consciously you can think of other things, you don't have to dwell on the pain, and say I hurt so bad I just can't move or I can't do this or I can't do that because of it.

44. I think you have to have a positive outlook on life and look for good things.

45. I feel very fortunate that I'm able to get out and move. Because I honestly believe in the future I won't be able to with it, and I want to keep active as long as I can cause I think that will postpone the time that I won't be able to do with it. My movement is more limited in the last three years, and the pain is more intense. And I was told that it would get worse as I got older. But you always think positive that maybe eventually they'll find something before it gets to that point, and you won't have to worry about it. I'm foreseeing this possibility, but I'm not dwelling on it. When that day hits, it will hit. There's nothing I can do to change it. I can't do anything I want today, and hope they're going to find something next week to cure whatever damage I do.

46. There's a possibility I could have had surgery and relieved part of it, but they didn't give me but a 50/50 chance. And I've got a 50/50 chance without anybody cutting on me. I could probably go to a chiropractor probably three times a week and keep going.

47. Seeing a change point somewhere in the future probably makes me cram in everything I can right now the way I do. And that keeps me happy, keeps me active, keeps me out of trouble. You just keep busy. You don't worry about anything.

48. My family is very special to me. I appreciate the fact that I'm able to do for them, and that I was able to spend the time that I did.

49. I appreciate the fact that even though I've had hard times, there's good days out there, and there are good people out there. I've seen too many people who can't function, or won't. And I think by having something to be thankful for, having a life that you can be involved in, you can always turn around and see somebody in a lot worse shape than you are. There's no reason to blame the world for the situation you are in.

50. I see people who are in worse shape than I am in a lot of ways. And not physical. They may not have the physical pain, but they're in a lot worse pain. And a lot of it is due to their own self infliction. I just feel that you have the ability to make or break the day. You can accept it on a positive level or you can accept it on a negative level and continually go down from that time of the day on.

51. The pain is second thought to me. I don't let my life revolve around the pain. The pain is a part of my life now. I can't say, "Pain, what are we going to do today?" It's like, "Pain, we're going, let's go." You have to take control of it, you can't let it control you.

52. You try hard to make it like a separate entity. I don't want to look on this pain as a constant thorn in my side. We all know it is but you don't want to dwell on it. I guess it comes from my Christian upbringing, and my relationship with God that you don't give the devil and satan in the pain the credit. Because once you give them the credit and the opening, they're going to take over. I don't have time for the pain to rule my life. And there just isn't time to let pain be the ruler.

53. You learn that you have to take control. One thing that is very important is how you feel about yourself. And you learn how to take your good points and develop them. Or you work at it. Or you let the bad points destroy and take over. You have to think positive. They can't dwell on the pain. Okay the pain's there, accept it. Your hand's there, accept it, appreciate it. Learn to do what you can do well. You have a talent, develop it. You have a good attitude toward something, appreciate it and build on it. Don't let all the negative and don't listen to all the negative. You have to accept the pain. It's a part of you, and it's going to be a part of you.

54. It's a part of you, and yet it's a separate entity. That's like your children. They're a part of you, but they're a separate individual. You have to accept them for what they are.

55. Like a child, pain can bring you good times and bad times too. But you can say that because you know they're a part of you too, but yet they have their own life to live, and you have to let go. You can't let pain devour you. You can't let it take over.

60. You keep it from taking over by learning what you can do, and how you can do it so that it doesn't hurt. I can't run down the steps or kick a football, but I can walk down the street and it not hurt me. I am able to give somebody a little happiness. That doesn't hurt me. I'm able to encourage somebody one day. That doesn't hurt. I am able to help three little boys get up and ready for school so therefore I'm helping. That doesn't hurt to do that. The physical aspect of doing it at times hurts. But I think it's your attitude towards it again. If you want it to command or if you want to command.

61. A bad day for me would not to be able to get up and walk. Not to be able to do something. When you lay flat on your back for 18 days. You learn that getting up and getting to move is a privilege that you don't take lightly. Bad days are when the pain hurts so bad that I have to end up on pain pills just to walk. A bad day for me is to be in so much pain that I wouldn't be able to do things with my family or friends. And I've had them. And it hurts not to be able do things to take care of yourself like get a drink of water or even call somebody for help. So you appreciate the good days, and you don't want the bad days to take over. You keep going so you don't dwell on the fact that it's there.

62. I think your state of mind has a lot to do with it. If you're confused it's hard to put the positive forward and think about the good part. The good parts of your pain is that you're able to feel it. Some people aren't even able to feel pain. They can do damage to themselves and not even know it. It makes you aware that you can loose a functioning part of your body. And so you take it more careful. But you don't want to slow and down and become rigid and stiff and when you do that and let the pain take over, then your brain doesn't function on anything but the pain, so, therefore, your mind is going to stagnate, too.

63. When I've been like that what's helped is not giving pain the privilege of having that kind of domineering power over me. Taking control.

64. My family loving me enough to care enough to give me the support that I needed through it. The friends.

65. I think personal convictions has a lot to do with how you accept life, and what you have to deal with in it. I started going to church and found Jesus Christ as my savior about 15 years ago. That made a big difference in how I could handle things. It gave me more strength and it gave me a more positive attitude. It teaches you how to accept things that are going on. Some things you can change, and some things you can't. You learn the difference. You learn to have constructive criticism, you don't put down.

66. I still have both parents, and they're super. I probably wouldn't have made it this long without them.

67. You know, there's always people out there that care about you, and want to help.

68. I was raised to consider other people.

69. I really don't know what made my characteristics the way they are. I just know that I can't sit back and let the pain take over. And I would have missed so many things that are important to me, especially with my family.

70. When this happened I looked in the mirror and saw that the car behind me had stopped, but the next car wasn't going to. My son was standing in the seat next to me. I twisted sideways to sit him down, hold him, and keep him from going through the windshield. And if I had not twisted, I would not be in this shape today. But I can't say that if he'd been sitting down, this wouldn't have happened. You don't know. It would have happened in another way maybe. If that wasn't bad enough, after we were hit, and we went to rearrange then we were hit again.

71. The pain means there's something messed up in there that shouldn't be. Beyond that it doesn't have a meaning.

72. I just don't see any reason for letting something control you to the point that you can't function.

73. Maybe the most important thing helping me is that I have the love and the support that a lot of people don't have.

APPENDIX E

REDUCED TRANSCRIPT FOR PARTICIPANT 8

Ms. H is in her late thirties and volunteered for the study in response to a newspaper advertisement. She continued her studies after obtaining a G. E. D. degree and worked for several years as a secretary. This work was abandoned because of pain, and she currently cares for children and the elderly. Ms. H is a divorced mother of three sons, one of whom lives with her. The pain began twenty-two years ago after an automobile accident. No surgery has been performed, but she reports extensive relief from chiropractic treatment, and some relief from heat therapy and bed rest. Medication is used once or less per week as needed and consists of Tylenol or Motrin which usually makes the pain less for about five hours. Ms. H is self supporting and has received no financial compensation for her pain.

Ms. H sees the pain as both a part of her and as having qualities of being a separate entity. Pain is usually identified with her body, and both are viewed as distinct from her. Pain acts to limit activity, and she reacts by ignoring it while giving it respect, and maintaining as high a level of activity as possible. She also maintains a positive attitude, and focuses on what she can do as opposed to what is lost. She believes that eventually the pain will overcome her body and curtail the ability to do things. The inevitability of this process can be delayed by moderately forced activity in the present. Twenty-five units can be identified within the interview.

1. Basically the pain started twenty two years ago. I saw that the car behind me had stopped, but the next car wasn't going to. I twisted sideways to keep my son from going through the windshield. We were hit again after we went to rearrange. I started having back problems then, and I just had the pain off and on, mostly on, all the way through. If I had not twisted, I would not be in this shape today. But maybe it would have happened in another way. The only thing I got out of it was the medical bills paid at the time.

2. You take your body for granted before. With pain, you're more conscious of what your body will do because that's what affects it. You learn you can't do heavy cleaning, lifting, or bending. You learn to lift with the knees, and not bend at the waist. If you don't sit properly, the circulation stops, and the pain starts. Sitting too long at one time gives you problems when you stand up. Sometimes the pain shoots down both legs. If you forget or become nonchalant, and ignore it, it will remind you real quick: it jabs you, just shoots right through.

