This is to certify that the

dissertation entitled

The relationship between the stress appraisal process, coping disposition, and level of acceptance of disability.

presented by

Darlene Ann Grace Groomes

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Rehabilitation Counselor Education

Major professor

Date July 11, 2000

THE RELATIONSHIP BETWEEN THE STRESS APPRAISAL PROCESS, COPING DISPOSITION, AND LEVEL OF ACCEPTANCE OF DISABILITY

By

Darlene A.G. Groomes

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Counseling, Educational Psychology and Special Education

2000

ABSTRACT

THE RELATIONSHIP BETWEEN THE STRESS APPRAISAL PROCESS, COPING DISPOSITION, AND LEVEL OF ACCEPTANCE OF DISABILITY

By

Darlene A.G. Groomes

The transactional theory of stress and coping (Lazarus & Folkman, 1984) has served as a useful lens for examining the interaction between a person and his or her varying responses to situational demands. Despite this theory's helpful framework for understanding the coping dispositions that follow primary appraisals in the general population, evidence for people with disability is unavailable. It is important to know about the subjective meanings that people with disability assign to situational demands that elicit stress, and to understand to what extent their coping disposition and level of acceptance of disability relate to that stress response. The primary purpose of this study was to examine the relationship between the stress appraisal process, coping disposition and level of acceptance of disability for people with disabilities. The sample for this study consisted of 151 people with disabilities who were randomly selected and asked to complete four survey questionnaires. Data were collected in person from three distinct rehabilitation service settings in Michigan.

Principal components analysis in which all information from the newly developed Stress Appraisal Inventory for Life Situations (SAILS) instrument were analyzed and revealed five factor areas that depicted areas of stress appraisal for people with disabilities. These five factor areas became the basis for the stress appraisal process identified in this study.

Results of this study indicate that a person's coping disposition is related to two factors of stress appraisal, Intensity of Stress and Environment. A person's level of acceptance of disability is related to two different factors of stress appraisal, Challenge and Experience, despite the understanding that coping disposition and acceptance of disability were found to relate to one another among the participants in this study. Acceptance of disability did not mediate the theoretically recognized relationship between stress and coping. Post-hoc exploratory analyses were performed to begin to understand the relationship between the SAILS factors and demographic characteristics secured in this study.

This investigation is the first to empirically examine the stress appraisal process of certain psychosocial situations for people with disabilities, and the first of its kind to contribute to stress and coping theory by examining the relationship between stress appraisal, coping dispositions, and level of acceptance of disability. The findings of this study indicate that certain subjective meanings that people with disabilities attribute to stressful situations are related to particular ways of coping and levels of acceptance of disability. Implications for education, practice, and research are provided.

DEDICATION

To Tim and Lans for their undeniable love, support, and patience throughout this entire process.

ACKNOWLEDGMENTS

This dissertation and all the steps leading to its completion would not have been possible without the efforts of several people. I wish to give thanks to those people who have graciously helped me in this endeavor.

Specifically, I would like to express my gratitude to Dr. Michael Leahy, my major advisor and dissertation chair, for his endless encouragement and tireless guidance throughout this process. His tremendous amount of support ensured that my research progressed smoothly and without hindrance. His enthusiasm about the value of research was a generous gift.

In addition, I would like to thank my dissertation committee members: Dr. Nancy Crewe, Dr. Mark Reckase, and Dr. Kenneth Rice. I am grateful to each of them in immeasurable ways for the support they offered throughout the process.

I am also thankful to the various rehabilitation service agencies for providing open access to prospective participants in this study. Specifically, I am grateful to the state director, district managers, orientation leaders, and staff at the four field offices of the Michigan Department of Career Development-Michigan Rehabilitation Services; the director, independent living counselor coordinator, and staff at the Capital Area Center for Independent Living; and the director and staff at Michigan State University's Resource Center for Persons with Disabilities.

I am appreciative of those people who openly shared their expertise and experience with me as I formulated my ideas for this study. In particular, I am indebted to Dr. Donald Linkowski, Dr. Jan Wallander, and Dr. Norman Endler for taking the time

to talk with me about acceptance of disability, coping, and coping measures so that I could have a deeper appreciation for these concepts as they related to my study. I want to particularly thank Dr. Linkowski for generously offering the use of the Acceptance of Disability Scale free-of-charge for my research study.

Finally, for her support and willingness to talk through my thinking, I thank Dr. Rochelle Habeck. Even when she was no longer a member of my educational faculty, she continued to influence my personal and professional growth. I would be remiss to not express a special thank you to my family and friends for their endless support and understanding. My husband, Tim and dog, Lansing are wonders in this universe and I benefit from their love on a daily basis. I am forever grateful to them for so many things, but the hugs and licks on the cheek were most meaningful to me. My parents, in-laws, and siblings offered their love and support and I could not have accomplished this without them. Thank you.

TABLE OF CONTENTS

	Page
LIST OF TABLES	x
LIST OF FIGURES	xii
LIST OF ABBREVIATIONS	xiii
CHAPTER 1	
INTRODUCTION	1
Statement and Significance of the Problem	6
Purpose of the Study	7
Definition of Terms	8
Assumptions and Limitations	10
CHAPTER 2	
REVIEW OF LITERATURE	13
Stress and the Appraisal Process	14
The Coping Construct	24
Coping Disposition	29
Measures of Coping	32
Acceptance of Disability	35
Conclusion	38
CHAPTER 3	
METHODOLOGY	39
Participants	40
Instrumentation	42
Procedures	54
Data Analysis	55
CHAPTER 4	
RESULTS	60
Participants	60
Characteristics of the Sample	61
Principal Components Analysis	70
Stress Appraisal Factors	71
Psychosocial Situations that Evoke Stress Appraisal	81
Stress Appraisal and Coping Disposition	82
Acceptance of Disability and Stress Appraisal	86
Acceptance of Disability and Coping Disposition	88
Acceptance of Disability as a Mediating Variable	90

Page

CHAPTER 5
DISCUSSION..... 97
The Appraisal Process..... 97
Stress Appraisal Process and Psychosocial Situational Demands..... 100
Stress Appraisal Process and Coping Disposition..... 101
Acceptance of Disability and Stress Appraisal Process..... 105
Stress Appraisal Process, Coping Disposition, and Acceptance of Disability..... 107
Post Hoc Analyses..... 109
Assumptions and Limitations..... 112
Implications for Education..... 113
Implications for the Rehabilitation Counseling Practice..... 114
Suggestions for Future Research..... 116
Conclusions..... 118

APPENDICES

A. LETTER OF INVITATION TO PROSPECTIVE MSU-RCPD STUDENTS..... 121

B. CONTACT INFOMRATION FOR PREVIEW COPY OF THE CISS..... 124

C. ACCEPTANCE OF DISABILITY SCALE..... 126

D. DEMOGRAPHIC AND GENERAL INFOMRATION QUESTIONNAIRE..... 135

E. STRESS APPRAISAL INVENTORY FOR LIFE SITUATIONS..... 137

F. CONSENT FORM..... 154

REFERENCES..... 157

LIST OF TABLES

Table		Page
1.	Stress Appraisal Subscales for the Stress Appraisal Inventory for Life Situations	47
2.	Participants Categorized by Service Setting and Area	62
3.	Demographic Characteristics of the Sample	65
4.	Age Variable	66
5.	Type of Disability Characteristic of the Sample	67
6.	Total Years with Disability Variable	68
7.	Participants Categorized by Gender, Race, and Years with Disability	69
8.	Component Eigenvalues, Percent Variance, and Cronbach Alphas Based on Principal Components Analysis	72
9.	SAILS Factor 1: Temporal Stress	74
10.	SAILS Factor 2: Person	76
11.	SAILS Factor 3: Environment	78
12.	SAILS Factor 4: Challenge	79
13.	SAILS Factor 5: Experience	80
14.	Relationship between Standard SAILS Score and Psychosocial Situation	82
15.	Means and Standard Deviations of SAILS Factors for Coping Disposition	84
16.	Tukey's HSD Comparisons of Coping Disposition for the SAILS Factors	85
17.	Range of Raw Scores for Levels of Acceptance of Disability	87

Table Page

18. Correlation Matrix among the SAILS Factors to Acceptance of Disability..... 87

19. Multiple Regression of SAILS Factors on Level of Acceptance of Disability..... 88

20. Descriptive Statistics of Acceptance of Disability for Coping Disposition..... 89

21. Tukey's HSD Comparisons of Coping Disposition for Acceptance of Disability..... 90

22. Significant Relationships among the Demographic Variables..... 91

23. Correlation Matrix among Coping Dispositions, SAILS Factors, and Acceptance of Disability..... 94

24. SAILS Factors..... 98

25. Comparison of Significant Relationships among the Three Variables..... 109

LIST OF FIGURES

Figure		Page
1.	Scree Plot of Eigenvalues from Principal Components Analysis.....	70
2.	Mediational Model of the Three-Variable System.....	107

LIST OF ABBREVIATIONS

AD..... Acceptance of Disability Scale

ANOVA..... Analysis of Variance

CACIL..... Capital Area Center for Independent Living

CISS..... Coping Inventory for Stressful Situations

DGIQ..... Demographic and General Information Questionnaire

MANCOVA..... Multivariate Analysis of Covariance

MANOVA..... Multivariate Analysis of Variance

MDCD-MRS..... Michigan Department of Career Development-Michigan Rehabilitation Services

PCA..... Principal Components Analysis

RCPD..... Resource Center for Persons with Disabilities

SAILS..... Stress Appraisal Inventory for Life Situations

SPSS..... Statistical Package for the Social Sciences

Chapter 1

INTRODUCTION

Times of uncertainty and difficulty often reveal how people cope with stress. Much of the stress and coping literature addresses the notion that all human beings encounter difficult situations and employ strategies for dealing with and lessening perceived stress. Antonovsky (1980) maintained that stressors are an inherent part of the human experience. He further suggested that understanding the subjective meaning of life situations is not important because of the ubiquitous nature of stressors. Because stress and tension inundate human reality, it is not important, perhaps even not useful, to elaborate on understanding the dynamic array of stress responses across humans who confront difficult situations everyday. Those who espouse the rehabilitation philosophy might disagree.

The foundation of the rehabilitation philosophy is the belief in the dignity and worth of people with disabilities. The focus of the philosophy is on the assets of the person and the resources of the environment (Maki & Riggar, 1997). Appreciating the internal operation of the individual in conjunction with the external situations posed from the environment is the exact type of interaction rehabilitation professionals seek to understand. The prevalence of disability remains high; therefore, it is important to recognize the different meanings that people with disabilities attribute to life situations. According to the United States Census Bureau (1999), about 54 million Americans report having a disability. Twenty-six million Americans report having a severe disability and half of these people are between the ages of 22 and 64 (United States Census Bureau, 1999). People with disability face a unique set of difficulties that challenge

Antonovsky's (1980) assertion that subjective meanings of events are not important. It is not enough to focus solely on what the individual brings to the event when examining stressful situations. Rather, it is critical to examine how the environment impacts an individual's phenomenological interpretation of the event. In accordance with McCarthy, Lambert, and Brack (1997), stress resides neither in the person nor in the environment, but in the interaction between the two. Therefore, uncovering information from person-environment interactions in stressful situations may assist in developing an understanding of stress response in people with disability.

When trying to understand the stress response, specifically the stress appraisal process among people with disability, it is useful to examine three areas of psychosocial impact: employment, health care, and social support. Each of these impacts, when appropriately managed, results in adaptation to disability that is more successful (Krause, 1996; Livneh & Antonak, 1997). Rehabilitation literature contends that these particular areas of impact often elicit stress, and improvement upon these impacts can enhance a person's sense of well-being and independence (Herrick, Elliott, & Crow, 1994; Krause, 1996; President's Committee on Employment of People with Disabilities, 1994; Rintala, Young, Hart, Clearman, & Fuhrer, 1992; Wright, 1980).

It is also critical to consider four specific aspects of subjective response. The first aspect of subjective response examines the extent to which the person appraises the situation as stressful. If a person believes that the situation is not at all stressful, then he or she makes a benign or irrelevant appraisal of the situation. The second aspect concerns the type of stress appraisal. Specifically, a person will appraise a situation as stressful if they perceive harm, threat, or challenge from the situation. The third aspect is

the level of experience with the stressful situation. This aspect involves a person's assessment of how often he or she experiences a situation, which influences the extent of consequences to his or her sense of well-being. According to Shontz (1975), stressful situations become less threatening as familiarity increases and confidence in effective coping mechanisms is learned. Therefore, a person will experience less consequence to his or her sense of well-being when particular situations occur more often. The final aspect of subjective response is the location of the difficulty or uncertainty in the situation. This aspect involves a person's perception that the source of difficulty and uncertainty is located within themselves or within some external element (i.e., person or thing) from the environment. If the source of difficulty is located within the environment, the person with disability will feel more consequence to his or her sense of well-being or level of independence because the environmental barrier hinders individual choice or action.

Psychology literature (Chaturvedi, 1983; Cox & Ferguson, 1991; Lazarus & Folkman, 1984a; Paterson & Neufeld, 1989; Shontz, 1975) focuses on these four aspects because they illustrate the nuances of the situational demand, thus influencing the person-environment interaction involved with stress appraisal. It is important to clearly understand this interaction because it is the capstone of the rehabilitation philosophy. Rehabilitation research has not examined the assumptions that lie within the four aspects of subjective response. Therefore, examining the stress appraisal process for people with disability is one step in that direction. More fully understanding whether a person with a disability has a stress response to any of these psychosocial areas, and the subjective nature of that person-environment interaction, would assist in creating intervention

programs to mediate negative evaluations of one's well-being or quality of life. Consequently, the advancement of knowledge about how such persons might appraise these specific life situations is a much-needed contribution to rehabilitation literature.

While it is important to uncover the subjective meanings that people with disability assign to specific life situations, it is equally important to apply a theoretical model of coping that incorporates the role of primary appraisal to overall coping effort. One such model is the transactional model of coping (Lazarus & Folkman, 1984a). According to Lazarus and Folkman (1984a, 1984b), people manage internal and external demands, and when they think these demands are taxing or exceeding their resources, they employ a coping process. Both the characteristics of the person and the environment contribute to the meaning that a person assigns a specific event. This process is primary appraisal, and serves as a catalyst for a person's coping response (Lazarus & Folkman, 1984a). The theory implies that a person's attribution of person-environment interaction to a specific event naturally evokes a coping response for effectively dealing with the taxing situation. Having a disability or living in social environments that hinder quality of life for people with disability may promote demands that exceed a person's resources for dealing with certain situations. The transactional theory of coping explicitly attempts to explain how people manage themselves at times when internal and external demands exceed their resources. Thus, it would be important to apply this theory to the stress appraisal process of people with disability who sometimes face a multitude of taxing situations.

Coping theory literature has further defined specific types of coping responses, or coping dispositions, that vary according to a person's method of dealing with stress.

While researchers differ on naming these styles, the most popular coping dispositions are identified as problem-focused, emotion-focused, and avoidance (Billings & Moos, 1984; Endler & Parker, 1990; Lazarus & Folkman, 1984b; Pearlin & Schooler, 1978; Skodol, 1998; Snyder & Dinoff, 1999; Stone, Helder, & Schneider, 1988). Research about primary and secondary appraisal processes supports the theory that persons with problem-focused coping fare better than those with emotion- or avoidance-focused coping dispositions because of their ability to more clearly resolve taxing situations (Billings & Moos, 1981; McCarthy, Lambert, & Brock, 1997; Swindle, Heller, & Lakey, 1988). Due to the lack of investigation in coping with stress among people with disability, it is difficult to determine whether coping disposition is a contributing factor to the subjective meanings assigned to life situations, and whether particular coping dispositions of people with disability relate to the extent of stress appraisal in a particular situation. It is important to resolve these difficulties so that what is already understood about the transactional model of coping can be enhanced and so that the gap that exists in rehabilitation literature can be lessened.

Another factor that might influence a person's subjective understanding of a life situation is acceptance of disability. Linkowski (1971) and Wright (1983) stated that acceptance of disability requires a process of value change in four areas: enlargement of scope of values, subordination of physique, containment of disability effects, and transformation from comparative to asset values. Livneh and Antonak (1997) called this adaptation to disability, and defined it as the process of gradually approaching person-environment congruence. Here, the interaction between the person and the environment promotes such a sense of well-being that psychosocial impacts may not readily elicit need

for stress appraisal. However, having a disability may be stressful (Bramston, Fogarty, & Cummins, 1999) regardless of level of acceptance or congruence, and it would be important to examine whether such acceptance influences a person's appraisal of a particular psychosocial situation. Moreover, it would be helpful to understand whether coping disposition and levels of acceptance of disability relate with the appraisal process for people with disabilities. Rehabilitation literature has not explored whether such relationships exist.

Nonetheless, to more fully understand the subjective meanings made by people with disability in relation to their life situations it may be important to examine the relationship among these three constructs. Such examination has a threefold purpose: 1) it may enhance the limited understanding of stress and coping with disability, 2) it may contribute to the rehabilitation literature that appears to need more understanding of the stress and coping processes of people with disabilities, and 3) it may establish rationale for intervention programs that specifically aim to enhance the well-being and independence of people with disability.

Statement and Significance of the Problem

The transactional theory of stress and coping has served as a useful lens for examining the interaction between a person and his or her varying responses to situational demands. While the theory has provided a framework for understanding the coping dispositions that follow primary appraisals in the general population, evidence for people with disability is unavailable. It is important to know about the subjective meanings that people with disability assign to situational demands, particularly in situations that illustrate employment, health care, and social support impacts of disability.

Questions remain as to whether a person perceives a situation as stressful, benign, or irrelevant. Specific to this aspect of appraisal, there is a need to establish support for whether the type of stress appraisal, the level of experience with the stressor, and/or the locus of stressor relates to a person's coping disposition. There is need for insight into whether acceptance of disability relates to specific stress appraisals. Additionally, if acceptance of disability, coping disposition, and stress appraisal process relate to one another, it would be important to clarify whether there is a mediation effect for acceptance of disability between coping disposition and stress appraisal. Given the transactional theory of coping, it can be assumed that people with disability offer new perspective on the interaction between person and environment when assessing stress and coping response. This study aimed to uncover such an interaction and expose the elements that draw out and relate to stress appraisals for people with disability. The primary appraisals of people with disability can offer a unique insight into their experience with life situations. It was important to discover what qualified as a stressful situation and what did not. Later, it may be necessary to examine how to foster effective coping processes for people who appraise a situation as stressful.

Purpose of the Study

The purpose of this study was to explore the relationship between the stress appraisal process, coping disposition, and level of acceptance of disability. This study represents a first attempt at gaining insight into the subjective meaning that people with disability attribute to stressful situations. Psychology literature grounds the relationship between stress and coping in various theoretical frameworks. This study made a unique contribution to the rehabilitation counseling profession by applying the transactional

theory of coping, and enhancing knowledge about whether acceptance of disability is a key factor in understanding the relationship between stress and coping.

Specific research questions aimed at achieving this purpose were:

1. Which psychosocial situations are more likely to evoke a stress appraisal from persons with physical or emotional disability?
2. Do type of stress appraisal, level of experience with the situation, and/or locus of stressor relate to the person's coping disposition?
3. Does acceptance of disability relate to stress appraisal?
4. Does acceptance of disability relate to coping disposition?
5. Does acceptance of disability mediate the relationship between coping style and stress appraisal?

Data were collected and analyzed from several instruments that explicated the stress appraisal process, coping disposition, and acceptance of disability in an attempt to address these questions.

Definition of Terms

Knowing the meaning of terms in this study was helpful in meeting the purpose of this study. The definitions of terms provided below have been adapted from the literature (Chaturvedi, 1983; Kohn, 1996; Lepore & Evans, 1996; Paterson & Neufeld, 1989; Shontz, 1975; Wright, 1983):

Disability: any person who has a physical or mental impairment which substantially limits one or more major life activities; one who has a record of such impairment; or one who is regarded as having such an impairment.

Appraisal process: The progressive steps taken to evaluate the demands of a particular life situation as it influences one's well-being. The key to understanding a person's evaluation of demands is the interaction between individual characteristics of the person and the environment that surrounds that person. An appraisal can fall into one of three categories: stress, benign, irrelevant. A stress appraisal is a potentially negative evaluation of one's well-being. There is a perception that one's sense of well-being is in doubt. The extent of stressful appraisal can range from extremely stressful to not at all stressful. A benign appraisal is a positive evaluation of one's well-being. Often the appraisal signifies a sense of security. An irrelevant appraisal is a neutral evaluation of one's well-being. No assessment of the implications for harm or challenge occurs.

Types of stress appraisals: Three specific types of stress appraisal exist. Harm refers to damage already done and usually requires undoing or reinterpreting what is already past. Perception of too much harm or loss results in depression. Threat refers to anticipatory evaluation whereby a person prepares for harm that may come. Challenge refers to expectation of gain with a positive outlook and enthusiasm toward the life situation.

Level of experience with the situation: Evaluation of the history with a particular situation and the direct negative effects of the stressor on the well-being of the person. Rare experience means the person has not had previous history with the situation and the stress that results is likely to have a negative effect on the psychological well-being of the individual. Daily experience means the person has previous history with the situation and the stress that results is likely to have little effect on the overall psychological well-being of the individual.

Locus of stressor: The source of difficulty or uncertainty perceived from the situation. Person locus refers to some characteristic, value, or goal within the individual that precipitates the stress appraisal. Environment locus refers to an external event that imposes modification upon the individual, which incites the stress appraisal.

Coping disposition: An enduring style of employing strategies to lessen danger and enhance well-being. Problem-focused refers to a style of coping that lessens the effect of the original trigger. Emotion-focused refers to a style of coping that lessens the heavy extent of the stress response. Avoidance refers to a style of coping that alters the perception of the stressor altogether.

Acceptance of Disability: A state of not resigning to the disability or devaluing the self. When a person enlarges their scope of values, subordinates physique, contains disability effects, and transforms comparative-status values into asset values, then he or she accepts having a disability.

Assumptions and Limitations

It is important to appreciate a number of assumptions and limitations in this study. A major assumption underlying this study concerns the validity of self-report to assess stress appraisal, coping disposition, and acceptance of disability. Self-report is a reasonable way to obtain this information because each of these constructs exist in the perceptions or judgments about one's self. This may influence the validity of responses differently than if employment of direct observation of behavior in stressful situations occurred. While limited in validity, many studies interested in coping with stress have used self-report as a method of data collection (Billings & Moos, 1984; Bramston,

Fogarty, & Cummins, 1999; Endler & Parker, 1990; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Revenson & Felton, 1989).

A second assumption of this study is the use of the transactional theory of coping. In order to understand the stress appraisals and coping dispositions of people with disability, this guiding theoretical framework is applicable. It is a reasonable framework because it appreciates person-environment interactions; similar to what the rehabilitation philosophy promotes as an individual's adaptation to disability.

