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# THE IMPACT OF PERCEIVED STRESS AND COPING BEHAVIORS ON COLLEGE ADJUSTMENT FOR UNDERGRADUATE STUDENTS WITH LEARNING DISABILITIES

A Dissertation

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

Doctor of Philosophy

By

AMBER N. ADKINS
Norman, Oklahoma
2002

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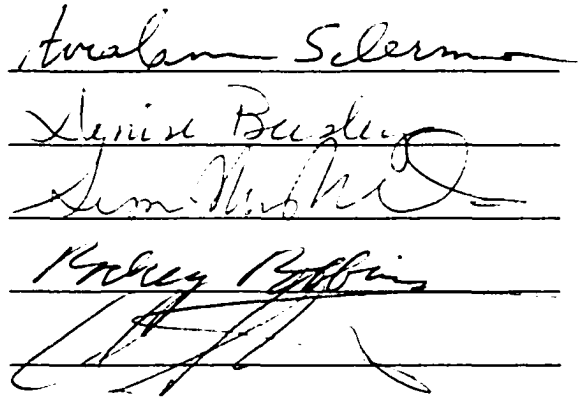
# THE IMPACT OF PERCIEVED STRESS AND COPING BEHAVIORS ON COLLEGE ADJUSTMENT FOR UNDERGRADUATE STUDENTS WITH LEARNING DISABILITIES

A dissertation APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

BY



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Abstract

In view of comparatively low graduation rates of post-secondary education for students with learning disabilities, the extant literature was reviewed on stress, coping and college adjustment for this population. Undergraduate students with learning disabilities may be at an increased risk of attrition due to higher perceived stress and greater tendencies to utilize emotion-focused and avoidance coping behaviors. The relationship of perceived stress and coping behaviors to college adjustment was investigated using a sample of 50 undergraduate university students with documented learning disabilities. The predictive ability of perceived stress and coping behaviors for college adjustment was determined using self-report questionnaires. Descriptive statistics and regression analyses were performed to determine the main effects of stress and coping on college adjustment and the possible presence of an interaction effect when stress and coping behaviors are combined. Overall, results did offer support for the contention that increased stress and passive coping behaviors negatively impacted college adjustment. Importantly, stress and emotion coping negatively impacted college adjustment for this sample, but it was not more so than the general university population. These findings suggest that university students with learning disabilities are experiencing similar amount of stress and exhibiting similar coping behaviors as their peers without learning disabilities.

# Chapter I

## INTRODUCTION

The literature indicates that having a learning disability is a life long issue with far reaching impacts inside and outside of the academic arena (Gerber, Schnieders, Paradise, Reiff, Ginsberg & Popp, 1990; Sitlington & Frank, 1990; Mellard & Hazel, 1992). Reiff and deFur (1992) reported that the "hidden nature" of learning disabilities have at times led to erroneous conclusions that learning disabilities solely affect academics. The problematic nature inherent with learning disabilities may include deficits in skills required for efficiency with organizing, problem solving and thinking critically. While the aforementioned skills often contribute to increased difficulty in meeting the demands in academic and other adult environments, they may represent only part of the problem that those with learning disabilities experience.

Adjustment problems such as low self-esteem, stress, and expectations for failure are thought to be secondary effects of a learning disability. Furthermore, difficulties with self-awareness of personal strengths and weaknesses, coupled with a perceived reluctance to self-advocate, contribute to difficulties experienced with making transitions into adulthood. Conclusions that have characterized learning disabilities as only an academic issue have hindered efforts to understand

the pervasive impact of learning disabilities and have limited personal understanding on the individual's behalf.

Several researchers have explored various areas of adult's lives with learning disabilities and drawn similar conclusions. In illustration, Bruck (1987) reviewed four studies regarding the adult outcomes of children with learning disabilities and reported several conclusions from the literature. First, the contention that learning disabilities are a lifelong disorder although adults with learning disabilities face qualitatively different challenges than children with learning disabilities was reaffirmed. Secondly, although some adults with learning disabilities experience achievements commensurate with their abilities, a great number experience poor adjustment in later life. Although it becomes important to avoid characterizing learning disabilities as precursors to adult psychopathology, a large proportion of adults with learning disabilities do report significant social and emotional difficulties.

The empirical findings in the extant literature coupled with the author's clinical experience obtained working with undergraduate students with learning disabilities provided the stimulus for the study. Numerous studies have examined the psychosocial characteristics of elementary and secondary students with learning disabilities that contribute to poorer academic and personal adjustment although few studies have investigated the postsecondary student with a learning disability.

## Problem Statement

This study was designed to better understand and describe the unique and shared relationships among stress, coping behaviors and adjustment to college for undergraduate students with learning disabilities. Specifically, this study investigates how college adjustment is affected by stress and coping behaviors for undergraduate students with learning disabilities.

## Statement of Purpose

The purpose of this study is to increase understanding regarding how college adjustment is affected by perceived stress and coping behaviors for undergraduate university students with learning disabilities. This study contributes to the empirical knowledge about postsecondary students with learning disabilities through examining the impact of psychosocial factors, such as stress and coping, on college adjustment. Determining these relationships may aid in helping others provide more responsive learning environments.

## Rationale for the Study

The current research problem seeks to gain a better understanding of the impact of stress and coping on college adjustment for students with learning disabilities. Transition to postsecondary settings often requires increased communication and pro-social skills to effectively navigate and succeed in the higher education environment. Traversing academic challenges, lack of social skills necessary to establish and maintain social support networks and delays in

cognitive development contribute to potential adjustment difficulties for students with learning disabilities. Additionally, the literature indicates that students with learning disabilities may demonstrate a tendency to utilize passive coping mechanisms including denial, avoidance of problems and catastrophizing when compared to their peers without learning disabilities (Gisthardt & Munsch, 1996). The development of post-secondary programs for students with learning disabilities have historically focused predominately on academic and vocational arenas that are necessary but seemingly insufficient. The past decade has brought a proliferation of research on psychosocial issues that serve to impede students with learning disabilities from experiencing successful adult lives. Unfortunately, the majority of the research has been conducted with adolescents, leaving only a limited awareness of the impact of psychosocial issues, such as stress and coping on adults with learning disabilities.

Moreover, little research over the past decade has been focused on the role of primary stressors and coping behaviors and their effect on college adjustment for adults with learning disabilities. Clinical observation readily unveils the obstacles that students in postsecondary education hurdle such as organizational difficulties, limited interpersonal and communication skills, becoming easily overwhelmed and difficulty problem-solving. Although clinically these difficulties appear evident, empirical research is necessary for the development of programs addressing this population's identified stressors and coping behaviors in

the postsecondary environment. Thus, the investigation of the impact of stress and coping behaviors on college adjustment offers potentially promising directions for future program development and additional research with this population.

The significant benefits in the results of this study could include the following:

1. It could provide knowledge of parameters of successful postsecondary transition for undergraduate students with learning disabilities.
2. Investigating stress and coping behaviors of a selected sample of undergraduate students with learning disabilities could contribute to the efforts of those involved in the development and delivery of services and personal growth opportunities for students.

## Implications

Bridging the gap between high school and college can be difficult for any student although the research indicates that this developmental task appears to be particularly difficult for students with learning disabilities (Brinkerhoff et al. 1992). College offers qualitatively different challenges than those experienced during secondary schooling. Specifically, greater problem-solving and decision-making skills are necessary for successful post-secondary adjustment. Brinkerhoff et al. (1992) reported that at the post-secondary level students are expected to (a) balance personal freedom with goal-setting, (b) plan for long-term projects, (c) integrate information from numerous sources and perhaps most importantly, (d)

function autonomously. If the goal of post-secondary education is to prepare students for adult life, and hopefully a successful adult life, then programs related to fostering independence and the necessary psychosocial skills required to succeed should be a part of the services offered to students with learning disabilities at post-secondary institutions.

Instead of continuing the line of research that differentiate students with learning disabilities from their peers without learning disabilities, it is imperative to search for factors that foster and impact adjustment, be that college or life adjustment. A common theme that continues to surface in the literature, is that having a learning disability is a life-long condition and while some skills deficits may be remediated, most skill deficits persist (Raskind et al., 1999). Additionally, research indicates that active coping behaviors and empowerment strategies positively impact successful adjustment. Unfortunately, the research indicates that students with learning disabilities tend to display more passive coping techniques and difficulties within their social environment resulting in diminished support systems and less successful adjustment.

In conjunction with the reported limited coping strategies, research indicates that this population may be more psychologically vulnerable and experience an increase in stress that translates to depression and anxiety (Stafford-DePass, 1997). Given this information, perhaps it would be more helpful to aid in the development of compensatory strategies that function to overcome difficulties

than to focus all of our collective energies on remediating academic skill deficits. Specifically, a better understanding of how college adjustment is affected by perceived stress levels and coping behaviors may translate to psychoeducational classes aimed at building these requisite skills.

# CHAPTER II

## REVIEW OF LITERATURE

By definition, learning disabilities are diagnosed when the individual's scores on achievement measures are significantly below what would be expected given the person's age, schooling and level of intelligence (APA, 1994). Additionally, to be diagnosed with a learning disability the individual's scores must at least fall within the low average range of intelligence, otherwise the diagnosis would be mental retardation. It would give the impression that the system is failing some students with learning disabilities evidenced by the fact that at least 40% drop-out of school which is 1.5 times the average rate for attrition (APA, 1994).

Zigmond and Thorton (1985) compared students with learning disabilities and students without learning disabilities and reported that more than half of the students with learning disabilities who began high school dropped-out prior to graduation. Of those students who remained in high school and graduated, similar employment rates were reported regardless of the presence of a learning disability. These findings highlight the importance of including programs beyond academic remediation that help students with learning disabilities remain in high school and attain goals similar to their peers without learning disabilities. More research on factors related to successful academic adjustment for students with

learning disabilities is necessary to serve and foster the achievements for this population that are commensurate with the abilities.

An explanation for the poor adult adjustment may lie in the experience of adults with learning disabilities in the arenas of vocational and postsecondary education. White (1992) and Gerber et al. (1990) reported that learning disabilities may cause academic difficulties for school-aged children but as adults these difficulties may be better viewed in vocational and social domains. In general, adults with learning disabilities report unemployment, underemployment and/or a general lack of satisfaction in their vocational and social lives. This may be due in part to the increasing demands placed upon their work and daily routines. These demands likely include such stressors as the increased need for social skills to successfully navigate the workplace or higher education institution (White, 1992). Skills such as oral and written communication, listening and interpersonal abilities are rewarded in the workplace and tend to be deficit areas for adults with learning disabilities (Sitlington & Frank, 1990; Mellard & Hazel, 1992).

Carnevale et al. (1988) conducted a two-year research project in conjunction with the American Society for Training and Development and the United States Department of Labor on the requisite basic workplace skills. These authors reported that to be competitive in the modern workplace, employees must be adaptable and possess strong interpersonal skills. In addition, valued traits of

employees included listening, problem solving, creativity, self-esteem, goal-setting, personal and career development and organizational effectiveness. These findings underscore the importance of fostering interpersonal skills, similar to the ones listed above, in conjunction with building and remediating basic reading, writing and computational skills.

A number of researchers have explored the coping behaviors evidenced by students and adults with learning disabilities to better understand psychosocial issues that tend to accompany the academic deficits (Kincer, 1991; Stafford-DePass, 1997; Reiff et al. 1995; Rimmer, 1991). Successful adults with learning disabilities have participated in research to aid in understanding the factors related to their positive adjustment. Overwhelmingly, these successful adults reported that they developed compensatory strategies such as coping skills, constructive attitudes and empowerment strategies that outweighed the specific learning disability and allowed for successful adjustment (Reiff et al., 1995). These behaviors fostered a sense of control over one's life and allowed the participants to make the adaptive changes necessary to succeed. Additionally, a common characteristic of successful adults with learning disabilities is development of self-awareness. The ability to understand one's own constellation of strengths and weaknesses allows the individual to make more effective decisions regarding their lives. For example, self-awareness is a necessary precursor for self-advocacy, the ability to communicate needs to employers, professors, etc., and to choose

environments that maximize areas of strength and minimize areas of weakness (Kincer, 1991).

Academic difficulties can serve as a virtual breeding ground for the development of secondary psychosocial difficulties. Results from Kincer's (1991) study indicated that adults with learning disabilities evidenced increased difficulties with depression, anxiety and low self-esteem when compared to their peers without learning disabilities. Rimmer (1991) stated that interview data collected through her research indicated that social and emotional factors derived from social stigma and elementary and secondary school failures negatively impacted college achievement for students with learning disabilities. Both researchers stated that the implementation of active and flexible coping strategies were associated with better academic outcomes. Better academic outcomes and flexible coping behaviors are characteristics that resoundingly improve the potential for successful vocational and social adjustment. Again, remediation of academic deficits are necessary but should not occur to the exclusion of the development of coping behaviors and empowerment strategies that tend to foster successful adult adjustment. A major tenet of education appears to be preparing students for successful adult life. For at least some students with learning disabilities this goal is not being realized and therefore it appears that the educational system is failing to address necessary factors that would better ensure successful adult adjustment for this population.

There has been an inordinate amount of clinical and educational literature regarding the conceptualization and treatment of children with learning disabilities; however the literature base is insufficient in addressing the needs of the adult student in postsecondary education (Price et al., 1994). The needs of adults with learning disabilities are qualitatively different than the needs of children and tend to be more multifaceted in nature. Additionally, there is a paucity of information available to the learning disability service provider or the mental health clinician detailing techniques for successfully navigating the interface of disability and mental health. Given that the psychosocial skills of self-awareness, pro-active social skills and possessing a positive self-concept are essential in successfully attaining a post-secondary degree and making the transition to work, understanding how to foster these skills in addition to academics becomes undeniably essential (Ryan & Price, 1992).

Conceptualizing learning disabilities in a more holistic framework is a necessity given the increasing numbers of students entering the world of post-secondary education. The National Center for Education Statistics (2000) indicates that learning disabilities are the most frequently reported disability of students enrolled in 2-year and 4-year postsecondary institutions. Additionally, the National Center for Education Statistics reported that the students with learning disabilities were less likely to persist and/or attain 2-year and 4-year degrees when compared to their peers without learning disabilities. These

statistics underscore the premise that students with learning disabilities are an at-risk group requiring additional support and understanding to make their achievement commensurate with their abilities.

One reason for the proliferation of students with learning disabilities entering post-secondary education is in response to federal legislation that mandates that students with disabilities be granted equal access to institutions of higher education that receive federal funding through Section 504 regulations of the Rehabilitation Act of 1973 (Jarrow, 1987). The section 504 regulations mandates access to postsecondary education for persons with disabilities and state:

> No otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. (Section 504 of the Rehabilitation Act of 1973, May 1977)

In response to the increase of students enrolling in postsecondary institutions, numerous academic accommodations were set in place to assist in leveling the academic playing field. Even with these academic accommodations, a number of students with learning disabilities are continuing to experience personal failure at a greater percentage than their peers without disabilities (Price, Johnson & Evelo, 1994; Skinner & Schenck, 1992).

Miller et al., (1990) designed a study investigating the variables that contribute to enrollment in higher education. The researchers conducted

interviews with students with learning disabilities who had either graduated or left high school. Their findings suggested that increased involvement with peers via extracurricular activities and a willingness to utilize community resources were major indicators of participation in postsecondary education. Additionally, within this sample, interpersonal difficulties in postsecondary education were found to further hamper attainment of occupational and life challenges. These findings lend support to the idea that self-awareness and prosocial behaviors are inherent facets of learning to cope successfully with learning disabilities (Greenbaum, Graham & Scales, 1995; Greenspan & Apthorp, 1992). Increasing the support services available to students with learning disabilities to include skills training and supportive counseling may prove essential in empowering this group to lead independent and productive lives post academe (Stewart, Cornish & Somers, 1995).

The postsecondary environment demands such skills as decision-making, self-advocacy and increased autonomy than previously required during high school. These students leave a support system that has traditionally promoted dependence and approach the threshold of an environment with deficits in the necessary social skills required to succeed. Given these deficits, it becomes less surprising that poor retention is reported for students with learning disabilities after the first year of higher education (Merchant & Gajar, 1997). Aune (1991) and Merchant & Gajar (1997) postulated that students with learning disabilities

were having a difficult time bridging the gap from high school to postsecondary education because the students lacked the requisite coping and advocacy skills to obtain the accommodations necessary to succeed in the higher learning environment. Aune's (1991) study taught the skills to students bound for postsecondary education and reported an 89% retention rate after the first year. Further, at the end of participation in the project, student's reported better abilities to identify and request necessary academic accommodations as a result of their abilities to manage and identify their particular constellation of strengths and weaknesses. Merchant & Gajar (1997) reviewed the literature concerning the outcomes of self-advocacy programs designed to transition students with learning disabilities into postsecondary education. They concluded that transition programs that emphasize the skill of self-advocacy improve retention rates although additional research is necessary to determine the efficacy of program components. In addition to the internal barriers experienced by the students, environmental barriers were also perceived to be obstacles.

Within the literature, several perceived environmental obstacles found in the postsecondary environment rise to the surface. Students with learning disabilities report a sense of unwillingness or unresponsiveness related to requesting academic accommodations. Specifically, this subset of the student body expressed a fear that disclosure of having a learning disability would create barriers for them in education. This fear stems from prior experiences of faculty

inadvertently communicating to students with learning disabilities that their opportunities and career choices were limited compared to their peers without learning disabilities (Houck, et al., 1992). This form of "gatekeeping" created realistic environmental barriers that risk the promotion of a sense of alienation from peers coupled with feeling of academic inadequacy (Barga, 1996). The veracity of the reported perceptions becomes less pertinent when the detrimental impacts on the students with learning disabilities are considered. When the perception of "gatekeeping" exists, the likelihood of students advocating and receiving the necessary academic accommodations decreases and the likelihood of experiencing academic failure dramatically increases.

Some authors have suggested that the "hidden nature" of learning disabilities contributes to the high levels of anxiety reported because these students may live in fear of being "found out" by professors and/or friends. Previous studies have supported this statement by elaborating on the concept of "passing" wherein students attempt to manage their disability without accommodations that draw attention to the learning disability and possibly label them as "disabled" for their academic career (Barga, 1996; Gerber et al., 1990; Houck et al., 1992). Gregg et al. (1992) belied the importance of recognizing the potential for high levels of stress and generalized anxiety experienced by students with learning disabilities and responding therapeutically to their emotional needs. Again, these findings suggests that simply meeting the academic needs of these

adults is insufficient in fostering skills necessary to succeed in higher education and the transition to work.

Findings of social skill deficits of students with learning disabilities are ample within the literature. Kavale & Forness (1996) conducted a meta-analysis to determine the overall findings of 152 studies regarding social skills deficits. As a result of the analysis, support for poor coping, adjustment difficulties and significant anxiety was reported from teachers, peers and the students themselves. The most appropriate conclusion drawn from the results indicate that undeniably, social difficulties co-exist with learning disabilities although more research is required to better understand the relationship between the two constructs.

In general, students with learning disabilities report a qualitatively different experience in higher education than their peers without learning disabilities. Some of the differences are found in the coping methods employed to combat the increased pressures experienced with psychosocial adjustment. A learning disability is a life long issue that is truly never "overcome" but can be remediated through the acquisition of skills and coping strategies (Polloway, Schewel, & Patton, 1992).

## Related Research to Stress

Stress is considered a major problem for many students with learning disabilities in postsecondary education. Therefore, an examination of the

predominant models of stress as a means of understanding coping behaviors of students attempting to adjust to postsecondary education is prudent.

Definition of Stress

The definition of stress can vary depending on the paradigm the individual is utilizing for the definition. Lovallo (1997) defines stress as "any disruption in the orderly working of the body." He further delineates stress into the categories of stimulus and response. Stressor is defined by Lovallo (1997) as "any challenge or threat to the normal processes or integrated function of a living thing and the response of the organism to that threat is the stress response." Aldwin (1994) provides an overarching definition of stress that states "stress refers to that quality of experience, produced through a person-environment transaction, that, through either overarousal or underarousal, results in psychological or physiological distress." This definition is based on a review of the stress literature and identifies three ways in which the term "stress" is commonly used.

From Aldwin's (1994) review of the stress literature, she delineated that stress definitions generally fall into one of three categories: (1) an internal state of the organism, (2) an external state of the organism or (3) resultant from the interaction between the organism and the environment.