3. In the last three years my movement is more limited, and the pain is more intense. You move a little slower. You don't just bounce right up and go. Some mornings, you crawl into the bathroom and get a hot shower going so it will limber you up. You can't stand up straight, and you walk kind of funny until you get moving. Some days you don't function. You may say, "I'm going to get up and do it today," but the legs don't move.
4. Cold, rainy weather will cause more intensified pain.
5. A bad day for me would not to be able to get up and walk and do something without having to take pain pills. Or to be in so much pain that I wouldn't be able to do things with my family or friends. And I've had them.
6. It hurts not to be able do things to take care of yourself. When you lay flat on your back for eighteen days, you learn getting to move is a privilege you don't take lightly. So you appreciate the good days and don't want the bad days to take over.
7. You keep it from taking over by learning what you can do and how you can do it so it doesn't hurt. You sit so you don't have the pain. I can walk down the street, and it not hurt me. I can ride a bicycle. I am able to give somebody a little happiness, or encourage somebody one day. I am able to help three little boys get up and ready for school so, therefore, I'm helping. Those things don't hurt even though the physical aspect of doing it at times hurts.
8. The pain taught me to take better care of my body and myself.
9. What is helpful is keeping active, keeping involved, because I know if I don't, I won't be able to. It will stiffen up and stagnate. You keep going so you consciously don't dwell on the pain. You know it's there subconsciously, but consciously you don't have to dwell on it and say, "I hurt so bad I can't do this or that because of it."
10. Basically I've learned to slow down a little bit. I've not had to take a lot of pain pills. There's times where I do have to take Motrin or aspirin, but not a lot. And I've undergone several treatments at a chiropractor which relieves the pain for a while, but then it returns. Steam and hot water relieve the pain more than anything. So a hot shower can keep you functioning for the day.
11. It's something you learn to live with, an adjustment you have to make, your attitude toward the pain can make you or break you. You have to decide whether you're going to let the pain win and rob you of the precious things you can do in life, or if you accept it, and say, "It's there, but I'm going to take it and do what has to be done." I feel you have to adjust your way of thinking. I don't let

my life revolve around the pain, but pain is a part of my life now. You have to take control of it, you can't let it control you. You have to think positive. The pain's there, accept it. Your hand's there, accept it, appreciate it. Learn to do what you can do well. Develop your talents. Appreciate something and build on it. Don't let the negative destroy and take over. You have to accept the pain, it's a part of you.

12. I can't sit back and let the pain take over. I could have given up a year ago when I had sciatica, and I was flat on my back for eighteen days. Sometimes, it's a conscious decision whether I'm going to get out of bed and walk today, or if I'm going to lay here and have self pity. That can make the pain feel worse. You can always make a stab at doing something.

13. There's no reason to blame the world for the situation you are in. You have the ability to make or break the day. You can accept it on a positive level or on a negative level and continually go down from that time of the day on. Think about the positive.

14. Some people can't even feel pain. They can do damage to themselves and not even know it. Feeling pain makes you aware that you can loose a functioning part of your body. And so you take it more careful.

15. I started going to church and found Jesus Christ as my savior about 15 years ago. That made a big difference in how I could handle things. It gave me more strength and a more positive attitude. It teaches you to accept things that are going on. Some things you can change and some things you can't. You learn to have constructive criticism, you don't put down.

16. I bring part of the pain on myself. It intensifies if I over do or do something I know I shouldn't. You have to do it in moderation. If I feel really good one day, and I over do it, the next day the pain's more prominent. If you're silly and do what you're not supposed to, you pay for it, the next day is rough. But I know some things need to be done, so I go ahead and do them. The pain just intensifies. It's always there. You always notice it.

17. I've always been people oriented. There's people out there that care about you and want to help. It's a great help to have the love and the support I got from my family and friends. And my obligations to other people have kept me going that I haven't given up and just let the pain take over. I appreciate the fact that I'm able to do for my family and friends.

18. A higher level of pain is my body telling me to back off of something that I'm doing. I don't listen to warning signals very well, my body gets to the pain level that I cannot tolerate, and I

have to stop. The pain means there's something messed up in there that shouldn't be. Beyond that it doesn't have a meaning.

19. The pain is from within, and it is not caused by a person, a place, an atmosphere. Pain is a part of you, and yet it's a separate entity, like your children. They're a part of you, but they're a separate individual. They have their own life to live, and you have to let go. You try hard to make it like a separate entity. But, you can't let pain devour you and take over. I can't say that anybody or any place intensifies it or causes it to be more prominent.

20. Anger doesn't have anything to do with my pain. Anger is my attitude when I do something dumb because I didn't have the patience to wait for somebody else to do it. If I'm upset or I'm angry with somebody, I may decide to do something that is going to hurt. Therefore, the pain will intensify that evening or the next day. If I'm not angry, I think about it more carefully and decide, "If I do this, am I going to be able to function tomorrow?" If I'm angry I don't consider that, I just do it. And the next day you don't function.

21. I'm sitting here now with pain in both legs and across the back and I don't think that's affecting my attitude or my way of thinking. The only way that I can say the pain really affects your attitude and disposition is that I would love to do a lot of physical activity I know I can't do. And sometimes it's frustrating. But you get over that and find something else to do.

22. Some days I'm not as tolerant and easy going as others. If the pain is very intense, I do become short. More with my own family who recognize the signs, but don't do what is expected. I'm more short with people early in the morning because the pain is greater. But I'm not angry at anybody, and I don't try to take it out on the world. It's not their fault.

23. I feel very fortunate that I'm able to get out and move. I was told that it would get worse as I got older. I believe, in the future, I won't be able to keep going, and I want to keep active as long as I can. I think that will postpone the time that I won't be able to do it. I'm foreseeing this possibility, but I'm not dwelling on it. When that day hits, it will hit. There's nothing I can do to change it. I can't do anything I want today and hope they're going to find something next week to cure whatever damage I do. But you always think positive that maybe eventually they'll find something before it gets to that point, and you won't have to worry about it. Seeing a change point somewhere in the future probably makes me cram in everything I can right now the way I do. And that keeps me happy, keeps me active, keeps me out of trouble.

24. I appreciate the fact that even though I've had hard times, there's good days out there, and there are good people out there. You can always turn around and see somebody in a lot worse shape than you are. They may not have the physical pain, but they're in a lot worse pain, often due to self infliction.

25. I don't want to look on this pain as a constant thorn in my side. We all know it is, but you don't want to dwell on it. My Christian upbringing and my relationship with God says you don't give the devil and satan in the pain the credit. Once you give them the credit, they're going to take over. I don't have time for the pain to rule my life.

APPENDIX F

BIOGRAPHICAL SKETCHES AND NARRATIVE SUMMARIES OF PARTICIPANTS' EXPERIENCES OF CHRONIC PAIN

Participant 1

Mr. A. is college graduate in his early fifties who was interviewed upon admission to an inpatient pain center. He has worked for many years as a medical laboratory technician and has held supervisory positions. His wife suffered a severe stroke approximately two years before he fractured a vertebra in a fall at work. His injury occurred about 14 months prior to the interview. He and his wife have five children, four daughters and a son. One daughter and three grandchildren live with him and his wife. He has not undergone surgery for the pain, and reports some to moderate relief from previous treatment with electrical stimulation, heat therapy, and traction. Bed rest has worsened the pain. He currently receives worker's compensation. The current medication is listed as ibuprofen, three to four times per day, which provides little relief.

Mr. A. experiences pain as having entered his life like a bandit who has taken over his body and disrupted what was an orderly, predictable, well planned life. The nature of the pain varies. At times, it (1) seems synonymous with his "self," (2) seems synonymous with his body, or (3) seems to have a separate identity (Mr. Pain). When synonymous with himself, the pain implies there is something wrong with or defective in himself. When it is synonymous with his body, it is seen as separate from the his "self." When it has a separate identity or is synonymous with his body, it cuts him off from family, friends, work, and future while engendering strong emotions. Previously held beliefs about how the world works, especially the medical profession, have been challenged, and no new order has been established. He had coped with a chronic heart condition for twenty years, but the experience with chronic pain is quite different and will not yield to the techniques and strategies that were successful in his previous crises and challenges.