One limitation of this study involved the generalizability of the results. The study was limited to adults with physical or emotional disabilities who come from specified regions of Michigan. Individuals from the sample may be similar to other individuals with physical or emotional disabilities who might encounter psychosocial situations that evoke stress appraisals. This study focused on an array of physical and emotional disabilities in an attempt to best represent individuals with disabilities in Michigan or elsewhere.

A second limitation concerned weaknesses in instrumentation. The author developed and field-tested two of the instruments. Therefore, test-retest reliability, other forms of internal consistency reliability, and evidence of validity were limited. Because this study was the first of its kind to examine the subjective meanings of situations that evoke stress appraisals, it was reasonable to expect such weakness. In addition, compromised internal validity may have existed if techniques for gathering data were not consistent across the different scheduled dates of instrument administration.

A final limitation involved the nature of the design of the study. This study was a one-time exploration of the relationship between stress appraisal process, coping

disposition, and acceptance of disability, which assumed that these relationships can be understood without employing a longitudinal framework of inquiry. In addition, the design of the SAILS relies on hypothetical situations rather than real life situations. Since this study was the first of its kind, it was practical to establish relationships among the variables and then employ designs that are more sophisticated later.

Chapter 2

REVIEW OF THE LITERATURE

This chapter provides a review of the literature pertaining to the relationship between the stress appraisal process, coping disposition, and level of acceptance of disability. The review begins with literature on stress research and defines a useful theory to apply to people with disability when examining their stress and coping processes. Discussion about the importance of primary appraisal and four subjective evaluation areas of this process takes place to understand the components that frame a stress appraisal. The review provides description of the various stress responses that result from the appraisal process and surveys rehabilitation literature to provide information about employment, healthcare, and social support as psychosocial elements known to attract a stress response. There is limited empirical research pertaining to the primary appraisal processes for people with disability.

The review then moves to discuss the construct of coping within the framework of transactional theory of stress and coping. This chapter provides information about coping with disability to highlight coping efforts and adaptation to disability. Psychology literature addresses coping disposition as a component of personality and as a contributing partner in the overall base of coping process theory. The review asserts that examining personality traits separate from coping disposition is not necessary. A review of instrumentation used to measure coping disposition occurs, with specific attention paid to the Coping Inventory for Stressful Situations (Endler & Parker, 1994).

Finally, the review defines acceptance of disability, describes its contribution to rehabilitation literature and explores its place in stress and coping literature. A review of

The Acceptance of Disability Scale (Linkowski, 1971) supports its utility in this proposed study. Highlights from several empirical studies offer support for this construct.

Stress and the Appraisal Process

Response, stimulus, and interactional models of stress are prominent in psychology literature (Romano, 1992). Each has made influential contribution to stress theory. Selye (1976) discussed the response model of stress in terms of an individual's physical response to a demand. How the physiology of a human being responded to a positive or negative event was the focus of this model. The stimulus model of stress focused on the life events (i.e., stressors) themselves and what effect these stressors had on the physical well-being of the person. Holmes and Rahe (1967) developed instruments that measure life events and their relationship to physical health. However, a major criticism of the stimulus model was its exclusion of individual differences in experience of the stressor (Romano, 1992).

Therefore, Lazarus and Folkman (1984a) proposed a third conceptualization of stress, the interactional or transactional model. Stimulus and response models of stress may have limited utility because a person defines stimulus as stressful only in terms of their stress response (Lazarus & Folkman, 1984a). The analysis of stress should consider differences among individuals and their differing responses to situational demands (Zeitlin and Williamson, 1994). In the transactional model, a person's appraisal of the event in terms of risk to well-being and the ability to cope with the situation mediates the impact of the stressor. The definition of stress in this model emphasizes the relationship between the person and the environment (Lazarus & Folkman, 1984a).

When measuring life events, items should be representative of the life experiences of the population studied (Cohen, 1988) and should examine effects as transactions between the individual and environment (Monroe & Peterman, 1988). Here, evidence indicates that the Lazarus and Folkman (1984a) transactional model of stress is preferred over stimulus or response models. According to Tetrick (1992), it is an individual's perception or cognition of the environment that influences his or her behavior; therefore, the transactional model of stress may be a more powerful determinant of the types of evaluations of events that people make. Rarely is the measurement of stressors for people with disabilities made. It becomes important then to develop appropriate instruments to measure life experiences that represent people with disabilities and to frame these instruments in the transactional model or theory of stress.

Defining the term "stress" is a difficult task, and researchers in the field do not support such an attempt (Paterson & Neufeld, 1989; Romano, 1992). Instead, researchers appear interested in focusing on three aspects of stress: stressors, or the physical and environmental conditions that a person perceives as threatening (Lepore & Evans, 1996); primary appraisal, or the evaluation of a particular encounter as relevant to well-being (Cox & Ferguson, 1991); and stress response, or the collective consequences of such stressors within the individual (Paterson & Neufeld, 1989). Rehabilitation counseling literature sporadically addresses these three aspects of stress. Instead, focus has been on coping strategies and coping with disability theories, which have omitted discussion about aspects of stress. Consequently, a limited perspective on the coping process of people with disability actually exists. Information about the meaning a person assigns to a particular stressor might then inform the type of coping process that the person uses.

Stressors. According to Lepore and Evans (1996), stress research focuses on five categories of stressors. Cataclysmic stressors are sudden life events that impose great adjustment to the lives of people (e.g., natural disasters, war, airplane wrecks); major life events are often unchangeable events that impose great adaptive demand (e.g., divorce, job loss, disability); daily stressors are ongoing stressors that are experienced day-to-day (e.g., financial problems, interruptions); ambient stressors are difficult environmental conditions that impose demands on people (e.g., noise, traffic congestion, crowding); and role stressors are ongoing difficulties related to fulfilling obligations (e.g., excessive workload, lack of social support, lack of control).

People with adventitious disabilities have experienced the "major life event" category of stressor and are faced with having to experience additional categories on a daily basis. While it would be important to examine the extent to which people with disabilities deal effectively with multiple stressors, it must not be assumed that people with disabilities live in a constant state of frustration or stress from having experienced a major life event (Wright, 1983). Fogarty, Bramston, and Cummins (1997) supported this idea when they found that both the general population and a group of individuals with intellectual disabilities identified many of the same stressors. It appeared that having a disability did not cause people to react to stress any differently.

It is not unusual for people to think that major catastrophes such as loss of job, divorce, or major accident are stressful events. However, Zautra, Guarnaccia, Reich, and Dohrenwend (1988) suggested that small events, like an argument with a friend, a parking ticket, or encountering a rude sales associate can also be stressful and lead to poor psychological or physical health outcomes. Bramston, Bostock, and Tehan (1993)

examined self-perceived stress levels of people with mild intellectual disabilities by administering the Daily Stress Inventory (DSI; Brantley & Jones, 1989). The DSI detects variations in the frequency and impact of minor stressors (Bramston, et al., 1993). These researchers found that on average, each of the 28 participants experienced seven stressful events per day, with the most stressful events involving difficulties in interpersonal relationships. Bramston, Fogarty, and Cummins (1999) found that 459 people with a mild intellectual disability reported experiencing eight to nine stressors from a list of 31 stressors listed on the Lifestress Inventory. While this study measured the subjective stress levels of persons with a mild intellectual disability, the authors did not attempt to uncover the meaning behind the event in question.

Consequently, rehabilitation researchers need to categorize the level of experience with the situation that people with disability have in two ways, rare experience and daily experience. This categorization may help to not support disability-related effects alone, and it may assist in exposing some meaning behind a person's appraisal of an event.

To summarize, people with disability may not sense specific types of stressors that differ from stressors of the general population. Life situations occur rarely or daily, each of which exposes the level of experience a person has with a stressor that comes from that life situation. Use of the transactional model clarified the impact of a stressor as mediated by a person's appraisal of the event, and help to discover the person-environment interactions that assist in making a primary appraisal. In addition, it provided perspective on the coping process of person with disability. Rehabilitation research needs to develop instruments that fully represent the life experiences of people with disability. It is not powerful enough to develop and use instruments that measure

stress levels that do not consider the subjective evaluation of events for people with disability. Even more critical is the need for instruments to probe deeper into the meaning behind the event. To facilitate this, it is necessary to understand the construct of primary appraisal.

Primary Appraisal. Those who contribute to the literature on stress mainly focus their efforts on the primary and secondary appraisals made by individuals. The definition of primary appraisal is the evaluation of a particular situation as it relates to a person's well-being (Chaturvedi, 1983; Cox & Ferguson, 1991). When interested in finding meaning behind an event, which largely answers questions like, "Am I in trouble?" or "Have I experienced this before?" focus needs to be on the primary appraisal of the event. Secondary appraisal evaluates how to effectively cope with the situation (Cox & Ferguson, 1991). Lazarus and Folkman (1984a) asserted that all cognitive appraisals (whether primary or secondary) are largely evaluative because they continuously occur and go beyond information processing by focusing on meaning or significance. Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986) interviewed 85 married couples over a six-month timeframe to examine the relations between primary appraisal and secondary appraisal processes. They found that secondary appraisal is a function of a person's judgments about what is at stake (primary appraisal) in a specific stressful situation. Folkman et al. (1986) were helpful in supporting this proposed study's assumption that understanding the contextual features of a specific situation and the coping processes of the individual are of utmost importance. Wallander and Varni (1995) also supported this idea when they found among adolescents with disability that

the meaning of the event, rather than its mere occurrence is what defined the actual assessment of a situation and led to coping processes.

A person evaluates a situation as stressful, benign, or irrelevant. According to the literature, an irrelevant appraisal is made when a person believes that there is no impact upon his or her well-being; a benign appraisal is made when a person believes that his or her well-being will be preserved or enhanced; a stressful appraisal occurs when a person believes that harm, threat, or challenge to his or her well-being will occur (Chaturvedi, 1983; Lazarus & Folkman, 1984a; Paterson & Neufeld, 1989). These three kinds of primary appraisal illustrate how complex the appraisal process is and how it largely depends on person factors and situational context (Lazarus & Folkman, 1984a). According to Shontz (1975), the person's appraisal or evaluation of a stimulus is the key to understanding stress. He further stated that one's appraisal of an event is relational because it connects to both the person and the environment. For example, one person may be confronted by a stranger and determine that the person's behaviors are benign enough to engage in a discussion; whereas another person may decide that the stranger's actions are threatening and flee from the presence of this dangerous person. The relationship between the person and her environment elicits a particular response, and one's primary appraisal of the situation determines this response.

Lazarus and Folkman (1984a) defined the person factors and situation factors that influence primary appraisal. Two examples of person factors that influence a primary appraisal are commitments, or things that underlie choices that people make and express what is important to that person; and beliefs, or cognitions that determine what is truth in the environment and determine how a person evaluates what is happening. Three

examples of situational factors include: novelty, the extent to which a person has had previous experience with the event; event uncertainty, the likelihood of an event's occurrence; and temporal factors such as imminence and duration. It is interesting to consider these person and situational factors because they set the stage for the meaning and significance assigned to primary appraisals.

All human beings have a need for social and psychological equilibrium (Moos & Schaefer, 1986). The extent to which person and situational factors influence the appraisal process, which is a continuously occurring phenomenon, serves to enhance or weaken this equilibrium. This is often evident in the stress appraisal process. A stressful appraisal means that the person would evaluate the situation as harmful, threatening, or challenging (Lazarus & Folkman, 1984a, 1984b). Harm, which includes loss, represents damage that occurred in the past; threat involves the anticipation of or potential for harm; and challenge involves the directed attention at what the person gains, not loses, under difficult odds (Lazarus & Folkman, 1984b). Many factors influence whether a person appraises a situation as stressful, including history and/or experience with a stressor and whether he or she locates the stressor in the person or the environment (Bramston, Fogarty, & Cummins, 1999; Fogarty, Bramston, & Cummins, 1997; Lepore & Evans, 1996; Paterson & Neufeld, 1989; Shontz, 1975). There is no rehabilitation counseling research that examined the stress appraisal process for people with disability. Consequently, little is known about the extent to which stress is felt, the type of stress experienced, the level of experience with the situation, and where that person located the source of difficulty (i.e., in themselves or the environment). Information about these

person and situational factors would be a useful first step in discovering the meaning assigned to a particular event and understanding a person's choice of stress response.

Examining an individual's appraisals in context with these influential factors is critical for three reasons. First, it could uncover that one's disability provides an experiential context for dealing with stressors, thus enhancing the likelihood of benign or irrelevant appraisals in the future. Second, it may uncover the extent to which a person experiences these events. Third, it may uncover important information about whether a stressor is located within a person or the environment. This proposed study included 1) the extent to which stress was perceived, 2) the type of stress experienced, 3) the level of experience with the situation, and 4) where that person located the source of difficulty. These may provide preliminary evidence of the transactional nature of the appraisal process and illuminate the stress response of people with disability.

Stress Response. No two people react to stress in the same way (Shontz, 1975). Consequently, understanding stress response is not simple (Dohrenwend & Dohrenwend, 1981). A person's appraisal of a stressful situation, whether harm, threat, or challenge dictates the type of stress response outcome for the individual. Paterson and Neufeld (1989) asserted that when a person evaluates a stressor as danger of harm or loss, anxiety in the form of fear persists. However, if that person thinks that other people or things caused the stress, anxiety in the form of anger is likely. If anxiety accompanies negative judgments of coping effectiveness, depression is likely to follow. Finally, if the stressor is a situation of achievement, a person may evaluate the experience as challenging and respond with excitement. Rutter (1994) encouraged the notion that accumulation of events over time contributes to a person's sense of resiliency or vulnerability. The extent

to which people are able to function effectively in the midst of stressful situations determines how well they adapt to the situation over time (e.g., divorce in the family). According to Paterson and Neufeld (1989), a history of success in dealing with a stressor may lead to an irrelevant appraisal, but if the person experiences variable success in dealing with the stressor, a person will appraise the stressful situation as challenging. In the case of people with disability where stressful situations appear over time, it would be important to examine whether they cope effectively and whether they experience the situation less or more often. While a vast amount of research has looked at coping effectiveness in people with disability, very few have done the groundwork to examine the stress appraisal process (i.e., the stressor, the primary appraisal, and the stress response) in relation to coping response.

In discussing adaptation to disability, Shontz (1975) stated that three factors: intensity of threat, type of situation and personal variables determine the type of stress response that occurs. Adaptation is most effective and efficient when stress is moderate; otherwise extreme levels of threat are associated with poor coping, poor judgment, and diminished control (Shontz, 1975). Three types of situations: relationships with social supports, employment, and health care are known to elicit levels of threat to people with disability, and require adaptation efforts (Wright, 1980). These psychosocial impacts of disability are documented in rehabilitation literature as quality of life indicators (Roessler, 1990).

According to Herrick, Elliott, and Crow (1994), social support protects an individual from the harmful effects of stressful encounters. Rintala, Young, Hart, Clearman, and Fuhrer (1992) found that for 140 persons with spinal cord injury, total

social support related to more satisfaction with life and better physical well-being. Krause (1996) longitudinally examined whether better adjusted people with spinal cord injury were more likely to obtain employment and whether becoming employed enhanced post-spinal cord injury adjustment. Krause concluded that enhanced adjustment correlated with employment status and termination of employment was associated with declines in adjustment.

The President's Committee on Employment of People with Disabilities (1994) concluded that fair and effective health care reform was a number one priority in the disability community. Their report stated that many participants listed health care as their single greatest concern, and nearly all participants agreed that health care reform was a prerequisite for advancement in employment, quality of life, and independent living. The proposed study framed specific situations using these three types of psychosocial impacts. These situations served as stressors to uncover the appraisal process and better understand the stress response of people with disability.

Historically, people with disabilities maintained a marginal role in society and not much opportunity existed to experience threat or challenge. However, with the passage of legislation like the Americans with Disabilities Act of 1990, opportunity to experience new situations such as access to public places, employment opportunities, and use of new technology and communication devices is possible. Social integration provides a sense of belonging and stability a person's life context, which in turn assists in maintaining a sense of well-being (Cronkite & Moos, 1995). Bramston, Fogarty, and Cummins (1999) suggested that rehabilitation policy has paved the way for people with disability to have more choice and new responsibilities. Furthermore, encouragement of autonomy may

produce situations that challenge one's coping responses (Bramston, Bostock, & Tehan, 1993). For these reasons, it is imperative to understand the stressors that people with disabilities experience, the kinds of primary appraisals they make, the kinds of stress responses that result, and what coping responses may be needed to effectively deal with a stressful situation. The review now turns to examine the construct of coping taken from literature that supports the transactional theory.

The Coping Construct

Primary appraisal shapes the coping decisions employed by all humans. These decisions are the secondary appraisal of humans. Secondary appraisal involves a person's belief about the viable options for coping (Cronkite & Moos, 1995). Lazarus and Folkman (1984a) carefully distinguished the decision for coping as the process of managing internal and external demands appraised as taxing or exceeding the resources of the person. Such distinction is widely accepted across coping theory literature (Endler & Parker, 1990; Lepore & Evans, 1996; Skodol, 1998; Zeitlin & Williamson, 1994). Humans use coping responses with the intention of protecting themselves from the effects of stressors (Lepore & Evans, 1996). It is unlikely that individuals would employ a coping strategy if they appraised a situation as benign or irrelevant.

According to Lazarus and Folkman (1984a), coping is the process of understanding what a person actually does in a specific context and what thoughts or actions change as a stressful situation unfolds. The act of coping consists of altering the source of stress, enhancing well-being, and reducing emotional consequences (Brown, 1993). Kohn (1996) asserted that the most important thing about how a person copes with stressful situations is how well the coping effort fits the demand of the situation.

Few understand what a person with a disability actually does in certain contexts to fit the demand of the situation, mainly because there is limited knowledge about how a person appraises such demand. Before this proposed study made such an attempt, it was helpful to understand how the literature discussed the coping with disability process.

Coping with disability. Vash (1981) maintained that emotional, behavioral, and environmental reactions are common in response to disability. She further stated that these reactions depend on a person's personality, philosophical outlook, family and community support, and remaining resources for developing effective and gratifying lifestyles. Roessler and Bolton (1978) stated that reaction to disability is a highly individualized matter that focuses on the person-environment fit and the way disability disrupts the fit. When reacting to changes in one's self and environment, overwhelming feelings of loss require special coping strengths and abilities (Robinson, West, & Woodworth, 1995). An individual's reactions to disability are a means of keeping distress within manageable limits (Livneh & Antonak, 1997); therefore, successful management of these reactions may lead to positive outcome and goal achievement.

According to Wright (1983), the succumbing framework highlights the negative effects of disability, offering limited focus on the challenge for change and meaningful adaptation. The coping framework is oriented toward seeking solutions to difficulties, presenting without façade when faced with difficulties, and discovering satisfactions (Wright, 1983). Robinson et al. (1995) encouraged the adoption of the coping-succumbing continuum view because it extends the thinking about coping as continued effort at solving problems and recognizes that such effort may be effective or ineffective. Effective coping includes the decision not to cope, at some time preferring temporary

reprieve before resuming active coping (Robinson, et al., 1995). Reaction to disability does not stop when a person has successfully adjusted; rather it simply changes with each step in the learning process (Vash, 1981). Thus, it becomes important that people with disability and rehabilitation professionals learn to emphasize positive meaning of disability and asset values in order to elicit an effective coping response over time. Furthermore, Brickman, Rabinowitz, Karuza, Coates, Cohn, and Kidder (1982) suggested that people with disability adopt a compensatory model of coping so that they see themselves as deprived by a social environment that refuses to yield necessary resources for independent living. This view emphasizes the role of the environment in developing assertion and values change in a person so that maintenance of effective coping or adherence to the coping framework continues.

In instances of traumatic onset disability, people first attempt to comprehend the extent of what happened before beginning the coping process (Vash, 1994). Here, an individual's perceptions about situational demands may add fuel to the fire of stress-induced coping, making personal and environmental mastery an unthinkable goal. Both Vash (1981) and Wright (1983) discussed mastery as a product of an effective coping process. It may be more helpful to reconceptualize the goal of mastery as personal and environmental management (Lazarus & Folkman, 1984a) because environmental barriers represent a continuous struggle and source of stress that is more likely managed than mastered. In order to manage the environment most effectively, people with disability will need to recognize whether they evaluate an environmental situation as eliciting harm, threat, or challenge. Kulkarni (1985) stated that when people perceive harm, they withdraw from the situation or display aggressive behaviors; if people feel threatened,

they may feel anxious and use various defense mechanisms to cope; and when challenged, they may actively strive to overcome or master the situation.

A useful definition of maladaptive coping is the failure to move through the entire coping process by avoiding the healing and restructuring of life (Robinson, West, & Woodworth, 1995). Zeidner and Saklofske (1996) stated that determining whether coping is adaptive or maladaptive requires an examination of personal and environmental reactions to the stress-inducing event. Not all reactions labeled as "effective" in most situations will lead to adaptive coping. For instance, Skinner (1995) described an instance of terminal illness (when circumstances are quite uncontrollable) where persistent, active attempts to ameliorate a problem led to frustration, exhaustion, and a sense of powerlessness. Janoff-Bulman (1999) discussed an automatic process that people go through before rebuilding their assumptions of benevolence, meaningfulness, and personal worth. She maintained that following a traumatic experience an individual largely shuts down and ignores the threatening or challenging aspects of the trauma. Furthermore, Janoff-Bulman (1999) stated that numbing and denial help establish psychological balance, which over time dissipates to permit the ability to engage with the experience and its implications. Consequently, it is important to recognize the person's need for ineffective coping behavior and detachment. However, in situations where maladaptive behaviors have persisted too long (Kahn, 1995) redirection toward adaptive strategies and rebuilding need to be encouraged.

Personality and coping. While it is difficult to see the unfolding nature of stressful situations and changes in a person's coping response, the coping process can be described as reflective of personality disposition (Lazarus & Folkman, 1984a). According to the

American Psychiatric Association (1994), personality traits are enduring patterns that determine how people think about and relate to themselves and their environment. Lazarus and Folkman (1984a) asserted that the type of process used in coping is generally premised on the personality traits of the individual. Skodol (1998) supported this assertion when he referred to personality traits and coping processes as personal dispositions in life stress literature. Moreover, Chaturvedi (1983) and Watson, David, and Suls (1999) stated that coping processes reflect the personality tendencies within the individual.