The first category generally refers to the physiological reactions that organisms have in reaction to stress. Studies that conceptualize stress in this manner generally focus on the organisms autonomic and neuroendrocrine

response to stress. The second definition of stress refers to major life events, trauma, daily hassles and other noxious events from the external environment. The third definition of stress is largely attributed to Lazarus and Folkman (1984) and is focused on the interaction between the person and the environment, particularly when there is a perceived mismatch between the resources of the person and the demands of the environment. Essentially, this model is how we bridge the gap between the person and the world through our memory and cognitive appraisals. This model will be addressed more completely because of the explanatory nature and the significance of the model to this study. An important caveat is that stress does not necessarily lead to deterioration but may, in fact, facilitate growth in the individual (Hann, 1993).

Stress and Coping Model

Lazarus and Folkman (1984) built upon Selye's General Adaptation Syndrome because they felt the model did not explain individual reactions to stressors. Lazarus and colleagues developed the Psychophysiological Model of Stress in an attempt to understand interactions with the environment and the emotional responses produced. This model is the most widely accepted cognitive formulation of coping with stressors in the field today.

Appraisal. In appraisal theory, people are continually evaluating their relationship with the environment. Essentially, this model purports that individuals evaluate the danger of the stressor through primary and secondary

appraisals that work interdependently. Individual beliefs and commitments decide the amount of threat the stressor is posing. Therefore, people are not viewed as victims of their environment but active participants within their environments. To better understand the model, primary appraisal and secondary appraisal will be discussed independently.

Primary Appraisal. Primary appraisal refers to the individual's evaluation of the specific situation as irrelevant (no stress), harm/loss, threat or challenge. Lazarus (1999) stated that primary appraisal has to do with whether or not that individual views the situation as relevant to their values, goal commitments, beliefs about self and the world and situational intentions. If there is a lack of relevancy of the situation to our well-being then the situation is not viewed as stressful. The fundamental principle in primary appraisal is whether or not the person views themselves as having something at stake and being threatened (Lazarus & Folkman, 1984; Lazarus, 1999; Park & Folkman, 1997). If the person makes the primary appraisal that nothing is at stake and the situation is not relevant to their sense of well-being, then there is no stress produced from the person-environment transaction. Conversely, if the person views the situation as relevant to their well-being, values are being threatened and/or goal commitments are at stake; the condition is considered stressful and an appraisal of harm/loss, threat or challenge is made. As consistent with the process formulation of coping,

both the environmental circumstances and personality variables combine to generate the determination of the primary appraisal.

Secondary Appraisal. Secondary appraisal refers to the "cognitive-evaluative process" that directs the person in deciding their options after the appraisal of a stressful person-environment relationship (Lazarus, 1999). As previously mentioned, this step is primarily undertaken when there has been a primary appraisal of harm, threat or challenge. Essentially, secondary appraisal allows the person to decide upon their coping options and provides the foundation for action to be taken to mediate the stressful person-environment relationship. Generally speaking, the more coping resources a person appraises themselves as having in their repertoire, the less stressful they perceive the situation (Park & Folkman, 1997).

As previously alluded, primary and secondary appraisal can occur simultaneously and are not static in their order of occurrence. The differences between the appraisals have more to do with their content. Simply stated, primary appraisal refers to the evaluation of the situation for personal relevancy and secondary appraisal has to do with deciding on the available resources for coping. There is a vast amount of interplay between primary and secondary appraisal and therefore, they should be considered parts of the same coping process (Lazarus, 1999).

A study conducted with adolescents was designed to determine if students with learning disabilities did indeed have a greater difficulty with the appraising sources of stress and generating possible coping resources to combat the stressful situations. The adolescents in the study completed a coping questionnaire and the results affirmed the researchers hypotheses. When compared to their peers without learning disabilities, the participants of the study demonstrated a diminished ability to appraise a stressful situation combined with increased difficulty deciding on an appropriate course of action (Shulman et al., 1995). Additionally, the students with learning disabilities demonstrated a greater level of pessimism and withdrew from the academic arena. These findings resonate with other studies that reported students with learning disabilities exhibit difficulties realistically appraising and approaching a situation, particularly academic in nature. Unfortunately, some students with learning disabilities appraise post-secondary education as an environmental situation that exceeds their personal resources and therefore, higher education is appraised as stressful (Gregg et al., 1992).

More recently, the literature has continued to report that students with learning disabilities experience significantly more stress when compared to their peers (Bender et al., 1999; Lepore, 1997; Wenz-Gross & Siperstein, 1998). Specifically, the reviewed studies indicated that on measures of stress and adjustment, students with learning disabilities consistently indicated higher stress.

lower peer support and poorer overall adjustment when compared to peers without learning disabilities. Additionally, these students reported being in fewer extra-curricular activities where opportunities to mobilize peer support networks would occur more frequently. Essentially, students with learning disabilities experience increased stress and a diminished support networks to cope with the increased stress. Unfortunately, although not surprising, these studies sample adolescents in secondary education as opposed to adults in postsecondary education. Therefore, the results have limited explanatory power regarding the experience of adults with learning disabilities in higher education.

As illustrated, stress and coping can be considered reciprocal functions because, without stress there is not a need to employ coping behaviors. The current literature resoundingly states that students with learning disabilities are an at-risk group that evidences increased levels of stress, both academically and socially. Knowing that this population experience high levels of stress, it becomes incumbent upon postsecondary personnel to foster skills that allow anxiety and stress to be mediated and thereby made more manageable. Therefore, it becomes necessary to better understand coping behaviors and adjustment of students with learning disabilities.

## Related Research on Coping

> It is not stress that kills us. It is the effective adaptation to stress that permits us to live.
> Vaillant, 1977, p. 374 (as cited in Zeidner & Saklofske,1996)

### Definitions of Coping

As with definitions of stress, the vast literature base on coping produces varying definitions of coping. A commonly agreed upon definition of coping refers to the process by which individuals mediate between stressful events and consequences of the appraised stressors such as anxiety, depression, psychological distress and somatic complaints (Parker & Endler, 1992; Lazarus & Folkman, 1984)) In general, the coping definitions fall into one of two camps: trait-oriented and process-oriented. The trait or dispostion-oriented camp defines coping as a static measure of structural or personality dispositions (Holahan, et al. 1996; Lazarus, 1999). Within this definition, theorists purport that people display consistent methods for coping with various stressors.

Dispositional coping measures attempt to tap the methods that people generally employ to deal with stressful situations (Holahan, et al., 1996). This allows an understanding of the generalizable coping behaviors that occur across specific situations. Dispositional coping can refer to coping styles that Millon (1982) (as cited in Aldwin, 1994) described as, "Personality styles characterize the more or less every day manner in which people approach the events of their lives. It is these typical ways of coping that may contribute to illness and the

manner in which individuals deal with it." Although, dispositional coping can refer less to personality styles and more to the general approach-avoidance modalities that are used depending on the person-environment interaction.

This approach to coping utilizes coping scores of the same individual collected across situations or on a single occasion as a means of representing a stable index of the individuals coping style. Additionally, the individual's coping scores are compared to responses of other individuals allowing the assessment of differences as a way to identify basic coping behaviors across different stressful situations (Parker & Endler, 1992). A major criticism of the approach-avoidance dichotomies, or dispositional coping strategies, is the simplistic definitions that fail to differentiate between emotion-focused strategies and those that are problem-focused in nature. This is not the case in methods that utilize the approach-avoidance dichotomies in a multi-faceted nature combining emotion- and problem-focused strategies within each of the broad categories (Aldwin, 1994). As evidenced, the two paradigms of coping are not as definitive and clear-cut as one may think. In addition, Haan (1993) stated that for a general understanding of the meaning that stress has for people, generalized operational definitions may be more useful in order for empirical recommendations to inform public policy.

Lazarus and Folkman (1984) contributed greatly to the coping literature by introducing the process-oriented approach to the research base. From their

process formulation. Lazarus and Folkman (1984) defined coping as, "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person". Additionally, Lazarus (1999) stated, "the key principle is that the choice of coping strategy will usually vary with the adaptational significance and requirements of each threat."

In addition to the overarching process definition of coping, Lazarus and Folkman (1984) postulated that coping was comprised of two qualitatively distinct functions: problem-focused and emotion-focused. Problem-focused coping strategies are similar to problem-solving strategies in that the individuals efforts are directed at changing some aspect of their environment and/or self. With respect to the stress appraisal process, the person "obtains information about what to do and mobilizes actions for the purpose of changing the reality of the troubled person-environment relationship" (Lazarus, 1999).

With respect to emotion-focused coping, the person cannot change some aspect of the self or the environment and therefore seeks to "regulate the emotions tied to the stressful situation without changing the realities of the stressful situation" (Lazarus, 1999). According to Lazarus and Folkman (1984) emotion-focused coping involves cognitive processes to minimize the psychological distress, cognitive reappraisals to change the meaning of a situation and behavioral strategies to avoid thinking about the stressful situation.

An important point to highlight is that both functions of coping can be exhibited from the same person in their attempts to cope with a stressful environmental situation. Similar to the stress appraisal process, the types of coping are best delineated for research purposes but should not be applied in either-or terms (Lazarus, 1999). Problem-focused and emotion-focused coping are interconnected and are essential components of the total coping process. Endler & Parker (2000) conducted a study that indicated that the individual's perception of control was adaptive to the situation and associated with lower anxiety and that both types of coping, problem- and emotion-focused, were associated with perceptions of control over a stressor. Although, the authors reported in the study that task-oriented coping was generally found more efficacious when dealing with stressors than emotion-focused coping efforts regardless of the amount of perceived control. Therefore, both types of coping behaviors are employed and useful in giving the individual a sense of control thereby reducing anxiety but task-oriented coping is generally found to be more efficacious and inversely related to psychological distress.

Coping depends largely on the appraisal process and the meaning deciphered from the event along with the realistic appraisal of resources available to the individual. The constructs of stress appraisal and the coping functions are interdependent and necessary to understand individual's adaptation to their environment.

In general, coping researchers and theorist agree that to fully understand coping behaviors, both dispositional and process or contextual approaches are active components. In addition, the coping literature reflects an agreement that coping behaviors can be classified into either problem- or emotion-focused coping efforts. People are also described as being active agents in the stress and coping framework and therefore actively work to manage emotions and/or stressors that result from the stressors (Miller & Major, 2000; Aldwin, 1994). In fact, the very term "coping strategies" implies an active, conscious effort on behalf of the individual to manipulate their external environments. Clinically speaking, the dispositional and process conceptualizations of coping are not mutually exclusive paradigms and should be viewed as interconnected (Pierce et al., 1996). When researching the complex nature of coping strategies, it becomes necessary to operationalize and categorize the coping strategies in an effort to effectively describe individual coping behaviors. Aspects of the development of coping and other possible correlates to coping need to be explored to fully understand coping as a construct and to improve measurability (Compas et al., 2001). In sum, coping researchers agree that the construct of coping is a complex entity and that the processes involved are complicated and interactive although must be categorized for research purposes.

Recently, the literature reflects an awareness of the pervasive impact the learning disabilities can have on an individual and the importance of

understanding the extent of the impact on the individual's life. Although, compared to the literature available regarding coping with stress in children, there is a dearth of literature regarding the experience of adults in post-secondary education. Regardless, the majority of studies reviewed agreed that students with learning disabilities demonstrate a tendency to utilize passive coping techniques and to report a smaller number of coping skills that are used during stressful situations.

Empirical studies focusing on stress, coping and adjustment report at an astounding consistency that this group is at a greater risk for academic failure and future life problems. Several studies have sought to understand whether students with learning disabilities encountered greater levels of stress and evidenced weaker coping strategies when compared to students without learning disabilities. Resoundingly, results suggest that students with learning disabilities reported failing more classes and being less involved in school activities than their peers (Geisthardt & Munsch, 1996). Additonally, the literature suggests that students with learning disabilities experienced greater levels of stress and depression. According to the current literature, additional stress related to school and peers may facilitate symptoms of depression therefore placing the individual at an increased risk for suicide (Bender et al., 1999).

The increased stressors become intimidating when coupled with the findings indicating that students with learning disabilities could not specify the

necessary steps required to manage the stressor and reported feeling more overwhelmed with their stated difficulties. Similar to previously mentioned studies, students with learning disabilities reported engaging in more passive coping techniques, such as escape avoidance and distancing tactics when compared to their peer counterparts (Coleman, 1992). This limited social support coupled with the findings of exhibiting a greater predilection for passive coping techniques places students with learning disabilities at a disadvantage on a scholastic and social level.

Importantly, the use of escape avoidance coping is not negative when one cannot change their environment but the reliance on any one coping behavior reduces the chances of adapting to the environment (Lazarus & Folkman, 1984). The students with learning disabilities also reported being more self-critical, responsible and feeling overwhelmed much of the time. Overall, the differences between the groups were their abilities to activate their resources (secondary appraisal) and to engage in active coping methods such as planful problem-solving techniques (Coleman, 1992; Gesithardt & Munsch, 1996).

In addition to coping skill deficits, the literature supports the contention that students with documented learning disabilities also lack psychosocial skills (Pavri & Monda-Amaya, 2000; Wayment & Zetlin, 1989). Researchers found that the students reported increased feelings of loneliness before and after school, specifically during academic and unstructured times. This school-related

loneliness reportedly stemmed from boredom with academic tasks, lack of companionship and social skill deficits.

Specifically, students reported engaging in solitary tasks and seeking out other people to be their primary sources of coping. In general, the students reported that the strategies employed were not efficacious in reducing their level of loneliness. Students with learning disabilities endorsed that they employed more passive or emotion-focused versus active coping strategies during stressful periods. These findings support the literature base that suggests that students with learning disabilities have lower perceived control over the events in their life, both scholastically and socially (Carlton-Ford & Levian, 1995; Kavale, & Forness, 1996; Pavri & Monda-Amaya, 2000).

As of late, a few studies have provided empirical support for expanding academic support services for students, particularly for at-risk populations, to include affective components such as stress management and coping skills training. As with previous studies, the literature within this area focused more on secondary settings instead of postsecondary settings. The importance of fostering coping and social skill acquisition is heightened when student attrition in postsecondary setting is considered.

Kamann & Wong (1993) reported findings from their study which taught coping skills, specifically positive self-talk, in an attempt to reduce math anxiety for students with learning disabilities. They found that by teaching a coping skill

such as positive self-statements they effectively altered the adolescent's pattern of self-dialogue. The adolescents exhibited a greater tendency to utilize positive coping statements after the training sessions. In accordance with the increase in positive self-statements, the research reported an increase in their mathematics performance. The authors concluded that the adolescents' negative self-talk might have interfered with their academic performance.

These findings suggest that teaching students with learning disabilities coping strategies, academic performance may be impacted. Again, the findings underscore the importance and benefit from including affective training into the established academic accommodations. Through addressing the individual as a whole being, via affective and cognitive skills acquisition, academic performance can change for the better. The research indicates that by teaching students with learning disabilities coping strategies to deal with environmental stressors, they can maximize their strengths and minimize their weaknesses (Coleman, 1992). Another potential benefit of addressing the psychological aspect of learning disabilities is the reduction of loneliness reported in the literature. Through group counseling or psychoeducational classes, students with learning disabilities may feel less alone when presented with the information that other students experience similar difficulties and concerns (Coleman, 1992).

Bray et al., (1999) conducted a study investigating the importance of stress and coping on students' decision to leave college. The researchers

hypothesized the active coping methods such as positive reinterpretation, growth and acceptance would increase their social integration within the postsecondary institution and that passive coping behaviors such as denial and disengagement would exert the opposite effect. Overall, the researchers reported that the student's choice of coping strategy significantly influenced their decision to remain or depart from a postsecondary institution. Specifically, the use of positive reinterpretation and growth increased the students reported social integration and the use of denial and disengagement reduced the student's level of social integration. As a result of the findings, Bray and colleagues recommended that postsecondary institutions begin attending to the affective needs of the student population. One method discussed was beginning mandatory stress management classes as a means of facilitating identification and means of coping with stress for college freshman.

In sum, Lazarus and Folkman (1984) aptly describe the importance and complexity of stress appraisal and coping to efficacious adaptational outcomes. As noted by the authors (1984):

> A person's overall social functioning is largely determined by the effectiveness with which he or she appraises and copes with the events of day-to-day living. The effectiveness of appraisal within a specific encounter is determined in part by its match with the flow of events. Ambiguity and vulnerability, which are present in most encounters, can make this match difficult to achieve. Effective coping in an encounter also depends on the match between secondary appraisal, this is, of coping options and actual coping demands, and between a selected coping strategy and other

> personal agendas. In effective coping, problem- and emotion-focused forms of coping will work in a complementary fashion and not impede each other. (p.223)

Adaptation is not a simple process but a complex process where one adjusts to meet the changing demands of their environment. Adjustment is a process wherein the person employs various coping methods to adapt under different life circumstances (Zeidner & Saklofske, 1996). The coping methods may be viewed as dispositional traits that are stable as well as process-oriented wherein the coping techniques change to meet the specific situations presented by the individuals environment. The literature demonstrates that students with learning disabilities exhibit increased difficulties with coping strategies. Specifically, these difficulties appear to be a reduced number of strategies that are employed along with a greater reliance on more passive coping techniques that may contribute to poorer adjustment.

In accordance with the interactive model of stress and coping that has been previously delineated, this study seeks to understand how the person (coping skills), environment (perceived stress) and the outcome of adjustment to college relate to each other. Thus, the relationship between the variables is explored in conjunction with the interaction, or the "fit", or lack thereof, between the person and the environment.

## Related Research on College Adjustment

Previous literature has provided support for the assertion that students with learning disabilities are at a higher risk for stress and poorer coping strategies (Bender et al., 1999; Barga, 1996; Geisthardt & Munsch, 1996; Gerber et al., 1990; Saracoglu et al. 1989). The constructs of perceived stress and coping skills seem necessary for successful adjustment of the individual. For the last decade, the literature has acknowledged the adjustment concerns for students with learning disabilities, yet most of these studies focus on elementary and secondary students as opposed to the adjustment difficulties unique to the postsecondary student.

Definition of College Adjustment

For some researchers, successful college adjustment refers to retention of students within the institution (Bean, 1982; Tinto, 1975). The models of student attrition may be helpful in understanding college adjustment, yet attrition is a simplified measure because it fails to understand the individual's reasons for leaving an institution. Perhaps the student choose to leave one institution and attend a different postsecondary institution that was a better "fit" for their personal needs. Baker & Siryk (1984) consider student adjustment to be a multi-faceted construct that includes factors such as: (1) academic adjustment, (2) social adjustment, (3) personal-emotional adjustment and (4) institutional attachment. This model of student adjustment incorporates personality and environmental variables that form an interaction and provide information beyond student

attrition. For the purposes of this research study, Baker & Siryk's (1984) conceptualization of college adjustment will be the model utilized for it's "fit" with the previous person and environment interaction conceptualizations of stress and coping. The following literature review on college adjustment employs the multi-dimensional conceptualization of adjustment.

Upon reviewing the literature, several themes emerge related to adult psychosocial adjustment for individuals with learning disabilities. A large portion of the literature focused on the overall delay in developmentally appropriate behaviors. Developmentally appropriate behaviors are described as being engaged in school, employment and social activities that were commensurate with their self-perceptions, capabilities and aspirations. Literature also focused on determining protective factors that facilitate adjustment in both the social and academic arenas. Investigating protective factors is indispensable to the development of programs designed for skill acquisition with this population. Lastly, psychosocial factors that prove detrimental to college adjustment are explored.

A noticeable deficit in the literature pertaining to adjustment of individuals with learning disabilities is that the studies reviewed did not specifically investigate how college adjustment is affected by stress and coping. This is curious when the literature repeatedly underscores the idea that students with learning disabilities consistently report increased stressors and less flexible coping

behaviors. Unfortunately, the paucity of literature likely reflects the small percentage of individuals with learning disabilities that seek out educational and employment opportunities that are commensurate with their abilities.

Fourqurean et al. (1991) and Haring et al. (1990) conducted follow-ups of high school graduates with learning disabilities to understand how the students were succeeding in the areas of employment and postsecondary education. The researchers reported that the high school graduates with learning disabilities experienced a higher unemployment rate when compared to their peers. Of the participants that were employed, less than half reported being employed in skilled work that required specific training. The majority of the individuals with learning disabilities were employed in entry-level jobs that provided little opportunity for advancement, few benefits and paid minimum-wage salaries. Of those students who pursued postsecondary education, a large percentage (50% in Fourquean et al. (1991)) did not complete an entire academic year. Additionally, Haring et al. (1990) reported that, in their sample, the attainment of postsecondary education did not enhance the student's employability.