Participant 2

Mr. B is a married man in his mid-forties who was interviewed upon admission to an inpatient pain center. He and his wife have three children, a daughter who lives in the Western U. S., and two sons of high school age who reside in the home. Although he did not

graduate from high school, he worked in the printing trade for over twenty years. The pain began after an injury at work which occurred twenty-six months before the interview. He indicates that his pain is always present although the intensity varies. He has undergone three surgeries for the pain and obtained some relief. Bed rest also provided some relief while electrical stimulation, heat therapy, and traction did not help. He currently receives worker's compensation which is not satisfactory. His only medication is listed as Tylenol with codeine, five or more times daily according to a schedule, which lessens the pain for one to two hours.

Mr. B experiences himself as a person with pain whereas he was previously an active "doer" for others. Before the pain began he did things for and with his family and other people. He had overcome difficulty in reading by relying on mechanical and mathematical abilities, and learned to adapt quite well. The pain has limited his ability to do for and with others. As a result of the limitation, Mr. B is not able to provide the material things, financial support, and activities he values for his family. This is seen as hurting the other family members. Family, friends, and self are also hurt by his "saying things he should not" due to tension, irritability, and bitterness. To avoid being sarcastic, he withdraws, which may hurt himself, or others, or both.

Participant 3

Mr. C is married man in his early thirties who was interviewed upon admission to an inpatient pain center. He obtained a general equivalence degree in lieu of high school graduation, and was employed as a truck driver for several years. Currently in his second marriage, he is a stepfather to a son and daughter. His ex-wife does not allow him to see a daughter by his previous marriage. Mr. C was injured on the job approximately twenty-four months prior to the interview. No surgery has been performed, but some relief is reported from nerve blocks, electrical stimulation, heat therapy, and bed rest. Traction was not helpful. Tylenol is the medication Mr. C prefers, but he reports taking it once a week or less. It usually lessens the pain for two to four hours. Currently, Mr. C receives no financial compensation although he hopes to receive a settlement some time in the future.

Mr. C views the pain as an aspect of himself that prevents him from engaging in his former activities. He has drastically changed from an action orientation to a sedentary one as a result of the pain and feels somewhat diminished in his view of himself and in his role in the family. The pain has brought some welcome changes to his life. He finds himself reading and thinking more, and he has reprioritized his life by placing more value on his family. Unfortunately, the pain

has also brought some unwelcome changes as it limits what he can do for his family financially, and limits his physical interaction with others.

Participant 4

Ms. D is a married woman in her late fifties who volunteered for the study upon her second admission to an inpatient pain center. The first admission to the same center occurred six years before. She is a high school graduate who worked as a private secretary for many years. Three sons are all in their thirties, but none reside with her. She indicates her pain is always present although the intensity varies. Surgery has been performed eight times and provided some relief. Heat therapy and bed rest also provide some relief. Nerve block injections and electrical stimulation have not helped. Medication is taken five or more times per day on a regular schedule, but provides little or no relief. Medications include aspirin, Advil, Darvocet, Parafon Forte, and an antidepressant. Current income includes social security benefits and an unspecified source.

Ms. D experiences pain, and the larger world, in an interpersonal context. She sees it as a child when it is manageable, but as a "pain man" and "foreigner" when it is stronger. Pain is also seen as being similar to an alcoholic, and parallels between pain and her alcoholic husband are apparent. Ms. D copes with the pain by attempting to peacefully coexist with it while maintaining superiority over it. She fears it dominating and controlling her. Rather than give in to the pain, Ms. D reaches out and helps others, many of whom are in worse condition than she.

Participant 6

Ms. F is a woman in her early forties who volunteered for the study in response to a newspaper advertisement. She recently graduated from college and is actively job hunting. Although not currently married, a long-term relationship with a man predates the onset of severe pain. Ms. F has two adult children who do not reside with her. Low back problems have existed since she was age fourteen, but became severe she fell down a flight of stairs about six years ago. A subsequent spinal fusion provided moderate relief and no further surgery was undertaken. Extensive relief has been obtained from chiropractic treatment, and psychotherapy. Heat therapy and bed rest have provided moderate relief. Ms. F takes no medication for her pain. No financial compensation has been received as a result of the injury.

Ms. F views her pain as both a part of her and as something she chooses to view as separate. Pain is intimately interwoven with activity, stress, and depression. Stress leads to pain, overactivity leads to pain, inactivity leads to pain and depression, pain leads to depression, depression leads to inactivity and stress, and low to moderate pain leads to activity. When pain or the factors that lead to it become severe, she feels rather small in size not being able to stand up straight, moves cautiously, and becomes inactive. Activity begins again once the pain goes away or becomes less severe. Pain acts as a signal for her to alter her activity. Activity, inactivity, and seeing the pain as separate are used to modulate the pain, stress, depression, and the impact of these factors on her self-view. Viewing the pain as separate from herself seems to be a difficult but useful means to regulate pain. The level of pain is not directly linked to interactions with other people, but is indirectly linked through the stress they may induce.

Participant 7

Ms. G is a single woman in her early forties who volunteered for the study in response to a newspaper advertisement. She is a college graduate with an advanced degree in education. Her pain began six and a half years ago subsequent to a lifting and pushing injury in the factory where she works. She has not had any surgery for the pain, but reports extensive relief from acupuncture, and some relief from chiropractic treatment, heat therapy, and bed rest. Medication is used once a week or less often and consists of Tylenol with codeine or aspirin. No financial compensation has been received as a result of her pain.

Ms. G experiences the pain as a part of her affecting her bodily functioning. As the pain becomes more severe, it becomes more separate and is viewed as threatening like a monster or poison. She seems to have forgotten much of what she was like before the pain, and views pain as a challenge to be met from day to day. Physical treatments such as acupuncture, acupressure, and keeping active are used extensively. The pain implies an unwanted and feared future of increased dependence concomitant with a worsening physical condition.

Participant 8

Ms. H is in her late thirties and volunteered for the study in response to a newspaper advertisement. She continued her studies after obtaining a G. E. D. degree and worked for several years as a secretary. This work was abandoned because of pain, and she currently cares for children and the elderly. Ms. H is a divorced mother of

three sons, one of whom lives with her. The pain began twenty-two years ago after an automobile accident. No surgery has been performed, but she reports extensive relief from chiropractic treatment, and some relief from heat therapy and bed rest. Medication is used once or less per week as needed and consists of Tylenol or Motrin which usually makes the pain less for about five hours. Ms. H is self supporting and has received no financial compensation for her pain.

Ms. H sees the pain as both a part of her and as having qualities of being a separate entity. Pain is usually identified with her body, and both are viewed as distinct from her. Pain acts to limit activity, and she reacts by ignoring it while giving it respect, and maintaining as high a level of activity as possible. She also maintains a positive attitude and focuses on what she can do as opposed to what is lost. She believes that eventually the pain will overcome her body and curtail the ability to do things. The inevitability of this process can be delayed by moderately forced activity in the present.

Participant 9

Mr. J is a man in his late forties who volunteered for the interview in response to a newspaper advertisement. Since graduating from high school, he has pursued some additional schooling. Mr. J is married, but he and his wife have no children. He currently does volunteer work at a mission, and until recently, did some administrative work at his church. The work is roughly equivalent to full time employment although he is not paid. The pain is not related to an injury, but seems secondary to a more extensive problem, the nature of which is undefined. Heat therapy provides some pain relief, but electrical stimulation, acupuncture, chiropractic treatment, and bed rest have not helped. Medication is avoided due to ineffectiveness. No financial compensation has been derived from the pain.

Mr. J views the pain as both separate from himself and as a part of himself. Pain is there and must be coped with. It arises from some process that seriously affects his body, and serves as a friendly enemy against which he must struggle. In many ways it is associated with his body, while his "self" is more identified with his mind. The current situation is coped with by maintaining activity, ignoring the pain, and relying on humor.