McCrae and Costa (1986) supported the link between personality and coping with a longitudinal survey design. Their study was broken into two parts. In the first study, they asked 154 men and 101 women to recall which ways of coping they had used in dealing with a stressful event. The authors chose the event from a checklist of recent life events that each person had experienced in the past year. This checklist categorized the events for the people into harm/loss, threats, and challenge events. In addition, participants were administered a battery of tests to assess psychological well-being. Four months later, the authors asked the participants to complete a personality inventory. Six months later (ten months from the occurrence of the stressful situation) they asked the participants to recall the assigned event and to indicate which coping strategies they employed to deal with that specific event.

McCrae and Costa (1986) developed a second study to satisfy participants who could not identify with any of the categorizations provided on the checklist in Study I. Study II asked participants to suggest their own stressful situation. This study also differed in terms of timing. In Study II, 80 men and 71 women completed the personality

inventory before nominating a stressful situation. Six months later, they mailed participants a questionnaire to assess their coping efforts. There was no assessment of well-being for these participants so it was not considered an outcome variable as it was in Study I.

Overall, their findings from this thoughtful examination suggested that coping and well-being relate to personality, and personality represents a powerful explanation for the effects of coping. Since two separate study groups examined the measurement of personality; one preceding and the other following the specific stressors and coping efforts, personality is "causally prior to the stressors, coping efforts, and well-being states assessed in [their] research" (McCrae & Costa, 1986, p. 400). It would not be necessary to examine personality traits as a separate variable from coping disposition.

Consequently, assessing coping disposition would be an important measure of individual difference, especially in terms of coping with disability. Because the appraisal process is a highly individualized process and coping processes vary according to situational context, it becomes important to examine coping disposition as a relational variable with the stress appraisal process for people with disability.

Coping Disposition

Literature has maintained that personal coping resources are relatively stable dispositions or styles that influence the selection of a coping process (Cronkite & Moos, 1995; Holahan, Moos, & Schaefer, 1996; O'Driscoll & Cooper, 1994; Pearlin & Schooler, 1978). Schwarzer and Schwarzer (1996) conceptualized coping disposition as a set of actions that reflect a particular strategy for managing a demand. For example, under the transactional model of coping, a person who uses instrumental actions to

change the person-environment relationship uses problem-focused coping efforts. A person who does not change the interaction, but assigns new meaning to the situation uses emotion-focused coping efforts. It is important to note that one set of actions is not more successful than the other (Schwarzer & Schwarzer, 1996).

Problem-focused, emotion-focused, and avoidance coping are the most widely accepted dimensions of coping effort (Billings & Moos, 1984; Endler & Parker, 1990; Lazarus & Folkman, 1984a; Pearlin & Schooler, 1978; Skodol, 1998; Snyder & Dinoff, 1999). Problem-focused coping, also named task-focused coping aims to lessen the effect of the original trigger (Paterson & Neufeld, 1989). Examples of this coping style in context to people with disabilities include gathering information about possible surgeries or medications, taking independent action such as modifying one's home to make it wheelchair accessible, and identifying alternative rewards that replace permanent losses (Brodwin, Tellez, & Brodwin, 1993). Emotion-focused coping or response-directed coping aims to lessen the heavy impact of the stress response (Paterson & Neufeld, 1989). Examples of this coping style specific to people with disability include controlling one's emotions in public situations encountered for the first time, releasing frustration, anger, or despair, and resigned acceptance or coming to terms with the disability or impairment (Brodwin, et al., 1993). Avoidance or appraisal-directed coping aims to cognitively alter the perception of the stressor (Paterson & Neufeld, 1989). Examples of this coping style in relation to people with disability include breaking down the overwhelming aspects and focusing on small, manageable components of a situation; employing statements of cognitive restructuring such as, "there are people worse off than

I"; and minimizing or denying serious aspects of the disability to preserve psychological strength (Brodwin, et al., 1993).

Kulkarni (1985) made a specific attempt to define coping processes for people with disability. His model delineated three categories: coping, defending, and fragmenting. He viewed these dimensions as if they were on a dynamic continuum with coping representing a higher level of adaptation to disability. He theorized that disability served as an activating experience for stress and that individuals may perceive life experiences that result from disability as a harm, threat, or challenge. Kulkarni developed The Coping with Disability Inventory (CDI) to measure a person's coping efforts. While his proposed model may be useful in categorizing adaptive responses to disability, no evidence from a person's stress appraisal validated Kulkarni's assumption that coping, fragmenting, and defending adaptive responses were indicative of a person's feelings, thinking, or action. His theory that certain actions from people with disabilities delineated particular strategies remained limited in scope and there was no empirical support for these categories. Therefore, the study described in this present dissertation used the theoretically driven processes of problem- or task-focused, emotion-focused, and avoidance.

Billings and Moos (1984) examined the relationship between stress and coping disposition in 424 depressed patients who were receiving services in several community mental health facilities. Their cross-sectional design adequately reached conclusions that problem-solving styles of coping were associated with less dysfunction and emotion-focused and avoidance styles of coping related to more depression. They found that women used emotion-focused coping styles more often. Moore and Stambrook (1992)

concluded that neither problem-focused nor emotion-focused coping styles were associated with better outcome among persons with head injury. Unfortunately, the use of multivariate analyses on a sample of 53 male participants seriously limited their ability to detect significant results. Revenson and Felton (1989) examined disability and coping as predictors of psychological well-being among 45 people with rheumatoid arthritis. They concluded that disability acted much like a stressor on psychological well-being, and that people employed emotion-focused strategies more often. Data collected were consistent with coping disposition research, especially in terms of more women using emotion-focused strategies. However, 80% of the sample was women, thus confounding the significance that women used emotion-focused strategies more often. Each of these studies attempted to associate coping disposition with outcomes of psychological well-being. The prevalence of problem- and emotion-focused and avoidance coping styles was very apparent and researchers have offered support for various demographic relationships. Therefore, this proposed study examined these particular coping styles as relational variables to the stress appraisal process of people with disabilities.

Measures of Coping

Schwarzer and Schwarzer (1996) provided a critical survey of 13 coping instruments and they suggested the development of "multilevel instruments that match the complexity of coping" (p. 129). This would mean that a coping inventory would describe both the actual coping in a particular situation and the stable coping style of the person taking the instrument. Many instrument developers who debate coping instrumentation would find this difficult because there is no resolution about measuring situation-specific coping efforts rather than dispositional coping efforts (De Ridder,

1997). Coping process supporters attempt to study how coping efforts change in response to particular types of stressful situations; whereas, coping disposition supporters argue that people have fairly stable coping efforts that they use across many types of situations (De Ridder, 1997).

Each methodological approach has merit. Situation-specific measures like the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1988) or the Coping Strategies Inventory (CSI; Tobin, Holroyd, Reynolds, & Wigal, 1989) take one particular situation and examine coping efforts within that one situation. Dispositional measures like the COPE Scale (Carver & Scheier, 1994) or the Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1994) examine coping efforts across a number of general situations and see if stability in coping effort is preserved. Most researchers have developed alternate forms of their original instrument to reflect the need for both types of coping measurement. This proposed study was interested in coping dispositions as they relate to stress appraisals across a variety of situations; therefore it was beneficial to use a dispositional coping instrument like the Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1994).

The CISS (Endler & Parker, 1994) was preferred over other dispositional instruments for use in the proposed study because it captured the most common dimensions of coping: problem-focused, emotion-focused, and avoidance coping. While the COPE Scale (Carver & Scheier, 1994) examined problem-, emotion-, and avoidance-focused coping and is considered a suitable dispositional measure of individual difference (Schwarzer & Schwarzer, 1996), its internal consistency and evidence of validity remains

weak (Carver & Scheier, 1994; De Ridder, 1997). The CISS provided more evidence of appropriate psychometric properties.

Endler and Parker (1994) examined the factor structure of the CISS using two groups of participants, 832 college students and 483 adults. Factor analyses and intercorrelation studies provided evidence for the multidimensionality of the CISS. Internal consistency reliabilities for Task, Emotion, Avoidance, Distraction, and Social Diversion scales are as follows: .91, .89, .84, .78, and .83 respectively.

Endler and Parker (1994) investigated the construct validity of the CISS against two other coping style inventories, the Coping Strategy Indicator (CSI; Amirkhan, 1990) and the Defense Style Questionnaire (DSQ; Bond & Vaillant, 1986). They found moderate positive correlations between the CISS Task scale and the CSI Problem-Solving scale (.53 for men; .46 for women) and between the CISS Emotion and Distraction scales and the CSI Avoidance scale (.49 men's Emotion, .46 men's Distraction; .57 women's Emotion, .48 women's Distraction). Similarly, they found moderate positive correlations between the CISS and DSQ scales. Finally, Endler and Parker (1994) examined the concurrent validity of the CISS by asking two groups of college students (n = 186; n = 231, respectively) to provide retrospective reports about the types of coping responses they had when experiencing either adjustment to university life or completion of a midterm examination. Results indicated that there were correlations between the CISS Task scale and the amount of task-oriented coping reported by students in each stressful situation. They found similar patterns of results for the other two scales. Overall, the study did support using basic coping styles across

differing situations. Consequently, the CISS was the best choice of instrument given the purposes of this proposed study.

Acceptance of Disability

In addition to primary appraisal and coping style, it is important to consider acceptance of disability as a third construct in relation to understanding the appraisal process and stress responses of people with disability. While she would not clearly recognize acceptance of disability as a personality trait, Wright (1983) maintained that disability is an inextricable part of one's identity and one's life. She acknowledged that accepting a disability might imply general personality adjustment because it represents the outlook of a mature person. However, she encouraged research and systematic observation as a point of validation for her assertion.

Wright (1983) defined acceptance of disability as a person's intolerance of resignation and self-devaluation. Attainment of such acceptance is possible once value change has occurred. Barker (1948) stated that removal of all restrictions upon people with disabilities, whether psychological or physical is not possible; therefore, reaction to disability needs to involve changes in the value systems of people with disability. The process of value change means that the person is able to prevail over the feeling of shame and inadequacy resulting from disability assumed as loss of value (Dembo, Leviton, & Wright, 1956; Wright, 1983). According to Wright (1983), specific value changes that occur for people with disability who are perceived as having high levels of acceptance of disability include: 1) enlarging the scope of values, which represents valuing those satisfactions that remain and reckoning with what has been lost; 2) subordinating physique, which means believing that physical appearance matters less than personality

and doing one's best; 3) containing disability effects, which means recognizing that not all areas of one's life need to be or are connected to having a disability; and 4) transforming comparative-status values into asset values, which means believing in one's own personal strengths rather than emphasizing the need to compare oneself to others' perceived or real strengths. Such value changes are essential for the lasting feeling of dignity (Linkowski, 1971; Wright, 1983).

Linkowski (1971) developed an instrument to measure levels of acceptance of disability based on the acceptance of loss theory (Dembo, et al., 1956; Wright, 1983). The Acceptance of Disability Scale (AD) is prominent in many rehabilitation studies (Belgrave, 1991; Heinemann & Shontz, 1982; Li & Moore, 1998; Linkowski & Dunn, 1974) and it has had great influence on acceptance of disability becoming a salient variable in rehabilitation research. The AD uses a six-point Likert scale that asks respondents how much they agree or disagree with statements related to adaptation of disability. Scores ranging from 50 through 300 are possible, with high scores falling about 254 or higher and low scores falling below 180 (Joiner, Lovett, & Goodwin, 1989). Many researchers have noted the effectiveness of the AD Scale as a measure of acceptance of disability and have illustrated correlations with several demographic and disability-related variables.

Heinemann and Shontz (1982) thoughtfully examined disability acceptance, self-esteem, sex-role attributes, and reading ability in a group of deaf adolescents. They found positive correlations between disability acceptance and self-esteem, which supported similar findings reported by Linkowski and Dunn (1974). Joiner, Lovett, and Goodwin (1989) examined the relationship between assertive behaviors, demographic

variables (i.e., race, marital status, and type of disability), and acceptance of disability. They sampled 160 adults who received rehabilitation counseling services from state vocational rehabilitation agencies and found several positive relationships. For example, assertive behavior correlated with acceptance of disability, thus concluding that people would move through rehabilitation services more quickly and achieve acceptance of their disabilities. Persons with disabilities who were divorced were significantly more accepting of their disabilities than other marital status groups. They found Caucasian people with disability were positively accepting of disability than were people of color. Finally, people with spinal cord injury, with neurological disorders, with cardiac problems, and with substance abuse issues were significantly more accepting of their disability than people who have mental retardation. The people with mental retardation in the study functioned at a high level and many expressed frustration with their condition, perhaps contributing to lower acceptance scores.

Finally, Li and Moore (1998) conveniently sampled 1, 266 adults, who utilized state vocational rehabilitation services, to examine relationships between acceptance of disability and various person characteristics. They found significant correlation between age, marital status, income, and acceptance. Younger, married, and higher income people reported more favorable acceptance of disability. Finding that married persons reported higher levels of acceptance contradicted Joiner et al. (1989). People with a single disability scored higher than people with multiple conditions and people with congenital disabilities scored higher than did people with adventitious disabilities.

One area of research that has not used acceptance of disability as a variable is in stress and coping with disability. There has been no attempt to conceptually understand

its relationship with the appraisal process or with coping styles or as a mediator between appraisal and coping style. Therefore, it does appear important to explore acceptance of disability in relation to the stress appraisal process and coping disposition of people with disability.

Conclusion

This literature review has identified the need to examine the stress appraisal process of people with disabilities and to relate this process to coping disposition and level of acceptance of disability. This type of examination is worthwhile to provide and enhance knowledge about stress and coping with disability. Literature on stress and coping theory, coping with disability, personality and coping, and acceptance of disability helped to inform this study. Knowledge from this preliminary study on stress appraisal process helped inform rehabilitation research and contributed to clinical application efforts that seek to enhance the psychological well-being of people with disabilities.

Chapter 3

METHODOLOGY

The purpose of this study was to examine the relationships between the stress appraisal process of people with disability, their coping disposition, and their acceptance of disability. Because the primary intention was to study these relationships, there was no introduction of experimental treatment. Instead, this investigation was a correlational field study that exposed variation between participants at a single point in time (Cone & Foster, 1995; Cook & Campbell, 1979). The research questions were:

1. Which psychosocial situations are more likely to evoke a stress appraisal from persons with physical or emotional disability?
2. Do type of stress appraisal, level of experience with the situation, and/or locus of stressor relate to the person's coping disposition?
3. Does acceptance of disability relate to stress appraisal?
4. Does acceptance of disability relate to coping disposition?
5. Does acceptance of disability mediate the relationship between coping style and stress appraisal?

Several hypotheses were also examined. These were:

1. Persons who have emotion- or avoidance-focused coping dispositions will perceive situations as harmful or threatening more often than persons with problem-focused coping dispositions will.
2. Persons who have task- or problem-focused coping disposition will perceive situations as challenging more often than persons with other coping dispositions and will experience the hypothetical situations more often.

3. Persons who have task- or problem-focused coping disposition will locate the source of difficulty/uncertainty in the environment (i.e., totally outside influences) more often than persons with other coping dispositions will.
4. Acceptance of disability will mediate the relation between coping disposition and stress appraisal process. Specifically, among persons with low levels of acceptance of disability, coping disposition will relate less strongly to stress appraisal, whereas among persons with high levels of acceptance of disability, coping disposition will relate more strongly in a positive direction with stress appraisal.

This chapter describes the participants, instruments, procedures, and the statistical analyses employed in this study.

Participants

Description of Sample

Using Cohen (1988), power analysis yielded a sample size of 150 when performing tests of multiple correlation with level of significance at $\alpha = .05$, medium effect size of $f^2 = .10$, and power at .80.

A sample was selected for the study from three distinct settings: the Michigan Department of Career Development, Michigan Rehabilitation Services field offices; the Capital Area Center for Independent Living; and Michigan State University's Resource Center for Persons with Disabilities. The purpose of sampling from these three sites was to ensure variability within the sampling frame, which enhances generalizability of results across the population of people with disability in Michigan. The entire sample of participants came from these sites.

While it would have been optimal to randomly select field offices, this study only used specific field offices of the Michigan Department of Career Development, Michigan Rehabilitation Services, which offered group orientation sessions. No difference, except volume of people, existed between group and individually scheduled orientation meetings. Therefore, sampling from people who attended group orientations was more convenient for achieving the necessary number of participants needed for this study. Permission to sample from the Michigan Department of Career Development, Michigan Rehabilitation Services field offices was sought and the study was proposed to the State Director and several district managers. Upon approval, a contact person was established in each office and plans to attend an upcoming group orientation were scheduled. At the orientation, interested people were invited to participate once they had completed the orientation services offered at each office.

In addition, contact was made with the Director of the Capital Area Center for Independent Living (CACIL) to obtain permission to sample participants from this site. Sensitivity to the independent living philosophy of personal choice was upheld when asking the Director about the most appropriate way to contact possible participants who use CACIL services to seek support, advocacy, and community services (e.g., transportation arrangements, and support group services). Once permission was granted, five Consumer Café Meetings, which provide consumers with advocacy information, wellness information, and or group support were attended. Individuals were invited to participate in the study at the end of each meeting.

Finally, contact with the director was made and permission to sample participants from Michigan State University's Resource Center for People with Disability (RCPD)

was sought. Participants who utilize the services offered through the RCPD are students of Michigan State University who are taking classes toward completion of an undergraduate or graduate degree. The director of the RCPD sent out a letter to all students on campus who utilize services via electronic e-mail. This letter (see Appendix A) stated the purpose of the study and invited interested persons to participate in one of various scheduled meeting times. The letter encouraged students to individually contact the investigator of this study if questions or need for non-group administration was preferred.

To summarize, the sampling frame was influenced by the need for adequate representation of people with disabilities who experience stress and coping in a variety of situations. To perform statistical tests, this study needed a total number of approximately 150 participants. Therefore, to secure the sufficient number of participants, a sample was drawn from the Michigan Department of Career Development, Michigan Rehabilitation Services field offices, the Capital Area Center for Independent Living, and the Resource Center for People with Disabilities at Michigan State University.

Instrumentation

An extensive search of tests and measures was completed to find the most appropriate instruments for use in this study. For example, professional journals in rehabilitation counseling, psychology, sociology, and Sweetland and Keyser (1991) were reviewed to explore the full range of options available. Individual authors were interviewed over the telephone and through electronic mail regarding their thoughts about the best ways to measure stress appraisal, coping disposition, and acceptance of disability. The decision to use the Coping Inventory for Stressful Situations (CISS;

Endler & Parker, 1994) and the Acceptance of Disability Scale (AD; Linkowski, 1971) was made after reviewing the literature and talking with various authors about their instruments. Additionally, it was determined that an instrument that measured the meaning in life situations for people with disability and a demographic questionnaire that would gather typical research data (e.g., age, gender, employment, marital status) and research data specific to disability condition (e.g., type of disability, time since onset) needed to be developed. Therefore, these instruments were developed for use in this study. Due to copyright restrictions, a copy of the Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1994) is not included in the Appendices. Readers are encouraged to contact Multi Health Systems for a preview copy of the CISS (see Appendix B). Readers can find copies of the Acceptance of Disability Scale (Linkowski, 1971), the Demographic and General Information Questionnaire and the Stress Appraisal Inventory for Life Situations in Appendices C, D and E, respectively.

Instrument Development

Several measures of stress were examined, yet none yielded the specific objective desired in this study. Most measures attempted to focus on the relationship between life changes (i.e., stressors) and physical health (Romano, 1992). For example, Holmes and Rahe (1967) developed the Schedule of Recent Experiences later revised as the Social Readjustment Rating Scale (SRRS) to assess an individual's total life stress. This highly used and respected instrument was not suitable for reflecting the life events experienced by person with disability. Therefore, the Stress Appraisal Inventory for Life Situations (SAILS) was developed for use in this study.

The Stress Appraisal Inventory for Life Situations. The Stress Appraisal Inventory for Life Situations (SAILS) was an instrument designed by the author with the purpose of measuring the stress appraisals of people with disability. The instrument was adapted, with permission, from the Adolescent Disability Coping Inventory (ADCI; Wallander & Varni, 1995). While the ADCI specifically measures common coping dispositions among adolescents, the scenarios used in the inventory and the classifications of stress areas provided in Wallander and Varni (1995) support the purpose behind the development of the SAILS. J. L. Wallander (personal communication, October 15, 1999) stated that the ADCI and its empirically based Taxonomy of Areas of Stress could serve as a useful guide in developing an appraisal inventory for adults with disabilities. In addition, the ACDI is a useful model for developing an adapted version (i.e., the SAILS) because it grounds itself in the transactional theory of coping (Lazarus & Folkman, 1984b) and focuses specifically on people with disability.

While developing the SAILS, the author of this study sought consultation from two rehabilitation counselor educators who have specific expertise in instrumentation and psychosocial adaptation of people with disability. A draft version of the instrument was provided to both consultants who made specific comments about the content of the scenarios and the form of the instrument. Consequently, both the consultants and investigator determined that the SAILS scenarios needed to include a person's cognitive reflection (e.g., "you wonder what kind of discomfort you will experience") or definitive action step (e.g., "you ask your supervisor to make opportunities for advancement available to you") so that the situation would present itself more like a primary appraisal

than the secondary appraisal format found in the ADCI (Wallander & Varni, 1995). Furthermore, creation of seven Likert scale statements ensured differentiation across four subjective response aspects: extent of stress response, type of stress response, experience with the situation, and location of stress response. These seven statements elaborate on the subjective meanings of primary appraisals and directly link to what the literature suggested as factors influencing the primary appraisal process (Bramston, Fogarty, & Cummins, 1999; McCarthy, Lambert, & Brack, 1997; Chaturvedi, 1983; Lazarus & Folkman, 1984a; Shontz, 1975).

Demographic and General Information Questionnaire. An instrument that captured the demographic information wanted in this study was not available. Therefore, the author developed a demographic and disability characteristics instrument to capture the information needed specifically for the purpose of this study. The data collected from this instrument yielded information needed for the proposed post hoc analyses described later in this chapter.

Information regarding the background of the participants was collected with the use of the Demographic and General Information Questionnaire (DGIQ). This survey instrument was designed specifically for this research study. Self-report questions asked of the participants were: gender, age, race/ethnicity, marital status, level of employment outside the home (full- or part-time), type of disability, and total years with disability. These variables were chosen based on results from a review of the literature that showed these variables as most pertinent to rehabilitation process and outcome study. These variables may illuminate greater variation when attempting to understand the relationship between stress appraisal process, coping disposition, and acceptance of disability.

Description of Final Instrument (see Appendix E)

The SAILS provides 15 general life situation/event scenarios and asks persons to complete seven, 5 point Likert scale statements (1-5), by circling the number that most closely matches how they think about the situation presented on each page (see Table 1). The first statement asks the person to rate to what extent they think the situation would be stressful. Data collected from this helped to inform the first research question.