As indicated previously, students with learning disabilities posses average to above average intellectual abilities although the research indicates a tendency for poor academic achievement coupled with social and emotional inadequacies. Holliday et al. (1999) examined the long-term, post-high school outcomes of 80 adult vocational rehabilitation clients that were identified as possessing high

intellectual abilities. The results found in this study were disturbing because of the limited postsecondary education accomplishments and bleak employment outlook. Five years post high school graduation, these individuals displayed restricted educational gains. The average academic grade level was reported at 12.7 years and only 21% had completed over four semesters of college. Employment wise, 22% earned more than $6 dollars per hour whereas 76% earned below $6 per hour. The majority of individuals (52%) were employed in unskilled labor while 36% were working in skilled labor and only 9% were in professional occupations. As Holliday et al. (1999) stated, "if this relatively advantaged high-IQ subgroup of adults with learning disabilities has difficulty in achieving adaptive postschool adjustment, the outlook for those with lower measured intelligence may be even less optimistic" (p. 276). In addition to the poor employment and education findings, a reported 30% of the participants received secondary DSM-III-R diagnoses and an additional 36% reported having personal and interpersonal problems severe enough to require intervention. These findings support the contention that psychosocial adjustment within this population is of particular concern.

Employment and academic arenas are not the sole areas wherein adjustment difficulties reside for this population. Morrison et al. (1997) and Ryan (1994) reviewed literature related to adults with learning disabilities and reported that this group experienced continued social problems with attenuated dependence

on family for support for a longer period of time than their peers without learning disabilities. The data suggests that curriculum targeted toward the development of age-appropriate decision-making skills may build the necessary self-confidence for independence in the adult years. Additionally, they reported that communicative ability, self-awareness and a supportive environment served as protective factors for adults with learning disabilities.

Given the significant percentage of individuals with learning disabilities that fail to attain independence within a developmentally appropriate time frame, it behooves researchers to gain an understanding of factors that facilitate adjustment. The literature indicated several common themes such as: 1) learning disabilities are an ongoing condition, 2) learning disabled individuals face additional life stressors and 3) learning disabled individuals tend to be late bloomers. Additionally, themes that supported success were: 1) realistic adaptation to life events that include self-awareness, proactive approach, perseverance and emotional stability, coping strategies and stress reduction, 2) appropriate goal setting and goal directedness, and 3) presence and use of effective support systems (Speckman et al., 1992).

A similar study investigated the adult outcomes of students with learning disabilities who graduated from high school. These findings suggest that the majority of adults are not living independently or paying their own living expenses so the goal of independent living is not being met. Given these grave

statistics, recommendations stated that training for self-advocacy skills must be increased and that the training needs to be continued into adulthood for some individuals (Sitlington et al. 1992; Speckman et al., 1992).

The findings speak to the necessity of discovering factors that contribute to successful adaptation in adulthood for persons with a learning disability. The ability to manage stress and utilize active and flexible coping strategies allowed for a successful adaptation to their environment. In particular, those individuals with a learning disability who possessed a sense of self-awareness, perseverance, proactivity, emotional stability and utilized support systems were more powerful predictors of success than IQ, academic achievement, SES or other background variables (Raskind et al. 1999). These factors likely serve as a buffer to the increased life stressors reported by individuals with learning disabilities.

Morrison and Cosden (1997) were also interested in deciphering emotional factors that place individuals with learning disabilities at risk along with factors that were protective in nature and fostered adjustment. Not surprisingly, in their review of the literature they found results that are echoed in previously reported studies. Regarding emotional adjustment, it appears that individuals with learning disabilities do not necessarily have significantly more emotional problems although the presence of a learning disability place this group at a higher risk for depression and anxiety.

Directly related to this investigation is uncovering factors that promote successful postsecondary adjustment (McKay, 1990; Ryan et al., 1999, Wenz-Gross & Siperstein, 1998). Research reviewed intimated that students with learning disabilities consistently experienced greater stress, lower peer support and poorer adjustment when compared to their peers without learning disabilities.

The few studies that specifically investigated the experiences of learning disabilities at the postsecondary level tend to concur with literature regarding overall academic adjustment within this specific population. When undergraduate students with learning disabilities were compared to their peers without learning disabilities on psychosocial factors and college adjustment significant differences materialized. In general, the research indicates that undergraduate students with learning disabilities experience lower social competence, lower levels of awareness and acceptance and these factors contribute to poorer overall, academic, social and affective adjustment to college (McKay, 1990; Ryan et al., 1999).

Interestingly, Ryan et al., (1999) reported that students with learning disabilities tended to take responsibility for failures and attribute their successes to luck. This suggests that students with learning disabilities fundamentally lack skills necessary to evaluate and integrate information from their environment that would foster a sense of success and autonomous functioning. These research

findings highlight the need for skills based training in psychosocial issues in conjunction with the remediation of academic skills deficits.

The study compared undergraduate students with and without learning disabilities on measures of college adjustment, self-efficacy and self-esteem and their findings were consistent with previously reviewed literature. The authors reported that the university students with learning disabilities experienced poorer academic and emotional adjustment when compared to their peers without learning disabilities. Additionally, the undergraduate students with learning disabilities reported poorer self-esteem, which supports that contention that emotional difficulties continue into adulthood for individuals with learning disabilities (Bruck, 1987; Haring et al. 1990).

It would be disingenuous to state that all students with learning disabilities experienced poor academic and emotional/social adjustment as some students report more successful adjustment than their peers without learning disabilities. The fact remains that some students with learning disabilities experience continued difficulties with social and emotional adjustment, and comprehensive support services are essential in nurturing autonomy and developing the requisite coping skills necessary for adaptation.

As previously alluded to, several studies conducted with students with learning disabilities are focused on elementary and secondary students, which have different needs than adults with learning disabilities. Nonetheless, the studies

are useful in understanding the larger picture of adjustment factors for individuals with learning disabilities. An important objective of education is the preparation of students to be prepared and competitive in the job-market or postsecondary education. Unfortunately, for many students with learning disabilities these objectives are not met and the individuals are employed in jobs that are below what would be expected given their intellectual ability.

Based on these and similar research findings, it would appear that the goal of education to prepare students for employment is not being realized. Therefore, educational institutions must expand their support services and focus on the development of skills necessary to make a successful transition from school-to-work. As gleaned from the literature, requisite skills such as coping behaviors, self-awareness and promoting advocacy via communicative skills with peers and professors/employers are skills that tend to promote successful adjustment.

The extant literature resoundingly indicates that students with learning disabilities face several academic challenges and the do not appear to be navigating these obstacles with any degree of success. Reporting higher levels of stress than compared to their peers without learning disabilities is one of the obstacles commonly referred to in the literature. In addition to the increased levels of stress, the literature indicates that this subset of students lack the necessary coping skills to mediate their increased stress levels. Another recurring theme throughout the studies reviewed return to the fact that the presence of a learning

disability is a risk factor but that it does not necessarily lead to poor emotional, social or personal adjustment. Given the recurrent findings of increased stress, limited coping skills and being an at-risk group for poor adjustment, it is necessary to further understand the internal and external factors that contribute to the development of risk and protective factors in this population. The hope is that through the investigation of these factors, the secondary problems associated with learning disabilities and that contribute to adjustment difficulties can be reduced. Given the extant findings in the literature, the following hypotheses are presented:

## Hypotheses

1. The main effects of perceived stress and task coping will significantly predict college adjustment for undergraduate students with learning disabilities. Specifically, higher scores for perceived stress will be predictive of lower college adjustment scores and higher scores for task coping will predict higher college adjustment scores.
2. An interaction effect of stress x task coping will significantly predict higher college adjustment for undergraduate students with learning disabilities.
3. The main effects of perceived stress and emotion coping will significantly predict lower college adjustment for undergraduate students with learning disabilities.

4. An interaction effect for stress x emotion coping will significantly predict poorer college adjustment for undergraduate students with learning disabilities.
5. The main effects of perceived stress and avoidance coping will significantly predict lower college adjustment for undergraduate students with learning disabilities.
6. An interaction effect for stress x avoidance coping will significantly predict poorer college adjustment for undergraduate students with learning disabilities.

# CHAPTER III

# METHODOLOGY OF THE STUDY.

## Participants

A convenience sample of 50 undergraduate students (26 male, 24 female) with learning disabilities registered with the Office of Disability Services at a large, Southwestern public university were participants in this study. Twenty-four percent of the participants endorsed the age category of 18-19, 30% endorsed the age category of 20-21, 20% endorsed the 22-23 age category and 26% endorsed the 24+ age category. Eighty-eight percent of the respondents were Caucasian, 4% African American, 4% American Indian and 4% Asian American. Twenty-six percent of the respondents were Freshman, 22% Sophomore, 14% Junior and 38% Senior. The majority of the respondents indicated that they had a reading learning disability (52%), compared to 28% written learning disability, 18% math learning disability and 2% learning disability not otherwise specified. Overall, the sample was generally representative in regards to gender although not for ethnic composition of the university. All participants were treated in accordance with the ethical standards of the APA (APA, 1992a). Sample size was determined by performing a power analysis.

## Variables

Variables integrated in this study included the independent variables of perceived stress and 3 types of coping responses (i.e., task, emotion and

avoidance) and the dependent variable of college adjustment. Perceived stress was measured by The Inventory of College Students' Recent Life Experiences. Coping responses were identified using the Coping Inventory for Stressful Situations and college adjustment was measured using the Student Adaptation to College Questionnaire.

Measures

The *Inventory of College Students' Recent Life Experiences (ICSRLE)* (Kohn, Lafreniere & Gurevich, 1990) is a self-report instrument comprised of 49 items rated on a 4-point Likert scale. This scale is a measure of everyday hassles and mundane irritants and stressors that negatively affect physical and mental health for college students. Stress research demonstrates that measuring daily hassles as compared to major life events are stronger predictors of future illness, psychiatric symptomology and other adaptational outcomes (DeLongis et al., 1982; Kanner et al., 1981; Kohn & Macdonald, 1992).

Participants are asked to indicate and rate their experience with each item over the past month on the following 4-point Likert scale: 1 = not at all a part of my life; 2 = only slightly a part of my life; 3 = distinctly a part of my life; and 4 = very much a part of my life. Seven factors form the measure and are as follows: 1) developmental challenge, 2) time pressure, 3) academic alienation, 4) romantic problems, 5) assorted annoyances, 6) general social mistrust and 7) friendship problems. Items include "finding courses to demanding," "a lot of

responsibilities," "disliking your studies," "decisions about intimate relationships," "social isolation" and "conflicts with friends." The ICSRLE is less contaminated by subjective distress than the Hassles Scale (Kanner et al., 1981) as evidenced by the low intercorrelations among the ICSRLE's seven factor-based subscales. The corresponding correlations among the ICSRLE were lower, ranging from .15 to .49, as compared to the Hassles scale ranging from .38 to .71. The internal consistency (alpha) of the factors range from .80 for time pressures and .47 for assorted annoyances. Alpha coefficients for the full scale are .89 to .88, similar to the .94 obtained in this study. The full scale correlates highly with the Perceived Stress Scale (PSS; Cohen et al., 1983), which measures appraisal of stressful experiences. An overall continuous severity score was derived from the instrument and that score represented the stress measure.

The *Coping Inventory for Stressful Situation (CISS)* (Endler & Parker, 1990a, 1994) is a multidimensional measure of coping that has three 16-item factors: (1) task-oriented, (2) emotion-oriented, and (3) avoidance-oriented. The last factor termed avoidance-oriented has two sub-factors named distraction and social diversion. Task-oriented coping refers to purposeful task-oriented efforts aimed at solving the problem. Whereas, emotion-oriented coping is concerned with self-oriented emotional reactions and avoidance-oriented coping refers to activities and cognitive changes concerned with avoiding the stressful situation (Endler & Parker, 1990a; Endler, 1997). Avoidance can operate via distraction or

via social diversion. Distraction occurs when the person engages in a substitute activity different from the stressful situation confronting the person. Social diversion occurs when the person chooses to be with other people as a means to avoid the stressful situation that they are confronting (Parker & Endler, 1992). Persons are asked to indicate on a 5-point intensity continuum, how they generally react to difficult, stressful or upsetting situations. Items include "schedule my time better," "become very upset" and "take time off and get away from the situation."

The alpha reliabilities for the task, emotion and avoidance subscales for college students were .90, .90 and .91 for men and .87, .89, and .82 respectively for women. The alpha reliabilities for the 3 subscales in this study were .90, .90 and .87 respectively. The authors report comparable results with adults, for a clinical psychiatric population and for adolescents. The test-retest reliabilities (6 weeks apart) for the task, emotion and avoidance subscales for college students were.73, .68, and .55 for men and .72, .71 and .60 respectively for women. These correlations are significantly high to support the idea that the CISS measures coping styles. Several studies have been conducted on the construct validity of the CISS using adolescent, undergraduate, adult and clinical populations. Endler & Parker (1990a) examined the relationship between the MMPI-2 scales and the CISS scales for 167 male airline pilots. Task-oriented coping was negatively correlated with most of the MMPI-2 content scales, whereas emotion-oriented

coping was found to be positively related with all of the MMPI-2 content scales. Additionally, the CISS was administered to undergraduate students along with the Beck Depression Inventory (BDI: Beck, 1978), the Endler Multidimensional Anxiety Scales (EMAS: Endler, Edwards & Vitelli, 1991) and the Somatization subscale of the Symptom Checklist (SCL-90R: Derogatis, 1977). A high positive correlation was evidenced between the Emotion-oriented Coping scale and the BDI and the SCL-90R for both men and women. Modest correlations were reported between the Emotion-oriented Coping scale and the EMAS State Anxiety subscales and most of the EMAS Trait Anxiety subscales for both genders. The CISS Task-oriented Coping scale was negatively related to the BDI and the EMAS State and Trait subscales for both men and women. Lastly, Task-oriented coping was found to be unrelated to the Somatization subscales of the SCL-90R for both genders.

In general, the results of the construct validation studies suggest that for both men and women, emotion-oriented coping is related to psychiatric symptomatology, depression and social symptomatology. Task-oriented coping is negatively related to pathology, particularly depression. For the two subscales of the avoidance-oriented coping, distraction is positively related to psychiatric and social symptomatology but social diversion is negatively related to depression (Endler & Parker, 1993; Endler & Parker, 1994). The Task-oriented, Emotion-

oriented and Avoidance-oriented coping scales were all used as measures of coping behaviors in this study.

The *Student Adaptation to College Questionnaire* (SACQ) (Baker & Siryk, 1984; 1986) is a 67-item self-report measure divided into 4 subscales and rated on a 9-point continuum. The four subscales include the following: 1) academic adjustment, 2) social adjustment, 3) personal-emotional adjustment and 4) institutional adjustment. Items include "I know why I am in college and what I want out of it," I am very involved with social activities in college," " I have been feeling tense or nervous lately" and "I am pleased now about my decision to go to college."

Alpha coefficients for the SACQ range from .81 to .90 for the Academic Adjustment subscale, from .83 to .91 for the Social Adjustment subscale, from .77 to .86 for the Personal-Emotional Adjustment subscale, from .85 to .91 for the Attachment subscale and from .92 to .95 for the Full Scale. The alpha reliability for the Full Scale obtained in this study was .91. The authors report that the variables measured by the SACQ are not expected to be necessarily stable and enduring properties of the individuals, rather the measured states can vary with changes in the students environment. Therefore, estimates of internal consistency reliability are more appropriate than test-retest reliability.

Cooper & Robinson (1988) reported relationships between the SACQ and other variables such as alienation, personal adjustment, prior interracial

experience and student retention. Also, the greater the disparity between a student's anticipated and actual SACQ college adjustment rating in a longitudinal study, the lower his or her GPA. Additionally, Dahmus et al. (1992) reviewed 28 studies that reported statistically significant relationships among personality variables measured by well-know instruments (e.g., Tennessee Self-Concept Scale (Fitts, 1965); Mental Health Inventory (Veit & Ware, 1983); State-Trait Anxiety Inventory (Spielberger, 1983)) and the SACQ. The Full Scale was utilized in this study as the measure for adjustment due to the interest in overall adjustment, not adjustment components.

Procedure

Participants were recruited from the Office of Disability Services at a Midwestern, public university. Permission to distribute questionnaires was obtained from the University's Institutional Review Board (IRB) and the Director of the Office of Disability Services at the University. The staff at the Office of Disability Services distributed the questionnaires to the undergraduate students with documented learning disabilities registered with the office.

Having obtained permission from the IRB and the Director of the Office of Disability Services, the staff at the office approached the undergraduate students with documented learning disabilities as they utilized the academic accommodations available at the Office of Disability Services. Participants were given a brief oral description of the study that included any associated risks and

benefits of participation in the study. Any questions were answered by the researcher or staff employed at the Office of Disability Services. Each participant signed a consent form and then completed a packet in one session containing the four instruments. All participants were provided the necessary academic accommodations required to successfully complete the self-report measures. Completed questionnaires were returned to the staff at the Office of Disability Services. Upon written request, the researcher forwarded a report of the completed study to any participant requesting results of the study.

## Research Design

This study was a non-randomized descriptive correlational study that utilized multiple regression for the statistics analysis of the data. The study was exploratory in nature because of the newness of the information in the field. Also, self-report questionnaires were used to obtain data

# CHAPTER IV

# RESULTS

## Descriptive Statistics

The Student Adaptation to College Questionnaire (SACQ) scores ranged from a low of 236 to a high of 527 (maximum possible, 603) with a mean of 394.96. The Inventory of Inventory of College Student's Recent Life Experiences (ICSLRE) scores ranged from a low of 58 to a high of 170 (maximum possible score, 196) with a mean score of 94.18. The Coping Inventory of Stressful Situations (CISS) Task subscale (16 items) scores ranged from 32 to 77 (maximum score possible, 80) with a mean score of 55.80; Emotion Coping (16 items) scores ranged from 18 to 75 (maximum possible, 80) with a mean of 47.64; and the Avoidance Coping subscale (16 items) scores ranged from 28 to 74 (maximum possible, 80) with a mean of 51.12. Examination of the mean scores on the CISS, SACQ and ICSRLE scales suggest they are comparable to norms for undergraduate college students reported in the manuals. The mean scores and standard deviation scores of the respondents on the SACQ, ICSRLE and the CISS instruments are presented in Table 1.

For the total sample of undergraduate university students with learning disabilities, a few variables consistently related to college adjustment. Specifically, stress and emotion coping are negatively related to college adjustment although they are positively related to each other (See Table 2).

## Testing of Hypotheses

The results that follow are organized by the hypothesis under investigation and are restated for the purpose of statistical analysis. Three multiple regression analyses were performed to analyze the six hypotheses of study.

### Hypothesis 1 and 2

The hypotheses examined explored how college adjustment was affected by stress, task coping and the interaction between stress and task coping. To test this hypothesis, a multiple regression analysis was conducted entering college adjustment as the dependent variable, and stress, task coping and stress x task coping as the independent variables. In this analysis, the independent variables were entered in blocks with stress and task coping entered in block 1 and the interaction of stress x task coping entered in block 2. Multivariate outliers were removed if they had studentized residuals greater 3.0 in magnitude. Additionally, residual plots were examined for violation of assumptions.

Results of this analysis indicated that the individual variables of stress and task coping entered in block one accounted for 34% of the variance in the dependent variable (R Square = .343), which was significant at the $p<.001$ level (See Table 3). When examining individual variables, only stress was of significance. Stress accounted for 57% of the variance ($t(-4.833) = -.573$, $p < .000$) and was negatively correlated with college adjustment (See Table 4).

The interaction term (stress*task coping) significantly accounted for 40% of the variance in the dependent variable (R Square = .396, $p < .05$) (See Table 3). When examining the individual variables, the interaction term (stress x task coping) was significant and accounted for 112% ($t(2.01) = 1.121$, $p < .05$) of the variance in college adjustment (See Table 4). Further analysis revealed that a suppressor effect was present. Specifically, task coping was acting as a suppressor variable and inflating the relationship between the stress and college adjustment. This occurs because task coping had a very low relationship to college adjustment, but a significant relationship to stress.

Hypotheses 3 and 4

Hypotheses 3 and 4 examined how college adjustment was affected by stress, emotion coping and the interaction between stress and emotion coping. To test this hypothesis, a multiple regression analysis was conducted entering college adjustment as the dependent variable, and stress, emotion coping and the interaction term of stress x emotion coping as the independent variables. In this analysis, the independent variables were entered in blocks with stress and emotion coping entered in block 1 and the interaction of stress x emotion coping entered in block 2. Multivariate outliers were removed if they had studentized residuals greater 3.0 in magnitude. Additionally, residual plots were examined for violation of assumptions.