Participant 10

Ms. K is a divorced woman in her mid-forties who volunteered for the study in response to a newspaper advertisement. She is a high school graduate who has worked for several years in a professional capacity. She is the mother of four children. Only her eighteen year old daughter lives with her, while three sons live independently. The pain began about four and one-half years before the interview when her foot was crushed by a falling object. It currently extends from her lower back down her right leg and foot. Two operations have provided some relief, while nerve blocks, heat therapy, bed rest, and psychotherapy have provided extensive relief. Moderate relief has been obtained from chiropractic treatment and electrical stimulation. Tylenol or Darvocet are used once per week or less often, and usually make the pain less for four to six hours. Financial support is obtained from employment and continuing worker's compensation. Ms. K has already sued and settled.

Ms. K sees the pain as having transformed her life for the better. She reports that it initially was like a depriving monster that aroused considerable anger. Her efforts to gain control over the pain slowly transformed her from an abused, controlled wife into an independent, autonomous person. Currently, the pain is seen as a friendly though inconvenient aspect of living that has brought her more rewards than it has taken away. Pain is closely identified with her body, but the way in which she modulates and reacts to it has become the model for attending to other aspects of her life.

Participant 11

Ms. L is a woman in her mid-thirties who volunteered for the study upon admission to an inpatient pain center. She is married and has two daughters, ages fifteen and twelve. Ms. L did not graduate from high school, and was employed as a cook until the onset of her pain eleven months prior to the interview. No identifiable cause for the pain had been found. Two surgeries have been performed but neither relieved the pain. Some relief has been obtained from heat therapy and traction. Tylenol with codeine usually makes the pain less for one to two hours, and is taken regularly by the clock. No financial compensation has been received or is expected for the pain.

Ms. L views the pain as a mysterious intrusion into her life that controls and limits her activities. At times, it seems like a voice or being telling her what she can and cannot do. The pain's causes and meaning for her future are unknown. Ms. L is searching for a way to understand the pain that will help her know how to get rid of it,

or at least to react to it appropriately. She would like her life to return to the pre-pain style as much as is possible.

Participant 12

Mr. M is a man in his early forties who volunteered for the interview in response to information forwarded to him by his physician. Although he did not finish high school, Mr. M did obtain an equivalency diploma. He is married and has three children, one of whom lives independently. His major employment has been as a truck driver. His pain began four and a half years ago subsequent to an injury on the job. Three operations, each of which provided extensive pain relief, have been performed. Bed rest has also brought some relief, but nerve blocks, electrical stimulation, chiropractic treatment, heat therapy, and traction did not help. Medication is taken as needed and includes aspirin and Darvon which usually reduce the pain for one to two hours. Mr. M currently receives Social Security and pension benefits, and indicates he plans a law suit because of his pain.

Mr. M views his pain as being closely linked to depression. Both are difficult to manage. The pain has taken away his future, his livelihood, and has put him and his family through numerous changes. Positive changes include increased sensitivity to others and closeness within the family. Negative changes include a loss of (1) a future toward which to work, (2) a sense of purpose, and (3) his place in the family. Mr. M attempts to cope with the pain by limiting his activity, but that becomes boring and depressing. To break the boredom and depression, he engages in activity, but increased pain results. This may be acceptable unless it reaches too high a level and the pain and depression take over. Suicidal ideation has also been present.

Participant 13

Mr. N is a man in his early fifties who volunteered for the study in response to a newspaper advertisement. He lives with his wife and three children, ages nine, sixteen, and seventeen; and has two children who live independently. The pain began approximately three months before the interview subsequent to a lifting injury at work. He is currently on sick leave, but receives no other financial compensation. No surgery has been performed, but some relief has been gained from bed rest and electrical stimulation. Medications include ibuprofen, Tylenol with codeine, percodan, and Elavil, taken regularly by the clock. He reports they provide little relief.

Mr. N sees the pain as a bodily phenomena having many parallels with his diabetes. Pain can be harsh and punitive if out of control, but is always present. It increases his dependence on others, especially physicians, which he resists. He sees himself as somewhat separate from his body with both the pain and the external world posing challenges to his sense of control. Coping strategies consist of adapting to the limitations imposed by the pain, and controlling himself, his environment, and factors that might increase the pain as much as possible.

Participant 14

Ms. P is a woman in her early forties who was interviewed upon admission to an inpatient pain treatment center. She is a high school graduate who has worked as a homemaker for her family. She is married and has six children, four of whom live independently. Back pain was first experienced twenty years ago, but was alleviated by surgery. Approximately four years ago, she experienced a neuropathy in her legs which lasted about a year. The current pain episode began approximately two months before the interview, and is believed to be due to the scar tissue growth. She reports numerous other surgeries, but none have been for her current pain problem. Moderate relief is derived from electrical stimulation, while heat therapy and bed rest provide some relief. The medication used is codeine which is taken three to four times per day, as needed. It usually lessens the pain for two to four hours. No financial compensation has been gained from the pain.

Ms. P views the pain as a constant, unpleasant presence that is a part of her, but which seems like an alien or foreign object that has attacked her body and disrupted her functioning. The pain has affected how her body works, how she functions in the family, how she thinks, and the kind of emotions she has. Few things decrease the pain or help her cope with it. It seems less obvious when she is distracted by other people, but remains ever present. She would like to find a way to get rid of it, but recognizes it may be with her for the rest of her life. She has not yet found a way to help her live with the pain.

Participant 15

Mr. Q is a man in his early forties who volunteered for the study upon admission to an inpatient pain treatment program. He is married and has five children, one of whom lives independently. A high school graduate, Mr. Q has been employed as a skilled mechanic in a large factory. His pain began as a result of his work activity about ten

years ago. Surgery provided extensive relief until about two and one-half years ago when another incident lead to paralysis of his left leg. The response to surgery was positive, but did not bring relief from pain or leg problems. The most recent episode appears to be a continuation of those problems. Surgery did not seem feasible, so he was referred to the pain center. Mr. Q reports that traction provides moderate relief, electrical stimulation provides some relief, while bed rest did not help. Medication is listed as Dilaudid and is taken one or two times per day. It provides little or no relief. He is currently on sick leave from his job and receives continuing worker's compensation payments.

Mr. Q relies upon strong religious beliefs to help him cope with and understand the pain. The pain is seen as part of his physical self which is separate from his spiritual self or soul. The pain feels like it is due to some mysterious external force. It is as though someone is using a voodoo doll to create the pain through a work of the devil. Pain is a phenomena of this world that must be endured. Knowing that heaven will be pain free is comforting. Mr. Q experiences suicidal ideation when he feels depressed and overwhelmed, but believes his religious beliefs have kept him from acting on those impulses.

Participant 16

Ms. R is a woman in her early sixties who volunteered for the study in response to a newspaper advertisement. Although she did not graduate from high school, she worked in a factory and attained a supervisory position before she stopped working because of the pain about seven years ago. Ms. R's husband of forty years died about three years ago. The two of them had six children, one of whom currently lives with her along with a grandchild. Originally, the pain just began for no apparent reason, and has been fairly consistent since her last surgery which was performed nine years ago, and an auto accident that happened seven years ago. Ms. R indicates she has had four surgeries for pain, which have provided some relief. Nerve blocks also provide moderate relief while heat therapy and bed rest bring some relief. Traction and osteopathic treatment did not help. Tylenol with codeine is the prescribed medication which is taken several time per week on an as needed basis. It always makes the pain less for two to four hours. She receives financial compensation from private insurance and Social Security benefits, and reports having sued and settled.

Ms. R views the pain as a part of her body, a part with which she must live day to day. Pain alternates with pain free periods, but can appear suddenly for no apparent reason. The pain makes her body feel heavy and of limited use, and she responds by lying down while using

an electrical stimulation (TENS) unit. Another reaction to pain is to withdraw from contact with others and isolate herself until the pain passes. She struggles against the pain and possible confinement to a wheel chair by keeping as physically active as possible.

APPENDIX G

CODING MANUAL: THREE THEMES OF THE EXPERIENCE OF CHRONIC PAIN

The chronic pain experience is not limited to the perception of bodily pain. Instead, it affects a person's entire life. The experience can be viewed as involving three major themes:

Experiencing Pain, Dealing with Chronic Pain, and Impact of Chronic Pain.