The second, third, and fourth statements although formed separately, were intended to measure the second aspect of subjective response--whether the person perceives harm, threat, or challenge from the situation. A person might in fact perceive a situation as harmful (i.e., depressing) or threatening, yet be inclined to act on the situation because of some perceived challenge. Therefore, three individual Likert scales were developed. Collecting data from these three statements served to better inform the second research question and provided rich information about the stress appraisal process for people with disability.

The fifth statement asks the person to rate how often they encounter the situation. Data collected from this captured the third aspect of subject response, level of experience with the situation, and yielded information to answer the second research question. Finally, the sixth and seventh statements ask the person to rate how often they believe they find the source of difficulty or uncertainty in the situation located in the environment or in them. Data collected on these highlighted the fourth aspect of subjective response, locus of stressor, and helped inform the second research question.

This study used three psychosocial impacts of living with disability: social support, employment, and healthcare to ground the situations. Five scenarios for each of

Table 1

Stress Appraisal Subscales for the Stress Appraisal Inventory for Life Situations

For each statement that follows the situation, circle the number that most closely matches how you think about the situation.

Subscale 1. This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Subscale 2. Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Subscale 3. Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

Subscale 4. I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Subscale 5. I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Subscale 6. The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Subscale 7. The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

the three areas of impact make for 15 situations. Based on a review of the literature, each of the five scenarios adequately captures the three psychosocial domains of living with disability. One example of a Social Support situation is, "You and your friends are discussing the subject of sex. You have something to add to the conversation, but no one asks your opinion and they act as if you would not be interested in an intimate relationship." An example of an Employment situation is, "You are interviewing for an important job opening. The interviewer states that you will only be hired because there is a law that requires hiring people with disability. You really want this job, so you say nothing to the interviewer about his/her attitude toward you." An example of a Health Care situation is, "Your doctor recommends a new experimental treatment that might benefit you. You do not want to try this treatment, but trust your doctor's recommendation. You decide to take the experimental treatment even though you have doubts about it."

Coping Inventory for Stressful Situations

The most commonly used measure to assess coping with a stressful situation has been the Ways of Coping Questionnaire (Lazarus & Folkman, 1988). This instrument asks persons to think about one specific stressful situation and to answer what ways of coping they use to deal effectively with that situation. While this is a well-respected instrument, its limited focus on one stressful situation did not match this study's purpose of finding meaning in several situations and relating coping disposition to such situations.

Research considers the Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1994) an instrument of choice for today and future research (Cook & Heppner, 1997). The CISS is a 48-item self-report questionnaire that lists a variety of coping

responses and asks persons to indicate how much they engage in such responses when confronted with difficult or stressful situations. Unlike other coping inventories, the CISS specifically asks persons to think about any type of stressful situation; it does not provide the stressful situation, as do other inventories. Therefore, the CISS is an appealing measure to use in this study because participants completed the SAILS, which covered a multitude of situations that might elicit a stress response.

The CISS is particularly concerned with examining three types of coping styles: task-, emotion- and avoidance-oriented coping (Endler & Parker, 1994). Scores on each of the three factors sum to form scale scores; higher scores specify greater use of that precise coping style (Cook & Heppner, 1997). One example of a Task-oriented coping item is, "Think about how I have solved similar problems." One example of an Emotion-oriented coping item is, "Tell myself that it is not really happening to me." One example of a Distraction scale, Avoidance-oriented coping item is, "Go out for a snack or meal." One example of a Social Diversion scale, Avoidance-oriented coping item is, "Try to be with other people." While the task-oriented coping category appears to have a different name from the commonly known problem-focused coping, it is simply a difference in nomenclature, not in definition.

Endler and Parker (1994) have attempted to refine the reliability and validity of the CISS. Cronbach alpha coefficients for Task, Emotion, Avoidance, Distraction, and Social Diversion scales are as follows: .91, .89, .84, .78, and .83 respectively. De Ridder (1997) provided a general overview of many coping measures, which highlighted the CISS as a useful dispositional measure because of a Cronbach's alpha > .70 and/or test-retest correlation > .70 and because it had good construct and/or predictive validity.

Interestingly, the most recent research effort related to the factor structure of the CISS found that data from 329 undergraduate students at a large midwestern university provided stronger support for a four-factor, not three-factor model (Cook & Heppner, 1997). Therefore, use of the Distraction and Social Diversion subscales might be preferred over the Avoidance-oriented scale. N.S. Endler (personal communication, October 19, 1999) stated that it is best to administer the CISS in the three-factor model for confidence in reliability of the measure.

Endler and Parker (1994) discussed evidence of validity based on various correlation tests with other measures of coping. For example, they found moderate positive correlations between the CISS Task scale and the CSI Problem-Solving scale (.53 for men; .46 for women) and between the CISS Emotion and Distraction scales and the CSI Avoidance scale (.49 men's Emotion, .46 men's Distraction; .57 women's Emotion, .48 women's Distraction). They found similar moderate positive correlations between the CISS and DSQ scales. The CISS was selected for use in this study because it represented a systematic approach to the assessment of coping disposition. In addition, the development of the instrument was based on the transactional theory of stress and coping (Lazarus & Folkman, 1984a), a thorough review of coping assessment literature, and a statistically sound psychometric validation effort.

Acceptance of Disability Scale

Few instruments measure a person's level of acceptance of self in relation to adaptation to disability. Antonak (1981) developed the Scale of Attitudes toward Disabled Persons (SADP) from the original Attitude toward Disabled Persons Scale (ATDP; Yuker, Block, & Campbell, 1960). While this instrument is psychometrically

sound and respected in rehabilitation research, its general purpose is to measure attitudes of non-disabled persons toward physically disabled people and attitudes of disabled persons toward themselves. This study was primarily interested in levels of acceptance of disability from the view of the person with a particular disability, not general attitudes toward self and others.

The Acceptance of Disability Scale (AD) has been a widely accepted measure of adjustment to disability since its creation in 1969 (Bolton, 1994). It is a 50-item self-report questionnaire derived from the theory of acceptance of loss (Dembo, Leviton, & Wright, 1956), which emphasizes the meanings, values, and emotions that people with disability associate with having a disability (Bolton, 1994; Linkowski, 1971). This measure was selected to operationalize the construct of acceptance of disability because it specifically addresses subjective meanings associated with disability, it has a short administration time of approximately 20 minutes, it can be used with adult populations who might read at a fourth grade or higher reading level, and it has well established reliability and validity. Responses to the test items use a standard 6-point Likert format of agreement or disagreement, and participants need only check their answer directly on the questionnaire. Scores sum into a total score, indicating one's level of acceptance of disability; higher scores reflect greater levels of acceptance of disability. According to Joiner, Lovett, and Goodwin (1989), high acceptance of disability scores fall from about 254 or higher and low scores fall below 180. One example of an acceptance of disability item is, "There is practically nothing a person in my condition is able to do and really enjoy it."

The AD has acceptable levels of reliability and evidence of validity. Many researchers have reported the AD as an effective measure of acceptance of disability (Davis, Anderson, Linkowski, Berger, & Feinstein, 1985; Glueckauf, Horley, Poushinsky, & Vogel; Heinemann & Shontz, 1982; Kaiser, Freeman, Wingate, & Chandler, 1987). However, these studies did not report specific internal consistency coefficients. Linkowski (1971) reported an internal consistency coefficient of .93 from a sample of 46 clients with physical disabilities who were in the vocational evaluation and planning phase of rehabilitation (Bolton, 1994; Linkowski, 1971).

Empirical evidence of content, construct, and concurrent validity exists. Most recently, Li and Moore (1998) examined the relationships between acceptance of disability and three explanatory variables: demographic characteristics; disability conditions such as disability onset and multiple disabilities; and psychosocial factors such as emotional support and perceived discrimination. From a sample of 1, 266 adults with disabilities Li and Moore found that the strongest positive correlates with disability acceptance were self-esteem and emotional support (.53 and .35 respectively). They perceived the strongest negative correlates were with disability acceptance discrimination and chronic pain (-.37 and -.33 respectively). Overall results of their study conclude that acceptance of disability is "significantly related to general self-image " (p. 22). In addition, Hampton and Crystal (1999) found that females had significantly lower levels of acceptance of disability than did males (mean difference for males = 185.30, mean difference for females = 168.09, $t = 2.30$, $p < .05$).

A principal factor analysis of the 50 response items for samples of 46 clients in a rehabilitation center and 55 college students resulted in support for a unidimensional

construct (Linkowski, 1971). However, multifactor rotations may provide insight and basis for a multidimensional construct (Bolton, 1994). According to D.C. Linkowski (personal communication, October 14, 1999), he intends to revise the AD to improve its psychometric qualities. However, he did state that the AD has empirical correlational evidence (i.e., positively related to adjustment of disability, locus of control, and education, while negatively associated with depression) that supports the reliability and validity of the scale in its current form.

Field Testing of the Instruments

Before using these instruments for the purpose of this study, all instruments were field-tested on five individuals from one field office of the Michigan Department of Career Development, Michigan Rehabilitation Services, and four students from Michigan State University's Resource Center for People with Disability. The purpose of this strategy was to know how long it would take to complete all of the instruments. In addition, feedback on the Stress Appraisal Inventory for Life Situations (SAILS) regarding appropriate terminology, ease of reading, ease of administration, and order of administration was needed because it was a newly developed instrument to measure the meaning of life situations for people with disability. Ten dollars was offered to individuals who agreed to be part of this pre-testing effort, and participants were told that the information they supplied would not be used or reported in any way as data, but that it would only supply feedback about the instruments.

Procedures

Design

The intent of the present study was to explore the relationship between the stress appraisal process, coping disposition, and level of acceptance of disability using a one-time administration of four self-report questionnaires. The study utilized a self-report format because the information within the questionnaires could not be scientifically observed, and the participants were most able to evaluate their meanings of stressful situations, their coping disposition, and their level of acceptance of disability. It was assumed that the participants were willing and able to respond honestly and accurately to all four questionnaires. In order to achieve the necessary sample size for this study, each participant was offered ten dollars for the completion of the questionnaires.

Data Collection

Data collection began on February 14, 2000 and ended on April 10, 2000. During this timeframe, visits were made to the Michigan Department of Career Development, Michigan Rehabilitation Services, the Capital Area Center for Independent Living, and Michigan State University's Resource Center for People with Disability, to invite people to participate in the study. Each participant (n = 151) who agreed to take part in the study completed a standard research consent form required by the University Committee on Research Involving Human Subjects at Michigan State University (See Appendix F). Participants were told that the study was interested in examining life situations from the perspective of people with disability, and that the information they share would contribute to an enhanced understanding of the well-being of people with disability.

Next, participants were informed that the study involved the administration of four self-report questionnaires that would take approximately one hour to complete. Each participant understood the intention of each questionnaire and was read the directions for completing the questionnaires aloud. The instructions to the participants were also offered in a self-explanatory format in order to promote independence in completing the packet of questionnaires. The investigator was present at each group administration to answer questions from participants that arose (e.g., a meaning of a word or phrase). The most frequently asked type of question from several participants was for clarification of a term or phrase in the Coping Inventory for Stressful Situations (i.e., what does "schedule my time better" mean?). The same example was told, as an attempt to clarify the meaning of the term or phrase, to each participant (i.e., if you missed the bus, how often would you think to schedule your time differently to make the bus on-time on the next occasion?). Four questionnaires were read to seven people who needed accommodation because of a visual impairment or learning disability.

At the time each participant handed over the completed instruments, each instrument was scanned for completeness. If any items were blank, the individuals were asked to complete those items. The participants were thanked and paid ten dollars each for their participation in the study.

Data Analysis

This investigation required a one-time administration of four self-report surveys to all participants in the study. Descriptive statistics were computed on sample characteristics from the Demographic and General Information Questionnaire. Examination of the following continuous variables: age and total years with disability

and of the following categorical variables was necessary to define the selected characteristics of the sample: gender, employment status, marital status, race, and type of disability. The means, standard deviations, frequencies and percentages were examined for each type of variable.

Before further analyses concerning the five research questions and four hypotheses for this study, a principal components analysis (PCA) was conducted on the 105 Stress Appraisal Inventory for Life Situations (SAILS) items based on subject responses (n = 151) to this questionnaire. The purpose of PCA is to reduce large data items into a few meaningful components based on the intercorrelation among the items, often revealing relationships that were not previously suspected or easily interpretable (Johnson & Wichern, 1992). Because PCA explains the variation that is unique to an item and its error variance, as well (Pedhazur & Schmelkin, 1991), it was chosen as the best data reduction method. The rule of eigenvalues greater than one (Johnson & Wichern, 1992) was utilized to determine which factors to retain, and a scree test was plotted to determine the number of retained factors in this study. Both Varimax and Direct Oblimin (oblique) rotation methods were used to ensure that the best factor solution was identified.

In order to address the first research question, the Fisher's r to Z transformation procedure (Hays, 1963) was used to transform all Varimax rotated factor loadings and normalize their correlations. Using these standardized factor loadings, five analyses of variance (ANOVA) models were run to test the differences in means across the three types of stressful psychosocial situations (i.e., social, employment, and health care). Post hoc comparisons were followed up on all significant F ratios using Tukey's honestly

significant difference post hoc comparison procedure (Shavelson, 1988; SPSS User's Guide, 1999).

Before answering the remaining four research questions, the Bartlett's estimation of common-factor score procedure (Mulaik, 1972) was utilized to obtain variables for the five factors identified using a principal components procedure. This procedure accounted for all factor loadings and not just those that were identified as the highest loadings from the PCA. All future mentioning of SAILS factors indicates those derived from the Bartlett's estimation of common-factor score procedure.

To address the second research question, a general multivariate linear model (MANOVA) was utilized. The three possible profile scores from the Coping Inventory for Stressful Situations (CISS) were the predictor variables and the five SAILS factors were the dependent variables in the model. Upon finding significant F (Wilks' Lambda, $p = < .05$) and to test the first three research hypotheses on the relationship between stress appraisal and coping disposition, Tukey's honestly significant difference post hoc comparison procedure was used to locate the differences found.

To address the third research question, a linear multiple regression model was used to test the relationship between level of acceptance of disability and stress appraisal. Acceptance of disability raw scores was the predictor variable and the SAILS factors were the dependent variables in the model. Significant Beta weight coefficients were analyzed to determine whether positive and /or negative linear relationships resulted.

The fourth research question was addressed by using a general univariate linear model to test the relationship between acceptance of disability and coping disposition.

Tukey's honestly significant difference post hoc comparison procedure was used to locate the significant differences found.

To address the fifth research question and the fourth research hypothesis, a general linear multivariate covariance (MANCOVA) model was used to test for mediation effect. Acceptance of disability was the covariate, coping profile scores were the fixed factors, and the two significant SAILS factors, Intensity of Stress and Environment, were the dependent variables. Level of significance for the F ratio determined whether a mediation effect occurred between coping disposition and stress appraisal.

Additional Analyses

Post hoc exploratory analyses were run using demographic variables to gain greater understanding into the stress appraisal process for people with disability. No a priori hypotheses were formed about demographic and disability condition characteristics because of the limited application of stress and coping theory to people with disabilities.

A general multivariate linear model (MANOVA) was not possible to test for significant relationship between the five dependent SAILS factor variables and the seven independent demographic variables: gender, age, race, marital status, employment status, type of disability, and total years with disability. Completing an omnibus test was not reasonable given the number of participants for the number of levels across all variables. Therefore, the MANOVA procedure was used with one demographic characteristic at a time as the independent variable; seven MANOVAs resulted. While this procedure is not statistically optimal, the exploratory nature of this study may support the findings and create future research interest.

Finally, given the exploratory nature of this study, a level of significance of α = .05 was used as the minimum rejection level of all statistical analyses used in this study. The Statistical Package for the Social Sciences (SPSS) software version 9.0. was employed in all of the data analyses in this study.

Chapter 4

RESULTS

Participants

The participants in this study consisted of 151 individuals who attended one of three different type service settings for people with disabilities. One hundred and thirty-seven individuals attended group orientation meetings at four field offices of the Michigan Department of Career Development, Michigan Rehabilitation Services (MDCD-MRS). Six individuals attended consumer café meetings at the Capital Area Center for Independent Living (CACIL). Fourteen individuals came during scheduled group meetings through Michigan State University's Resource Center for Persons with Disabilities (RCPD). An exact participation percentage rate is unknown across all three service settings because total access to all individuals from each setting was limited. However, the rate was computed based on the number of people with whom the investigator had direct contact. Two hundred and eighteen individuals were asked to participate in the study, of which 157 agreed, for a participation rate of 72%.

The 157 completed surveys yielded 151 useable surveys. Over a period of eight weeks, the information from these 151 individuals was gathered from a total of 22 visits to the MDCD-MRS field offices; five visits to the CACIL; and 11 visits to scheduled group meetings with individuals from Michigan State University's RCPD. Only the primary investigator collected data from the 151 individuals who comprise the sample in this study.

Characteristics of the Sample

Participants were between the ages of 18 through 65, all met the definition of having a disability, and were within the normal range of intellectual functioning. Initially, certain participants were excluded from the study based on cognitive or psychological functioning. Once data collection began, it became apparent that collecting data from all interested parties, regardless of diagnosis or impairment, would yield interesting data about the stress appraisal process. Therefore, clinical judgment was used and those individuals who disclosed having a physical or emotional disability (i.e., learning disability, depression, anxiety disorder) were included in the study.

The final sample comes from three geographical areas of the state of Michigan, as defined by the Michigan Department of Career Development. Table 2 presents a breakdown of the participants by each of the three service settings according to geographical area. The Eastern area encompasses the thumb of Michigan. This area is a largely mixed socioeconomic region, including rural areas, suburbs and cities. The city of Flint has one of the largest racial and ethnic minority populations in this area. The Northwestern area includes the northern and western regions of the lower peninsula and the entire upper peninsula of Michigan. This area is primarily rural and composed of

Table 2

Participants Categorized by Service Setting and Area (n= 151)

Area/Service Setting	N	Percent
Northwestern Area (n = 28)		
Grand Rapids (MDCD-MRS)	28	18.5
Eastern Area (n = 17)		
Flint (MDCD-MRS)	17	11.3
Southern Area (n = 106)		
Ann Arbor (MDCD-MRS)	33	21.9
East Lansing (RCPD)	14	9.3
Lansing		
MDCD-MRS	53	35.1
CACIL	6	4

mainly Caucasians, with the majority of racial and ethnic minorities located in the city of Grand Rapids. Finally, the Southern area includes the lower portion of the state of Michigan. This area includes the state Capitol in Lansing and two major university communities: The University of Michigan in Ann Arbor and Michigan State University in East Lansing. This area is a largely mixed socioeconomic region and includes suburbs, cities, and rural farming areas. The highest concentration of minorities is in the Ann Arbor and Lansing areas.

There is over-representation in the Southern area in the present sample because of the conveniently chosen service setting locations. Descriptive statistics for the population were secured from the directors of each service setting, and the following variables were examined: gender, age, marital status, race/ethnicity, employment status, and type of disability. No comparative information was available between population and sample distributions for the total years with disability variable. A review of the population and sample statistics indicated that the individuals who chose to participate had demographic characteristics very similar to those of the population.

For gender, marital status, employment status and type of disability variables, the population and sample distributions were very similar, with no remarkable differences. An approximate 11% difference in age at the four MDCD-MRS field offices indicates that this study captured an older sample in Flint and Grand Rapids with a majority in the 30 – 60 year age category (population majority in the 18-29 age category). Differences in age were similar for two MDCD-MRS field offices: Lansing and Ann Arbor and for the CACIL and RCPD, as well. The race/ethnicity variable was similar across all service settings except for a reversed difference between Caucasians and African-Americans in

Flint. This study captured 87% African-Americans and 3% Caucasians, whereas the population distribution is 69% Caucasian and 29% African-American.

Based on the information that the participant identified on the Demographic and General Information Questionnaire, the sample in this study consisted of 83 males (55%) and 68 females (45%). The racial/ethnic composition of the final sample was 92 Caucasians (60.9%), 41 Black/African American (27.2%), 6 Hispanics (4.0%), 4 Asian/Pacific Islander (2.6%), 1 Native American (.7%), and 7 individuals who identified themselves as Mixed Race (4.6%). Table 3 provides the breakdown of the sample by demographic characteristics. The participant's age ranged from 18 – 63 with mean age of 36 years. The age variable was partitioned into a four level categorical variable as indicated in Table 4 so that specific groupings could be examined. Regarding employment, 61.6% (n = 93) of the sample indicated that they were unemployed, and 13.9% (n = 21) were students. Three participants identified having multiple employment positions such as: employed part-time and student, student and volunteer, or employed part-time and student and volunteer. In terms of marital status, 60.3 % (n = 91) were married, and one participant did not complete this item.

These demographic data are comparable to national statistics although there were differences in percentages among the age, race/ethnicity and employment status variables. The chance of acquiring a disability increases as people grow older. According to the United States Census Bureau (1999), for people who are 55- 64, 20% of Caucasians, 35% of African-Americans, and 28% of Hispanics report having a severe disability. Seventy-seven percent of people with non-severe disabilities are currently employed, and people with hearing or visual impairments have the highest employment

Table 3

Demographic Characteristics of the Sample

Variable	N	Percent
Gender		
Male	83	55.0
Female	68	45.0
Race/Ethnicity		
Asian/Pacific Islander	4	2.6
Black/African-American	41	27.2
Caucasian	92	60.9
Hispanic	6	4.0
Native-American	1	0.7
Mixed Race	7	4.6
Marital Status		
Single	91	60.3
Married	29	19.2
Divorced	25	16.6
Widowed	5	3.3
Employment Status		
Full-time	13	8.6
Part-time	17	11.3
Student	21	13.9
Volunteer	4	2.6
Not Employed	93	61.6
Other: Multiple positions	3	4.6

Note: The Ns do not total 151 due to missing data.

Table 4

Age Variable (n=151)

Level	Age	N	Percent
1	18 – 27 years	40	26.5
2	28 – 36 years	38	25.2
3	37 – 44 years	39	25.8
4	45 or more years	34	22.5

percentage rate. Despite the growth in employment status, securing employment remains difficult for people with disabilities who are interested in working (United States Census Bureau, 1999).

There was great variability in the types of disability presented by the sample. Table 5 offers the breakdown of the sample by type of disability. Eighty-six percent of the sample identified having a physical disability or impairment, whereas 13.2% have emotional disabilities. Types of chronic diseases listed by participants included: diabetes, kidney disease, human immunodeficiency virus (HIV), hepatitis C, lupus, cancer, and multiple sclerosis. Types of emotional disabilities listed by participants included: depression, anxiety, and stress. Types of physical injury listed by participants included: elbow, hands, foot, shoulder, and hip. One participant did not identify his or her type of disability. An "Other" category that encompassed two participant's responses was created in order to uphold confidentiality of their known type of disability. The

Table 5

Type of Disability Characteristic of the Sample

Disability Type	N	Percent
Learning Disability	27	17.9
Alcohol/Substance Abuse	26	17.2
Emotional	20	13.2
Back Injury	11	7.3
Chronic Disease	11	7.3
Arthritis	7	4.6
Head Injury	7	4.6
Spinal Cord Injury	6	4
Amputation/Limb Deficiencies	6	4
Epilepsy	5	3.3
Nerve Injury	5	3.3
Physical Injury	4	2.6
Visual Impairment	4	2.6
Hearing Impairment	4	2.6
Muscular Dystrophy	3	2
Heart Disease	2	1.3
Other	2	1.3

Note: The Ns do not compute to 151 due to missing data.

investigator did not want to single out any one type of disability, thereby possibly exposing the identity of the participants.