Results of this analysis indicated that the variables of stress and emotion coping (Model 1) accounted for 38% of the variance in the dependent variable (R Square = .384), which was significant at the $p<.000$ level (See Table 5). When examining individual variables, stress and emotion coping were of significance. Stress accounted for 32% of the variance ($t(-2.12) = -.324$, $p < .04$) and emotion coping accounted for 36% of the variance ($t(-2.32) = -.355$, $p < .025$) in college adjustment (See Table 6). Of importance is that both variables were negatively correlated with college adjustment.

Hypotheses 5 and 6

Hypotheses 5 and 6 investigated how college adjustment was affected by stress, avoidance coping and the interaction between stress x avoidance coping. To test this hypothesis, a multiple regression analysis was conducted entering college adjustment as the dependent variable, and stress, avoidance coping and stress x avoidance coping as the independent variables. In this analysis, the independent variables were entered in blocks with stress and avoidance coping entered in block 1 and the interaction of stress x avoidance coping entered in block 2. Multivariate outliers were removed if they had studentized residuals greater 3.0 in magnitude. Additionally, residual plots were examined for violation of assumptions.

Results of this analysis indicated that the variables of stress and avoidance coping (model 1) accounted for 35% of the variance in the dependent variable (R

Square = .354) , which was significant at the p<.000 level (See Table 7). When examining individual variables, stress was of significance. Stress accounted for 55% of the variance (t (-4.71) = -.552, p < .000) in college adjustment (See Table 8). Similar to previously reported results, stress was negatively correlated with college adjustment.

## Summary of Findings

This chapter presented and discussed the data that were collected in this study. The primary interests of this study were to determine whether the individual variables of stress, task coping, emotion coping, avoidance coping and the respective interaction terms predicted the dependent variable of college adjustment for undergraduate students with learning disabilities.

Consistently in the findings, undergraduate students with learning disabilities with higher stress levels tended to report more difficulty adjusting to college. Additionally, the same students who reported using more emotion-coping behaviors also reported poorer college adjustment. The main effect of task coping and avoidance coping did not demonstrate significant impact on college adjustment in this study.

The only interaction term that was significant in accounting for variance in college adjustment, above and beyond the main effects, was the interaction of stress and task coping. This proved to be resultant from a suppressor effect, which inflated the percentage of variance accounted for in college adjustment rendering

the finding illegitimate. Importantly, this sample of undergraduate university students with learning disabilities reported similar amounts of stress, coping behaviors and college adjustment when compared to individual instrument's normative samples of university students.

# CHAPTER V

## DISCUSSION

The following are major conclusions drawn from this study. The findings are limited to the sample studied; however, some generalizations may be drawn that are applicable to other postsecondary students with learning disabilities that may assist in creating a more responsive learning environment for this group of students. Based on the literature review, this study was initiated to assess the impact of stress and coping behaviors on college adjustment for undergraduates with learning disabilities.

It can be concluded from this study that stress and specific coping behaviors have an impact on college adjustment for undergraduate students with learning disabilities. The results demonstrate that stress emerged as a significant predictor of poor college adjustment for this sample as it does for general university populations. This finding is inconsistent with expectations from the literature that indicate that students with learning disabilities experience greater stress levels and poorer coping behaviors when compared to the peers without learning disabilities. Literature relevant to this study's rationale indicates that students with learning disabilities experience higher levels of stress when compared to their peers without learning disabilities, placing them at potential risk for adjustment problems in education (Bender et al., 1999; Bray et al., 1999; Geisthardt & Munsch,1996; Gregg et al., 1992; Speckman et al., 1992; Wenz-

Gross & Siperstein, 1998). This study suggests that university students with learning disabilities experience no greater stress or poorer coping skills than the average university student reports experiencing.

An important consideration in facilitating college adjustment is how students are responding to the stressful environment of academics. In this study, three coping behaviors were investigated to determine their individual impact on college adjustment for this population. The results indicated that emotion coping (i.e., self-oriented emotional reactions) emerged as a significant predictor of lower college adjustment but task coping (i.e., purposeful efforts aimed at solving the identified problem) and avoidance coping (i.e., activities aimed at avoiding the problem) did not demonstrate a significant ability to affect college adjustment. Again, this finding is inconsistent with the existent literature base that indicates students with learning disabilities tend to implement more passive coping, such as emotion coping, in their efforts to mediate stressful events (Aune, 1991; Pavri & Monda-Amaya, 2000; Reiff et al, 1995; Wayment & Zeitlin, 1989). These empirical findings suggest that students with learning disabilities do not implement passive coping techniques at a higher frequency when compared to their undergraduate peers without learning disabilities.

Task coping did not predict college adjustment for this sample. This finding is inconsistent with the literature base that indicates more active coping styles that are aimed at solving the problem contribute to better academic

adjustment for all students, including students with learning disabilities (Merchant & Gajar, 1997; Price et al., 1994). The other hypothesized interactions between stress and emotion and avoidance coping, respectively, also did not prove to significantly impact college adjustment. Importantly, the coping measure utilized in this study conceptualized emotion and avoidance coping in a negative nature. Given the focus of negative emotions (i.e., blame myself) in this emotion based coping subscale, it is less surprising that emotion coping would be considered ineffective when considering college adjustment. More specifically, the measure of college adjustment requires that several tasks be completed to attain successful college adjustment. Obviously, task coping would appear more effective than emotion coping when the constructs are based on accomplishing behavioral tasks and goals.

## Implications

The unique finding in this study regarding undergraduate students with learning disabilities not differing on measures of stress, coping behaviors and college adjustment than the general undergraduate population generates several possible explanations. This sample is likely more motivated and higher functioning due to several reasons. First the majority of the sample is comprised of non-traditional students (22 years or older) and they may developmentally possess better coping skills than their younger counterparts. In conjunction with their non-traditional status, the sample was largely included Junior and Senior classification which

may suggest they have had more time to adjust academically and possess greater social support networks that accentuate their coping behaviors. Nevertheless, the negative impact of stress and emotion coping on college adjustment suggests the increased need for more holistic student support services for all university students, including those with learning disabilities.

Implementing stress-management classes into the academic support services that are currently the standard option appears warranted based on the empirical findings in this study. In many educational environments, a greater emphasis is placed on the cognitive domain; however in assisting individuals with adjustment concerns, it may be prudent to address the affective domain as well. According to this study, it is evident that addressing how students navigate stressful situations through their coping behaviors is central in facilitating college adjustment. Teaching students how to identify their own personal stress triggers coupled with an introduction to stress reduction techniques such as focused breathing, visualization and progressive muscle relaxation may prove essential in fostering college adjustment for all university students (Coleman, 1992; Kamann & Wong, 1993). Bray et al., (1999) suggested integrating a mandatory stress-management course for university student that emphasized active coping skills and encouraged avoidance of passive coping skills, such as emotion and avoidance coping. The extant literature would encourage teaching skills to students that encourages them to recognize their personal stressors and increase

their overall range of coping skills. This method would increase the likelihood that their coping behaviors matched the demand of the stressor thus fostering more successful adaptation. Overall, this study supports the literature that belies the need for adding psychosocial education into the academic arena although this need is not greater for university students with learning disabilities.

Although this study did not support task coping as being predictive of college adjustment, the extant literature coupled with the finding that emotion coping negatively impacted college adjustment suggest otherwise. This underscores the need to teach students with and without learning disabilities time-management and organizational skills that would serve to break the stressor down into manageable parts. The ability to work towards actively solving the problem is a more productive long-term strategy than utilizing passive coping techniques or attempting to ignore the stressors (Geisthardt & Munsch, 1996).

Perhaps most importantly, the skills mentioned above are also integral components of successful transition into the vocational realm. Although academic skills are necessary, the ability to effectively navigate stressors present in the particular vocation are prerequisite for success. Skills such as time-management, organizational skills and the ability to navigate everyday stressors will be an expected part of their repertoire (Carnevale et al., 1988; White, 1992).

## Limitations

Several limitations temper the discussion of findings, conclusions and implications for practice stemming from this study's findings. First, the admissions criteria at the Southwestern University demand that all students meet the uniform standards as compared to open-admissions policies found at 2 and 4-year academic institutions. The study was limited to undergraduate university students with learning disabilities and these students are likely higher functioning than the students who did not pursue postsecondary education at a 4-year University. Secondly, this study was self-report and the risk of participants responding in a more socially acceptable manner is present. Observations of actual coping patters would be preferred, particularly when acquired at different points across the academic year and in different types of situations. Third, this sample was largely comprised of students with senior classification with reading disabilities, which limits the generalizability of the findings. An additional limitation of the sample is the obvious lack of minority representation and the greater number of males in this sample than compared to the Southwestern University's gender representation. Fourth, undergraduate students with learning disabilities who chose not to participate in this study may differ from the population with respect to severity of disability as well as various psychological characteristics. Nevertheless, these findings do not find support in the growing body of literature focused on postsecondary students with learning disabilities

with respect to increased stress levels, poorer coping behaviors and greater difficulties adjusting to college.

## Recommendations

As a result of the findings in this study, the following recommendations are made for further study:

1. Additional research should be conducted on the impact of stress and coping behaviors on college adjustment in other academic environments. Private institutions and community college settings should be researched to allow for a greater pool of information concerning this population.
2. Research should be conducted to determine the differences between those students who are retained and those who prematurely leave the educational setting.
3. Future research should include a larger sample that is followed over their postsecondary education with respect to stress and coping behaviors.
4. Research that evaluates the college adjustment of undergraduates with learning disabilities who participate in skills based courses, such as stress-management courses, versus undergraduate students with learning disabilities who do not participate in the same course.
5. A qualitative study that utilizes ethnographic data collection procedures such as direct interviews with the participants focused on coping habits, particular academic and personal stressors, severity of disability and

experiences of past adjustment issues related to their personal acceptance of their disability.

References

Aldwin, C.M. (1994). Definitions of stress. In Aldwin, C. M. (Eds.). Stress, Coping and Devleopment: An Integrated Perspective (pp.21-43). New York: Guilford Press.

Aldwin, C.M. (1994). Measurement of coping strategies. In Aldwin, C. M. (Eds.). Stress, Coping and Devleopment: An Integrated Perspective (pp.21-43). New York: Guilford Press.

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

Aune, E. (1991). A transition model for post-secondary bound students with learning disabilities. Learning Disabilities Research & Practice, 6, 177-187.

Baker, R. W., & Siryk, B. (1984). Measuring adjustment to college. Journal of Counseling Psychology, 31 (2), 179-189.

Baker, R.W., & Siryk, B. (1989). Student Adaptation to College Questionnaire Manual. Los Angeles, CA: Western Psychological Services.

Bean, J. P. (1982). Student attrition, intentions, and confidence: Interaction effects in a path model. Research in Higher Education, 17 (4), 291-320.

Beck, A.T. (1978). Depression Inventory. Philadelphia, PA: Center for Cognitive Therapy.

Bender, W. N., Rosenkrans, C. B., & Crane, M. (1999). Stress, depression and suicide among students with learning disabilities: Assessing the risk. Learning Disability Quarterly, 22, 143-156.

Bray, N. J., Braxton, J. M., & Sullivan, A. S. (1999). The influence of stress-related coping strategies on college student departure decisions. Journal of College Student Development, 40 (6), 645-657.

Brinkerhoff, L.C., Shaw, S.F., & McGuire, J.M. (1992). Promoting access, accommodations, and independence for college students with learning disabilities. Journal of Learning Disabilities, 25 (7), 417-429.

Bruck, M. (1987). The adult outcomes of children with learning disabilities. Annals of Dyslexia, 37, 253-263.

Carnevale, A.P., Gainer, L.J., Meltzer, A.S., & Holland, S.L. (1988). Workplace basics: The skills employers want. Training and Development Journal, 42, 22-30.

Cohen, S., Kamarack, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385-396.

Coleman, M. R. (1992). A comparison of how gifted/ld and average ld boys cope with school frustration. Journal for the Education of the Gifted, 15 (3), 239-265.

Compas, B., Connor-Smith, J.K., Saltzman, H., Thomsen, A.H., & Wadsworth, M.E. (2001). Coping with stress during childhood and adolescence:

Problems, progress, and potential in theory and research. Psychological Bulletin, 127 (1), 87-127.

Cooper, S.E., & Robinson, D.A.G. (1988). Psychometric properties of the Student Adaptation to College Questionnaire with engineering and science students. Measurement and Evaluation in Counseling and Development, 21, 124-129.

Dahmus, S., Bernardin, H.J., & Bernardin, K. (1992). Student adaptation to college questionnaire. Measurement and Evaluation in Counseling and Development, 25, 139-142.

DeLongis, A., Coyne, J.C., Dakof, G., Folkman, S., & Lazarus, R.S. (1982). Relationship of daily hassels, uplifts, and major life events to health status. Health Psychology, 1 (2), 119-136.

Derogatis, L.R. (1977). SCL-90R (Revised) version manual: I. Baltimore, MD: Johns Hopkins School of Medicine.

Endler, N.S. (1997). Stress, anxiety and coping: The multidimensional interaction model. Canadian Psychology, 38 (3), 136-153.

Endler, N.S., Edwards, J.M., & Vitelli, R. (1991). Endler Multidimensional Anxiety Scales (EMAS): Manual. Los Angeles, CA: Western Psychological Services.

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

Endler, N.S., & Parker, J.D.A. (1993). The multidimensional assessment of coping: Concepts, issues, and measurements. In Van Heck, G.L., Bonaiuto, I.J., & W. Nowack (Eds.). Personality Psychology in Europe, Vol. 4. Tilburg University Press.

Endler, N.S., & Paker, J.D.A. (1990a). Coping Inventory for Stressful Situations (CISS): Manual. Toronto: Multi-Health Systems.

Endler, N.S., Speer, R.L., Johnson, J.M., & Flett, G.L. (2000). Controllability, coping, efficacy and distress. European Journal of Personality, 14, 245-264.

Fitts, W.H. (1965). The Tennessee Self-Concept Scale manual. Los Angeles, CA: Western Psychological Services.

Fourqurean, J. M., Meisgeier, C., Swank, P.R., & Williams, R.E. (1991). Correlates of postsecondary employment outcomes for young adults with learning disabilities. Journal of Learning Disabilities, 27 (7), 400-405.

Geisthardt, C., & Munsch, J. (1996). Coping with school stress: A comparison of adolescents with and without learning disabilities. Journal of Learning Disabilities, 29, (3), 287-296.

Gerber, P.J., Schnieders, C. A., Paradise, L.V., Reiff, H.B., Ginsberg, R. J., & Popp, P. A. (1990). Persisting problems of adults with learning disabilities:

Self-reported comparisons from their school age and adult years. Journal of Learning Disabilities, 23 (9), 570-573.

Geisthardt, C., & Munsch, J. (1996). Coping with school stress: A comparison of adolescents with and without learning disabilities. Journal of Learning Disabilities, 29 (3), 287-296.

Greenbaum, B., Graham, S., & Scales, W. (1995). Adults with learning disabilities: Educational and social experiences during college. Exceptional Children, 61 (5), 460-471.

Greenspan, S. & Apthorp, H. (1992). Social competence and work success of college students with learning disabilities. Journal of Postsecondary Education and Disability, 9, 227-234.

Gregg, N., Hoy, C., King, M., Moreland, C., & Jagota, M. (1992). The MMPI-2 profile of adults with learning disabilities in university and rehabilitation settings. Journal of Learning Disabilities, 25 (6), 386-395.

Haan, N. (1993). The assessment of coping, defense, and stress. In Haan, N. (Ed.), Handbook of Stress: Theoretical and Clinical Aspects. New York: John Wiley & Sons.

Halper, A.R. (1991). Factors Relating to College Achievement of a Group of Students with Learning Disabilities Attending a Private University. Unpublished Doctoral Dissertation, The George Washington University.

Haring, K. A., Lovett, D. L., & Smith, D.D. (1990). A follow-up study of recent special education graduates of learning disabilities programs. Journal of Learning Disabities, 23 (2), 108-113.

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

Holliday, G.A., Koller, J.R., & Thomas, C.D. (1999). Post-high school outcomes of high I.Q. adults with learning disabilities. Journal for the Education of the Gifted, 22 (3), 266-281.

Houck, C. K., Asselin, S., B., Troutman, G. C., & Arrington, J.M. (1992). Students with learning disabilities in the university environment: A study of faculty and student perceptions. Journal of Learning Disabilities, 25 (10), 678-684.

Jarrow, J.E. (1987). Integration of individuals with disabilities in higher education: A review of the literature. Journal of Postsecondary Education and Disability, 5 (2), 38-57.

Kamann, M. P., & Wong, B. Y. L. (1993). Inducing adaptive coping self-statements in children with learning disabilities through self-instruction training. Journal of Learning Disabilities, 26 (9), 630-638.

Kanner, A.D., Coyne, J.C., Schaefer, C., & Lazarus, R.S. (1981). Comparisions of two modes of stress measurement: Daily hassles and major uplifts versus major life events. Journal of Behavioral Medicine, 4 (1), 1-39.

Kavale, K. A., & Forness, S. R. (1996). Social skills deficits and learning disabilities: A meta-analysis. Journal of Learning Disabilities, 29 (3), 226-237.

Kincer, K.K.D. (1991). Factors That Influence Adjustment to Postsecondary Institutions as Perceived by Students with Learning Disabilities in Virgina. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University.

Kohn, P.M., Lafreniere, K., & Gurevich, M. (1990). The inventory of college students' recent life experiences: A decontaminated hassles scale for a special population. Journal of Behavioral Medicine, 13 (6), 619-630.

Kohn, P.M., & Macdondald, J.E. (1992). Hassles, anxiety and negative well-being. Anxiety, Stress and Coping, 5, 151-163.

Lazarus, R. S. (1999). Stress and Emotion: A New Synthesis. New York: Springer.

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

Lepore, S. J. (1997). Social-environmental influences on the chronic stress process. In Gottlieb, B. H. (Ed.), Coping with Chronic Stress. New York: Plenum Press.

Lovallo, W. R. (1997). Stress and health: Biological and psychological interactions. Thousand Oaks: Sage Publications.

McKay, E.S. (1990). Psychosocial Competence, Adjustment to College and Academic Success of Learning Disabled Community College Students. Unpublished doctoral dissertation, North Carolina State University.

Mellard, D.F., & Hazel, J. S. (1992). Social competence as a pathway to successful life transitions. Learning Disability Quarterly, 15, 251-270.

Merchant, D. J., & Gajar, A. (1997). A review of the literature on self-advocacy components in transition programs for students with learning disabilities. Journal of Vocational Rehabilitiation, 8, 223-231.

Miller, C.T., & Major, B. (2000). Coping with stigma and prejudice. In Miller, C.T., & Major, B., Social Psychology of Stigma. New York: Guilford Press.

Miller, R. J., Snider, B., & Rzonca, C. (1990). Variables related to the decision of young adults with learning disabilities to participate in postsecondary education. Journal of Learning Disabilties, 23 (6), 349-354.

Morrison, G.M., & Cosden, M.A. (1997). Risk, resilience, and adjustment of individuals with learning disabilities. Learning Disability Quarterly, 20, 43-60.

Park, C. L., & Folkman, S. (1997) Meaning in the context of stress and coping. Review of General Psychology, 1 (2), 115-144.

Parker, J.D.A. & Endler, N.S. (1992). Coping with coping assessement: A critical review. European Journal of Personality, 6, 321-344.

Pedhazur, E.J. (1997). Multiple Regression in Behavioral Research: Explanation and Prediction (3rd ed.). Fort Worth, TX: Harcourt Brace College Publishers.

Pierce, G. R., Sarason, I.G., & Sarason, B.R. (1996). Coping and social support. In Zeidner, M., & Endler, N.S. (Eds.), Handbook of Coping, Theory, Research, Applications. New York: John Wiley & Sons.

Polloway, E.A., Schewel, R., & Patton, J.R. (1992). Personal perspectives. In Polloway, E.A., Schewel, R., & Patton, J.R. (Eds.), Learning Disabilities: The Challenges of Adulthood (pp.235-240). Austin, TX: Pro-Ed.

Price, L., A., Johnson, J.M., & Evelo, S. (1994). When academic assistance is not enough: Addressing the mental health issues of adolescents and adults with learning disabilities. Journal of Learning Disabilities, 27 (2), 82-90.