Theme One: Experiencing Pain

The first theme relates to Experiencing Pain in bodily and emotional terms. Parks (1987) found that painful emotional experience can be understood by noting its source and major theme. An adaptation of her coding system is presented to aid in identification of this theme. You are not coding the units for their theme and source. This information is provided only to help you rate the Experiencing Pain theme. The major themes are:

1. Hurting or being hurt by being injured or wounded emotionally or bodily.
2. Frustrating oneself or being frustrated by being cramped or blocked.
3. Shocking or being shocked or stunned.
4. Lacking or being deprived by being weak, physically deprived, or loss of ability to function.
5. Straining or being strained by inability to relax, excessive demands, or over exertion.

6. Confusing oneself or being confused by not understanding actions of others, or one's relationship to the world.

There are three perceived sources for the experience of pain. Oneself or body, may be identified as the source through inadequacies, inabilities, actions, or thoughts that affect the self. A second source is in the perceived actions of other people. The third source lies in the nature of the world in general. Familiarity with these themes and sources can be helpful in identifying Experiencing Pain units. The relationship between themes and sources is summarized in Figure G-1.

The experience theme includes descriptions of what happened or is happening to a person.

Examples:

1. The pain is something that's pretty hard to live with. Since I was in here before, the intensity of it has got extremely worse. It's twenty-four hours a day.
2. During rainy damp weather, my back will ache constantly, similar to a constant toothache. Cold weather bothers my arthritis and that doubles the pain. In humid weather, the pain in my back gets outrageous. My legs and ankles swell a lot.
3. I was in printing for over twenty years. . . I was production scheduler. The entire shop was my responsibility and I loved it. I got hurt working on a printing press. I couldn't produce like I had in the past, so they laid me off and replaced me with somebody else. Basically, I lost the job I had. . . My knowledge about printing is not doing me any good because I can't work.
4. Pain has not been very enjoyable. It's put a damper on my life. I've not been able to enjoy life, my wife, or any of that. Money-wise, everything has been rough. It makes a fellow stop and think about the things that you had and was able to do and it takes things away from you. A hell of a lot's changed and it takes a hell of a lot of adapting to get used to it.

Sub-Themes			
Focus	Accepting/ Facing	Maintaining/ Tolerating	Escaping/ Avoiding
Reflective Engagement	: 1. I can : have pain and : still find : life to be : worthwhile. : : : - - - - -	: 2. I keep : myself going : by using : fantasy, : rules, or by : making sense : of the pain. : : : - - - - -	: 3. I can : block out the : pain through : fantasy, : watching TV, : or reading a : good book. : : : - - - - -
Reflective Disengagement	: 1D. I can let : go of some of : my awareness : of the pain : experience. : : : - - - - -	: 2D. I should : not dwell on : or think about : the pain or : its meaning. : : : - - - - -	: 3D. I try not : think about : it, I try not : dwell on it. : I block it : out. : : : - - - - -
Bodily Engagement	: 4. Being : active is : important to : me, helps me : cope, and : makes life : worthwhile. : : : - - - - -	: 5. I do : what I have to : do to get : through the : day, e.g., : stand up, sit : down, or move : around. : : : - - - - -	: 6. I over do : things to : spite the : pain, to try : to break : through it. : But it ends up : hurting more. : : : - - - - -
Bodily Disengagement	: 4D. I can do : calming, : relaxing : things that : let me : function and : accept the : pain. : : : - - - - -	: 5D. I can : passively do : things to my : body to get : some relief, : e.g., use a : heating pad or : medication. : : : - - - - -	: 6D. I try to : block out or : put the pain : aside with : medication, or : get rid of it : through : surgery. : : : - - - - -
Interpersonal Engagement	: 7. Involvement : with others : helps me feel : good and makes : my life : worthwhile. : : : - - - - -	: 8. Being : involved with : other people : helps me deal : with my pain. : : : - - - - -	: 9. Other : people might : help me get : rid of the : pain. : : : - - - - -
Interpersonal Disengagement	: 7D. Sometimes : I need to : withdraw from : others to face : my pain. : : : - - - - -	: 8D. Getting : away from : people helps : me cope with : my pain. : : : - - - - -	: 9D. With- : drawing from : other people, : prevents added : pain. : : : - - - - -

Figure H-1. Reproduction of Figure 1. Dealing with Chronic Pain:
A Matrix of Sub-Themes and Foci

5. I think I've been in a depression. I contemplated ending it all. I wanted to give up, still want to at times. I think the pain created frustrations, bitterness, and anger. I didn't have feelings like this before, feelings that you don't want to wake up, or you wake up and you can't get up unless you crawl, you don't walk, and you sit in a chair.

6. Sometimes the pain scares me because you wonder, is it something that's going to always be with you or cause something else to happen? You wonder when you go to bed at night if the next morning, am I going to be able to get up and walk? Or am I going to be crippled in some way? Cause they say it's the early stages of something but they don't know what it is. I always carry that fear that maybe they're holding something back. My doctor says he's not. You wonder what it is. I worry about it.

Theme Two: Dealing with Chronic Pain

The second major theme involves Dealing with Chronic Pain and its concomitant effects by doing or not doing something. Attempts to deal with chronic pain are not not necessarily successful. "Dealing" is an ongoing process, a struggle to come to terms with chronic pain and its perceived effects. You will be asked to rate the initial set of units only for the presence of this theme. You will be asked to rate the second set of units using the more detailed schema for this theme. Therefore, aspects of this theme will be described only briefly.

Dealing with Chronic Pain is one aspect of the experience of chronic pain. It can be recognized as being what people do in an attempt to cope or come to terms with a difficult situation. They may do something by moving or adjusting their bodies, by not moving, by relaxing, by seeking others, by reflecting on their situation and trying to understand it in a new way, by distracting themselves from

it, or by engaging in fantasy. This is not an exhaustive list. More details are available in Appendix H.

Examples:

1. Pain is part of your whole being, it's with you constantly. It's another dimension within your body, like having three legs instead of two, you learn how to deal with it. It's not going to go away so you work with it, know your limitations, and know it's there. [This represents a way of thinking about or understanding pain].
2. This body is going to be buried in the ground and destroyed. Pain and suffering is of this world. As long as I'm here I'm going to have it. The pain belongs to this body but it don't belong to my soul. Pain has no part in the here-after. [This represents a way of thinking about or understanding pain].
3. In the last three years, my movement is more limited and the pain is more intense. You move a little slower. You don't just bounce right up and go. Some mornings you crawl into the bathroom and get a hot shower going so it will limber you up. You can't stand up straight and you walk kind of funny until you get moving. Some days you don't function. You may say I'm going to get up and do it today, but the legs don't move.
4. You do a little something and you pay for it later with pain and not sleeping there's some days I can do more than other days and those days I go out and do it. The next day I feel as bad, if not worse, for going out and doing something.
5. I've always been people oriented. . . And my obligations to other people have kept me going that I haven't given up and just let the pain take over.
6. I have no patience with anybody, I don't want them to talk to me because I'm so touchy or grouchy, I'll bite their heads off. . . I don't mean to be that way so I have a tendency to withdraw.

Theme Three: Impact of Chronic Pain

The third major theme involves the ongoing "Impact" or effect of chronic pain on a person's life. These units may be readily identified by content reflecting changes in a person's way of

relating to his or her self/body, others, or world. Two major sub-themes may be identified. In one, the impact may be viewed as beneficial or valuable. The person might mention becoming more thoughtful, understanding of self, sensitive to or open with others, or having an increased understanding of life and the world around him or her. The second sub-theme applies when the impact is seen as damaging. The content may reflect a sense of the self or body as being weaker, less able to do things, out of control, or more uncertain. The person may feel more isolated or withdrawn from others, feel he or she has lost his or her role among family and friends, or doubt he or she could regain the role vis-à-vis others. The person may perceive the world as changed for the worst, bleak, empty, or untrustworthy (Parks, 1987). The impact theme is summarized in Figure G-2.