In order to examine specific groupings, the total years with disability variable was partitioned into a four-level categorical variable as indicated in Table 6. The percentage of males (24%) to females (25%) in this study who lived zero to six years with disability was quite even. However, differences were apparent in the remaining categories: 59% of females (n = 68) lived seven to 24 years, as compared to 40% of the males (n = 83), and 36% of males lived 25 or more years with disability, as compared to 16% of females. These findings were consistent within and across racial/ethnicity groupings, as well. Given that Caucasians comprised the majority of the sample, it is feasible to see that they reported a higher percent of total years with disability for each level of category than other racial/ethnic groupings. Table 7 presents a breakdown of participants by gender, race, and total years with disability to illustrate these differences.

Table 6

Total Years with Disability Variable (n= 151)

Level	Years with Disability	N	Valid %
1	0 – 6 years	37	24.5
2	7 – 15 years	39	25.8
3	16 – 24 years	34	22.5
4	25 or more years	41	27.2

Table 7

Participants Categorized by Gender, Race, and Years with Disability (n = 151)

Group	Total Years with Disability N 0-6	7-15	16-24	25 or more	% Total
Females (n = 68)					
Asian/Pacific Islander	0	1	1	1	4.4
Black/African-American	5	8	4	1	26.5
Caucasian	10	11	12	8	60.3
Hispanic	2	0	1	1	5.8
Native-American	0	0	0	0	0
Mixed Race	0	1	1	0	3
Males (n = 83)					
Asian/Pacific Islander	0	1	0	0	1.2
Black/African-American	6	5	2	10	27.7
Caucasian	12	10	12	17	61.5
Hispanic	1	0	0	1	2.4
Native American	0	0	1	0	1.2
Mixed Race	1	2	0	2	6

Principal Components Analysis

Before conducting the analyses regarding specific research questions for this study, the SAILS subscale items were grouped into empirically defined categories using a principal components procedure. In order to determine the number of factors retained by this data reduction technique, the rule of eigenvalues greater than one (Johnson & Wichern, 1992) was employed. Within matrix theory, eigenvalues specify variance and the first few eigenvalues explain most of the total variance (Pedhazur & Schmelkin, 1991; Johnson & Wichern, 1992). Figure 1 depicts the scree plot that identified a five-factor solution. The x-axis depicts the eigenvalues and the y-axis depicts the number of components. This factor solution was rotated using the Varimax (orthogonal) procedure, which maximizes the variances of the factors without changing the mathematical properties of the solution (Tabachnick & Fidell, 1996). As compared to other solutions, the five-factor solution was most meaningfully interpreted because of its parsimony.

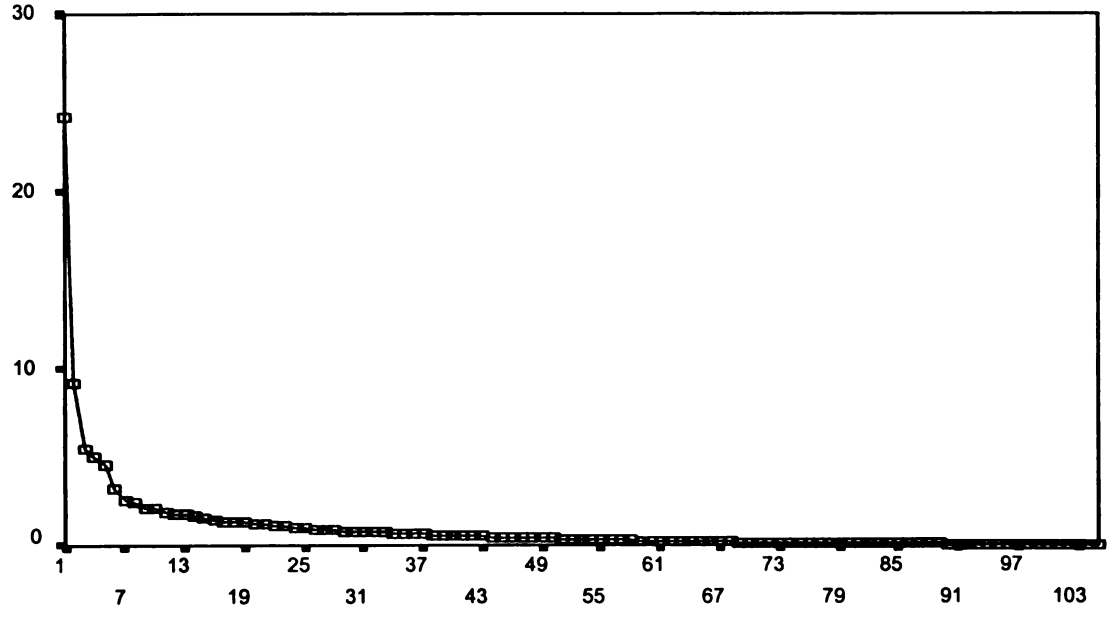


Figure 1. Scree Plot of Eigenvalues from Principal Components Analysis.

Eigenvalues for the five-factor solution ranged from 17.43 to 7.02 and accounted for 46.2% of the variance. All items loaded on at least one of the five factors with loading coefficients ranging from .30 to .82, and the highest loadings on each item served as a basis for factor membership. Finally, these five factors were named based on the items that loaded highest in that factor. These five factor names are: Intensity of Stress, Person, Environment, Challenge, and Experience (see Table 24).

Finally, in order to estimate the internal consistency of each factor, the reliability coefficients were computed. Before determining the final alpha coefficient value, a reliability scale analysis with "items deleted" was run to see if the coefficients increased and if item deletion was necessary. The analysis resulted in two reliability scales increasing by an average of 0.25 percent, which is not enough to warrant item deletion. Consequently, all reliability coefficients remained at their original value, ranging from .88 through .97 and no items from the SAILS instrument were deleted. The value of each reliability scale indicates high to moderate internal consistency. Table 8 presents the labels, eigenvalues, percentages of variance accounted for, and alpha coefficients for each SAILS factor. The following section in this chapter provides further elaboration on the five factors and their loadings.

Stress Appraisal Factors

Before running various statistical tests to answer the specific research questions and hypotheses, the Bartlett procedure for estimating common factors (Mulaik, 1972) was utilized to create variables for each of the five SAILS factors. According to Mulaik (1972), Bartlett estimators are generally superior to least-square regression estimators of

Table 8

Component Eigenvalues, Percent Variance, and

Cronbach Alphas Based on Varimax Rotation

Factor	Eigenvalue	% Variance	Cronbach Alpha
1. Intensity of Stress	17.43	16.60	.97
2. Person	8.23	7.83	.93
3. Environment	8.01	7.62	.91
4. Challenge	7.83	7.45	.91
5. Experience	7.02	6.69	.88

common-factor scores. The Bartlett method optimally creates variables and meets the assumptions for independence of errors (Lewis-Beck, 1980) required for statistical testing. These variables were used in analyzing the specific research questions for this study. Each of these five newly created variables have means equal to zero and standard deviations equal to one.

In order to provide meaning for the stress appraisal factors, Tables 9-13 illustrate how exploratory factor analysis defined the five SAILS factors given the specific loading values. Fifteen situations depicted in the SAILS asked participants to respond to the same seven subscale items for each situation. The item loadings show the highest to lowest values for the specific aspect of stress appraisal for which the factor is named.

Table 9 depicts SAILS subscale items one, two, and three (see Table 1) that defined the first factor, Intensity of Stress. More specifically, whether participants

identified a social support, employment, or health care situation as characteristically stressful (not benign or irrelevant), and identified those situations as harmful or threatening determined this aspect of subjective meaning of their appraisal. Participants who responded by circling any number from two through five on these first three subscales indicated that they thought the hypothetical situation would be 1) stressful; 2) harmful (i.e., referring to damage already done and usually requires undoing or reinterpreting what is already past); and 3) threatening (i.e., referring to anticipatory evaluation whereby a person prepares for harm that may come). The Cronbach alpha coefficient was .97 indicating very high internal consistency of the items contained in this factor. The Intensity of Stress factor contained 45 of the 105 items from the SAILS, thus contributing to the high internal consistency coefficient.

Table 10 depicts subscale item seven of the SAILS (see Table 1) that defined the second factor, Person. Whether the participants located the source of difficulty from the three types of situations within themselves determined this aspect of subjective stress appraisal meaning. If the participants circled the number one, "always", on the 5-point Likert scale options, it was assumed that they most often times located the source of difficulty within their person, thus experiencing a more extreme stress response to that subjective response characteristic. This particular subscale item was the only item that was reverse-scored on the SAILS instrument. This factor contained 15 items in total and yielded a relatively high alpha coefficient of .93.

Table 9

SAILS Factor 1: Intensity of Stress

Situation Number	Type of Psychosocial Situation	Situation Subscale Item	Loading
14	Employment	Harm	.762
8	Employment	Harm	.753
2	Employment	Harm	.720
12	Health Care	Harm	.704
14	Employment	Extent of Stress	.690
6	Health Care	Harm	.689
14	Employment	Threat	.674
6	Health Care	Extent of Stress	.662
1	Social Support	Harm	.660
8	Employment	Threat	.652
12	Health Care	Extent of Stress	.647
11	Employment	Harm	.636
11	Employment	Extent of Stress	.635
13	Social Support	Threat	.628
13	Social Support	Harm	.624
12	Health Care	Threat	.619
4	Social Support	Harm	.619
8	Employment	Extent of Stress	.618
6	Health Care	Threat	.616
2	Employment	Extent of Stress	.614
10	Social Support	Extent of Stress	.601
4	Social Support	Threat	.597
4	Social Support	Extent of Stress	.596
1	Social Support	Extent of Stress	.594
1	Social Support	Threat	.590
10	Social Support	Harm	.589

Table 9 (cont'd)

Situation Number	Type of Psychosocial Situation	Situation Subscale Item	Loading
2	Employment	Threat	.587
15	Health Care	Extent of Stress	.577
13	Social Support	Extent of Stress	.575
11	Employment	Threat	.568
15	Health Care	Harm	.555
9	Health Care	Extent of Stress	.552
3	Health Care	Harm	.543
10	Social Support	Threat	.540
5	Employment	Threat	.533
7	Social Support	Extent of Stress	.527
3	Health Care	Extent of Stress	.527
5	Employment	Harm	.519
9	Health Care	Harm	.503
7	Social Support	Harm	.486
3	Health Care	Threat	.485
7	Social Support	Threat	.467
9	Health Care	Threat	.451
5	Employment	Extent of Stress	.443
15	Health Care	Threat	.423

Table 10

SAILS Factor 2: Person

Situation Number	Type of Psychosocial Situation	Loading
8	Employment	.816
14	Employment	.759
13	Social Support	.757
11	Employment	.746
6	Health Care	.728
15	Health Care	.718
5	Employment	.696
9	Health Care	.681
12	Health Care	.670
7	Social Support	.669
10	Social Support	.654
1	Social Support	.594
4	Social Support	.594
3	Health Care	.593
2	Employment	.537

Table 11 describes subscale item six of the SAILS (see Table 1) that defined the third factor, Environment. Whether the participants located the source of difficulty from the situations in the environment, or outside-the-person influences, determined this aspect of subject meaning of their stress appraisal. If the participants circled the number five, "never", on the 5-point Likert scale options, it was assumed that they located the source of difficulty outside their person, thus experiencing a more extreme stress response for that subject response characteristic. This factor contained 15 items in total and indicated moderate internal consistency with Cronbach alpha = .91.

Table 12 portrays subscale item four of the SAILS (see Table 1) that defined the fourth factor, Challenge. Whether the participants thought that they could gain something positive from any type of psychosocial situation determined this aspect of subjective meaning. If the participants circled the number five, "never", on the 5-point Likert scale options, it was assumed that they did not expect to gain something positive from the situation, thus experiencing a more extreme stress response for that subject response characteristic. This factor contained 15 items and had a Cronbach alpha = .91, which indicates moderate internal consistency.

Finally, Table 13 depicts subscale item five of the SAILS (see Table 1) that defined the fifth factor, Experience. Whether participants identified going through or experiencing the situations before determined this aspect of subject meaning of their stress appraisal. If the participants circled the number five, "never", on the 5-point Likert scale options, it was assumed that they had no frequent experience with the type of situation, thus experiencing a more extreme stress response for that subject response

Table 11

SAILS Factor 3: Environment

Situation Number	Type of Psychosocial Situation	Loading
13	Social Support	.773
8	Employment	.771
14	Employment	.748
12	Health Care	.739
11	Employment	.736
6	Health Care	.654
2	Employment	.650
10	Social Support	.624
7	Social Support	.591
4	Social Support	.549
15	Health Care	.527
9	Health Care	.525
5	Employment	.433
1	Social Support	.302
3	Health Care	.300

Table 12

SAILS Factor 4: Challenge

Situation Number	Type of Psychosocial Situation	Loading
6	Health Care	.741
13	Social Support	.737
12	Health Care	.734
7	Social Support	.732
15	Health Care	.689
5	Employment	.683
9	Health Care	.679
11	Employment	.660
10	Social Support	.657
8	Employment	.619
14	Employment	.611
3	Health Care	.595
4	Social Support	.497
2	Employment	.439
1	Social Support	.301

Table 13

SAILS Factor 5: Experience

Situation Number	Type of Psychosocial Situation	Loading
8	Employment	.696
14	Employment	.689
11	Employment	.684
15	Health Care	.666
4	Social Support	.605
9	Health Care	.574
12	Health Care	.536
7	Social Support	.529
13	Social Support	.528
6	Health Care	.493
1	Social Support	.492
5	Employment	.489
10	Social Support	.453
3	Health Care	.449
2	Employment	.442

characteristic. This factor contained 15 items in total and yielded a moderately high alpha coefficient of .88.

Psychosocial Situations that Evoke Stress Appraisal

In order to examine which psychosocial situations evoke a stress appraisal from persons with physical or emotional disability (research question number one), the sample factor loadings for each SAILS factor were transformed into standardized loadings with approximately normal distributions. The Fisher r to Z transformation (Hays, 1963) was used to create the standard scores that were used in subsequent analyses. These standard scores meet the assumptions for hypothesis testing.

These five standardized loadings were used as dependent variables and one categorical variable, type of psychosocial situation, as the independent variable to run a single-factor analysis of variance (ANOVA). The three types of psychosocial situations portrayed in the SAILS were social support, employment, and health care. Each situation was represented five times, to which participants responded with the seven subscale items discussed earlier.

The purpose of the ANOVA was to compare the means of the five standardized loading groups. Variation between and within the five groups was not statistically significant ($\alpha \leq .05$) in relation to type of psychosocial situation. All obtained F values were small with a range of values between .054 and 1, as indicated in Table 14. Consequently, the ANOVA did not support a relationship between type of situation and the SAILS factors.

Table 14

Relationship between Standardized SAILS Loadings and Psychosocial Situation

Factor	Degrees of Freedom		F	Significance Level
Factor 1 (Intensity of Stress)	Between Groups	2	.218	.804
	Within Groups	102		
Factor 2 (Person)	Between Groups	2	.260	.772
	Within Groups	102		
Factor 3 (Environment)	Between Groups	2	1.0	.369
	Within Groups	102		
Factor 4 (Challenge)	Between Groups	2	.441	.645
	Within Groups	102		
Factor 5 (Experience)	Between Groups	2	.054	.948
	Within Groups	102		

Stress Appraisal and Coping Disposition

In order to attend to the second research question and test research hypotheses one through three, a multivariate analysis of variance (MANOVA) was conducted. A general linear multivariate model procedure with the Type III sums of squares was used. Type III sums of square is the most commonly used method and has advantages over the other sums of square types (SPSS Base 9.0 User's Guide, 1999). The purpose of the MANOVA was to test the differences among the coping dispositions on the SAILS factors.

A significant multivariate $\underline{F}$ (Wilks' Lambda = .78, $\underline{F}$ (15, 395) = 2.51, p = < .05) was found for the coping disposition variable. The coping disposition variable was the

profile score obtained by adding up an individual's total response on the CISS and categorizing it into three levels of problem-focused, emotion-focused, and avoidance-focused styles. Six participants did not have a clearly identified coping disposition, thus the category "not specified" was created. Post-hoc comparisons (Tukey's HSD, $\alpha = .05$) followed, which indicated that participants differed in terms of coping disposition for Factor 1 (Intensity of Stress) and Factor 3 (Environment). No other SAILS factors differed significantly. Table 15 depicts the differences in SAILS factor means for coping disposition. Table 16 presents the results of the Tukey's HSD comparisons of coping dispositions for the SAILS factors. According to Newton and Rudestam (1999), Tukey's test is popular for exploring all pairwise comparisons with a large number of groups, and it examines the difference among group means by referring to the difference between the range of means as a measure of their dispersion.

The MANOVA results in Table 16 do not support research hypotheses one through three in this study. No support for Hypothesis 1 was found because participants who had problem-focused coping dispositions ($n = 22$) were significantly likely to perceive situations as harmful and threatening as were participants with emotion- focused ($n = 69$), but not participants who had avoidance-focused coping dispositions ($n = 54$). Interestingly, with a significance level equal to one, participants who had avoidance-coping dispositions had means lower than expected and in the direction opposite than hypothesized. Hypothesis 2 was not supported because coping disposition did not at all relate to Factor 4 (Challenge). Finally, Hypothesis 3 was not supported because participants who had avoidance-focused coping dispositions were significantly

Table 15

Means and Standard Deviations of SAILS Factors for Coping Disposition

SAILS Factor	Coping Disposition	Mean	Standard Deviation
Intensity of Stress	Problem-Focused	-.286	.999
	Emotion-Focused	.332	.870
	Avoidance-Focused	-.280	1.06
Person	Problem-Focused	.005	1.13
	Emotion-Focused	.008	.933
	Avoidance-Focused	-.182	1.04
Environment	Problem-Focused	-.522	.966
	Emotion-Focused	-.009	.926
	Avoidance-Focused	.333	1.04
Challenge	Problem-Focused	-.160	.876
	Emotion-Focused	.003	.966
	Avoidance-Focused	.002	1.08
Experience	Problem-Focused	.401	.925
	Emotion-Focused	-.010	.898
	Avoidance-Focused	-.003	1.14

Table 16

Tukey's HSD Comparisons of Coping Disposition for the SAILS Factors

Factor/Coping Disposition	Comparison Coping Disposition	Significance Level
Factor 1 (Intensity of Stress)		
Problem-Focused	Emotion-Focused	.043*
Emotion-Focused	Avoidance-Focused	.003*
Avoidance-Focused	Problem-Focused	1
Factor 2 (Person)		
Problem-Focused	Emotion-Focused	1
Emotion-Focused	Avoidance-Focused	.478
Avoidance-Focused	Problem-Focused	.788
Factor 3 (Environment)		
Problem-Focused	Emotion-Focused	.252
Emotion-Focused	Avoidance-Focused	.081
Avoidance-Focused	Problem-Focused	.003*
Factor 4 (Challenge)		
Problem-Focused	Emotion-Focused	.867
Emotion-Focused	Avoidance-Focused	1
Avoidance-Focused	Problem-Focused	.889
Factor 5 (Experience)		
Problem-Focused	Emotion-Focused	.170
Emotion-Focused	Avoidance-Focused	.985
Avoidance-Focused	Problem-Focused	.309

Note: *$p < .05$

likely to locate the source of difficulty/uncertainty from the situation in the environment, as were participants with problem-focused coping styles. Persons with emotion-focused dispositions did not relate at all to Factor 3, suggesting that they did not locate the source of difficulty from the situations within the environment.

Acceptance of Disability and Stress Appraisal

In order to address research question number three, a linear multiple regression model was utilized to discern relationship between level of acceptance of disability and stress appraisal. Participants' total raw score from the AD Scale was used as the dependent variable. Acceptance of disability raw scores ranged from 115 through 300, with a mean score of 210. The AD raw scores were then categorized into three levels, as illustrated in Table 17.

Table 18 displays the correlations between the variables. The correlations for the SAILS factors range from a low of -.269 between Factor 4 and Acceptance of Disability and a high of .407 between Factor 5 and Acceptance of Disability.

Table 19 presents the unstandardized regression coefficient (B), the standardized coefficients (Beta), R^2, and adjusted R^2. $\underline{R}$ for regression was significantly different from zero, $\underline{F}$ (5, 145) = 9.69, $p < .05$. Only two of the SAILS factors (Factor 4, Challenge and Factor 5, Experience) contributed significantly to explain level of acceptance of disability. Altogether, these two stress appraisal factors explained 25% (23% adjusted) of

Table 17

Range of Raw Scores for Levels of Acceptance of Disability

Level (Raw Scores)	N	Percent
High (254 – 300)	20	13.2
Medium (180 – 253)	95	62.9
Low (50 –179)	36	23.8

Table 18

Correlation Matrix among the SAILS Factors to Acceptance of Disability

Variables	Correlations					
	AD	F1	F2	F3	F4	F5
Acceptance of Disability	1	-.092	.023	-.058	-.269*	.407*
Factor 1 (Intensity of Stress)	-.092	1				
Factor 2 (Person)	.023		1			
Factor 3 (Environment)	-.058			1		
Factor 4 (Challenge)	-.269*				1	
Factor 5 (Experience)	.407*					1

Note: *p < .01 (2-tailed)

Table 19

Multiple Regression of SAILS Factors on Level of Acceptance of Disability

Variables/Model Summary	B	β	Significance Level
Factor 1 (Intensity of Stress)	-3.60	-.092	.202
Factor 2 (Person)	.886	.023	.752
Factor 3 (Environment)	-2.26	-.058	.423
Factor 4 (Challenge)	-10.5	-.269	.000*
Factor 5 (Experience)	15.87	.407	.000*

$R^2 = .251$
Adjusted $R^2 = .225$

Note: *$p < .05$

the variability in level of acceptance of disability. As Table 19 indicates, participants with low levels of acceptance of disability were more likely to perceive that they could gain something positive from the situations and participants with high levels of acceptance of disability reported that extent of experience with the situation influenced their stress appraisal.