Raskind, M. H., Goldberg, R. J., Higgins, E. L., & Herman, K. L. (1999). Patterns of change and predictors of success in individuals with learning disabilities: Results from a twenty-year longitudinal study. Learning Disabilities Research & Practice, 14 (1), 35-49.

Reiff, H.B. & deFur, S. (1992). Transition for youths with learning disabilities: A focus on developing independence. Learning Disability Quarterly, 15, 237-249.

Reiff, H.B., Ginsberg, R., & Gerber, P.J. (1995). New perspectives on teaching from successful adults with learning disabilities. Remedial and Special Education, 16 (1), 29-37.

Ryan, A.G. (1994). Life adjustment of college freshman with and without learning disabilities. Annals of Dyslexia, 44, 227-249.

Ryan, A.G., Nolan, B.F., Keim, J., & Madsen, W. (1999). Psychosocial adjustment factors of postsecondary students with learning disabilities. Journal of College Student Psychotherapy, 13 (3), 3-18.

Ryan, A., & Price, L. (1992). Adults with LD: Looking ahead. Intervention in School and Clinic, 28 (1), 6-20.

Saracoglu, B., Minden, H. & Wilchesky, M. (1989). The adjustment of students with learning disabilities to university and its relationship to self-esteem and self-efficacy. Journal of Learning Disabilities, 22 (9), 590-592.

Shulman, S., Carlton-Ford, S. Levian, R., & Hed, S. (1995). Coping styles of learning disabled adolescents and their parents. Journal of Youth and Adolescence, 24 (3),281-294.

Sitlington, P. L., & Frank, A. R. (1990). Are adolescents with learning disabilities successfully crossing the bridge into adult life? Learning Disability Quarterly, 13, 97-111.

Sitlington, P.L., Frank, A.R., & Carson, R. (1992). Adult adjustment among high school graduates with mild disabilities. Exceptional Children, 59 (3), 221-233.

Skinner, M.E., & Schenck, S. J. (1992). Counseling the college-bound student with a learning disability. The School Counselor, 39, 369-376.

Speckman, N.J., Goldberg, R.J., & Herman, K.L. (1992). Learning disabled children grow up: A search for factors related to success in young adult years. Learning Disabilities Research and Practice, 7, 161-170.

Spielberger, C.D. (1983). Manual for the State-Trait Anxiety Inventory (STAI Form Y). Palo-Alto, CA: Consulting Psychologists Press.

Stafford-DePass, J. (1997). Psychological Characteristics and Life Experiences of Highly Successful Learning Disabled Adults. Unpublished Doctoral Dissertation, California School of Professional Psychology-Alameda.

Stewart, D., Cornish, P., & Somers, K. (1995). Empowering students with learning disabilities in the Canadian postsecondary education system. Canadian Journal of Counselling, 29 (1), 70-79.

Tinto, V. (1975). Dropout from higher education: An interdisciplinary review and synthesis. Interchange, 1, 89-125.

Veit, C.T., & Ware, J.E., Jr. (1983). The structure of psychological distress and well-being in general populations. Journal of Consulting and Clinical Psychology, 51, 730-742.

Wayment, H. A., & Zeitlin, A. G. (1989). Coping responses of adolescents with and without mild learning handicaps. Mental Retardation, 27 (5), 311-316.

Wenz-Gross, M., & Siperstein, G. N. (1998). Students with learning problems at risk in middle school: Stress, social support, and adjustment. Exceptional Children, 65 (1), 91-100.

White, W.J. (1992). The postschool adjustment of persons with learning disabilities: Current status and future projections. Journal of Learning Disabilities, 25 (7),448-456.

Zeidner, M., & Saklofske, D. (1996). Adaptive and maladaptive coping. In Zeidner, M., & Endler, N.S. (Eds.), Handbook of Coping, Theory, Research, Applications. New York: John Wiley & Sons.

Zigmond, N., & Thorton, H. (1985). Follow-up of postsecondary age learning disabled graduates and drop-outs. Learning Disabilities Research, 1 (1), 50-55.

Table 1

Student Adaptation to College Questionnaire, Inventory of College Student's Recent Life Experiences, and Coping Inventory of Stressful Situations Subscales Means and Standard Deviations

| Subscales | M | SD |
|---|---|---|
| SACQ Full Scale | 394.96 | 68.45 |
| ICSRLE Full Scale | 94.18 | 23.62 |
| Task Coping | 55.80 | 11.05 |
| Emotion Coping | 47.64 | 13.12 |
| Avoidance Coping | 51.12 | 11.79 |

Table 2

Correlations of Stress, Task Coping, Emotion Coping, Avoidance Coping and College Adjustment

| Subscale | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. Stress | -- | .08 | .67** | -.04 | -.56** |
| 2. Task Coping | | -- | .02 | .12 | .13 |
| 3. Emotion Coping | | | -- | -.06 | -.57** |
| 4. Avoidance Coping | | | | -- | .22 |
| 5. College Adjustment | | | | | -- |

** $p<.01$

Table 3

Multiple Regression Summary Tables Predicting College Adjustment

| Variable Entered | Multiple R | R2 | R2 Change | F Change | Signif F |
|---|---|---|---|---|---|
| | Change | | | | |
| Stress Task Coping | .586 | .343 | .343 | 12.296 | .001 |
| Interaction (stress x task) | .630 | .396 | .053 | 4.038 | .050 |

Table 4

Multiple Regression Summary Tables Predicting College Adjustment

| Variable Entered | Standardized Beta | t | Significance |
|---|---|---|---|
| Stress | -.573 | -4.833 | .000* |
| Task Coping | .174 | 1.469 | .148 |
| Interaction (stress x task) | 1.121 | 2.009 | .05* |

* $p<.05$

Table 5

Multiple Regression Summary Tables Predicting College Adjustment

| Variable Entered | Multiple R | R2 | R2 Change | F Change | Signif F |
|---|---|---|---|---|---|
| Stress Emotion Coping | .620 | .384 | .384 | 14.637 | .000 |
| Interaction (stress x emotion) | .623 | .388 | .004 | .337 | .564 |

Table 6

Multiple Regression Summary Tables Predicting College Adjustment

| Variable Entered | Standardized Beta | t | Significance |
|---|---|---|---|
| Stress | -.324 | -2.118 | .040* |
| Emotion Coping | -.355 | -2.318 | .025* |
| Interaction (stress x emotion) | .427 | .581 | .564 |

* $p<.05$

Table 7

Multiple Regression Summary Tables Predicting College Adjustment

| Variable Entered | Multiple R | R2 | R2 Change | F Change | Signif F |
|---|---|---|---|---|---|
| Stress Avoidance Coping | .595 | .354 | .354 | 12.873 | .000 |
| Interaction (stress x avoidance) | .596 | .355 | .001 | .068 | .796 |

Table 8

Multiple Regression Summary Tables Predicting College Adjustment

| Variable Entered | Standardized Beta | t | Significance |
|---|---|---|---|
| Stress | -.552 | -4.708 | .000* |
| Avoidance Coping | .202 | 1.718 | .092 |
| Interaction (stress x avoidance) | -.180 | -.261 | .796 |

* $p<.05$

# APPENDICES

# APPENDIX A: PROSPECTUS

# The Impact of Perceived Stress and Coping Behaviors on College Adjustment For Undergraduate Students with Learning Disabilities

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Abstract

In view of comparatively low graduation rates of post-secondary education for students with learning disabilities, the extant literature was reviewed on stress, coping and college adjustment for this population. Undergraduate students with learning disabilities may be at an increased risk of attrition due to higher perceived stress and greater tendencies to utilize emotion-focused and avoidance coping behaviors. The relationship of perceived stress and coping behaviors to college adjustment was investigated using a sample of 50 undergraduate university students with documented learning disabilities. The predictive ability of perceived stress and coping behaviors for college adjustment was determined using self-report questionnaires. Regression analysis was performed to determine the main effects of stress and coping on college adjustment and the possible presence of an interaction effect when stress and coping are combined. It is hypothesized that higher endorsements of perceived stress, emotion-focused and avoidance-focused coping will negatively impact college adjustment for undergraduate students with learning disabilities.

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# Chapter I

## INTRODUCTION

The literature indicates that having a learning disability is a life long issue with far reaching impacts inside and outside of the academic arena (Gerber, Schnieders, Paradise, Reiff, Ginsberg & Popp, 1990; Sitlington & Frank, 1990; Mellard & Hazel, 1992). Reiff and deFur (1992) reported that the "hidden nature" of learning disabilities have led some to erroneous conclusions that learning disabilities solely affect academics. The difficulties that are inherent in having a learning disability such as deficits with organizing materials, problems solving and critical thinking contribute to problems in meeting the demands of adulthood, but those difficulties are only a piece of the puzzle.

Adjustment problems such as low self-esteem, stress, and expectations for failure are thought to be secondary effects of a learning disability. Furthermore, difficulties with self-awareness of personal strengths and weaknesses, coupled with reluctance to self-advocate, contribute to difficulties experienced with making transitions into adulthood. Conclusions that have characterized learning disabilities as only an academic issue have hindered efforts to understand the pervasive impact of learning disabilities and have limited personal understanding on the individual's behalf.

Several researchers have explored various areas of adult's lives with learning disabilities and drawn similar conclusions. In illustration, Bruck (1987)

reviewed four studies regarding the adult outcomes of children with learning disabilities and reported several conclusions from the literature. First, as previously mentioned, learning disabilities are a lifelong disorder although adults with learning disabilities face qualitatively different challenges than children with learning disabilities. Secondly, although some adults with learning disabilities experience achievements commensurate with their abilities, a great number experience poor adjustment in later life. Although it becomes important to avoid characterizing learning disabilities as precursors to adult psychopathology, a large proportion of adults with learning disabilities do report significant social and emotional difficulties.

An explanation for the poor adult adjustment may lie in the experience of adults with learning disabilities in the arenas of vocational and postsecondary education. White (1992) and Gerber et al. (1990) reported that learning disabilities may cause academic difficulties for school-aged children but as adults these difficulties may be better viewed in vocational and social domains. In general, adults with learning disabilities report either unemployment, underemployment and/or a general lack of satisfaction in their vocational and social lives. This may be due in part to the increasing demands placed upon their work and daily routines. These demands likely include such stressors as the increased need for social skills to successfully navigate the workplace or higher education institution (White, 1992). Skills such as oral and written

communication, listening and interpersonal abilities are rewarded in the workplace and tend to be deficit areas for adults with learning disabilities (Sitlington & Frank, 1990; Mellard & Hazel, 1992).

Carnevale et al. (1988) conducted a two-year research project in conjunction with the American Society for Training and Development and the United States Department of Labor on the requisite basic workplace skills. These authors reported that to be competitive in the modern workplace, employees must be adaptable and possess strong interpersonal skills. In addition, valued traits of employees included listening, problem solving, creativity, self-esteem, goal-setting, personal and career development and organizational effectiveness. These findings underscore the importance of fostering interpersonal skills, similar to the ones listed above, in conjunction with building and remediating basic reading, writing and computational skills.

Zigmond and Thorton (1985) compared students with learning disabilities and students without learning disabilities and reported that more than half of the students with learning disabilities who began high school dropped-out prior to graduation. Of those students who remained in high school and graduated, similar employment rates were reported regardless of the presence of a learning disability. These finding highlight the importance of including programs beyond academic remediation that help students with learning disabilities remain in high school and attain goals similar to their peers without learning disabilities. More

research on factors related to successful academic adjustment for students with learning disabilities is necessary to serve and foster the achievements for this population that are commensurate with the abilities.

By definition, learning disabilities are diagnosed when the individuals scores on achievement measures are significantly below what would be expected given the person's age, schooling and level of intelligence (APA, 1994). Additionally, to be diagnosed with a learning disability the individual must be assessed to possess at least a low average level of intelligence, otherwise the diagnosis would be mental retardation. Given this information, the system is failing the students with learning disabilities when at least 40% drop-out of school which is 1.5 times the average rate for attrition (APA, 1994).

A number of researchers have explored the coping behaviors evidenced by students and adults with learning disabilities to better understand psychosocial issues that tend to accompany the academic deficits (Kincer, 1991; Stafford-DePass, 1997; Reiff et al. 1995; Rimmer, 1991). Successful adults with learning disabilities have participated in research to aid in understanding the factors related to their positive adjustment. Overwhelmingly, these successful adults reported that they developed compensatory strategies such as coping skills, constructive attitudes and empowerment strategies that outweighed the specific learning disability and allowed for successful adjustment (Reiff et al., 1995). These behaviors fostered a sense of control over one's life and allowed the participants

to make the adaptive changes necessary to succeed. Additionally, a common characteristic of successful adults with learning disabilities is development of self-awareness. The ability to understand one's own constellation of strengths and weaknesses allows the individual to make more effective decisions regarding their lives. For example, self-awareness is a necessary precursor for self-advocacy, the ability to communicate needs to employers, professors, etc., and to choose environments that maximize areas of strength and minimize areas of weakness (Kincer, 1991).

Academic difficulties can serve as a virtual breeding ground for the development of secondary psychosocial difficulties. Results from Kincer's (1991) study indicated that adults with learning disabilities evidenced increased difficulties with depression, anxiety and low self-esteem when compared to their peers without learning disabilities. Rimmer (1991) stated that interview data collected through her research indicated that social and emotional factors derived from stigma and elementary and secondary school failures negatively impacted college achievement for students with learning disabilities. Both researchers stated that the implementation of active and flexible coping strategies were associated with better academic outcomes. Better academic outcomes and flexible coping behaviors are characteristics that resoundingly improve the potential for successful vocational and social adjustment. Again, remediation of academic deficits are necessary but should not occur to the exclusion of the development of

coping behaviors and empowerment strategies that tend to translate to successful adult adjustment. A major tenet of education appears to be preparing students for successful adult life. For at least some students with learning disabilities this goal is not being realized and therefore it appears that the educational system is failing to address necessary factors that would better ensure successful adult adjustment for this population.

## Problem Statement

The problem of this study is to better understand and describe the unique and shared relationships among stress, coping behaviors and adjustment to college for undergraduate students with learning disabilities and more specifically, to understand how college adjustment is affected by stress and coping behaviors for undergraduate students with learning disabilities.

## Statement of Purpose

The purpose of this study is to increase understanding regarding how college adjustment is affected by perceived stress and coping behaviors for undergraduate university students with learning disabilities.

## Rationale for the Study

The current research problem seeks to gain a better understanding of the impact of stress and coping on college adjustment for students with learning disabilities. As previously mentioned, transition to postsecondary settings require increased communication and pro-social skills to effectively navigate and succeed

in the higher education environment. Factors such as unique academic challenges, a lack of social skills necessary to establish and maintain social support networks and cognitive development delays contribute to potential adjustment difficulties for students with learning disabilities. Additionally, the literature indicates that students with learning disabilities may demonstrate a tendency to utilize passive coping mechanisms such as denial, avoidance of problems and catastrophizing when compared to their peers without learning disabilities (Gisthardt & Munsch, 1996). The development of post-secondary programs for students with learning disabilities have historically focused predominately on academic and vocational arenas that are necessary but seemingly insufficient. The past decade has brought a proliferation of research on psychosocial issues that serve to impede students with learning disabilities from experiencing successful adult lives. Unfortunately, the majority of the research has been conducted with adolescents, leaving only a limited awareness of the impact of psychosocial issues, such as stress and coping on adults with learning disabilities.

Moreover, little research over the past decade has been focused on the role of primary stressors and coping behaviors and their effect on college adjustment for adults with learning disabilities. Clinical observation readily unveils the difficulties that students in postsecondary education grapple with such as organizational difficulties, limited interpersonal and communication skills, becoming easily overwhelmed and difficulty problem-solving. Although clinically

these difficulties appear evident, empirical research is necessary for the development of programs addressing this population's identified stressors and coping behaviors in the postsecondary environment. Thus, the investigation of the impact of stress and coping behaviors on college adjustment offers potentially promising directions for future program development and additional research with this population.

The significant benefits in the results of this study could include the following:

1. It could provide knowledge of parameters of successful postsecondary transition for undergraduate students with learning disabilities.
2. Investigating stress and coping behaviors of a selected sample of undergraduate students with learning disabilities could contribute to the efforts of those involved in the development and delivery of services and personal growth opportunities for students.

## Assumptions

The following assumptions were made with respect to this study:

1. Participants responding to the instruments gave accurate and honest self-reports.
2. Participants will read and write English.
3. The construct of stress can be measured.
4. The construct of individual coping behaviors can be measured

5. The construct of college adjustment can be measured.
6. Linear relationships exist between the dependent variable of college adjustment and the independent variables of stress and coping behaviors.

## Research Question

1. How well do perceived stress and task, emotion and avoidance coping predict college adjustment for undergraduate university students with learning disabilities? For undergraduate students with learning disabilities, how well do the interaction of stress and task, emotion and avoidance coping, respectively, predict college adjustment?

## Hypotheses

1. The main effects of perceived stress and task coping will significantly predict college adjustment for undergraduate students with learning disabilities. Specifically, higher scores for perceived stress will be predictive of lower college adjustment scores and higher scores for task coping will predict higher college adjustment scores.
2. An interaction effect of stress x task coping will significantly predict higher college adjustment for undergraduate students with learning disabilities.
3. The main effects of perceived stress and emotion coping will significantly predict lower college adjustment for undergraduate students with learning disabilities.

1. An interaction effect for stress x emotion coping will significantly predict poorer college adjustment for undergraduate students with learning disabilities.
2. The main effects of perceived stress and avoidance coping will significantly predict lower college adjustment for undergraduate students with learning disabilities.
3. An interaction effect for stress x avoidance coping will significantly predict poorer college adjustment for undergraduate students with learning disabilities.

## Limitations

1. The sample is limited to undergraduate students with learning disabilities registered with the Office of Disability Services at the University of Oklahoma.
2. Due to the fact that the participants were selected from an undergraduate population at the University of Oklahoma, the results may not be generalizable beyond undergraduate University students with learning disabilities.
3. This study is correlational in nature and therefore, causal statements cannot be drawn.

## Summary

Bridging the gap between high school and college can be difficult for any student although the research indicates that this developmental task appears to be particularly difficult for students with learning disabilities (Brinkerhoff et al.

1992). College offers qualitatively different challenges than those experienced during secondary schooling. Specifically, greater problem-solving and decision-making skills are necessary for successful post-secondary adjustment. Brinkerhoff et al. (1992) reported that at the post-secondary level students are expected to (a) balance personal freedom with goal-setting, (b) plan for long-term projects, (c) integrate information from numerous sources and perhaps most importantly, (d) function autonomously. If the goal of post-secondary education is to prepare students for adult life, and hopefully a successful adult life, then programs related to fostering independence and the necessary psychosocial skills required to succeed should be a part of the services offered to students with learning disabilities at post-secondary institutions.

Instead of continuing the line of research that differentiate students with learning disabilities from their peers without learning disabilities, it is of high importance to search for factors that foster and impact adjustment, be that college or life adjustment. Several themes continue to arise in the literature, one of these themes being that having a learning disability is a life-long condition and while some skills deficits may be remediated, most skill deficits persist (Raskind et al., 1999). Additionally, research indicates that active coping behaviors and empowerment strategies positively impact successful adjustment. Unfortunately, the research indicates that students with learning disabilities tend to display more

passive coping techniques and difficulties within their social environment resulting in diminished support systems.

In conjunction with the reported limited coping strategies, research indicates that this population may be more psychologically vulnerable and experience an increase in stress that translates to depression and anxiety (Stafford-DePass, 1997). Given this information, perhaps it would be more helpful to aid in the development of compensatory strategies that function to overcome difficulties than to focus all of our collective energies on remediating academic skill deficits. Specifically, a better understanding of how college adjustment is affected by perceived stress levels and coping behaviors may translate to psychoeducational classes aimed at building these protective factors.

# CHAPTER II

## REVIEW OF LITERATURE

In the past years, there has been an inordinate amount of clinical and educational literature regarding the conceptualization and treatment of learning disabilities and children. This literature base is insufficient in addressing the needs of the adult student in postsecondary education (Price et al., 1994). The needs of adults with learning disabilities are qualitatively different than the needs of children and tend to be more multifaceted in nature. Additionally, there is a paucity of information available to the learning disability service provider or the mental health clinician illustrating how to successfully navigate the interface of disability and mental health. Given that the psychosocial skills of self-awareness, pro-active social skills and possessing a positive self-concept are essential in successfully attaining a post-secondary degree and making the transition to work, understanding how to foster these skills in addition to academics becomes undeniably essential (Ryan & Price, 1992).