Examples:

1. Now I'm getting along. I have a lot of trying times. But I'm making my way through slowly. When I have to realize it ain't going to go away tomorrow or next week, that makes it harder.

2. Before, I never stopped to think about anything... Sometimes, I sit around and examine my feelings. It put my priorities where they should be, I reckon. It's let me stop and look around at things I've done and wish I hadn't done and things I would like to do. It's kind of balanced itself out. Of course, the pain's bad. It's not good for you. But I think a lot more now than I used to... I think I've got more in touch with myself. The frustration were probably there before but I didn't have the time to sort them out.

3. My whole life was changed. I'm a different person, and I don't want to be. I was an active person, I enjoyed doing a lot of things before pain and after pain you're limited in what you enjoy and how you enjoy it.

Sub-Theme				
Focus	Damaging		Valuable	
Body/Self	:	Weaker, less able to	:	Oneself is seen as
	:	do things, less	:	stronger, more
	:	competent, out of	:	competent, more able
	:	control. More	:	to survive. Self
	:	uncertain, less	:	understanding and
	:	confident, shame	:	awareness is
	:	over one's	:	increased.
	:	condition, less self	:	
	:	esteem.	:	
	:		:	
Others	:		:	
	:	More withdrawn,	:	More open with and
	:	isolated, reclusive.	:	to others, increased
	:	Belief the one's	:	understanding of
	:	past role in relation	:	others.
	:	to others cannot be	:	
	:	as good as before.	:	
	:		:	
	:		:	
	:		:	
World	:		:	
	:	The world is empty,	:	Increased
	:	untrustworthy, the	:	understanding of
	:	future is	:	limits and
	:	unacceptable.	:	possibilities of
	:		:	life and the world.
	:		:	

Adapted from Parks (1987) with permission.

Figure G-2. Impact of Chronic Pain: A Matrix of Sub-Themes and Foci

4. Before, you had something to live for--vacation, work. And you knew what you had to do all week. But now, you've got nothing to look forward to. I can really get thinking I'm going to be all right, able to get back in to the mainstream. Then you get down for two or three days. The longer it goes, the more doubt and depression set in and it's like you're fooling yourself. Deep inside you, you quit looking ahead, you think, "It ain't going to get no better, it's going to get worse". I'm going to have that pain again." And that brings you down.

APPENDIX H

CODING MANUAL: DEALING WITH CHRONIC PAIN

Three Sub-Themes

Accepting/Facing

There are two major dimensions involved in seeking mastery. One is the theme, goal, or intentionality of an attempt to deal with chronic pain. The second is the focus of the attempt. There are three sub-themes related to the "Dealing" theme. The first is ACCEPTING/ FACING. Accepting pain implies accepting it and its concomitant limits as a part of oneself and one's life. Implied is a recognition that life, even with pain, is worthwhile and acceptable in comparison to death. The pain may be seen as unwelcome or undesirable, but the overt attempt to rid oneself of pain is not present. Instead, a person works with it. The person views him or her self as a person-in-pain or a person-with-pain. The pain is more synonymous with the self.

Accepting/Facing can take different forms. An unusual form appears in meditation and relaxation where the person no longer takes notice of pain or anything else. In a more active state, a person may be in a pleasant mood and just not notice pain. This is different from blocking out pain. There is acceptance but pain is not focal or "figural," instead it becomes part of the "ground." "Testing the limits" or pushing oneself would be given this coding when the consequences of increased pain are accepted and faced.

Facing is a related concept, but is more of a coming to grips with pain by being aware of it, meeting it "face-to-face." In such an encounter pain is focal or figural. Facing is likely to occur when the intensity of pain has increased and demands one's attention. It is also seen when a person monitors his or her body for pain--a "listening to pain"--to work with it and accommodate its presence. Facing always is associated with accepting, and acceptance always implies pain has been faced sometime in a person's life.

Maintaining/Tolerating

The second goal or theme is MAINTAINING/TOLERATING. The pain may be seen as part of the self yet separate, like a friendly opponent, unwelcome guest, or an occasionally unruly child. The major difference between this category and accepting/facing is a an absence of acceptance. Instead, the person is putting up with it. Maintaining implies a stasis, a holding onto the status quo, or resisting against giving in to pain. There is an effort to control and manage pain and not let it get out of hand, or to prevent it from becoming more intense. There is a sense of being on the edge of an abyss of pain, struggling to climb out of or stay out of the abyss for as long as possible, knowing that eventually one will slide back into it. It is what a person does to find enough psychological stability to continue existing. Some forms of seeking relief would have this classification if the goal is a temporary reduction which gives a person breathing room. If the goal is to get rid of pain, it would be

better classified as Avoiding/Escaping. Tolerating involves a sense of outlasting or out-enduring pain. It is more like being in the abyss waiting for the opportunity to climb out.

Escaping/Avoiding

The third sub-theme or goal is ESCAPING/AVOIDING. The pain is not seen as part of the self, and is alien or "not-me." Escaping implies an attempt to push pain away from oneself, break free from it, obliterate it, toss it away, or put it some place else with a goal of becoming pain free. These attempts to deal with pain can often be recognized by an expressed desire to "get back to normal" or "get better," where normal or better is a pain free condition. Avoiding is more an effort to put a barrier between oneself and pain, to block it out, to cover it up, or ignore it.

Foci and Sub-Theme/Focus Combinations

There are three foci pertinent to participant's attempts to deal with pain. Each focus has two subdivisions labeled "Engagement" and "Disengagement." The subdivisions are not separate foci. Disengagement is always a special type of engagement where the emphasis is on not doing something, not thinking something, or not being with others. For some of the combinations, examples of disengagement are quite rare.

The next section discusses the relationships between these foci and sub-themes in detail, after giving a general description of each focus. This section can be used to code the units for their theme and

foci. The interrelationships between the foci and the themes or goals can best be understood by examining Figure H-1.

Reflective Engagement/Disengagement

The first focus involves reflection or thought. In REFLECTIVE ENGAGEMENT, a person may direct her or his thoughts, formulate rules for living, fantasize, describe relationships, or make sense of personal experience. REFLECTIVE DISENGAGEMENT implies a purposeful not-thinking about something. Examples of the latter include meditation (which also has a strong body focus), not dwelling on pain, or avoiding thinking about pain so it seemingly does not exist.

1. ACCEPTING/FACING THROUGH REFLECTIVE ENGAGEMENT.

The emphasis for Reflective Engagement is on thinking about oneself in relation to pain, the world, or others so the chronic pain experience is accepted and faced. The focus is on thinking or reflective activity in which pain or other aspects of the experience are seen as part of oneself, as an aspect of living. The person may be focused on pain, or be unaware of it in the way one is unaware of one's arms or legs. The person may recognize and accept a different relationship to the world through a job or family role change.

Examples:

A. Pain is part of your whole being, it's with you constantly. It's another dimension within your body, like having three legs instead of two, you learn how to deal with it. It's not going to go away so you work with it, know your limitations, and know it's there.

Sub-Theme						
	I. Hurting/ Being HURT	II. Frustrating/ Being Frustrated	III. Shocking/ Being Shocked	IV. Lacking/ Being Deprived	V. Straining/ Being Strained	VI. Confusing/ Being Confused
Focus						
Self/Body	1. I hurt : someone and : I feel bad. : : : : : : : : : : : : : :	4. I can : not get it : done. : : : : : : : : : : : : : :	7. I am : surprised : at, and/or : disappointed : in myself. : : : : : : : : : : : : : :	10. I am : weak and/or : inadequate. : : : : : : : : : : : : : :	13. I can : not relax : and feel : content. : : : : : : : : : : : : : :	16. Who am : I? What can : I expect : from myself? : : : : : : : : : : : : : :
Others	2. Someone : is attacking : me. :	5. Someone : is thwarting : me. :	8. Someone : has betrayed : me. :	11. Someone : is not with : me; I am : isolated, : alone, and : miss what : they could : give me. :	14. Someone : is demanding : too much of : me. :	17. Someone : is confusing : me; I do : not know : what they : mean or how : to interpret : their : actions. :
World	3. The : world is : dangerous to : me. :	6. The : world is : against me : in my ef- : forts to : reach my : goal. :	9. The im- : possible is : happening; : the world is : not as I had : thought. :	12. The : world is : empty for : me; I am : alone in the : world. :	15. Life is : too much; I : don't want : to have to : deal with : it. :	18. The : world is : strange and : unfamiliar. : I do not : know what is : going on or : what to : expect. :
Physical Analogy	BEING INJURED OR WOUNDED	BEING CRAMPED OR BLOCKED	BEING SHOCKED OR STUNNED	BEING WEAK, PHYSICALLY DEPRIVED; LOSS OF FUNCTION OR LIMB.	BEING STRAINED PHYSICALLY, OVEREXERTION.	FALLING; BEING DIS-ORIENTED.