Acceptance of Disability and Coping Disposition

To address the fourth research question, a general univariate linear model was used to test the relationship between level of acceptance of disability and coping disposition. Table 20 depicts the differences in acceptance of disability means for coping disposition. Most participants (n = 69) responded having an emotion-focused coping disposition, which had the lowest level of acceptance of disability, whereas 22 participants responded having problem-focused coping dispositions and the highest level of acceptance of disability.

A significant univariate $\underline{F}$ (1, 3) = 13.10, $p < .05$ was found for the coping disposition variable. Post hoc comparisons (Tukey's HSD, $\alpha = .05$) indicated that differences among coping dispositions were significant, as illustrated in Table 21. Consequently, participants' level of acceptance of disability related more significantly to problem-focused or emotion-focused coping dispositions than to avoidance-focused coping dispositions.

Table 20

Descriptive Statistics of Acceptance of Disability for Coping Disposition

Coping Disposition	N	Mean	Standard Deviation
Problem-Focused	22	244	33.01
Emotion-Focused	69	193	33.67
Avoidance-Focused	54	218	36.89

Note: The $\underline{N}$s do not compute to 151 due to missing data.

Table 21

Tukey's HSD Comparisons of Coping Disposition for Acceptance of Disability

Coping Disposition	Comparison Coping Disposition	Significance Level
Problem-Focused	Emotion-Focused	.000*
Emotion-Focused	Avoidance-Focused	.001*
Avoidance-Focused	Problem-Focused	.017*

Note: *p < .05

Acceptance of Disability as a Mediating Variable

In order to address research question number five, only those relationships found to be significant for stress appraisal and coping disposition were used in a general linear multivariate covariance (MANCOVA) model. Significant relationships were found between SAILS Factor 1 and SAILS Factor 3 on coping disposition using a MANOVA procedure in research question two. Therefore, to test for mediation effects, acceptance of disability was the covariate, SAILS Factor 1 and SAILS Factor 3 were the dependent variables, and coping disposition was the fixed variable.

A significant multivariate F (Wilks' Lambda = F .997 (2, 145) = .207, p > .05) was not found for acceptance of disability. The results indicated that acceptance of disability was not a mediating variable between the relationship between stress appraisal and coping disposition. This means that the relationship between stress appraisal and coping disposition did not diminish when acceptance of disability was controlled for in

the test. Consequently, Hypothesis 4 was not supported because the mediating variable was not an important variable of explanation.

Additional Analyses

A series of post hoc data analyses were performed in an attempt to explore the generalizability of relationships between the demographic variables and the five SAILS factors. Seven multivariate analyses of variance were computed, each computing for a single demographic variable at a time. Including all independent variables was not technologically possible when using SPSS 9.0. Table 22 depicts which variables significantly related to the SAILS Factors.

Table 22

Significant Relationships among the Demographic Variables

Variable	Relationship with SAILS
Gender	Factor 1: Intensity of Stress
Age	Factor 3: Environment
Race/Ethnicity	Factor 3: Environment Factor 4: Challenge
Employment Status	Factor 3: Environment
Total Years with Disability	Factor 4: Challenge

A significant multivariate F (Wilks' Lambda, F = .88 (5, 145) = 3.85, $p < .05$) was found for the gender variable. A mean of -.265 males (n = 83) and .323 females (n = 68) responded differently only on SAILS Factor 1, Intensity of Stress. Therefore, females are more likely to perceive stress, harm, and threat in situations.

A significant multivariate F (Wilks' Lambda, F = .84 (15, 395) = 1.75, $p < .05$) was found for the age variable. Post hoc comparisons (Tukey's HSD, $\alpha = .05$) indicated that for SAILS Factor 3, participants between 18 through 44 years located the source of difficulty in the environment more often than participants aged 45 through 63 years.

A significant multivariate F (Wilks' Lambda, F = .77 (15, 373) = 2.42, $p < .05$) was found for the race/ethnicity variable. Post hoc comparisons (Tukey's HSD, $\alpha = .05$) indicated that for SAILS Factors 3 and 4, Caucasian and African-Americans located the source of difficulty in the environment, and perceived that they could gain something positive from the situations.

A significant multivariate F (Wilks' Lambda, F = .78 (25, 525) = 1.45, $p < .05$) was found for the employment status variable. Post hoc comparisons (Tukey's HSD, $\alpha = .05$) indicated that for SAILS Factor 3, participants who were students or not employed located the source of difficulty in the environment more often than participants who were employed (i.e., full-time or part-time) or volunteers.

A significant multivariate F (Wilks' Lambda, F = .82 (15, 395) = 1.91, $p < .05$) was found for the total years with disability variable. Post hoc comparisons (Tukey's HSD, $\alpha = .05$) indicated that for SAILS Factor 4, participants who lived with disability 25 years or more perceived that they could gain something positive from the situation more often than participants who lived with disability zero to 24 years.

No significant multivariate test differences for the marital status or primary type of disability variables were found in relation to the SAILS factors.

In an attempt to examine data and research hypotheses and questions in another way, exploration of coping disposition as a continuous variable was completed. It was thought that exploring the data in this manner might yield more meaningful information about the fluidity of the coping process in relation to stress and acceptance of disability, rather than treating it as a categorical variable.

A bivariate correlation matrix was examined for significant relationship among the three variables of interest: stress appraisal process, coping disposition, and acceptance of disability. Table 23 displays the correlations between the variables. Regarding relationship with the SAILS factors, coping disposition correlations ranged from -.178 between Problem-Focused coping and Factor 2 (Person) and .284 between Emotion-Focused coping and Factor 1 (Intensity of Stress). For the Acceptance of Disability variable, the coping disposition correlations ranged from -.422 between Emotion-Focused coping and Acceptance of Disability and .254 between Problem-Focused coping and Acceptance of Disability. No significant correlation between Avoidance-Focused coping and the SAILS factors or Acceptance of Disability was found.

These findings were similar to the data reported for the categorical analysis of coping dispositions, except a difference was found to suggest that people with problem-focused coping dispositions related in a negative direction to SAILS Factor 2 (Person). This finding lends credence to Hypothesis 3 because people who have higher scores to reflect problem-focused dispositions would be less likely to locate the source of difficulty

Table 23

Correlation Matrix among Coping Dispositions, SAILS Factors, and Acceptance of Disability

Variables	Correlations					
	F1	F2	F3	F4	F5	AD
Problem-Focused	-.087	-.178*	-.082	-.089	.092	.254*
Emotion-Focused	.284*	-.043	.008	.098	-.073	-.422*
Avoidance Focused	.016	-.148	.100	.000	.044	.115
Factor 1 (Intensity of Stress)	1					-.092
Factor 2 (Person)		1				.023
Factor 3 (Environment)			1			-.058
Factor 4 (Challenge)				1		-.269
Factor 5 (Experience)					1	.407
Acceptance of Disability	-.092	-.023	-.058	-.269*	.407*	1

in the person. However, there is no relationship to SAILS Factor 3 (Environment) suggesting that people in this study who had problem-focused dispositions would not locate the source of difficulty in the environment. Further research would be necessary to clarify where the source of difficulty is coming from for people in this study who had problem-focused coping dispositions.

Hypothesis 1 was not fully supported because people with avoidance–focused coping dispositions did not relate with SAILS Factor 1 (Intensity of Stress). Yet, the findings supported Hypothesis 1 because people with emotion-focused coping dispositions were positively related to SAILS Factor 1. This finding suggests that people from the sample who had emotion-focused coping dispositions would most likely perceive stress, harm, or threat from a situation, whereas people with avoidance- and problem-focused coping dispositions would not. Only people with emotion-focused

dispositions related with this factor, and no significant relationship for people with problem- or avoidance-focused dispositions were found. This discrepancy suggests that an interaction between the three types of coping dispositions may be occurring, specifically between problem- and avoidance-focused coping dispositions. In the categorical analysis, people with problem- and emotion-focused coping related together, whereas people with avoidance-focused dispositions had lower means than expected and related in the opposite direction than did the other two coping dispositions.

Hypothesis 2 remained unsupported by the supplemental analysis because SAILS Factor 4 (Challenge) did not significantly relate to coping disposition.

The supplemental analysis that examined the relationship between coping disposition and acceptance of disability was similar to the categorical variable analysis. Acceptance of disability related more significantly to problem-focused or emotion-focused coping dispositions. There was no significant relationship between acceptance of disability and avoidance-focused dispositions. Also supported was the finding that people with problem-focused dispositions were likely to have higher levels of acceptance of disability, whereas people with emotion-focused dispositions had lower levels of acceptance.

In summary, the examination of the coping dispositions variable as a continuous, rather than categorical variable, did yield interesting information. Similar relationships were found among the variables, with the exception of people with emotion-focused dispositions relating in a positive direction with SAILS Factor 1 (Intensity of Stress). Further research that explores the possible interaction is needed to clarify this finding. Only limited information about the fluidity of the coping process was obtained through

this supplemental analysis. Further examination of the SAILS with a coping variable that is continuous (non-categorical) is needed to more fully explore the fluid nature of the stress and coping process for people with disabilities.

Chapter 5

DISCUSSION

The purpose of the present study was to explore the relationship between the stress appraisal process, coping disposition, and level of acceptance of disability, using the underpinnings of the transactional theory of stress and coping. Lazarus and Folkman (1984a) asserted that the transactional theory of stress and coping is a useful model when examining the interaction between a person and his or her response to situational demands. A unique feature of this investigation was the selection of people with disabilities for whom the transactional approach to stress and coping makes sense, but for whom application of such theory has not occurred. A stress appraisal inventory was developed to determine the subjective meanings that persons assign to life situations, which resulted in five empirically derived areas of stress appraisal for people with disabilities (see Table 24). These five areas were examined for relationship with a person's coping disposition and level of acceptance of disability, thus operationalizing the transactional theory of stress and coping specifically for people with disabilities.

The Appraisal Process

Before this study was implemented, a review of the literature suggested that there were four areas of subjective response to stress: extent of stress appraisal, type of stress appraisal, level of experience, and location of the difficulty. The SAILS instrument was developed to highlight these four areas and to provide information about the appraisal process specific to people with disabilities. However, exploratory factor analysis determined that the instrument did not succinctly capture these four areas of response as the literature had suggested.

Table 24

SAILS Factors

Factor Name	Definition
Factor 1: Intensity of Stress	Perception that the situation may be stressful and that harm or threat is likely.
Factor 2: Person	Perception that the source of difficulty in the situation comes from within the person.
Factor 3: Environment	Perception that the source of difficulty in the situation comes from the environment.
Factor 4: Challenge	Perception that the person will gain something positive from the situation.
Factor 5: Experience	Perception that the person has some past experience with the situation.

Instead, extent of stress appraisal did not stand alone as its own factor; it related with two aspects of stress appraisal: harm and threat. This first factor was named Intensity of Stress because it reflects the strength behind the negative evaluation that is attributed to one's well-being (actual harm, threat of harm). This finding suggests that regardless of the extent of stress appraisal, participants in this study may have evaluated the demands posed in the hypothetical situations as negatively influencing their well-being. This may have occurred because the instrument did not direct people to move on to the next situation once they appraised a situation as not at all stressful (i.e., benign appraisal). The consequence of this was positive in that participants continued to explicate other subjective response areas thus contributing to the unique meaning that

they assign to certain circumstances, and unfortunate in that information that might have directly implicated transactional theory was misguided.

According to transactional theory, a stressful appraisal means that an individual would evaluate a situation as harmful, threatening, or challenging. However, in this study, challenge was not found to be related strongly enough with aspects of harm or threat to be part of the first SAILS factor. The exploratory factor analysis placed Challenge as its own separate factor, suggesting that participants who perceived gain as a positive aspect of a situation, would not likely appraise the situation as stressful (i.e., benign appraisal). It is not known what this finding means, although there is speculation that the sample from this study might make a unique contribution to what the literature currently offers, which traditionally addresses challenge as part of a stress appraisal for the general population. Perhaps the wording of Subscale Item 4 of the SAILS (see Table 1) needs to be reworked to accurately reflect the meaning of challenge as participants from this study may define it.

Level of experience was its own distinctive factor, and the only area of subjective response to align itself with what the literature suggested. Participants perceived themselves as having more or less experience with a particular situation, thus contributing to their stress appraisal process.

It was thought that the fourth area of subjective response, locus of stressor, would have loaded together to become its own factor. However, Person and Environment were separate factors. This was not unsettling given that locus of stressor was based on whether a person sensed that the negative influence on well-being was coming from an external imposition (environment factor) or a personally prescribed one (person factor).

In addition, because the transactional theory advocates person-environment interaction, it was likely that these two would form separate factors.

In summary, overall results of the principal components analysis suggested that not all areas of subjective response for the stress appraisal process were supported as discussed in the literature about the general population. This may mean that participants in this study offer an inimitable perspective to the stress appraisal process and to some extent support the transactional theory of stress and coping. On the other hand, it is possible that the SAILS, which was designed to reflect the subjective response areas is responsible for the differences in these areas, and this limited the subsequent exploratory factor analysis. Nevertheless, there are certain features of the appraisal process for the sample in this study that do not support the literature or the transactional theory and further research is needed. Suggestions for future research are discussed later in the chapter.

Stress Appraisal Process and Psychosocial Situational Demands

Three types of psychosocial situations: social support, employment, and health care delineated the situational demands in the SAILS instrument. It was not known which category of situations would more likely evoke a stress appraisal from people with disabilities in the sample. Exploratory factor analysis empirically validated the subjective response areas and did not specifically locate the type of psychosocial situation within any meaningful order. Instead, the type of situation was evenly distributed across and within the five factors.

These results are interesting because they suggest that regardless of situational context, it is the person-environment interaction that defines a person's stress response.

For example, SAILS Situation Three states, "Your physician has told you that you require a surgical operation. You wonder what kind of discomfort you will experience and what the outcome will be." A person who read this situation was not particularly stressed because the content was dealing with a health care situation, but because of how that person was perceiving herself in interaction with the environment around her. These results suggest that people with disabilities in this study would agree with McCarthy, Lambert, and Back (1997) who contend that stress resides neither in the person nor the environment, but in the interaction between the two. The individual who is appraising a situation as benign or stressful is influenced by both person and environmental factors (Lazarus & Folkman, 1984a), which set the stage for the meaning and significance assigned to primary appraisals. All attempts to claim that certain types or categories of situations from the SAILS elicit stress would be in error. Such outcome would have direct implication for practice and these are discussed later in the chapter.

Stress Appraisal Process and Coping Disposition

Humans use coping responses with the intention of protecting themselves from the effects of stressors and to reduce emotional consequences (Brown, 1993; Lepore & Evans, 1996). Results from examining the relationship between the five SAILS factors and coping dispositions indicated that there is relationship between two of the SAILS factors and coping disposition. The information from the results not only answered research question two, but also helped to elaborate on the first three hypotheses in this study.

It was initially hypothesized that persons who have emotion- or avoidance-focused coping dispositions would perceive situations as harmful or threatening more

often than persons with problem-focused coping dispositions. This was hypothesized because literature suggested that persons with problem-focused dispositions actively seek to change the person-environment interaction, rather than change its meaning or ignore its effect (Billings & Moos, 1981; McCarthy, Lambert, & Brock, 1997; Swindle, Heller, & Lakey, 1988). While no one coping disposition is better than the other (Schwarzer & Schwarzer, 1996), it was thought that those people who actively moved toward change would perceive less harm or threat. However, people with problem-focused dispositions were just as likely to perceive harm and threat from a situation.

It is interesting to note that people with avoidance-focused coping dispositions in this study related in the opposite direction to those people with problem-focused dispositions for Factor 1 (Intensity of Stress). This aspect supported research hypothesis one, unlike those with emotion-focused dispositions. This may mean that the participants who avoid stressful situations are denying the negative impact of harm and threat on their well-being, whereas people with problem- and emotion-focused dispositions are more realistically able to face the difficulty knowing that their coping strategies afford them some ability to enhance their well-being. This finding supports Janoff-Bulman (1999) in that denial can help establish psychological balance, while also suggesting the importance of Kahn's (1995) assertion that redirection away from maladaptive coping needs to be encouraged.

The second hypothesis that persons with problem-focused dispositions would perceive situations as more challenging was not considered because the fourth SAILS factor (Challenge) was not related to coping disposition. Since this subjective response

area did not relate with coping disposition, it was not appropriate to explore this a priori hypothesis.

Another result from examining the relationship between the five SAILS factors and coping dispositions indicated that participants who have problem- or avoidance-focused coping dispositions had stress appraisals that located the source of difficulty/uncertainty in the environment. Thus, there was no support for the third hypothesis, which stated that persons with problem-focused dispositions would locate the source of difficulty or uncertainty from the situation within the environment more often than persons with other coping styles. This suggests that participants who seek to change or those who ignore the effect of the situation might often believe that the environment poses barriers to successful life management. In addition, this may mean that there are some similarities between those persons who seek to change the effect of what has triggered the stress (problem-focused) and those who totally alter their perception of the stressor altogether (avoidance-focused). In some way, participants who are seeking to change the negative aspect of a situation are trying to alter the perception, yet in a healthier, task-oriented way that offers long-term effective solution to stress.

Curiously, people with emotion-focused dispositions did not have similar relationship to those with the other coping styles. They approached relationship with avoidance-focused dispositions on the third SAILS factor (Environment), but not to a significant level (see Table 16). This may mean that a participant who is attempting to lessen the heavy extent of the stressor (emotion-focused) is unable to see outside of their own personal influence on the situation, thus refusing to acknowledge outside influences

as part of the problem. They may assign new meaning to a situation, and do not see environmental influences as presenting barriers to successful life management.

It is important to note that finding significance in Factor 3 supports Bramston, Bostock, and Tehan (1993) because it may mean that encouraging autonomy challenges the participants' coping responses. However, the source of the stress that is challenging the coping response in certain people is not coming from a characteristic within themselves, but from external barriers that pose threats to their well-being. This finding supports the rehabilitation and independent living philosophies, which maintain that stressful demands exist in the environment, not only in the person and that sociopolitical attention is needed at this level.

SAILS factors 2 (Person), 4 (Challenge) and 5 (Experience) were not related to the type of coping disposition that participants in this study possessed. These findings demonstrate that, in this study, participants would not seek to alter those situations where the difficulty was coming from within themselves, or where they perceived they would be challenged. In addition, they would not be stressed based on level or extent of experience with these situations. It appears that participants feel as though they are not taxed by situations where these three aspects of stress appraisal can be personally managed. Consequently, participants might appraise such situations as benign or irrelevant and not employ a coping strategy. Including the person, challenge, and experience aspects of stress appraisal that are supported for the general population may not fit the stress appraisal process of the sample used in this study. Most people with disabilities do not live in a state of frustration because of their disability (Wright, 1983), but having a disability might yield a different stress response that is not yet appreciated. Caution

should be taken in generalizing this result beyond the parameters posed in this study; however, there is indication that searching for a theoretical foundation of stress for people with disabilities is warranted. Further research into the stress appraisal process might extenuate the need for updating coping with disability theory, as well.

In summary, these findings demonstrate that people with disabilities in this study do seek to protect themselves from the effects of stressors that elicit feelings of harm or threat, and participants with certain dispositions seek to reduce emotional consequences that they perceive coming from the environment. Regardless of coping disposition, harm and threat were often perceived from the situation, whereas challenge was not. People with emotion-focused dispositions did not locate the difficulty or uncertainty from the situation within the environment, whereas people with problem- or avoidance-focused dispositions did. Level of experience with a situation, whether rarely or daily, did not relate to the type of coping disposition that the person possessed. None of the hypotheses from the study was supported. This may mean that one coping disposition is no more effective than another as the literature often cites (Billings & Moos, 1981; McCarthy, Lambert, & Brock, 1997; Swindle, Heller, & Lakey, 1988), and further examination of the relationship between stress and coping for people with disabilities is needed.

Acceptance of Disability and Stress Appraisal Process

Acceptance of disability was found to be related to two aspects of the stress appraisal process for participants in this study: the fourth SAILS factor (Challenge) and the fifth SAILS factor (Experience). The other three factors: Intensity of Stress, Person, and Environment were not found to be significantly related to level of acceptance of disability. Specifically, participants who had low levels of acceptance perceived

situations as more challenging, whereas people with high levels of acceptance reported that extent of experience mattered whether they appraised a situation as stressful or not.

According to Dembo, Leviton, and Wright (1956), reaction to disability needs to involve changes in the value systems of people with disabilities, and this process of change means that the person prevails over the feelings of shame and inadequacy resulting from disability. When this change occurs, a person with a disability is said to have a high level of acceptance of disability (Linkowski, 1971; Wright, 1983). Findings from this study seem to support these authors' arguments that over time, with certain levels of experience, people would have higher levels of acceptance of disability. These findings also raise important questions because people with low level of acceptance were more challenged by or saw themselves as gaining more from certain situations. Perhaps people who have not moved through the value change that is needed to support acceptance of self with disability are perseverant on directing their attention to what is possible to gain from difficult odds rather than actually modifying their behavior toward healthy coping and personal resource management. Further research is needed to examine the role of challenge in the lives of people with disabilities.

There are few explanations as to why perceptions of harm, threat or locus of stressor did not relate to acceptance of disability. These aspects of stress appraisal for participants in this study may offer more general and external information about the appraisal process than do the individually natured and internal factors of challenge and experience. These two factors may highlight the individualized nature of stress appraisal that intensity of stress and locus of stressor do not, thereby relating more to the internal psychological process of acceptance of disability.

Stress Appraisal Process, Coping Disposition, and Acceptance of Disability

No attempt had been made to conceptually understand whether coping disposition and acceptance of disability relate to each other, or to understand if acceptance of disability might mediate the theoretical underpinnings of the relationship between stress and coping. According to Baron and Kenny (1986), a mediational model assumes a three-variable system in which two exploratory paths feed into the outcome variable: the direct impact of the predictor variable and the impact of the mediator, and the impact of the predictor variable to the mediator (see Figure 2). Knowing in this study that certain aspects of both coping disposition and acceptance of disability related to the stress appraisal process of persons with disabilities, test for mediation effect of acceptance of disability on the relationship with stress and coping was feasible. However, it was first necessary to see if acceptance of disability related to coping disposition (Research Question 4).