Conceptualizing learning disabilities in a more holistic framework is a necessity given the increasing numbers of students entering the world of post-secondary education. The National Center for Education Statistics (2000) indicates that learning disabilities are the most frequently reported disability of students enrolled in 2-year and 4-year postsecondary institutions. Additionally, the National Center for Education Statistics reported that the students with

learning disabilities were less likely to persist and/or attain 4-year and 2-year degrees when compared to their peer without learning disabilities. These statistics underscore the premise that students with learning disabilities are an at-risk group requiring additional support and understanding to make their achievement commensurate with their abilities.

One of the reasons for the proliferation of students with learning disabilities entering post-secondary education is in response to federal legislation that mandates that students with disabilities be granted equal access to institutions of higher education that receive federal funding through Section 504 regulations of the Rehabilitation Act of 1973 (Jarrow, 1987). The section 504 regulations mandate that access to postsecondary education for persons with disabilities and state:

> No otherwise qualified handicapped individual shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. (Section 504 of the Rehabilitation Act of 1973, May, 1977)

In response to the increase of students enrolling in postsecondary institutions, numerous academic accommodations were set in place to assist in leveling the academic playing field. Even with these academic accommodations, students with learning disabilities are continuing to experience personal failure at

a greater percentage than their peers without disabilities (Price, Johnson, & Evelo, 1994; Skinner & Schenck, 1992). In addition to the internal barriers experienced by the students, environmental barriers are also perceived to be obstacles.

Miller et al., (1990) designed a study investigating the variables that contribute to enrollment in higher education. The researchers conducted interviews with students with learning disabilities who had either graduated or left high school. The authors found that an increased involvement with peers via extracurricular activities and a willingness to utilize community resources were major indicators of participation in postsecondary education. The authors also suggested that interpersonal difficulties in postsecondary education may lead to difficulties meeting future occupational and life challenges. These findings lend support to the idea that self-awareness and interpersonal relationships are inherent facets of learning to cope successfully with learning disabilities (Greenbaum, Graham & Scales, 1995; Greenspan & Apthorp, 1992). Increasing the support services available to students with learning disabilities to include skills training and supportive counseling may prove essential in empowering this group to lead independent and productive lives after college (Stewart, Cornish & Somers, 1995).

The postsecondary environment demands skills such as decision-making, self-advocacy and greater independence than previously required during high school. These students leave a support system that has traditionally promoted

dependence and approach the threshold of an environment with deficits in the necessary social skills required to succeed. Given these deficits, it becomes less surprising that poor retention is reported for students with learning disabilities after the first year of higher education (Merchant & Gajar, 1997). Aune (1991) and Merchant & Gajar (1997) postulated that students with learning disabilities were having a difficult time bridging the gap from high school to postsecondary education because the students lacked the requisite skills of self-awareness and self-advocacy to receive the accommodations necessary to succeed in the higher education environment. Aune's (1991) study taught the skills to students bound for postsecondary education and reported an 89% retention rate after the first year. Further, at the end of participation in the project, student's reported better abilities to identify and request necessary academic accommodations as a result of their abilities to acknowledge their particular learning disability. Merchant & Gajar (1997) reviewed the literature concerning the outcomes of self-advocacy programs designed to transition students with learning disabilities into postsecondary education. They concluded that transition programs that emphasize the skill of self-advocacy improve retention rates although additional research is necessary to determine the efficacy of program components.

In a study conducted at a large higher education institution, researchers interviewed faculty and student perceptions regarding the impact of learning disabilities on academic career choices and opportunities within the university

environment (Houck et al., 1992). The researchers indicated that faculty and student perceptions on academic expectations and willingness to make academic accommodations were disparate. The study suggested that faculty inadvertently communicate to students with learning disabilities that their opportunities and career choices were limited compared to their peers without learning disabilities. A second finding from this study indicated that students with learning disabilities were significantly less optimistic than faculty regarding the availability and readiness to provide academic accommodations. This disparity of perceptions suggests a lack of communication and a need for increased campus wide awareness towards the needs of students with learning disabilities.

Barga (1996) conducted a similar study regarding postsecondary experiences of students with learning disabilities and found similar results. The researcher interviewed students in a private institution and found that they reported experiencing labeling, stigmatization and gatekeeping that created barriers for them in education. These environmental barriers promoted a sense of alienation from peers and a sense of inadequacy academically. Again, these findings suggests that simply meeting the academic needs of these adults is insufficient in fostering skills necessary to succeed in higher education and the transition to work.

Findings of social skill deficits of students with learning disabilities are ample within the literature. Kavale & Forness (1996) conducted a meta-analysis

to determine the overall findings of 152 studies regarding social skills deficits. As a result of the analysis, support for poor coping, adjustment difficulties and significant anxiety was reported from teachers, peers and the students themselves. The most appropriate conclusion drawn from the results indicate that undeniably, social difficulties co-exist with learning disabilities although more research is required to better understand the relationship between the two constructs.

In general, students with learning disabilities report a drastically different experience in higher education than their peers without learning disabilities. Some of the differences are found in the coping methods employed to combat the increased pressures experienced with adjustment and life challenges. A learning disability is a life long issue that is truly never "overcome" but can be remediated through the acquisition of skills and coping strategies (Polloway, Schewel, & Patton, 1992).

## Related Research on Stress

As mentioned previously, stress is considered a major problem for many students with learning disabilities in postsecondary education. One needs to examine the predominant models of stress to understand the coping behaviors of students attempting to adjust to postsecondary education.

Definition of Stress

The definition of stress can vary depending on the paradigm the individual is utilizing for the definition. Lovallo (1997) defines a stress as "any disruption in the orderly working of the body." He further delineates stress into the categories of stimulus and response. A stressor is defined by Lovallo (1997) as "any challenge or threat to the normal processes or integrated function of a living thing and the response of the organism to that threat is the stress response". Aldwin (1994) provides an overarching definition of stress that states "stress refers to that quality of experience, produced through a person-environment transaction, that, through either overarousal or underarousal, results in psychological or physiological distress." This definition is based on a review of the stress literature and identifying three ways in which the term "stress" is commonly used.

From Aldwin's (1994) review of the stress literature, she delineated that stress definitions generally fall into one of three categories: (1) an internal state of the organism, (2) an external state of the organism or (3) resultant from the interaction between the organism and the environment.

The first category generally refers to the physiological reactions that organisms have in reaction to stress. Studies that conceptualize stress in this manner generally focus on the organisms autonomic and neuroendrocrine response to stress. The second definition of stress refers to major life events, trauma and daily hassles and other noxious events from the external environment.

Lastly, the third definition of stress is largely attributed to Lazarus and Folkman (1984) and is focused on the interaction between the person and the environment particularly when there is a perceived mismatch between the resources of the person and the demands of the environment. Essentially, this model is how we bridge the gap between the person and the world through our memory and cognitive appraisals. This model will be addressed more completely because of the explanatory nature and the significance of the model to this study. An important facet of stress is that stress does not necessarily lead to deterioration but may lead to facilitate growth in the individual (Hann, 1993).

Stress and Coping Model

Lazarus and Folkman (1984) built upon Selye's General Adaptation Syndrome because they felt the model did not explain individual reactions to stressors. Lazarus and colleagues developed the Psychophysiological Model of Stress in an attempt to understand interactions with the environment and the emotional responses produced. This model is the most widely accepted cognitive formulation of coping with stressors in the field today.

Appraisal. In appraisal theory, people are continually evaluating their relationship with the environment. Essentially, this model proposes that individuals evaluate the danger of the stressor through primary and secondary appraisals that work interdependently. Individual beliefs and commitments decide the amount of threat the stressor is posing. Therefore, people are not viewed as

victims of their environment but active participants within their environments. To better understand the model, primary appraisal and secondary appraisal will be discussed independently.

Primary Appraisal. Primary appraisal refers to the individual's evaluation of the specific situation as irrelevant (no stress), harm/loss, threat or challenge. Lazarus (1999) stated that primary appraisal has to do with whether or not that individual views the situation as relevant to their values, goal commitments, beliefs about self and the world and situational intentions. If there is a lack of relevancy of the situation to our well-being then the situation is not viewed as stressful. The fundamental principle in primary appraisal is whether or not the person views themselves as having something at stake and being threatened (Lazarus & Folkman, 1984; Lazarus, 1999; Park & Folkman, 1997). If the person makes the primary appraisal that nothing is at stake and the situation is not relevant to their sense of well-being, then there is no stress produced from the person-environment transaction. On the other hand, if the person views the situation as relevant to their well-being, values are being threatened and/or goal commitments are at stake; the condition is considered stressful and an appraisal of harm/loss, threat or challenge is made. As consistent with the process formulation of coping, both the environmental circumstances and personality variables combine to generate the determination of the primary appraisal.

Secondary Appraisal. Secondary appraisal refers to the "cognitive-evaluative process" that directs the person in deciding their options after the appraisal of a stressful person-environment relationship (Lazarus, 1999). As mentioned previously, this step is primarily undertaken when there has been a primary appraisal of harm, threat or challenge. Essentially, secondary appraisal allows the person to decide upon their coping options and provides the foundation for action to be taken to mediate the stressful person-environment relationship. Generally speaking, the more coping resources a person appraises themselves as having in their repertoire, the less stressful they perceive the situation (Park & Folkman, 1997).

As previously eluded, primary and secondary appraisal can occur simultaneously and are not static in their order of occurrence. The differences between the appraisals have more to do with their content. Simply stated, primary appraisal refers to the evaluation of the situation for personal relevancy and secondary appraisal has to do with deciding on the available resources for coping. There is a vast amount of interplay between primary and secondary appraisal and therefore, they should be considered parts of the same coping process (Lazarus, 1999).

A study conducted with adolescents was designed to determine if students with learning disabilities did indeed have a greater difficulty with the appraising sources of stress and generating possible coping resources to combat the stressful

situations. The adolescents in the study completed a coping questionnaire and the results affirmed the researchers hypotheses. When compared to their peers without learning disabilities, the participants of the study demonstrated a diminished ability to appraise a stressful situation combined with increased difficulty deciding on an appropriate course of action (Shulman et al., 1995). Additionally, the students with learning disabilities demonstrated a greater level of pessimism and withdrew from the academic arena. These findings resonate with other studies that report that students with learning disabilities exhibit difficulties realistically appraising and approaching a situation, particularly academic in nature. Additionally, students with learning disabilities demonstrate difficulties in choosing an appropriate course of action to mediate the impact of the stressful situation.

Some students with learning disabilities appraise post-secondary education as an environmental situation that exceeds their personal resources and therefore, higher education is appraised as stressful. Gregg and colleagues (1992) compared the personality profiles of adults with learning disabilities in University and rehabilitation settings to identify any affective variables that may aid in better understanding postsecondary transition issues. On the MMPI- 2 clinical scales, this study found the students in the rehabilitation setting evidenced high scores on the Sc and Ma scales, which may indicate feelings of self-doubt, withdrawal and difficulties in concentrating. The University group evidenced high scores on the

Pt scale indicating possible "uncontrollable or obsessive thoughts, feelings of fear and/or anxiety, and doubts about one's own ability" (Gregg et al., 1992). Further, the University group had a code-type of 7-8, which could indicate a great amount of emotional stress and chronic feelings of insecurity, inadequacy and inferiority. Both groups demonstrated profiles that would be similar to those under great amounts of short and long-term stress that leads to anxiety. The authors suggested that the "hidden nature" of learning disabilities contributes to the high levels of anxiety reported because these students may live in fear of being "found out" by professors and/or friends. Previous studies have supported this statement by elaborating on the concept of "passing" wherein students attempt to manage their disability without accommodations that draw attention to the learning disability and possibly label them as "disabled" for their academic career (Barga, 1996; Gerber et al., 1990; Houck et al., 1992). Gregg et al. (1992) belied the importance of recognizing the potential for high levels of stress and generalized anxiety experienced by students with learning disabilities and responding therapeutically to their emotional needs.

More recently, the literature has continued to report that students with learning disabilities experience significantly more stress when compared to their peers (Bender et al., 1999; Lepore, 1997; Wenz-Gross & Siperstein, 1998). Specifically, the reviewed studies indicated that on measures of stress and adjustment, students with learning disabilities consistently indicated higher stress,

lower peer support and poorer overall adjustment when compared to peers without learning disabilities. Additionally, these students reported being in fewer extra-curricular activities where opportunities to mobilize peer support networks would occur more frequently. Essentially, students with learning disabilities experience increased stress and a diminished support networks to cope with the increased stress. Unfortunately, although not surprising, these studies sample adolescents in secondary education as opposed to adults in postsecondary education. Therefore, the results have limited explanatory power regarding the experience of adults with learning disabilities in higher education.

Stress and coping can be considered reciprocal functions because, without stress there is not a need to employ coping behaviors. The current literature resoundingly states that students with learning disabilities are an at-risk group that evidences increased levels of stress, both academically and socially. Knowing that this population experience high levels of stress, it becomes incumbent upon postsecondary personnel to foster skills that allow anxiety and stress to be mediated and thereby made more manageable. Therefore, it becomes necessary to better understand coping behaviors and adjustment of students with learning disabilities.

## Related Research on Coping

> It is not stress that kills us. It is the effective adaptation to stress that permits us to live.
> Vaillant, 1977, p. 374(as cited in Zeidner & Saklofske,1996)

Definitions of Coping

As with definitions of stress, the vast literature base on coping produces varying definitions of coping. A commonly agreed upon definition of coping refers to the process by which individuals mediate between stressful events and consequences of the appraised stressors such as anxiety, depression, psychological distress and somatic complaints (Parker & Endler, 1992; Lazarus & Folkman, 1984)) In general, the coping definitions fall into one of two camps: trait-oriented and process-oriented. The trait or dispostion-oriented camp defines coping as a static measure of structural or personality dispositions (Holahan, et al. 1996; Lazarus, 1999). Within this definition, theorists purport that people display consistent methods for coping with various stressors.

Dispositional coping measures attempt to tap the methods that people generally employ to deal with stressful situations (Holahan, et al., 1996). This allows an understanding of the generalizable coping behaviors that occur across specific situations. Dispositional coping can refer to coping styles that Millon (1982) (as cited in Aldwin, 1994) described as, "Personality styles characterize the more or less every day manner in which people approach the events of their lives. It is these typical ways of coping that may contribute to illness and the manner in which individuals deal with it". Although, dispositional coping can refer less to personality styles and more to the general approach-avoidance modalities that are used depending on the person-environment interaction.

This approach to coping utilizes coping scores of the same individual collected across situations or on a single occasion as a means of representing a stable index of the individuals coping style. Additionally, the individuals coping scores are compared to responses of other individuals allowing the assessment of individual differences as a way to identify basic individual coping behaviors across different stressful situations (Parker & Endler, 1992). A major criticism of the approach-avoidance dichotomies, or dispositional coping strategies, is the simplistic definitions that fail to differentiate between emotion-focused strategies and those that are problem-focused in nature. This is not the case in methods that utilize the approach-avoidance dichotomies in a multi-faceted nature combining emotion- and problem-focused strategies within each of the broad categories (Aldwin, 1994). As evidenced, the two paradigms of coping are not as definitive and clear-cut as one may think. In addition, Haan (1993) stated that for a general understanding of the meaning that stress has for people, generalized operational definitions may be more useful in order for empirical recommendations to inform public policy.

Lazarus and Folkman (1984) also contributed greatly to the coping literature by introducing the process-oriented approach to the research base. From their process formulation, Lazarus and Folkman (1984) defined coping as, "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of

the person". Additionally, Lazarus (1999) stated, "the key principle is that the choice of coping strategy will usually vary with the adaptational significance and requirements of each threat".

In addition to the overarching process definition of coping, Lazarus and Folkman (1984) postulated that coping was comprised of two qualitatively distinct functions: problem-focused and emotion-focused. Problem-focused coping strategies are similar to problem-solving strategies in that the individuals efforts are directed at changing some aspect of their environment and/or self. With respect to the stress appraisal process, the person "obtains information about what to do and mobilizes actions for the purpose of changing the reality of the troubled person-environment relationship" (Lazarus, 1999).

With respect to emotion-focused coping, the person cannot change some aspect of the self or the environment and therefore seeks to "regulate the emotions tied to the stressful situation without changing the realities of the stressful situation" (Lazarus, 1999). According to Lazarus and Folkman (1984) emotion-focused coping involves cognitive processes to minimize the psychological distress, cognitive reappraisals to change the meaning of a situation and behavioral strategies to avoid thinking about the stressful situation.

An important point to highlight is that both functions of coping can be exhibited from the same person in their attempts to cope with a stressful environmental situation. Similar to the stress appraisal process, the types of

coping are best delineated for research purposes but should not be separated or thought of in either-or terms (Lazarus, 1999). Problem-focused and emotion-focused coping are interconnected and are essential components of the total coping process. Endler & Parker (2000) conducted a study that indicated that the individual's perception of control was adaptive to the situation and associated with lower anxiety and that both types of coping, problem- and emotion-focused, were associated with perceptions of control over a stressor. Although, the authors reported in the study that task-oriented coping was generally found more efficacious when dealing with stressors than emotion-focused coping efforts regardless of the amount of perceived control. Therefore, although both types of coping behaviors are employed and useful in giving the individual a sense of control thereby reducing anxiety, task-oriented coping is generally found to be more efficacious and inversely related to psychological distress.

As mentioned previously, coping depends largely on the appraisal process and the meaning deciphered from the event along with the realistic appraisal of resources available to the individual. The constructs of stress appraisal and the coping functions are interdependent and necessary to understand individual's adaptation to their environment.

In general, coping researchers and theorist agree that to fully understand coping behaviors, both dispositional and process or contextual approaches are active components. In addition, the coping literature reflects an agreement that

coping behaviors can be classified into either problem- or emotion-focused coping efforts. People are also described as being active agents in the stress and coping framework and therefore actively work to manage emotions and/or stressors that result from the stressors (Miller & Major, 2000; Aldwin, 1994). In fact, the very term "coping strategies" implies an active, conscious effort on behalf of the individual to manipulate their external environments. Clinically speaking, the dispositional and process conceptualizations of coping are not mutually exclusive paradigms and should be viewed as interconnected (Pierce et al., 1996). Although, when researching the complex nature of coping strategies, it becomes necessary to operationalize and categorize the coping strategies in an effort to effectively describe individual coping behaviors. In sum, coping researchers agree that the construct of coping is a complex entity and that the processes involved are complicated and interactive although must be categorized for research purposes.

Recently, the literature reflects an awareness of the pervasive impact the learning disabilities can have on an individual and the importance of understanding the extent of the impact on the individual's life. Compared to the literature available regarding coping with stress in children, there is a significantly smaller literature base regarding the experience of adults in post-secondary education. Regardless, the majority of studies reviewed agreed that students with learning disabilities demonstrate a tendency to utilize passive coping techniques

and to report a smaller number of coping skills that are used during stressful situations.

As mentioned previously, the studies focusing on stress, coping and adjustment report at an astounding consistency that this group is at a greater risk for academic failure and future life problems. Geisthardt & Munsch (1996) sought to understand whether students with learning disabilities encountered greater levels of stress and evidenced weaker coping strategies when compared to students without learning disabilities. The investigators surveyed 7th grade students to determine perceived stress levels and coping effectiveness. Their results suggest that students with learning disabilities reported failing more classes and being less involved in school activities than their peers. This limited social support coupled with the findings of exhibiting a greater predilection for passive coping techniques places students with learning disabilities at a disadvantage scholastically and socially.

In a similar vein, Coleman (1992) conducted a study with gifted students with learning disabilities and average students with learning disabilities. Both groups completed a coping questionnaire and verbally responded to four scenarios that required the use of coping skills. Coleman reported that the gifted students with learning disabilities engaged in more planful problem solving than their counterparts. The average students with learning disabilities could not specify the necessary steps required to manage the stressor and reported feeling more

overwhelmed with their stated difficulties. Additionally, and similar to previous studies, the average students with learning disabilities reported engaging in more passive coping techniques, such as escape/avoidance and distancing tactics when compared to their counterparts. The use of escape/avoidance coping is not negative when one cannot change their environment but the reliance on any one coping behavior reduces the chances of adapting to the environment (Lazarus & Folkman, 1984). The average students with learning disabilities in this study also reported being more self-critical, responsible and feeling overwhelmed much of the time. Overall, the differences between the groups were their abilities to activate their resources (secondary appraisal) and to engage in active coping methods such as planful problem-solving techniques.