Adapted from Parks (1987) with permission.

Figure G-1. Experiencing Pain: A Matrix of Sub-Themes and Foci

B. You have to decide whether you're going to let the pain win and rob you of the precious things you can do in life, or if you accept it and say, "It's there, but I'm going to take it and do what has to be done." I feel you have to adjust your way of thinking.

C. I got to get myself oriented to something else, some other goal. I haven't figured out exactly what it's going to be yet. I'm looking, but I just haven't come across it yet. I'm not going to give up. It might not be what I wanted it to be in the start, in the beginning, but I'm going to do something, I'm not sure what.

D. You can't sit around and feel sorry for yourself. You've got to keep moving forward cause if you don't you might as well point a damn gun to your head and end it. [A rule or guideline for living].

1D. ACCEPTING/FACING THROUGH REFLECTIVE DISENGAGEMENT.

The focus is on not thinking or reflecting about pain or one's situation in such a way that pain is accepted. The best examples of this include a strong bodily component such as meditation or relaxation.

Examples:

A. I meditate fifteen minutes once or twice a day to keep my stress level down. If I'm in pain while I'm meditating, I try not to be aware of it. And usually after meditation the pain level has gone down because I'm not tense and irritated about it.

B. I don't think about tomorrow. I'm not going to think about how to handle it until it's here. Then I'll deal with it. I find it's more relaxing than thinking about next week or two days from now. I would be more disappointed if I planned on something and then physically I couldn't do it.

2. MAINTAINING/TOLERATING THROUGH REFLECTIVE ENGAGEMENT.

The emphasis is on maintaining oneself or tolerating pain by making sense of pain, using fantasy, or devising rules for living.

Examples:

A. Now, I take one day at a time instead of a week at a time. It's kind of a disadvantage. Before what today brought, it brought. Now, you wonder what kind of day you're going to have tomorrow.

B. I try to keep my spirits up, but I get depressed. It's like being smothered, or like drowning. It's overcoming. Then I pray. That helps mentally, but beyond that, I'm still waiting.

C. I'm learning to take it a day at a time, and sometimes you take it a few minutes at a time because on a day that it's at its worst, if I can go five minutes with the sense of being pain free, it can be heaven.

D. Occasionally you see someone that's worse off than you are that are actually coping. Some don't but a lot do. It shows you that your situation is cope-able. It helps you keep pushing. [This is reflective since no relationship with a particular person is involved].

E. There have been times when my pain has been so bad it would have been easy to have given up, in fact, I've contemplated suicide a few times.

Note: Example "E" is coded as reflective engagement since it is a thought or contemplation that helps a person maintain oneself or tolerate pain. Reports of actual suicide attempts would be likely coded as bodily and/or reflective disengagement. None of the participants in this project reported any suicide attempts although suicidal thoughts were common.

2D. MAINTAINING/TOLERATING THROUGH REFLECTIVE DISENGAGEMENT

This category suggests an attempt to hold on by directing oneself to not think about or focus on the chronic pain experience. What is conspicuously absent is any self direction to do something else. An example is an admonition to not dwell on it.

A. I don't want to look on this pain as a constant thorn in my side. We all know it is but you don't want to dwell on it. . .
I don't have time for the pain to rule my life.

If this example said, "Don't dwell on it, think about something else," it would be coded as reflective engagement (either to maintain/ tolerate or to escape/avoid). If there was more urgency to the statement--for example, "when I have a lot of pain, I don't dwell on it"--it would be coded reflective disengagement through escaping/ avoiding.

3. ESCAPING/AVOIDING THROUGH REFLECTIVE ENGAGEMENT.

The emphasis here is on blocking out pain through thinking about something else such as fantasy, watching television, or reading a book.

Examples:

A. The pain feels like it's a foreign part or an object that has attacked my body. It's an "it" that doesn't belong there and I want it to go away. . . Thinking about it that way, I can think it's going to separate from my body and be gone. Where if I think about it as part of my body, then I'm stuck with it and I don't want to be stuck with it.

B. This body is going to be buried in the ground and destroyed. Pain and suffering is of this world. As long as I'm here I'm going to have it. The pain belongs to this body but it don't belong to my soul. Pain has no part in the here-after.

C. When I'm really hurting, I'll think what I would do if I hit the lottery and that makes me block that pain so I can get some sleep. Or I think of something that you'd enjoy doing. You try to ignore it.

3D. ESCAPING/AVOIDING THROUGH REFLECTIVE DISENGAGEMENT.

This category is quite rare. Some types of hypnosis will fall within this rubric, as will reports of attempts to not think about the

chronic pain experience where there is no indication of doing or thinking something else. The most dramatic form is total disengagement through suicidal acts. An example of an admonition against thinking about pain follows.

A. Since I've been hurt, I try to avoid feeling sorry for myself because I can real easy. I have a bad time when I get depressed and think about things I shouldn't. . . I have more trouble when I talk about what is wrong than I do anytime. If I don't have to talk about it, I feel a lot better.

B. I try not to think about it [pain], block it out. Just like there's nothing wrong and try to look forward like I used to, for tomorrow.

Bodily Engagement/Disengagement

The second focus is on the body. BODILY ENGAGEMENT implies the person is actively doing something in trying to master their pain. This includes exercise, bodily movement, work, or chores. BODILY DISENGAGEMENT implies the focus is on decreasing one's activity in an attempt to gain mastery. Examples would include meditation (which also has a strong reflective component), relaxation, monitoring one's body for changes, slowing down, surgery, or using medication, heating pads, or massagers.

4. ACCEPTING/FACING THROUGH BODILY ENGAGEMENT.

The focus here is on bodily activity with acceptance of pain or one's situation. There is a sense of working within one's physical limits and accepting the consequences if one exceeds the limits.

Examples:

A. I have gotten to where I go for walks nearly every day, about two miles. I do some stretching exercises or ride the stationary bike when my pain level is moderate to low. Whatever I can do comfortably, I do. But I do not go beyond that.

B. You control the pain by adjusting your body to what's going on. You learn how to deal with what you've got to the best of your ability. . . . You learn how to get up slowly, how to walk, how to set in a car, and how to bend.

C. I still can ride my bike at times but walking is a definite problem. But walking is the best thing for you. Swimming is great if you could just find a warm enough pool.

The last unit gives the sense that she engages in physical activity even though she has pain, that the activity is good for her. There is no sense of urgency to the activity: it is good in principle.

4D. ACCEPTING/FACING THROUGH BODILY DISENGAGEMENT.

This focus is rare. Meditation and relaxation are the most common and easily recognized forms, and both have a reflective component as well. The following example is a complex unit involving several themes. The portion that would be scored 4D involves accepting use of the shower to relax and get going, and the sense of a reduced level of activity implied by the contrast to "bouncing right up." Other codings might include "4" for acceptance/facing through bodily engagement, and "5" maintaining/tolerating through bodily engagement.

A. In the last three years my movement is more limited and the pain is more intense. You move a little slower. You don't just bounce right up and go. Some mornings you crawl into the bathroom and get a hot shower going so it will limber you up. You can't stand up straight and you walk kind of funny until you get moving. Some days you don't function. You may say I'm going to get up and do it today, but the legs don't move.

5. MAINTAINING/TOLERATING THROUGH BODILY ENGAGEMENT.

This category implies bodily activity to hold pain in check or keep it from increasing. This activity is more necessary and is more like drudgery.

Examples:

A. About the only thing that changes the intensity of it is by me arranging my body--getting up and walking, sitting in the chair for a little while or laying on the couch for a little while. At night time, wandering around, that eases it--doesn't make it go away. Makes it so that I can get a little more comfortable at times.