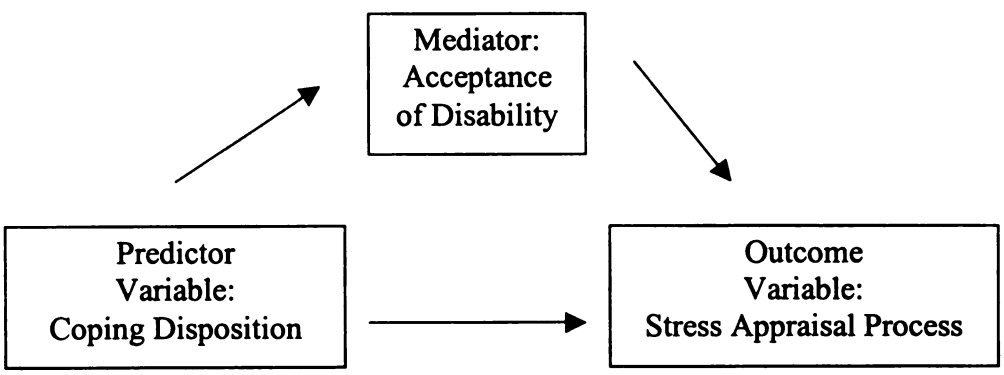


Figure 2. Mediational Model of the Three-Variable System.

Acceptance and coping. A significant relationship between acceptance of disability and coping disposition was found in this study. The majority of people with disabilities in this study had either emotion- or avoidance-focused coping dispositions and low to medium levels of acceptance of disability. These findings suggest that participants could benefit from changing their system of personal values, and might profit by actively working to change situations or increase personal resources to cope with taxing demands. People with problem-focused dispositions in this study had medium to high levels of acceptance of disability, which means that people who are intolerant of self-devaluation (Wright, 1983) may seek opportunities to change the situation or seek information to improve the situation. These findings may support Livneh and Antonak (1997) who contend that approaching person-environment congruence (i.e., adaptation to disability) promotes a sense of well-being, thus less need to elicit a stress appraisal.

Mediation effect. Results from this study indicated that including acceptance of disability in the framework did not diminish the relationship between stress appraisal and coping disposition. These findings suggest that the relationship between the stress appraisal process and coping disposition for participants in this study is important, regardless of a mediating variable and is in need of further clarification.

It is interesting to note that, in this study, what was significant in the relationship between stress appraisal and coping was not found significant in the relationship between stress appraisal and acceptance of disability (see Table 25), yet coping disposition and acceptance to disability were strongly related to one another. No reason for this puzzling result could be adequately identified, and further research specifically on the relationship

Table 25

Comparison of Significant Relationships among the Three Variables

Variable	Relationship with SAILS
Coping Disposition	Factor 1: Intensity of Stress Factor 3: Environment
Acceptance of Disability	Factor 4: Challenge Factor 5: Experience

between the stress appraisal process and coping dispositions of people with disabilities might generate additional hypotheses worthy of examination.

Post Hoc Analyses

Exploration of generalizability regarding the relationships between the demographic variables and the five SAILS factors yielded several significant findings. The results indicated that several SAILS factors were significantly related to gender, age, race/ethnicity, employment status, and total years with disability (see Table 22).

Specific post-hoc results. Interpretation of specific results of post-hoc analysis appears more problematic than the interpretation of the general findings discussed earlier. Insightful conclusions about why some demographic characteristics related with only one or few SAILS factors remains a challenge. Males and females appraised stress with perceptions of harm or threat in differing ways, yet no differences were found with respect to challenge or the remaining two aspects of subjective response: locus of stressor or extent of experience. It is possible that males and females approach harm and threat in similar ways; thus, examining the nuances of these subjective response areas for

people with disabilities may be important. Since SAILS factor three (Environment) was significant in the general findings on the stress appraisal process, question remains as to why there was no difference in the way males and females located difficulty/uncertainty in the environment.

A second intriguing finding was in terms of age where only SAILS factor three (Environment) was found significant. Perhaps people between the ages of 18 through 44 are experiencing more demands that account for locating the source of difficulty in the environment (i.e, educational demands, employment demands, familial demands), whereas people 45 through 63 years old seem to understand what the barriers in the environment are, know how to work with them, or know that trying to work with them is an unbeatable circumstance. This interpretation is plausible, but it would seem to implicate SAILS factor 5 (Experience) as significant, which it did not.

Another finding was that people of various races/ethnicities differed with respect to SAILS factor three (Environment) and SAILS factor four (Challenge). Specifically, Caucasian and African-Americans located the source of difficulty in the environment, and perceived that they could gain something positive from the situations more often than the other racial/ethnicity groupings. These findings are not surprising considering that these two groups made up 88% of the sample. However, it is remarkable that no other SAILS factors were found to be significant, mainly with respect to extent of appraisal and type of stress appraisal.

The employment status variable was the fourth characteristic on which differences in stress appraisal were found. Students and unemployed people located the source of difficulty in the environment (SAILS Factor 3) more often than employed people did.

This finding is plausible when one considers that employment is a situation that often elicits stress (Krause, 1996, Wright, 1980), and barriers perceived to affect one's work status do appear to affect the overall sense of well-being in the person. It is interesting that differences in perception of challenge (SAILS Factor 4) were also not found considering that participants might believe they could gain something positive if they were currently employed or remaining productive in a volunteer setting or as a student. These findings have important implications for rehabilitation counselors whose primary goals are to seek out employment opportunities and to return people with disabilities to full-time employment.

A final area of relationship was between total years with disability and SAILS factor four (Challenge). People who lived 25 years or longer with disability may be more capable of seeing themselves as gaining from a particular situation because they have had more experience with handling various life situations with disability. However, it seems implausible that SAILS factor five (Experience) did not also relate with the total years with disability variable. Perhaps there is a distinction between developmentally living life with disability and extent of experience, which was not differentiated in this study.

Nonsignificant findings. Two nonsignificant findings from this study warrant further discussion. Marital status and type of disability were not found to relate with the stress appraisal process of persons with disabilities. It would appear that having social supports, in the form of a significant partner, did not influence a person's stress appraisal process. This information does not coincide with literature that suggests that social support positively influences one's sense of well-being (Rintala, Young, Hart, Clearman, & Fuhrer, 1992). Regardless of whether people were single, married, divorced, or

widowed, they were not impacted by the need to elicit a stress appraisal. However, having a partner should not be considered the only means of social support because family, friends, and others can serve in this capacity, as well.

Likewise, specific type of disability did not influence the need for a stress appraisal. This finding suggests that perhaps the appraisal process and areas of subject response are more important foundations of stress theory than are a person's specific type of disability. It may be plausible to assume that the appraisal process of people with disabilities in this study is based on the notion of disability in general and not on a specific type. Further research and additional validation of the SAILS based on specific type of disability is needed to substantiate this claim.

Assumptions and Limitations

The primary assumption underlying this study concerned the validity of self-report to assess stress appraisal, coping disposition, and acceptance of disability. It was assumed that the participants had the ability and judgment to honesty and accurately assess their stress appraisals, coping disposition and level of acceptance of disability.

A second assumption of this study was the use of the transactional theory of coping. In order to understand the stress appraisals and coping dispositions of people with disability, this guiding theoretical framework was applicable. It was a reasonable framework because it appreciates person-environment interactions; similar to what the rehabilitation philosophy promotes as an individual's adaptation to disability.

One limitation of this study involved the generalizability of the results. The study was limited to adults with physical or emotional disabilities who come from specified regions of Michigan, and from three different types of service settings. It cannot be

assumed with a 72% participation rate that individuals from the sample may be similar to other individuals with physical or emotional disabilities who might encounter the need to elicit stress appraisals. However, this study attempted to capture an array of physical and emotional disabilities from various service settings in an attempt to best represent individuals with disabilities in Michigan or elsewhere.

A second limitation concerned weaknesses in instrumentation. The author developed and field-tested two of the instruments. Therefore, test-retest reliability, other forms of internal consistency reliability, and evidence of validity were limited. Despite thoughtful instrument development efforts, it is recognized that certain psychosocial situations that evoke stress appraisal were not included in the instrument, and therefore not subject to analyses.

A final limitation involved the nature of the design of the study. This study was a one-time exploration of the relationship between stress appraisal process, coping disposition, and acceptance of disability, which assumed that these relationships can be understood without employing a longitudinal framework of inquiry. Since this study was a preliminary examination, it was practical to first establish relationships among the variables.

Implications for Education

The results of this investigation indicate that the stress appraisal process of this study's sample may be linked to certain areas of coping disposition, mainly perceptions of stress, harm, threat and environmental locus. The current rehabilitation counseling curriculum, which pays close attention to the process of coping with disability may benefit from including information about the subjective meaning that persons assign to

events in which coping strategies are employed. In addition, it would be important to acknowledge the important influence that acceptance of disability has on coping with disability and on the stress appraisal process, as well. Continuing efforts to train students to appreciate the rehabilitation and independent living philosophies that support person-environment interactions is critical. Broadening the curriculum to include examples of how people with disabilities assign meaning from these interactions in order to effectively manage life situations appears important when attempting to promote the dignity and worth of people with disabilities.

Implications for Rehabilitation Counseling Practice

One of the most significant findings of this study was the understanding that type of psychosocial situation was not as important as understanding the subjective response aspects of stress. Rehabilitation counselors can benefit from asking clients about the meaning behind their appraisal, whether aspects of intensity of stress, person, environment, challenge, or experience are influencing the need to cope with the stress. The stress appraisal process of people with disabilities in this study is a highly individualized one. Assuming that a person with a disability automatically employs strategies to manage life with disability is inaccurate and may hinder a person's goal-setting activities.

Appreciation for avoidance-focused coping dispositions is desirable because 36% of the participants had avoidance-focused dispositions, as opposed to 15% who had problem-focused ones. However, rehabilitation counselors may need to develop ways of encouraging people with disabilities to adapt healthy coping strategies so that future stress appraisals are minimized. It would be helpful if rehabilitation counselors could

assist persons with emotion-focused dispositions to explore environmental reasons for stress because, in this study 46% of the participants were not able to locate the source of difficulty in the environment. Practitioners and clients alike might benefit from focusing efforts on legislative change that can improve the quality of life, including minimizing the likelihood of encountering social and environmental barriers for people with disabilities.

While acceptance of disability did not influence the relationship between stress and coping for people with disabilities in this study, it is important that counselors realize that level of acceptance of disability does influence the meaning that people assign to the positive aspects of stressful events (e.g., challenge and experience). Trying to assist people through a values change process, to the point where positive aspects of managing stress are recognized may improve a person's overall sense of well-being. Rehabilitation counselors may need to appreciate the results of this study that indicate that perceptions of challenge and level of experience affect the internal psychological perceptions of living with disability, whereas the other aspects of stress appraisal (intensity of stress, locus of stressor) are more externally perceived.

Finally, it is necessary that rehabilitation counselors understand that certain demographic characteristics of their clientele may influence the stress appraisal process. Whether respecting multicultural worldviews, understanding developmental perspectives of disability, discovering vocational goals, or returning people to work, rehabilitation counselors are responsible for knowing that people will differ in their subjective response to situations encountered in their individualized rehabilitation plans.

Suggestions for Future Research

A range of alternatives can be offered in terms of directions for further research. Two areas of critical importance deal with implications for stress and coping theory specifically for people with disabilities and for further development on the Stress Appraisal Inventory for Life Situations (SAILS).

Stress and Coping Theory

The results from this study indicate that more research is needed in terms of a theoretical foundation of stress for people with disabilities. While the four areas of subjective response in the general population were empirically validated, five specific response areas were implicated for people with disabilities. Intensity of Stress, Person, Environment, Challenge, and Experience explained by the SAILS need further definition and differentiation from one another in order to advocate for a theory specific to people with disabilities.

Differences in the way participants in this study perceive challenge do not seem to fit the Lazarus and Folkman (1984a) transactional definition of stress appraisal. Conceivably, something about the participants from the sample leads challenge to be perceived as a benign appraisal. Perhaps further examination of the specific personal and situational factors that influence primary appraisal, such as commitments, beliefs, imminence, and duration (Lazarus & Folkman, 1984a) is needed to more fully appreciate the findings from this study.

Knowing from transactional theory that primary appraisal influences the need for secondary appraisals, it is perplexing that more factors from the SAILS did not relate to coping. Perhaps exploring a more fluid nature of coping rather than examining coping

disposition might elicit a stronger stress-coping connection. Aspects of challenge, experience, and person locus need further examination as to why these response areas did not relate with coping disposition for the participants in this study. The results from this study indicate that the stress-coping continuum is strong because no mediation effect diminished its strength. However, clarification about a possible theory of primary appraisal leading to secondary appraisal process for people with disabilities is warranted.

Instrument Development

There are several limitations, beyond those already mentioned, that suggest that further validation of the SAILS is desired. Replicating this study with similar participants and finding the same five factors might suggest stability of the stress appraisal process for people with disabilities, and it might confirm the component structure identified in this study. The factors identified in this study may differ according to a different sample, perhaps indicating another approach to understanding the stress appraisal process and its relationship to coping for people with disabilities. Nevertheless, a larger sample size would be beneficial to uphold the merits of exploratory factor analysis. Developing a structural equation model to test the current results may be helpful in strengthening the significance of the findings.

Restructuring the SAILS to prompt individuals to move onto the next situation if they indicate the current situation is not at all stressful may be important. The purpose of this study was to understand the subjective meanings of stress using the transactional theory as a guide, and caution in direct linkage to the theory is encouraged. The prompt to move to the next situation would more closely differentiate between a benign and stressful appraisal and may strengthen the validation of the SAILS beyond its current

level. It may also be more useful to design the SAILS so that the person identifies the stressful situation rather than read various hypothetical situations. Doing so would not only focus on the stress appraisals, but may provide opportunity to connect the personal and situational factors mentioned earlier into the instrument. Possibly the type of situation in terms of stress appraisal would then become important to consider.

Conclusions

This study was the first to empirically determine the relationship between the stress appraisal process, coping disposition, and level of acceptance of disability. It provided evidence that the stress appraisal process of the participants in this study may be unique rather than similar to the general population. Results from this study reveal that coping disposition may influence certain aspects of stress appraisal, although avoidance-focused dispositions were not in the expected direction for perceptions of harm and threat. Evidence from this study indicates that acceptance of disability may be related to stress appraisal, although not all aspects of the appraisal process are important. The findings from this study lend support to a relationship between coping disposition and acceptance of disability, which may yield interesting future research in this direct line.

The five subjective response areas from the SAILS indicate that people with disabilities from this study do assign meaning to stressful situations that connect to their need to employ coping strategies. This study was only a first step towards increased understanding, and it demonstrated the need to connect stress appraisal to coping with disability research. Perhaps this study will encourage researchers who are committed to examining coping with disability and coping strategies for people with disabilities to

explicitly include aspects of stress appraisal. The result may be more meaningfully contributions to rehabilitation counseling literature.

Given the current professionalization issues in counseling, it is important to encourage best practices. Resources continue to grow scarce and those counselors most capable of understanding how stress appraisal fits in with well-being and achieving life goals may be called upon more often to assist those people with disabilities who are deserving of quality in and of life.

APPENDICES

APPENDIX A

LETTER OF INVITATION TO PROSPECTIVE MSU-RCPD STUDENTS

February 2000

Dear MSU Student:

It is a pleasure to introduce myself to you. My name is Darlene Groomes and I am a doctoral student in the Rehabilitation Counseling Education program, here at MSU. I am currently working on my dissertation research and I need your help.

I am looking for a number of students with physical and/or sensory disabilities to complete several questionnaires that ask how they perceive situations in life that may be difficult to handle. Michael Hudson, the Director of the Resource Center for Persons with Disabilities, has agreed to help me by forwarding this e-mail to you. I have no knowledge of who you are and will not know your specific disability unless you choose to participate in this study. If you have a physical disability (e.g., spinal cord injury, multiple sclerosis, muscular dystrophy, carpal tunnel syndrome) and/or a sensory disability (e.g. visual impairment, hearing impairment), I will pay you $10 for completing four questionnaires, which take 45-60 minutes to complete. If you require accommodations, please let me know and I will make appropriate arrangements to meet your needs.

By participating in this study, you may gain insight into how you perceive various life situations and how you would most often choose to handle difficulties that arise from these situations. If you are interested in earning $10 by participating in the study, you will need to attend ONE of the group sessions in Bessey Hall. Dates, times, and room numbers for the group sessions are indicated below:

Date	**Time**	**Room Number**
February 14	3:00pm	235-F Bessey Hall
February 17	11:00am	105 Bessey Hall
February 24	1:00pm	313 Bessey Hall
February 28	7:00pm	220 Bessey Hall
March 1	10:00am	313 Bessey Hall
March 2	1:00pm	313 Bessey Hall
March 14	9:00am	271 Bessey Hall

(continued on next page)

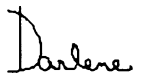
Date	Time	Room Number
March 16	1:00pm	313 Bessey Hall
March 29	7:00pm	220 Bessey Hall
April 6	11:00am	105 Bessey Hall
April 10	7:00pm	220 Bessey Hall

Please come ONLY to the time slot and room number that matches the specific date that you choose. You do not need to bring anything with you; all materials will be supplied to you.

If you are interested in participating in this study, but are unable to make the scheduled group sessions dates listed above, or you are uncomfortable as part of a small group format, please contact me at 517-347-9832 or at groomesd@msu.edu to arrange a more convenient time for you.

If you have questions about your involvement in this study, please call me or send me an e-mail message. I will be glad to discuss your questions with you.

Sincerely,



Darlene A.G. Groomes
Ph.D. Candidate

APPENDIX B

CONTACT INFOMRATION FOR PREVIEW COPY OF THE CISS

To receive information about or a copy of the Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1994), please contact:

Multi Health Systems, Inc.
Research and Development Department

In the U.S.: 908 Niagara Falls Blvd.
North Tonawanda, NY, 14120-2060

Phone: (800) 456-3003

In Canada: 3770 Victoria Park Ave.
Toronto, Ontario, M2H 3M6

Phone: 416-492-2627 or (800) 268-6011
Fax: 416-492-3343 or (888) 540-4484

E-mail address: www.mhs.com

APPENDIX C

ACCEPTANCE OF DISABILITY SCALE

Acceptance of Disability Scale
(Linkowski, 1971)

READ EACH STATEMENT AND PUT AN "X" IN THE SPACE INDICATING HOW MUCH YOU AGREE OR DISAGREE WITH EACH STATEMENT.

1. A physical disability may limit a person in some ways, but this does not mean he/she should give up and do nothing with his/her life.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

2. Because of my disability, I feel miserable much of the time.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

3. More than anything else, I wish I didn't have this disability.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

4. Disability or not, I'm going to make good in life.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

5. Good physical appearance and physical ability are the most important things in life.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

6. My disability prevents me from doing just about everything I really want to do and from becoming the kind of person I want to be.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

7. I can see the progress I am making in rehabilitation, and it makes me feel like an adequate person in spite of the limitations of my disability.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

8. It makes me feel very bad to see all the things nondisabled people can do which I cannot.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

9. My disability affects those aspects of life that I care most about.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

10. Though I am disabled, my life is full.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

11. If a person is not entirely physically able, he/she is that much less a person.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

12. A person with a disability is restricted in certain ways, but there is still much he/she is able to do.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

13. There are many more important things in life than physical ability and appearance.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

14. There are times I completely forget that I am physically disabled.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

15. You need a good and whole body to have a good mind.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

16. There are many things a person with my disability is able to do.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

17. Since my disability interferes with just about everything I try to do, it is foremost in my mind practically all the time.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

18. If I didn't have my disability, I think I would be a much better person.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

19. My disability, in itself, affects me more than any other characteristic about me.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

20. The kind of person I am and my accomplishments in life are less important than those of nondisabled persons.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

21. I know what I can't do because of my disability, and I feel that I can live a full and normal life.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

22. Though I can see the progress I am making in rehabilitation, this is not very important since I can never be normal.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

23. In just about everything, my disability is annoying to me so that I can't enjoy anything.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

24. How a person conducts him/herself in life is much more important than physical appearance and ability.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

25. A person with my disability is unable to enjoy very much in life.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

26. The most important thing in this world is to be physically normal.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

27. A person with a disability finds it especially difficult to expand his/her interests and range of abilities.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

28. I believe that physical wholeness and appearance make a person what he/she is.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

29. A physical disability affects a person's mental ability.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

30. With my condition, I know just what I can and cannot do.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

31. Almost every area of life is closed to me because of my disability.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

32. Because of my disability, I have little to offer other people.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

33. Besides the many physical things I am unable to do, there are many other things that I am able to do.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

34. Personal characteristics such as honesty and a willingness to work hard are much more important than physical appearance and ability.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

35. I get very annoyed with the way some people offer to help me.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

36. With my disability, there isn't a single area of life that is not affected in some major way.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

37. Though I can see that disabled people are able to do well in many ways, still they can never lead normal lives.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

38. A disability, such as mine, is the worst possible thing that can happen to a person.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

39. No matter how hard I try or what I accomplish, I could never be as good as a person as one without my disability.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

40. There is practically nothing a person in my condition is able to do and really enjoy it.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

41. Because of my disability, I am unable to enjoy social relationships as much as I could if I were not disabled.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

42. There are more important things in life than those my physical disability prevents me from doing.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

43. I want very much to do things that my disability prevents me from doing.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

44. Because of my disability, other people's lives have more meaning than my own.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

45. Oftentimes, when I think of my disability, it makes me feel so sad and upset that I am unable to think of or do anything else.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

46. A disability changes one's life completely. It causes one to think differently about everything.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

47. I feel that I should be as able as the next person, even in areas where my disability prevents me.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

48. Life is full of so many things that I sometimes forget for brief periods of time that I am disabled.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

49. Because of my disability, I can never do most things that normal people can do.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

50. I feel satisfied with my abilities, and my disability doesn't bother me too much.

___ I disagree very much
___ I disagree pretty much
___ I disagree a little
___ I agree a little
___ I agree pretty much
___ I agree very much

APPENDIX D

DEMOGRAPHIC AND GENERAL INFOMRATION QUESTIONNAIRE

Demographic and General Information Questionnaire

1. Gender (please circle): Male Female

2. Age: _____ years old

3. Marital Status (please circle): Single Married Divorced Widowed

4. Race/Ethnicity (please circle):
   a. Asian or Pacific Islander
   b. Black/African-American, not of Hispanic Origin
   c. Caucasian/White, not of Hispanic Origin
   d. Hispanic
   e. Native-American
   f. Mixed Race

5. Current Employment Status (please circle):
   a. Full-time outside the home
   b. Part-time outside the home
   c. Student
   d. Volunteer position
   e. Not employed

6. Primary type of disability (please circle):
   a. Learning disability
   b. Alcoholism/drug abuse
   c. Back injury
   d. Arthritis
   e. Epilepsy
   f. Spinal cord injury
   g. Heart disease
   h. Amputation
   i. Visual impairment
   j. Hearing impairment
   k. Chronic disease
   l. Other _____

7. Were you born with this disability (please circle): Yes No

8. How long have you had this disability: _____ years

9. Secondary type of disability (please circle only if applicable)
   a. Learning disability
   b. Alcoholism/drug abuse
   c. Back injury
   d. Arthritis
   e. Epilepsy
   f. Spinal cord injury
   g. Heart disease
   h. Amputation
   i. Visual impairment
   j. Hearing impairment
   k. Chronic disease
   l. Other _____

10. How long have you had this disability: _____ years

APPENDIX E

STRESS APPRAISAL INVENTORY FOR LIFE SITUATIONS

STRESS APPRAISAL INVENTORY FOR LIFE SITUATIONS (SAILS)

Michigan State University
Darlene A.G. Groomes

Directions for Use

Please read the situation that is presented on every page. For each statement that follows the situation, circle the number that most closely matches how you think about the situation.