Similarly, Pavri & Monda-Amaya (2000) and Wayment & Zetlin (1989) surveyed and interview adolescents with a documented learning disability to determine their levels of perceived loneliness and their coping strategies. These researchers found that the students reported increased feelings of loneliness before and after school, specifically during academic and unstructured times. This school-related loneliness reportedly stemmed from boredom with academic tasks, lack of companionship and social skill deficits.

Specifically, students in this study reported engaging in solitary tasks and seeking out other people to be their primary sources of coping. In general, the students reported that the strategies employed were not efficacious in reducing

their level of loneliness. Students with learning disabilities endorsed that they employed more passive or emotion-focused versus active coping strategies during stressful periods. These findings support the literature base that suggests that students with learning disabilities have lower perceived control over the events in their life, both scholastically and socially (Carlton-Ford & Levian, 1995; Kavale, & Forness, 1996; Pavri & Monda-Amaya, 2000).

As of late, a few studies have provided empirical support for, and recognized the importance of, expanding academic support services for students, particularly for at-risk populations, to include affective components such as stress management and coping skills training. As with previous studies, most were conducted with adolescents with learning disabilities although one study was conducted using college students.

Kamann & Wong (1993) reported findings from their study which taught coping skills, specifically positive self-talk, in an attempt to reduce math anxiety for students with learning disabilities. They found that by teaching a coping skill such as positive self-statements they effectively altered the adolescent's pattern of self-dialogue. The adolescents exhibited a greater tendency to utilize positive coping statements after the training sessions. In accordance with the increase in positive self-statements, the research reported an increase in their mathematics performance. The authors concluded that the adolescents' negative self-talk might have interfered with their academic performance.

These findings suggest that teaching students with learning disabilities coping strategies, academic performance may be impacted. Again, the findings underscore the importance and benefit from including affective training into the established academic accommodations. Through addressing the individual as a whole being, via affective and cognitive skills acquisition, academic performance can change for the better. The research indicates that by teaching students with learning disabilities coping strategies to deal with environmental stressors, they can maximize their strengths and minimize their weaknesses (Coleman, 1992). Another potential benefit of addressing the psychological aspect of learning disabilities is the reduction of loneliness reported in the literature. Through group counseling or psychoeducational classes, students with learning disabilities may feel less alone when presented with the information that other students experience similar difficulties and concerns (Coleman, 1992).

Bray et al., (1999) conducted a study investigating the importance of stress and coping on students' decision to leave college. The researches hypothesized the active coping methods such as positive reinterpretation, growth and acceptance would increase their social integration within the postsecondary institution and that passive coping behaviors such as denial and disengagement would exert the opposite effect. Overall, the researchers reported that the student's choice of coping strategy significantly influenced their decision to remain or depart from a postsecondary institution. Specifically, the use of positive

reinterpretation and growth increased the students reported social integration and the use of denial and disengagement reduced the student's level of social integration. As a result of the findings, Bray and colleagues recommended that postsecondary institutions begin attending to the affective needs of the student population. One method discussed was beginning mandatory stress management classes as a means of facilitating identification and means of coping with stress for college freshman.

In sum, Lazarus and Folkman (1984) aptly describe the importance and complexity of stress appraisal and coping to efficacious adaptational outcomes. As noted by the authors (1984):

> A person's overall social functioning is largely determined by the effectiveness with which he or she appraises and copes with the events of day-to-day living. The effectiveness of appraisal within a specific encounter is determined in part by its match with the flow of events. Ambiguity and vulnerability, which are present in most encounters, can make this match difficult to achieve. Effective coping in an encounter also depends on the match between secondary appraisal, this is, of coping options and actual coping demands, and between a selected coping strategy and other personal agendas. In effective coping, problem- and emotion-

focused forms of coping will work in a complementary fashion and not impede each other. (p.223)

Adaptation is not a simple process but a process where one adjusts to meet the changing demands of their environment. Adjustment is a process wherein the person employs various coping methods to adapt under different life circumstances (Zeidner & Saklofske, 1996). The coping methods may be viewed as dispositional traits that are stable as well as process-oriented wherein the coping techniques change to meet the specific situations presented by the individuals environment. The literature demonstrates that students with learning disabilities exhibit increased difficulties with coping strategies. Specifically, these difficulties appear to be a reduced number of strategies that are employed along with a greater reliance on more passive coping techniques that may contribute to poorer adjustment.

In accordance with the interactive model of stress and coping that has been previously delineated, this study seeks to understand how the person (coping skills), environment (perceived stress) and the outcome of adjustment to college relate to each other. Thus the relationship between the variables will be explored and the interaction will be the "fit" or lack of "fit" between the person and the environment.

## Related Research on College Adjustment

Previous literature has provided support for the assertion that students with learning disabilities are at a higher risk for stress and poorer coping strategies (Bender et al., 1999; Barga, 1996; Geisthardt & Munsch, 1996; Gerber et al., 1990; Saracoglu et al. 1989). The constructs of perceived stress and coping skills seem necessary for successful adjustment of the individual. For the last decade, the literature has acknowledged the adjustment concerns for students with learning disabilities, yet most of these studies focus on elementary and secondary students as opposed to the adjustment difficulties unique to the postsecondary student.

### Definition of College Adjustment

For some researchers, successful college adjustment refers to retention of students within the institution (Bean, 1982; Tinto, 1975). The models of student attrition may be helpful in understanding college adjustment, yet attrition is a simplified measure because it fails to understand the individual's reasons for leaving an institution. Perhaps the student choose to leave one institution and attend a different postsecondary institution that was a better "fit" for their personal needs. Baker & Siryk (1984) consider student adjustment to be a multi-faceted construct that includes factors such as: (1) academic adjustment, (2) social adjustment, (3) personal-emotional adjustment and (4) institutional attachment. This model of student adjustment incorporates personality and environmental

variables that form an interaction and provide information beyond student attrition. For the purposes of this research study, Baker & Siryk's conceptualization of college adjustment will be the model utilized for it's "fit" with the previous person and environment interaction conceptualizations of stress and coping. The following literature review on college adjustment employs the multi-dimensional conceptualization of adjustment.

To gain an understanding of factors that facilitate adjustment, several researchers have investigated adults with learning disabilities to determine personal characteristics that have contributed to their successful adjustment. Speckman and colleagues (1992) studied fifty young adults (ages 18-25) to determine if certain factors in their experiences could delineate successful and unsuccessful adjustment. To be considered successful, these authors stated that the individuals must demonstrate that: (a) age appropriate activities and endeavors, (b) rate themselves generally satisfied with their lives and (c) describe school, employment and social activities that were commensurate with their self-perceptions, capabilities and aspirations. The authors reported that on the measure of IQ the successful and unsuccessful groups were similar and stated that the relationship of success and IQ was unclear. Additionally, both groups reported chronic academic deficits during their academic career. Overall, on the quantitative analysis, both groups were quite similar.

The successful and unsuccessful adults differed immensely on the qualitative analysis. The researcher used a semi-structured interview to understand the individual's perceptions of their life experiences. In general the researcher reported themes common to all participants and themes that tended to facilitate success. The themes that were common across groups included: 1) learning disabilities are an ongoing condition, 2) learning disabled individuals face additional life stressors and 3) learning disabled individuals tend to be late bloomers. The themes that supported success were: 1) realistic adaptation to life events that include self-awareness, proactive approach, perseverance and emotional stability, coping strategies and stress reduction, 2) appropriate goal setting and goal directedness, and 3) presence and use of effective support systems.

Sitlington et al. (1992) conducted a similar study investigating the adult outcomes of students with learning disabilities who graduated from high school. As with Speckman and colleagues, these authors defined successful adjustment as: a) employed full-time or part-time (students and homemakers were included), b) living independently and paying some of their living expenses and c) involved in 3 or more leisure activities. In the participants, 4% of the males and 10% of the females met the criteria for successful adjustment. These findings indicate that, in this sample, the majority of adults are not living independently or paying their own living expenses so the goal of independent living is not being met. Given

these grave statistics. Sitlington and colleagues stated that training for self-advocacy skills must be increased and that the training needs to be continued into adulthood for some individuals.

The findings from Speckman et al. (1992) speak to the necessity, and purpose of this study, of discovering factors that contribute to successful adaptation in adulthood for person with a learning disability. In the above study, the ability to manage stress and utilize active and flexible coping strategies allowed for a successful "fit" to their environment. These factors likely serve as a buffer to the increased life stressors that both groups of young adults reported. Again, it becomes incumbent upon the support staff of postsecondary institutions to understand how to foster these "protective" factors in the students with learning disabilities.

Morrison and Cosden (1997) were also interested in deciphering factors that place individuals with learning disabilities at risk and factors that were protective in nature and fostered adjustment. Not surprisingly, in their review of the literature they found results that are echoed in studies reported previously in this review of the literature. Regarding emotional adjustment, the authors reported that overall, it appears that individuals with learning disabilities do not have significantly more emotional problems although the presence of a learning disability place this group at a higher risk for depression and anxiety.

Morrison et al. (1997) and Ryan (1994) reviewed literature related to adults with learning disabilities and reported that this group experienced continued academic and social problems and attenuated dependence on family for support for a longer period of time than their peers without learning disabilities. The data suggests that curriculum targeted toward the development of age-appropriate decision-making skills may build the necessary self-confidence for independence in the adult years. Additionally, they reported that verbal skill, self-awareness and a supportive environment, both emotionally and practically, served as protective factors for adults with learning disabilities.

A longitudinal study was conducted to determine the factors that promote and inhibit successful adjustment in individuals with learning disabilities. Raskind et al., (1999) followed 41 individuals who had attended the same school designed for learning disabilities. They collected data at four points during the participants lives: 1) upon entering the school, 2) leaving the school, 3) at 10 years and 4) at 20 years and reported the changes that occurred across the time points. The results again state that the presence of a learning disability is a life-long issue although, the majority of these participants reported that the stressor of having a learning disability diminished when they left the academic context. Upon reviewing the data, Raskind and colleagues reported that a definite set of attitudes and behaviors predicted successful adjustment for these participants. In particular, those individuals with a learning disability who possessed a sense of self-awareness,

perseverance, proactivity, emotional stability and utilized support systems were more powerful predictors of success than IQ, academic achievement, SES or other background variables. The implications of this study support the idea that educational institutions must go beyond the traditional academic accommodations if they desire to empower and work towards fostering successful life adjustment for this population.

Other research is related directly to factors that promote successful postsecondary adjustment (McKay, 1990; Ryan et al., 1999). The studies compared undergraduate students with learning disabilities to their peers without learning disabilities on psychosocial factors and college adjustment. Both studies reported significant differences in college adjustment for the two groups of undergraduates. In general, the research indicates that undergraduate students with learning disabilities experience lower social competence, lower levels of awareness and acceptance and these factors contribute to poorer overall, academic, social and affective adjustment to college (McKay, 1990; Ryan et al., 1999). Interestingly, Ryan et al., (1999) reported that students with learning disabilities tended to take responsibility for failures and attribute their successes to luck. This suggests that students with learning disabilities fundamentally lack skills necessary to evaluate and integrate information from their environment that would foster a sense of success and autonomous functioning. These research

findings highlight the need for skills based training in psychosocial issues in conjunction with the remediation of academic skills deficits.

In a study conducted by Saracoglu et al. (1989) the importance of protective factors such as coping skills, self-esteem and self-efficacy are highlighted as a means of buffering individuals from environmental stressors that are innate at the university level. The study compared undergraduate students with and without learning disabilities on measures of college adjustment, self-efficacy and self-esteem and their findings were consistent with previously reviewed literature. The authors reported that the university students with a learning disability experience poorer academic and emotional adjustment when compared to their peers. Additionally, the undergraduate students with learning disabilities reported poorer self-esteem, which supports that contention that emotional difficulties continue into adulthood for individuals with learning disabilities (Bruck, 1987; Haring et al. 1990).

It would be disingenuous to state that all students with learning disabilities experienced poor academic and emotional/social adjustment as some students report more successful adjustment than their peers without learning disabilities. The fact remains that some students with learning disabilities experience continued difficulties with social and emotional adjustment, and comprehensive support services are essential in nurturing autonomy and developing the requisite coping skills necessary for adaptation.

As previously alluded to, several studies conducted with students with learning disabilities are focused on elementary and secondary students, which have different needs than adults with learning disabilities. Nonetheless, the studies are useful in understanding the larger picture of adjustment factors for individuals with learning disabilities. An important objective of education is the preparation of students to be prepared and competitive in the job-market or postsecondary education. Unfortunately, for many students with learning disabilities these objectives are not met and the individuals are employed in jobs that are below what would be expected given their intellectual ability.

Fourqurean et al. (1991) and Haring et al. (1990) conducted follow-ups of high school graduates with learning disabilities to understand how the students were succeeding in the areas of employment and postsecondary education. The researchers reported that the high school graduates with learning disabilities experienced a higher unemployment rate when compared to their peers. Of the participants that were employed, less than half reported being employed in skilled work that required specific training. The majority of the individuals with learning disabilities were employed in entry-level jobs that provided little opportunity for advancement, few benefits and paid minimum-wage salaries. Of those students who pursued postsecondary education, a large percentage (50% in Fourquean et al. (1991)) did not complete an entire academic year. Additionally, Haring et al.

(1999) reported that, in their sample, the attainment of postsecondary education did not enhance the student's employability.

As indicated previously, students with learning disabilities posses average to above average intellectual abilities although the research indicates a tendency for poor academic achievement coupled with social and emotional inadequacies. Holliday et al. (1999) examined the long-term, post-high school outcomes of 80 adult vocational rehabilitation clients that were identified as possessing high intellectual abilities. The results found in this study were disturbing because of the limited postsecondary education accomplishments and bleak employment outlook. Five years post high school graduation, these individuals displayed restricted educational gains. The average academic grade level was reported at 12.7 years and only 21% had completed over four semesters of college. Employment wise, 22% earned more than $6 dollars per hour and 76% earned below $6 per hour. The majority (52%) were employed in unskilled labor while 36% were working in skilled labor and only 9% were in professional occupations. As Holliday et al. (1999) stated, "if this relatively advantaged high-IQ subgroup of adults with learning disabilities has difficulty in achieving positive postschool adjustment, the outlook for those with lower measured intelligence may be even less optimistic" (p. 276). In addition to the poor employment and education findings, a reported 30% of the participants received secondary DSM-III-R diagnoses and an additional 36% reported having personal and interpersonal

problems severe enough to require intervention. These findings support the contention that psychosocial adjustment within this population is of particular concern.

Based on these and similar research findings, it would appear that the goal of education to prepare students for employment is not being realized. Therefore, educational institutions must expand their support services and focus on the development of skills necessary to make a successful transition from school-to-work. As gleaned from the literature, requisite skills such as coping behaviors, self-awareness and promoting advocacy via communicative skills with peers and professors/employers are skills that tend to promote successful adjustment.

Wenz-Gross and Siperstein (1998) examined how stress and social support effected student adjustment. The researchers surveyed middle school students and found that students with learning disabilities experienced greater stress, lower peer support and poorer adjustment when compared to their peers without learning disabilities. Specifically, the authors found a strong relationship between academic stress and feelings about the self, contributed to poor social and academic adjustment. Overall, the findings from this study provide further support for the belief that students with learning disabilities experience greater stress, less support and adjustment difficulties.

Related to the literature on poor adjustment, Bender and colleagues' (1999) study investigated the relationships among stress, depression and suicide

for students with learning disabilities. The authors reviewed the available literature and reported that students with learning disabilities experienced greater levels of stress and depression. According to the current literature, additional stress related to school and peers may facilitate symptoms of depression therefore placing the individual at an increased risk for suicide.

The literature is ambiguous regarding the exact relationship between the constructs of stress, depression and suicide for students with learning disabilities. Studies investigating the qualities of "successful" and "unsuccessful" students may prove helpful in determining risk factors for stress, depression, suicide and adjustment in this population. Personal attributes such as self-awareness, perseverance, proactivity, emotional stability, goal setting and the utilization of support systems proved more powerful predictors than academic skills alone (Raskind et al., 1999). This suggests the strong need to focus on fostering these necessary skills in students with learning disabilities along with improving their documented academic deficits.

The following literature is specifically related to this research study in that the studies focus on adjustment factors of postsecondary students with learning disabilities. A noticeable deficit in the literature concerning adjustment is that the studies reviewed did not specifically investigate how college adjustment is affected by stress and coping. This is curious when the literature repeatedly

underscores the idea that student with learning disabilities consistently report increased stressors and less flexible coping behaviors.

A recurring theme throughout the studies reviewed return to the fact that the presence of a learning disability is a risk factor but that it does not necessarily lead to poor emotional, social or personal adjustment. It is necessary to further understand the internal and external factors that contribute to the development of risk and protective factors in this population. The hope is that through the investigation of these factors, the secondary problems associated with learning disabilities and that contribute to adjustment difficulties can be reduced.

# CHAPTER III

# METHODOLOGY OF THE STUDY

## Introduction

The purpose of this study is to investigate the impact of perceived stress levels, coping responses on college adjustment of students with learning disabilities. This chapter describes the research procedures involved in the study: (a) the research design, (b) the subject selection, (c) instrumentation and (d) data collection and analysis of the data.

## Research Design

This study will be a non-randomized descriptive correlational study that utilizes multiple regression for the statistics analysis of the data. The study is exploratory in nature because of the newness of the information in the field. Also, self-report questionnaires will be used to obtain data.

### Participants

A convenience sample of 50 undergraduate students ( 26 male, 24 female) with learning disabilities registered with the Office of Disability Services at a large, Midwestern public university will be participants in this study. The sample will be generally representative in regards to gender although not for ethnic composition of the university. All participants will be treated in accordance with the ethical standards of the APA (APA, 1992a). Sample size was determined by performing a power analysis.

Variables

Variables integrated in this study included the independent variables of perceived stress and 3 types of coping responses (i.e., task, emotion and avoidance) and the dependent variable of college adjustment. Perceived stress will be measured by The Inventory of College Students' Recent Life Experiences. Coping responses will be identified using the Coping Inventory for Stressful Situations and college adjustment will be measured using the Student Adaptation to College Questionnaire.

Measures

The *Inventory of College Students' Recent Life Experiences (ICSRLE)* (Kohn, Lafreniere & Gurevich, 1990) is a self-report instrument comprised of 49 items rated on a 4-point Likert scale. This scale is a measure of everyday hassles and mundane irritants and stressors that negatively affect physical and mental health for college students. Stress research demonstrates that measuring daily hassles as compared to major life events are stronger predictors of future illness, psychiatric symptomology and other adaptational outcomes (DeLongis et al., 1982; Kanner et al., 1981; Kohn & Macdonald, 1992).

Participants are asked to indicate and rate their experience with each item over the past month on the following 4-point Likert scale: 1 = not at all a part of my life; 2 = only slightly a part of my life; 3 = distinctly a part of my life; and 4 = very much a part of my life. Seven factors form the measure and are as follows: 1)

developmental challenge, 2) time pressure, 3) academic alienation, 4) romantic problems, 5) assorted annoyances, 6) general social mistrust and 7) friendship problems. Items include "finding courses to demanding," "a lot of responsibilities," "disliking your studies," "decisions about intimate relationships," "social isolation" and "conflicts with friends." The ICSRLE is less contaminated by subjective distress than the Hassles Scale (Kanner et al., 1981) as evidenced by the low intercorrelations among the ICSRLE's seven factor-based subscales. The corresponding correlations among the ICSRLE were lower, ranging from .15 to .49, as compared to the Hassles scale ranging from .38 to .71. The internal consistency (alpha) of the factors range from .80 for time pressures and .47 for assorted annoyances. Alpha coefficients for the full scale are .89 to .88, similar to the .94 obtained in this study. The full scale correlates highly with the Perceived Stress Scale (PSS: Cohen et al., 1983), which measures appraisal of stressful experiences. An overall continuous severity score will be derived from the instrument and that score will represent the stress measure.

The *Coping Inventory for Stressful Situation (CISS)* (Endler & Parker, 1990a, 1994) is a multidimensional measure of coping that has three 16-item factors: (1) task-oriented, (2) emotion-oriented, and (3) avoidance-oriented. The last factor termed avoidance-oriented has two sub-factors named distraction and social diversion. Task-oriented coping refers to purposeful task-oriented efforts aimed at solving the problem. Whereas, emotion-oriented coping is concerned

with self-oriented emotional reactions and avoidance-oriented coping refers to activities and cognitive changes concerned with avoiding the stressful situation (Endler & Parker, 1990a; Endler, 1997). Avoidance can operate via distraction or via social diversion. Distraction occurs when the person engages in a substitute activity different from the stressful situation confronting the person. Social diversion occurs when the person chooses to be with other people as a means to avoid the stressful situation that they are confronting (Parker & Endler, 1992). Persons are asked to indicate on a 5-point intensity continuum, how they generally react to difficult, stressful or upsetting situations. Items include "schedule my time better," "become very upset" and "take time off and get away from the situation."