B. I'm really not sure what makes me get through every day and how I get through every day. It's just going through the motions and trying to get through every day. It's just there to do. You just got to keep going because there's nothing else at all.

5D. MAINTAINING/TOLERATING THROUGH BODILY DISENGAGEMENT.

This is the most commonly used disengagement category. This implies a focus on the body but with a passive, disengaged quality. Some surgery, much use of medication, and reduction in physical activity fall under this rubric.

Examples:

A. The surgeon told me that every time you go in, you grow scar tissue and that gets to be a problem. There were times I couldn't walk, but rather than be bed ridden, I was willing to go through another surgery. Some people take a gamble and I just happen to be one of those people.

In this example the surgery is seen as something that would help her maintain her functioning, with no mention of it being a means to get rid of pain.

B. The only way that I get very much relief is lay on a heating pad or take a hot shower, lay flat on the floor... I feel the

best when I'm taking a scalding hot shower. I take two or three showers a day.

C. I'm on every six hours pain medication. That makes it bearable, but it doesn't go away. Those last two hours get awfully long. I have a TENS [transcutaneous electrical nerve stimulation] machine that helps me get through those two hours.

D. The past two years, I've had muscle spasms. . . I tried to relax, but it didn't help, I didn't have any control over it. But muscle spasms if you relax, they do pass. You can put up with that that passes.

E. I feel I don't have time to tolerate the pain. . . I've slowed down. I've still got to slow down more. I wear out easier.

6. ESCAPING/AVOIDING THROUGH BODILY ENGAGEMENT.

The emphasis is on trying to escape from pain by out doing it, beating it in a physical contest, not accepting the changes in one's physical condition. These efforts are often made with anger at pain and are not successful. There may be a blatant disregard for limitations.

Examples:

A. I tried [doing] everything but ended up getting hurt more or end up in bed for a week.

B. Some days it's hard to accept the pain. That's when I push myself to fight the pain. It's like you get mad at the pain, and want to get even with it but end up hurting yourself.

C. You do a little something and you pay for it later with pain and not sleeping there's some days I can do more than other days and those days I go out and do it. The next day I feel as bad, if not worse, for going out and doing something.

In the last example, he does not accept the consequences of the activity, and instead feels bad when the attempt is not successful.

The goal of the attempt was to be like he was before, and escape the pain.

6D. ESCAPING/AVOIDING THROUGH BODILY DISENGAGEMENT.

The emphasis is on bodily inactivity or disengagement as a way of getting rid of pain. Bed rest would be one such example. Surgery or receiving a massage from someone fall within this category, but they also have interpersonal aspects. Suicidal attempts are another action that would be coded here as well as in other categories.

Examples:

A. Drugs and alcohol don't help. By the time it puts the pain aside, I'm so drugged that I'm totally knocked out. And that's not a quality life.

B. I went to a chiropractor to begin with. I had bad headaches and my head wouldn't move. He helped move my neck and head... My parents talked me into going to an acupuncture doctor. . . The acupuncture takes away the top level of the pain. [Note the interpersonal aspect of this unit].

Interpersonal Engagement/Disengagement

The third focus is on interpersonal relationships with others. ENGAGEMENT WITH OTHERS involves an awareness of both self and another person. Activities might include seeking others for advice, support, or reassurance; talking with others; or having them do something for you. DISENGAGEMENT FROM OTHERS involves purposefully curtailing one's interactions or withdrawal from interaction. Examples of the latter include curtailing the level of participation when pain increases, withdrawing from others so as not to hurt them (and feel remorse), or not engaging with someone who increases the stress level (and pain).

7. ACCEPTING/FACING THROUGH INTERPERSONAL ENGAGEMENT

The focus is on other people with a sense that being-in-relationship with others as important to living, accepting, and facing pain.

Examples:

A. When I start getting down, I focus on other people and help people in the hospital, who have terminal cancer, or are in the nursing home. . . Even though I feel rotten, it helps you feel good about yourself.

B. Now, whenever there is somebody in pain, I'm real sympathetic. I don't like to see anybody in pain. And I try to sort of talk them out of it. Let them talk to me about how they feel, and I'll usually talk them out of it a little bit. They feel better after they talk to me. I think if you talk about your pain and your symptoms and everything, you feel better.

C. In the past five or six months since I've been trying to get in the pain center. . . I've talked to a couple of people who have got on with their life, and that's what I want to do.

7D. ACCEPTING/FACING THROUGH INTERPERSONAL DISENGAGEMENT.

This disengagement category occurs rarely. The descriptive emphasis is on withdrawing from others to face and accept pain.

A. There's times when I am with my friends, I've got up and go lay down on the bed. . . and try and take care of it [pain] myself.

8. MAINTAINING/TOLERATING THROUGH INTERPERSONAL ENGAGEMENT.

The emphasis is on a person's ties to other people that help him or her hang on and keep going. Careful distinction should be made between these units and those coded "7" or "9" by attending to the goal of the activity. By definition, going to a pain clinic is seen

as seeking out professional others to help maintain/tolerate, or avoid/escape pain.

Examples:

A. I have a couple of grandchildren close by. I'm least aware of pain when I see their joy in doing or learning something. I keep going and fighting to not let it get the best of me because I want my children and my grandchildren to remember me as what I know I can be, as if I didn't have the pain.

B. I've always been people oriented. . . And my obligations to other people have kept me going that I haven't given up and just let the pain take over.

C. But talking with the doctors assured me that what I felt was there, it's just there's nothing they can do about it, which relieved me a lot.

8D. MAINTAINING/TOLERATING THROUGH INTERPERSONAL DISENGAGEMENT.

Getting away from people is seen as helpful in dealing with the pain. The focus is on withdrawing from others to allow a person to cope or maintain.

Examples:

A. Now, the personality change is more controlled. I might become withdrawn [around people] because you have to use a certain amount of your mental energies to cope with the pain.

B. Once I started getting control of my own life, my husband went berserk. . . It didn't take long before I realized that I had to get out of the situation because it was absolutely destructive.

The first example conveys a sense of disengagement while in the presence of others and use of reflective engagement to cope with the pain. The second example suggests that getting away from her husband helped her master pain.

9. ESCAPING/AVOIDING THROUGH INTERPERSONAL ENGAGEMENT.

The emphasis is on seeking other people who may help one escape or avoid pain. Psychologists, physicians, chiropractors, or other professionals are among those sought after. Family and friends are another source of help. The other person is seen as having the power or ability to help reduce or get rid of some aspect of the chronic pain experience. An example would be:

A. If I know of a way to make it better, I'd be all for it, that's the reason I'm here at the pain center. I haven't got nothing to loose--I've got everything to gain. I've made my mind up there's no way I'm going to live like this for the rest of my life. . . I'm going to get over this.

9D. ESCAPING/AVOIDING THROUGH INTERPERSONAL DISENGAGEMENT.

This is a rarely use category. By definition, it would involve escaping or avoiding some aspect of the chronic pain experience by moving away or disengaging from others.

Examples:

A. I have no patience with anybody, I don't want them to talk to me because I'm so touchy or grouchy, I'll bite their heads off. . . I don't mean to be that way so I have a tendency to withdraw.

Some general rules for coding may be helpful. Take the perspective of the participant, and code what they are trying to communicate. First, examine a thematic unit for its overall meaning. Separate the aspects related to "EXPERIENCING" and "IMPACT" from the "DEALING" parts, if the former are present. If the unit requires more than one code to identify the main components, more than one code should be assigned. Not every sentence or phrase needs to be coded.

Some phrases included in a unit may not be relevant to the rest of the unit and should be ignored.

NOTE: No judgement that one theme or goal is better than another is being made. The themes are descriptive of the ways in which people react to chronic pain. Actions related to a theme may help a person deal with pain in some situations while being detrimental in others.

VITA

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Mr. Erdmann was subsequently employed in the Psychology Department of Curative Rehabilitation Center, which is located in Milwaukee, Wisconsin. Responsibilities included work in a pain clinic treating people with chronic pain--especially low back pain and headaches.

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