Situation One

You are at a social event with your friend who provides transportation assistance for you. You tell your friend that you both need to leave, but your friend tells you to find another way home. You are now faced with having to ask a person who is not familiar with your transportation needs to drive you home.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Two

You are interviewing for an important job opening. The interviewer states that you will only be hired because there is a law that requires hiring persons with disability. You really want this job, so you say nothing to the interviewer about his/her attitude toward you.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Three

Your physician has told you that you require a surgical operation. You wonder what kind of discomfort you will experience and what the outcome will be.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Four

You are at a restaurant with your family. Your relatives have ordered a meal for you without considering that you can do so without their assistance. You say nothing and eat the meal that is chosen for you.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Five

You recently become aware of several job promotions in your current place of employment. You think about the things you might like to do in your career and feel limited in the employment opportunities offered to you. You ask your supervisor to make opportunities for advancement available to you.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Six

Your managed care provider is requiring you to change your primary care physician. You have a pleasant and long-standing relationship with your current physician and do not want to establish a new relationship.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Seven

You and your friends are discussing the subject of sex. You have something to add to the conversation, but no one asks your opinion and they act as if you would not be interested in an intimate relationship.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Eight

Your supervisor does nothing to encourage your full participation at work. Your supervisor always speaks for you and answers questions from co-workers for you.

This situation would be…

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be….

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be….

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation….

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation…

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)…

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)…

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Nine

Your doctor recommends a new experimental treatment that might benefit you. You do not want to try this treatment, but trust your doctor's recommendation. You decide to take the experimental treatment even though you have doubts about it.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Ten

Your significant other wants to spend the evening at a comedy club. You would much rather stay at home and watch television. You think that if you say this to your significant other, an argument will occur.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Eleven

You hear a co-worker and supervisor talking about an idea for improving work conditions. The supervisor seems enthusiastic about the idea even though you brought it up a few days ago and the supervisor ignored it.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Twelve

You hear about a new medication that you might benefit from. You would like to try it, but your HMO has refused to pay for that particular medication.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Thirteen

You and your friends were planning to go to a movie together. You overhear your friends talking about their frustration with you. They state that if you did not have a disability it would be much more fun and easy to go to social events.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Fourteen

Your supervisor tells you that you are fired because you are not working adequately and are not getting along with co-workers. You file a complaint with the Equal Employment Opportunity Commission because you believe that your supervisor violated your rights under the law.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

Situation Fifteen

Your medical team recommends that you receive physical therapy services three times a week. You believe that you do not need that much therapy. You tell your medical team that their recommendation is not appropriate.

This situation would be...

Extremely Stressful	Stressful	Moderately Stressful	A little Stressful	Not at all Stressful
5	4	3	2	1

Dealing with this situation would be....

Extremely Depressing	Depressing	Moderately Depressing	A little Depressing	Not at all Depressing
5	4	3	2	1

Dealing with this situation would be....

Extremely Threatening	Threatening	Moderately Threatening	A little Threatening	Not at all Threatening
5	4	3	2	1

I would expect to gain something positive from this situation....

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

I go through this type of situation...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from external sources (other people or things)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

The stress from this situation would come from internal sources (myself)...

Never	Rarely	Sometimes	Most Often	Always
5	4	3	2	1

APPENDIX F

CONSENT FORM

Participant Consent Form

The purpose of this study is to understand what people with disabilities think about certain particular life situations that may stressful to them, how they might think about handling difficulties that arise from the situation, and what they think about themselves as a person with a disability. In order to meet the objective of this study, you will be asked to fill out four questionnaires, which take approximately 45-60 minutes to complete.

Your participation in this study is greatly needed and appreciated. You are under no obligation to participate in this study; participation is voluntary. You may leave at any time if you choose to do so. You do not have to answer certain questions if you choose not to. Whether or not you participate will NOT affect your ability to receive services from this organization.

The information you provide is completely confidential. Only the investigator in this study will use it, and the information will NOT be discussed or released to others for any purpose. Your responses will be used ONLY when combined with those of many other participants. Your privacy will be protected to the maximum extent allowable by law.

You will be paid $10 upon full completion of the four questionnaires. You indicate your voluntary agreement to participate in this study by signing and returning this consent form.

Participant Signature: _____

Date: _____

If you have questions or concerns regarding this research study, please contact:

Darlene A.G. Groomes
237 Erickson Hall
Michigan State University
East Lansing, MI 48824-1034
(517) 355-1838
groomesd@msu.edu

If you have questions about your rights as a human subject of research, please contact:

David E. Wright, Ph.D.
UCRIHS Chair
246 Administration Building
Michigan State University
East Lansing, MI 48824-1046
(517) 355-2180

REFERENCES

References

American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, D.C.: American Psychiatric Association.

Amirkhan, J.H. (1990). A factor analytically derived measure of coping: The Coping Strategy Indicator. Journal of Personality and Social Psychology, 59, 1066-1074.

Antonak, R.F. (1981). Development and psychometric analysis of the Scale of Attitudes Toward Disabled Persons (Technical Report No. 1). Durham, New Hampshire: University of New Hampshire, Education Department.

Antonovsky, A. (1980). Health, stress, and coping. San Francisco, California: Jossey-Bass.

Barker, R.G. (1948). The social psychology of physical disability. The Journal of Social Issues, 4, 28-38.

Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51 (6), 1173-1182.

Belgrave, F.Z. (1991). Psychosocial predictors of adjustment to disability in African Americans. Journal of Rehabilitation 57, 37-40.

Billings, A.G., & Moos, R.H. (1981). The role of coping responses and social resources in attenuating the stress of life events. Journal of Behavioral Medicine, 4 (2), 139-157.

Billings, A.G., & Moos, R.H. (1984). Coping, stress, and social resources among adults with unipolar depression. Journal of Personality and Social Psychology, 46 (4), 877-891.

Bolton, B. (1994). Acceptance of disability scale. In D.J. Keyser & R.C. Sweetland (Eds.), Test Critiques, Volume 10. Austin, Texas: Pro-Ed.

Bond, M.P., & Valliant, J.S., (1986). An empirical study of the relationship between diagnosis and defense style. Archives of General Psychiatry, 43, 285-288.

Bramston, P., Bostock, J., & Tehan, G. (1993). The measurement of stress in people with an intellectual disability: A pilot study. International Journal of Disability, Development and Education, 40 (2), 95-104.

Bramston, P., Fogarty, G., & Cummins, R.A. (1999). The nature of stressors reported by people with an intellectual disability. Journal of Applied Research in Intellectual Disabilities, 12 (1), 1-10.

Brantley, P.J., & Jones, G.N. (1989). Daily Stress Inventory. Florida: Psychological Assessment Resources, Inc.

Brickman, P., Rabinowitz, V.C., Karuza, J., Jr., Coates, D., Cohn, E., & Kidder, L. (1982). Models of helping and coping. American Psychologist, 37 (4), 368-384.

Brodwin, M.G., Tellez, F., & Brodwin, S.K. (1993). Medical, psychosocial and vocational aspects of disability. Athens, Georgia: Elliott & Fitzpatrick, Inc.

Brown, J.D. (1993). Coping with stress: The beneficial role of positive illusions. In A.P. Turnbull, J.M. Patterson, S.K. Behr, D.L. Murphy, J.G. Marquis, & M. J. Blue-Banning (Eds.), Cognitive coping, families, and disability (pp. 123-133). Baltimore, Maryland: Paul H. Brookes.

Carver, C.S., & Scheier, M.F. (1994). Situational coping and coping dispositions in a stressful transaction. Journal of Personality and Social Psychology, 66, 184-195.

Chaturvedi, M.K. (1983). Human stress and stressors. New Delhi, India: Cosmo.

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Cohen, L.H. (1988). Life events and psychological functioning. In L.H. Cohen (Ed.), Life events and psychological functioning: Theoretical and methodological issues (pp. 7-30). New York: Sage.

Cone, J.D., & Foster, S.L. (1995). Dissertations and theses from start to finish. Washington, D.C.: American Psychological Association.

Cook, T.D., & Campbell, D.T. (1979). Quasi-experimentation: Design and analysis of issues for field settings. Boston, Massachusetts: Houghton Mifflin.

Cook, S.W., & Heppner, P.P. (1997). A psychometric study of three coping measures. Educational and Psychological Measurement, 57 (6), 906-923.

Cox, T., & Ferguson, E. (1991). Individual differences, stress and coping. In C.L. Cooper & R. Payne (Eds.), Personality and stress: Individual differences in the stress process (pp. 7-30). New York: John Wiley & Sons.

Cronkite, R.C., & Moos, R.H. (1995). Life context, coping processes, and depression. In E.E. Beckham & W.R. Leber (Eds.), Handbook of depression (pp. 569-587). New York: The Guilford Press.

Davis, S.H., Anderson, C., Linkowski, D.C., Berger, K., & Feinstein, C.F. (1985). Developmental tasks and transitions of adolescents with chronic illnesses and disabilities. Rehabilitation Counseling Bulleting, 29, 69-80.

Dembo, T., Leviton, L., & Wright, B.A. (1956). Adjustment to misfortune: A problem of social-psychological rehabilitation. Artificial Limbs 3, 4-62.

De Ridder, D. (1997). What is wrong with coping assessment? A review of conceptual and methodological issues. Psychology and Health, 12, 417-431.

Dohrenwend, B.S., & Dohrenwend, B.P. (1981). Life stress and psychopathology. In D.A. Regier & G. Allen (Eds.), Risk factor research in the major mental disorders (National Institute of Mental Health, DHHS Publication No. ADM 81-1086) (pp. 131-141). Washington, D.C.: National Institute on Mental Health.

Endler, N.S., & Parker, J.D.A. (1990). Multidimensional assessment of coping: A critical evaluation. Journal of Personality and Social Psychology, 58 (5), 844-854.

Endler, N.S., & Parker, J.D.A. (1994). Assessment of multidimensional coping: Task, emotion, and avoidance strategies. Psychological Assessment, 6 (1), 50-60.

Fogarty, G.J., Bramston, P., & Cummins, R.A. (1997). Validation of the Lifestress Inventory for people with a mild intellectual disability. Research in Developmental Disabilities, 18 (6), 435-456.

Folkman, S., & Lazarus, R.S. (1988). Manual for the Ways of Coping Questionnaire. Palo Alto, California: Consulting Psychologist Press.

Folkman, S., Lazarus, R.S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R.J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. Journal of Personality and Social Psychology, 50 (5), 992-1003.

Glueckauf, R.L., Horley, J., Poushinsky, M.F., & Vogel, R. (1984). Assertiveness training for disabled individuals in wheelchairs: Preliminary findings. International Journal of Rehabilitation Research, 7, 441-443.

Hampton, N.Z., & Crystal, R. (1999). Gender differences in acceptance of disabilities among vocational rehabilitation consumers. Journal of Applied Rehabilitation Counseling, 30 (1), 16-21.

Hays, W.L. (1963). Statistics for psychologists. New York: Holt, Rinehart, and Winston.

Heinemann, A.W., & Shontz, F.C. (1982). Acceptance of disability, self-esteem, sex role identity, and reading aptitude in deaf adolescents. Rehabilitation Counseling Bulletin, 25 197-203.

Herrick, S.M., Elliott, T.R., & Crow, F. (1994). Social support and the prediction of health complications among persons with spinal cord injuries. Rehabilitation Psychology, 39 (4), 231-249.

Holahan, C.J., Moos, R.H., & Schaefer, J.A. (1996). Coping, stress, resistance, and growth: Conceptualizing adaptive functioning. In M. Zeidner & N.S. Endler (Eds.), Handbook of coping: Theory, research, applications (pp. 24-43). New York: John Wiley & Sons.

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

Janoff-Bulman, R. (1999). Rebuilding shattered assumptions after traumatic life events: Coping processes and outcomes. In C.R. Snyder (Ed.), Coping: The psychology of what works (pp. 305-323). New York: Oxford University Press.

Johnson, R.A., & Wichern, D.W. (1992). Applied multivariate statistical analysis (3rd ed.). Upper Saddle River, New Jersey: Prentice Hall.

Joiner, J.G., Lovett, P.S., & Goodwin, L.K. (July 1989). Positive assertion and acceptance among person with disabilities. Journal of Rehabilitation, 22-29.

Kahn, A.M. (1995). Coping with fear and grieving. In I.M. Lubkin, Chronic illness: Impact and interventions (pp.241-260). Boston, Massachusetts: Jones and Bartlett.

Kaiser, S.B., Wingate, S.B., Freeman, C.M., & Chandler, J.L. (1987). Acceptance of physical disability and attitudes toward personal appearance. Rehabilitation Psychology, 32 (1), 51-58.

Kohn, P.M. (1996). On coping adaptively with daily hassles. In M. Zeidner & N.S. Endler (Eds.), Handbook of coping: Theory, research, applications (pp. 181-201). New York: John Wiley & Sons.

Krause, J.S. (1996). Employment after spinal cord injury: Transition and life adjustment. Rehabilitation Counseling Bulletin, 39 (4), 244-255.

Kulkarni, M.R. (1985). Coping with disability inventory: A study of the reliability and validity of an instrument designed to measure coping behavior of physically disabled persons in the United States and India (Doctoral dissertation, Michigan State University, 1985). Dissertation Abstracts International, 114728THS.

Lazarus, R.S., & Folkman, S. (1984a). Stress, Appraisal, and Coping. New York: Springer.

Lazarus, R.S., & Folkman, S. (1984b). Coping and adaptation. In W.D. Gentry (Ed.), Handbook of behavioral medicine (pp. 282-325). New York: The Guilford Press.

Lepore, S.J., & Evans, G.W. (1996). Coping with multiple stressors in the environment. In M. Zeidner & N.S. Endler (Eds.), Handbook of coping: Theory, research, applications (pp. 350-380). New York: John Wiley & Sons.

Lewis-Beck, M.S. (1980). Applied regression: An introduction. (Sage University Paper Series on Quantitative Application in the Social Sciences, series no. 07-022). Newbury Park, California: Sage.

Li, L., & Moore, D. (1998). Acceptance of disability and its correlates. The Journal of Social Psychology, 138 (1), 13-25.

Linkowski, D.C. (1971). A scale to measure acceptance to disability. Rehabilitation Counseling Bulletin, 14 (4), 236-244.

Linkowski, D.C., & Dunn, M.A. (1974). Self-concept and acceptance of disability. Rehabilitation Counseling Bulletin, 17, 28-32.

Livneh, H., & Antonak, R.F. (1997). Psychosocial adaptation to chronic illness and disability. Gaithersburg, Maryland: Aspen.

Maki, D. R., & Riggar, T.F. (1997). Rehabilitation Counseling: Concepts and paradigms. In D.R. Maki & T.F. Riggar (Eds.), Rehabilitation Counseling: Profession and Practice (pp. 3-31). New York: Springer.

McCarthy, C.J., Lambert, R.G., & Brack, G. (1997). Structural model of coping, appraisal, and emotions after relationship breakup. Journal of Counseling and Development, 76, 53-64.

McCrae, R.R., & Costa, P.T. (1986). Personality, coping, and coping effectiveness in an adult sample. Journal of Personality, 54 (2), 385-405.

Monroe, S.M., & Peterman, A.M. (1988). Life stress and psychopathology. In L.H. Cohen (Ed.), Life events and psychological functioning: Theoretical and methodological issues (pp. 31-63). New York: Sage.

Moos, R.H., & Schaefer, J.A. (1986). Life transitions and crises: A conceptual overview. In R.H. Moos (Ed.), Coping with life crises: An integrated approach (pp. 1-28). New York: Plenum Press.

Moore, A.D., & Stambrook, M. (1992). Coping strategies and locus of control following traumatic brain injury: Relationship to long-term outcome. Brain Injury, 6 (1), 89-94.

Mulaik, S.A. (1972). The foundations of factor analysis. New York: McGraw-Hill.

Newton, R.R., & Rudestam, K.E. (1999). Your statistical consultant: Answers to your data analysis questions. Thousand Oaks, California: Sage.

O'Driscoll, M.P., & Cooper, C.L. (1994). Coping with work-related stress: A critique of existing measures and proposal for an alternative methodology. Journal of Occupational and Organizational Psychology 67, 343-354.

Paterson, R.J., & Neufeld, R.W.J. (1989). The stress response and parameters of stressful situations. In R.W.J. Neufeld (Ed.), Advances in the investigation of psychological stress (pp. 7-42). New York: John Wiley & Sons.

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

Pedhazur, E.J., & Schmelkin, L.P. (1991). Measurement, design, and analysis: An integrated approach. Hillsdale, New Jersey: Lawrence Erlbaum Associates.

President's Committee on Employment of People with Disabilities (1994). Operation people first: Toward a national disability policy. Journal of Disability Policy Studies, 5 (2) 81-106.

Rintala, D.H., Young, M.E., Hart, K.A., Clearman, R.R., & Fuhrer, M.J. (1992). Social support and the well-being of person with spinal cord injury living in the community. Rehabilitation Psychology, 37 (3), 155-163.

Revenson, T.A., & Felton, B.J. (1989). Disability and coping as predication of psychological adjustment to rheumatoid arthritis. Journal of Consulting and Clinical Psychology 57 (3), 344-348.

Robinson, F.M., Jr., West, D., & Woodworth, D., Jr. (1995). Coping+Plus: Dimensions of disability. Westport, Connecticut: Praeger

Roessler, R.T. (1990). A quality of life perspective on rehabilitation counseling. Rehabilitation Counseling Bulletin, 34 (2), 82-90.

Roessler, R., & Bolton, B. (1978). Psychosocial adjustment to disability. Baltimore, Maryland: University Park Press.

Romano, J.L. (1992). Psychoeducational interventions for stress management and well-being. Journal of Counseling and Development, 71, 199-202.

Rutter, M. (1994). Stress research: Accomplishments and tasks ahead. In R.J. Haggerty, L.R. Sherrod, N. Garmezy, & M. Rutter (Eds.), Stress, risk, and resilience in children and adolescents (pp.354-385). New York: Cambridge University Press.

Schwarzer, R., & Schwarzer, C. (1996). A critical survey of coping instruments. In M. Zeidner & N.S. Endler (Eds.), Handbook of coping: Theory, research, applications (pp. 107-132). New York: John Wiley & Sons.

Selye, H. (1976). The stress of life. New York: McGraw-Hill.

Shavelson, R.J. (1988). Statistical reasoning for the behavioral sciences (2nd ed.). Boston, Massachusetts: Allyn and Bacon, Inc.

Shontz, F.C. (1975). The psychological aspects of physical illness and disability. New York: Macmillan.

Skinner, E.A. (1995). Perceived control, motivation, and coping. Thousand Oaks, California: Sage.

Skodol, A.E. (1998). Personality and coping as stress-attenuating or –amplifying factors. In B.P. Dohrenwend (Ed.), Adversity, stress, and psychopathology (pp. 377-389). New York: Oxford University Press.

Snyder, C.R., & Dinoff, B.L. (1999). Coping: Where have you been? In C.R. Snyder (Ed.), Coping: The psychology of what works (pp. 3-19). New York: Oxford University Press.

SPSS, Inc. (1999). SPSS Base 9.0 user's guide. Chicago, Illinois: SPSS, Inc.

Stone, A.A., Helder, L., & Schneider, M.S. (1988). Coping with stressful events. In L.H. Cohen (Ed.), Life events and psychological functioning: Theoretical and methodological issues (pp. 182-210). New York: Sage.

Sweetland, R.C., & Keyser, D. J. (1991). Tests: a comprehensive reference for assessments in psychology, education, and business. Austin, Texas: Pro-Ed.

Swindle, R.W., Heller, K., & Lakey, B. (1988). A conceptual reorientation to the study of personality and stressful life events. In L.H. Cohen (Ed.), Life events and psychological functioning: Theoretical and methodological issues (pp. 237-268). New York: Sage.

Tabachnick, B.G., & Fidell, L.S. (1996). Using multivariate statistics (3rd ed.). New York: HarperCollins.

Tetrick, L.E. (1992). Mediating effect of perceived role stress: A confirmatory analysis. In J.C. Quick, L.R. Murphy, & J.J. Hurrell (Eds.), Stress and well-being at work (pp. 134-152). Washington, D.C.: American Psychological Association.

Tobin, D.L., Holroyd, K.A., Reynolds, R.V., & Wigal, J.K. (1989). The hierarchical factor structure of the Coping Strategies Inventory. Cognitive Therapy and Research 13, 343-361.

United States Census Bureau (1999). Census Bureau facts for features (Public Information Office Report No. CB99-FF.13). Washington, DC: Author.

Vash, C.L. (1981). The psychology of disability. New York: Springer.

Vash, C.L. (1994). Personality and adversity: Psychospiritual aspects of rehabilitation. New York: Springer.

Wallander, J.L., & Varni, J.W. (1995). Appraisal, coping, and adjustment in adolescents with a physical disability. In J.L. Wallander & L.J. Siegel (Eds.), Adolescent health problems: Behavioral perspectives (209-229). New York: The Guilford Press.

Watson, D., Davis, J.P., & Suls, J. (1999). Personality, affectivity, and coping. In C.R. Snyder (Ed.), Coping: The psychology of what works (pp. 119-140). New York: Oxford University Press.

Wright, B.A. (1983). Physical disability: A psychosocial approach (2nd ed.). New York: HarperCollins.

Wright, G.N. (1980). Total Rehabilitation. Boston, Massachusetts: Little, Brown and Company.

Yuker, H.E., Block, J.R., & Campbell, W.J. (1960). A scale to measure attitudes toward disabled persons (Human Resources Study No. 7). Albertson, New York: Human Resources Center.

Zautra, A.J., Guarnaccia, C.A., Reich, J.W., & Dohrenwend, B.P. (1988). The contribution of small events to stress and distress. In L.H. Cohen (Ed.), Life events and psychological functioning: Theoretical and methodological issues (pp. 123-147). New York: Sage.

Zeidner, M., & Saklofske, D. (1996). Adaptive and maladaptive coping. In M. Zeidner & N.S. Endler (Eds.), Handbook of coping: Theory, research, applications (pp. 505-531). New York: John Wiley & Sons.

Zeitlin, S., & Williamson, G.G. (1994). Coping young children: Early intervention practices to enhance adaptive behavior and resilience. Baltimore, Maryland: Paul H. Brookes.