The alpha reliabilities for the task, emotion and avoidance subscales for college students were .90, .90 and .91 for men and .87, .89, and .82 respectively for women. The alpha reliabilities for the 3 subscales in this study were .90, .90 and .87 respectively. The authors report comparable results with adults, for a clinical psychiatric population and for adolescents. The test-retest reliabilities (6 weeks apart) for the task, emotion and avoidance subscales for college students were.73, .68, and .55 for men and .72, .71 and .60 respectively for women. These correlations are significantly high to support the idea that the CISS measures coping styles. Several studies have been conducted on the construct validity of the CISS using adolescent, undergraduate, adult and clinical populations. Endler &

Parker (1990a) examined the relationship between the MMPI-2 scales and the CISS scales for 167 male airline pilots. Task-oriented coping was found to negatively correlate with most of the MMPI-2 content scales, whereas emotion-oriented coping was found to be positively related with all of the MMPI-2 content scales. Additionally, the CISS was administered to undergraduate students along with the Beck Depression Inventory (BDI; Beck, 1978), the Endler Multidimensional Anxiety Scales (EMAS; Endler, Edwards & Vitelli, 1991) and the Somatization subscale of the Symptom Checklist (SCL-90R; Derogatis, 1977). A high positive correlation was evidenced between the Emotion-oriented Coping scale and the BDI and the SCL-90R for both men and women. Modest correlations were reported between the Emotion-oriented Coping scale and the EMAS State Anxiety subscales and most of the EMAS Trait Anxiety subscales for both genders. The CISS Task-oriented Coping scale was reported to be negatively related to the BDI and the EMAS State and Trait subscales for both men and women. Lastly, Task-oriented coping was found to be unrelated to the Somatization subscales of the SCL-90R for both genders.

In general, the results of the construct validation studies suggest that for both men and women, emotion-oriented coping is related to psychiatric symptomatology, depression and social symptomatology. Task-oriented coping is negatively related to pathology, particularly depression. For the two subscales of the avoidance-oriented coping, distraction is positively related to psychiatric and

social symptomatology but social diversion is negatively related to depression (Endler & Parker, 1993; Endler & Parker, 1994). The Task-oriented, Emotion-oriented and Avoidance-oriented coping scales will all be used as measures of coping behaviors in this study.

The *Student Adaptation to College Questionnaire* (SACQ) (Baker & Siryk, 1984; 1986) is a 67-item self-report measure divided into 4 subscales and rated on a 9-point continuum. The four subscales include the following: 1) academic adjustment, 2) social adjustment, 3) personal-emotional adjustment and 4) institutional adjustment. Items include "I know why I am in college and what I want out of it," I am very involved with social activities in college," " I have been feeling tense or nervous lately" and "I am pleased now about my decision to go to college."

Alpha coefficients for the SACQ range from .81 to .90 for the Academic Adjustment subscale, from .83 to .91 for the Social Adjustment subscale, from .77 to .86 for the Personal-Emotional Adjustment subscale, from .85 to .91 for the Attachment subscale and from .92 to .95 for the Full Scale. The alpha reliability for the Full Scale obtained in this study was .91. The authors report that the variables measured by the SACQ are not expected to be necessarily stable and enduring properties of the individuals, rather states that can vary with changes in the students environment. Therefore, estimates of internal consistency reliability are more appropriate than test-retest reliability.

Cooper & Robinson (1988) reported relationships between the SACQ and other variables such as alienation, personal adjustment, prior interracial experience and student retention. Also, the greater the disparity between a student's anticipated and actual SACQ college adjustment rating in a longitudinal study, the lower his or her GPA. Additionally, Dahmus et al. (1992) reviewed 28 studies that reported statistically significant relationships among personality variables measured by well-know instruments (e.g., Tennessee Self-Concept Scale (Fitts, 1965); Mental Health Inventory (Veit & Ware, 1983); State-Trait Anxiety Inventory (Spielberger, 1983)) and the SACQ. The four subscales and the Full Scale will be utilized in this study as the measures for adjustment.

Procedure

Participants will be recruited from the Office of Disability Services at a Midwestern, public university. Permission to distribute questionnaires will be obtained from the University's Institutional Review Board (IRB) and the Director of the Office of Disability Services at the University. The staff at the Office of Disability Services will distribute the questionnaires to the undergraduate students who have verified documentation of disability.

Having obtained permission from the IRB and the Director of the Office of Disability Services, the staff at the office will approach the undergraduate students with documented learning disabilities as they utilize the academic accommodations available at the Office of Disability Services. Participants will

be given a brief oral description of the study which, included any associated risks and benefits of participation in the study. Any questions will be answered by the researcher or staff employed at the Office of Disability Services. Each participant will sign a consent form and then complete a packet in one session containing the four instruments. All participants will be provided the necessary academic accommodations required to successfully complete the self-report measures. Completed questionnaires will be returned to the staff at the Office of Disability Services. Upon written request, the researcher will forward a report of the completed study to any participant requesting results of the study.

Demographic data will be analyzed using measures of central tendency. Questionnaires will be hand scored. Total scores for each participant will be calculated. Multiple regression analyses will be utilized due to the researcher's interest in the relationships among the independent, or predictor variables, and the dependent variable. Multiple regression analysis improves the researchers ability to predict or describe by using two or more independent variables to predict the dependent variable (Pedhazur, 1997). Of primary importance in this study is how well the independent variables of perceived stress and task, emotion and avoidance coping behaviors, when considered individually and together, predict the dependent variable of college adjustment.

To test the hypotheses, 3 multiple regression analyses will be conducted entering college adjustment as the dependent variable, and the main effects of

perceived stress and task, emotion and avoidance coping behaviors as the independent variables. In conjunction, 3 interaction terms comprised of perceived stress and the three types of coping behaviors will be entered in their respective blocks. The interaction term is necessary to determine if the combined effect of perceived stress and task, emotion and avoidance coping, respectively, produced a greater, or different, effect than either variable entered individually. In this analysis the independent variables will be entered in a blockwise regression.

In the first regression analysis, block 1 will contain the independent variables of perceived stress and task coping to evaluate the main effects and block 2 will contain the interaction term of stress x task coping to determine the combined effect on college adjustment. This analysis will be conducted to test hypotheses 1 and 2.

The second regression analysis will contain the independent variables of stress and emotion coping in block 1 and the interaction term of stress x emotion coping in block 2. This analysis will be conducted to test hypotheses 3 and 4.

In the third, and final, regression analysis, perceived stress and avoidance coping will be entered as the main effects in block 1 and the interaction of stress x avoidance coping entered in block 2. This analysis will be conducted to test hypotheses 5 and 6.

Studentized residuals that are +/- 3.0 in magnitude will be removed. Additionally, residual plots will be examined for violation of assumptions.

Multiple regression analyses will be used to determine the amount of unique variance that stress and task, emotion and avoidance coping methods contributed to college adjustment for students with learning disabilities. Further, a multiple regression will be used to determine the amount of shared variance that the interactions of perceived stress and task, emotion and avoidance coping strategies, respectively, contributed to college adjustment for students with learning disabilities.

The level of statistical significance for purposes of data analysis in the study will be $p = .05$. When multiple regression analysis is used, a sample size sufficiently large enough to support data analysis is needed to decrease risk of Type II errors. A power analysis will be conducted to determine the sample size needed for this study. Data will be presented in tabular format and as graphs.

# APPENDIX B: DEMOGRAPHIC DATA SHEET

## Demographic Questionnaire

**Directions: Please circle the most applicable option.**
**Results are anonymous, please do not place any identifiers, such as names, on this questionnaire.**

*AGE GROUP*:

18-19 20-21 22-23 24+

***GENDER***: MALE FEMALE

***RACE/ETHNICITY***: CAUCASIAN AFRICAN-AMERICAN
AMERICAN INDIAN ASIAN OTHER

_____

*# YEARS IN COLLEGE*: 1 2 3 4+

***CLASSIFICATION:*** FRESHMAN SOPHOMORE JUNIOR
SENIOR

***REGISTERED WITH THE OFFICE OF DISABILITY SERVICES WITH A DOCUMENTED LEARNING DISABILITY?*** Yes No

***IF YES, PLEASE SPECIFY THE SPECIFIC LEARNING DISABILITY***

_____

***IF YES, PLEASE INDICATE THE APPROXIMATE AGE AT DIAGNOSIS.***

_____

PLEASE INDICATE IF YOU HAVE HAD A MAJOR LIFE CRISIS IN THE IMMEDIATE PAST THAT IS AFFECTING YOU THE LAST MONTH.

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# APPENDIX C: INVENTORY OF COLLEGE STUDENTS RECENT LIFE EXPERIENCES

Inventory of College Students' Recent Life Experiences (ICSRLE)

Following is a list of experiences which many students have some time or other. Please indicate for each experience how much it has been a part of your life over the past month. Put a "1" in the space provided next to an experience if it was not at all part of your life over the past month (e.g., "trouble with mother in law - 1 "); "2" for an experience which was only slightly part of your life over that time; "3" for an experience which was distinctly part of your life; and "4" for an experience which was very much part of your life over the past month.

Intensity of Experience over Past Month

1 = not at all part of my life
2 = only slightly part of my life
3 = distinctly part of my life
4 = very much part of my life

1. Conflicts with boyfriend's/girlfriend's/spouse's family

2. Being let down or disappointed by friends

3. Conflict with professor(s)

4. Social rejection

5. Too many things to do at once

6. Being taken for granted

7. Financial conflicts with family members

8. Having your trust betrayed by a friend

9. Separation from people you care about

10. Having your contributions overlooked

11. Struggling to meet your own academic standards

12. Being taken advantage of

13. Not enough leisure time

14. Struggling to meet the academic standards of others

15. A lot of responsibilities

16. Dissatisfaction with school

17. Decisions about intimate relationship(s)

18. Not enough time to meet your obligations

19. Dissatisfaction with your mathematical ability

20. Important decisions about your future career

21. Financial burdens

22. Dissatisfaction with your reading ability

23. Important decisions about your education

24. Loneliness

25. Lower grades than you hoped for

26. Conflict with teaching assistant(s)

27. Not enough time for sleep

28. Conflicts with your family

29. Heavy demands from extra-curricular activities

30. Finding courses too demanding

31. Conflicts with friends

32. Hard effort to get ahead

33. Poor health of a friend

34. Disliking your studies

35. Getting "ripped off" or cheated in the purchase

of services

36. Social conflicts over smoking

37. Difficulties with transportation

38. Disliking fellow student(s)

39. Conflicts with boyfriend/girlfriend/spouse

40. Dissatisfaction with your ability at written expression

41. Interruptions of your school work

42. Social isolation

43. Long waits to get service (e.g., at banks, stores, etc.)

44. Being ignored

45. Dissatisfaction with your physical appearance

46 Finding course(s) uninteresting

47. Gossip concerning someone you care about

48. Failing to get expected job

49. Dissatisfaction with your athletic skills

# APPENDIX D: COPING INVENTORY FOR STRESSFUL SITUATIONS

## CISS – ADULT

**By Norman S. Endler, Ph.d., F.R.S.C. & James D. A. Parker, Ph.D.**

**Instructions:** The following are ways people react to various difficult, stressful, or upsetting situations. Please circle a number from 1 to 5 for each item. Indicate how much you engage in these types of activities when you encounter a difficult, stressful or upsetting situation.

| **Not at All** | | | | **Very Much** | |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 1. Schedule my time better. |
| 1 | 2 | 3 | 4 | 5 | 2. Focus on my problems and see how I can solve it. |
| 1 | 2 | 3 | 4 | 5 | 3. Think about the good times I've had. |
| 1 | 2 | 3 | 4 | 5 | 4. Try to be with other people. |
| 1 | 2 | 3 | 4 | 5 | 5. Blame myself for procrastinating. |
| 1 | 2 | 3 | 4 | 5 | 6. So what I think is best. |
| 1 | 2 | 3 | 4 | 5 | 7. Become preoccupied with aches and pains. |
| 1 | 2 | 3 | 4 | 5 | 8. Blame myself for having gotten into the situation. |
| 1 | 2 | 3 | 4 | 5 | 9. Window shop. |
| 1 | 2 | 3 | 4 | 5 | 10. Outline my priorities. |
| 1 | 2 | 3 | 4 | 5 | 11. Try to go to sleep. |
| 1 | 2 | 3 | 4 | 5 | 12. Treat myself to a favorite food or snack. |
| 1 | 2 | 3 | 4 | 5 | 13. Feel anxious about not being able to cope. |
| 1 | 2 | 3 | 4 | 5 | 14. Become very tense. |
| 1 | 2 | 3 | 4 | 5 | 15. Think about how I solved similar problems. |
| 1 | 2 | 3 | 4 | 5 | 16. Tell myself that it is really not happening to me. |
| 1 | 2 | 3 | 4 | 5 | 17. Blame myself for being too emotional about the situation. |
| 1 | 2 | 3 | 4 | 5 | 18. Go out for a snack or meal. |
| 1 | 2 | 3 | 4 | 5 | 19. Become very upset. |
| 1 | 2 | 3 | 4 | 5 | 20. Buy myself something. |
| 1 | 2 | 3 | 4 | 5 | 21. Determine a course of action and follow it. |
| 1 | 2 | 3 | 4 | 5 | 22. Blame myself for not knowing what to do. |
| 1 | 2 | 3 | 4 | 5 | 23. Go to a party. |

| | | | | | |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 24. Work to understand the situation. |
| 1 | 2 | 3 | 4 | 5 | 25. "Freeze" and not know what to do. |
| 1 | 2 | 3 | 4 | 5 | 26. Take corrective action immediately. |
| 1 | 2 | 3 | 4 | 5 | 27. Think about the event and learn from my mistakes. |
| 1 | 2 | 3 | 4 | 5 | 28. Wish that I could change what had happened or how I felt. |
| 1 | 2 | 3 | 4 | 5 | 29. Visit a friend. |
| 1 | 2 | 3 | 4 | 5 | 30. Worry about what I am going to do. |
| 1 | 2 | 3 | 4 | 5 | 31. Spend time with a special person. |
| 1 | 2 | 3 | 4 | 5 | 32. Go for a walk. |
| 1 | 2 | 3 | 4 | 5 | 33. Tell myself that it will never happen again. |
| 1 | 2 | 3 | 4 | 5 | 34. Focus on my general inadequacies. |
| 1 | 2 | 3 | 4 | 5 | 35. Talk to someone whose advice I value. |
| 1 | 2 | 3 | 4 | 5 | 36. Analyze the problem before reacting. |
| 1 | 2 | 3 | 4 | 5 | 37. Phone a friend. |
| 1 | 2 | 3 | 4 | 5 | 38. Get angry. |
| 1 | 2 | 3 | 4 | 5 | 39. Adjust my priorities. |
| 1 | 2 | 3 | 4 | 5 | 40. See a movie. |
| 1 | 2 | 3 | 4 | 5 | 41. Get control of the situation. |
| 1 | 2 | 3 | 4 | 5 | 42. Make an extra effort to get things done. |
| 1 | 2 | 3 | 4 | 5 | 43. Come up with several different solutions to the problem. |
| 1 | 2 | 3 | 4 | 5 | 44. Take some time off and get away from the situation. |
| 1 | 2 | 3 | 4 | 5 | 45. Take it out on other people. |
| 1 | 2 | 3 | 4 | 5 | 46. Use the situation to prove that I can do it. |
| 1 | 2 | 3 | 4 | 5 | 47. Try to be organized so I can be on top of the situation. |
| 1 | 2 | 3 | 4 | 5 | 48. Watch T.V. |

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# APPENDIX E: STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE

## STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE (SACQ)
## ROBERT W. BAKER, Ph.D. and BOHDAN SIRYK, M.A.

The 67 statements on the front and back of this form describe college experiences. Read each one and decide how well it applies to you at the present time (within the past few days). For each statement, circle the asterisk at the point in the continuum that best represents how closely the statement applies to you. Circle only one asterisk for each statement. To change an answer, draw and X through the incorrect response and circle the desired response. Be sure to use a hard-tipped pen or pencil and press very firmly. Do not erase.

| | Applies very Closely to Me ← | | | | | | | | | Doesn't Apply to Me at All → |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. I feel that I fit in well as part of the college environment. | * | * | * | * | * | * | * | * | * | * |
| 2. I have been feeling tense or nervous lately. | * | * | * | * | * | * | * | * | * | * |
| 3. I have been keeping up to date on my academic work. | * | * | * | * | * | * | * | * | * | * |
| 4. I am meeting as many people and making as many friends as I would like at college. | * | * | * | * | * | * | * | * | * | * |
| 5. I know why I am in college and what I want out of it. | * | * | * | * | * | * | * | * | * | * |
| 6. I am finding academic work at college difficult. | * | * | * | * | * | * | * | * | * | * |
| 7. Lately I have been feeling blue and moody a lot. | * | * | * | * | * | * | * | * | * | * |
| 8. I am very involved with social activities in college. | * | * | * | * | * | * | * | * | * | * |
| 9. I am adjusting well to college. | * | * | * | * | * | * | * | * | * | * |
| 10. I have not been functioning well during exams. | * | * | * | * | * | * | * | * | * | * |
| 11. I have felt tired much of the time lately. | * | * | * | * | * | * | * | * | * | * |
| 12. Being on my own, taking responsibility for myself, has not been easy. | * | * | * | * | * | * | * | * | * | * |
| 13. I am satisfied with the level at which I have been performing academically. | * | * | * | * | * | * | * | * | * | * |
| 14. I have had informal, personal contacts with college professors. | * | * | * | * | * | * | * | * | * | * |
| 15. I am pleased now about my decision to go to | * | * | * | * | * | * | * | * | * | * |

| | |
|---|---|
| college. | |
| 16. I am pleased now about my decision to attend this college in particular. | * * * * * * * * * * * |
| 17. I'm not working as hard as I should on my coursework. | * * * * * * * * * * * |
| 18. I have several close social ties at college. | * * * * * * * * * * * |
| 19. My academic goals and purposes are well defined. | * * * * * * * * * * * |
| 20. I haven't been able to control my emotions well lately. | * * * * * * * * * * * |
| 21. I'm not really smart enough for the academic work I am expected to be doing now. | * * * * * * * * * * * |
| 22. Lonesomeness for home is a source of difficulty for me now. | * * * * * * * * * * * |
| 23. Getting a college degree is very important to me. | * * * * * * * * * * * |
| 24. My appetite has been good lately. | * * * * * * * * * * * |
| 25. I haven't been very efficient in my use of study time lately. | * * * * * * * * * * * |
| 26. I enjoy living in the college dormitory. (Please omit if you do not live in a dormitory; any university housing should be regarded as a dormitory.) | * * * * * * * * * * * |
| 27. I enjoy writing papers for courses. | * * * * * * * * * * * |
| 28. I have been having a lot of headaches lately. | * * * * * * * * * * * |
| 29. I really haven't had much motivation for studying lately. | * * * * * * * * * * * |
| 30. I am satisfied with the extracurricular activities available at college. | * * * * * * * * * * * |
| 31. I have given a lot of though lately to whether I should ask for help form the Psychological/Counseling Services Center or from a psychotherapist outside of college. | * * * * * * * * * * * |
| 32. Lately I have been having doubts regarding the value of a college education. | * * * * * * * * * * * |
| 33. I am getting along very well with my roommate(s) at college. (Please omit if you do not have a roommate.) | * * * * * * * * * * * |
| 34. I wish I were at another college or university. | * * * * * * * * * * * |
| 35. I've put on (or lost) too much weight | * * * * * * * * * * * |

| | |
|---|---|
| recently. | |
| 36. I am satisfied with the number and variety of courses available at college. | * * * * * * * * * * * |
| 37. I feel that I have enough social skills to get along well in the college setting. | * * * * * * * * * * * |
| 38. I have been getting angry too easily lately. | * * * * * * * * * * * |
| 39. Recently I have had trouble concentrating when I try to study. | * * * * * * * * * * * |
| 40. I haven't been sleeping very well. | * * * * * * * * * * * |
| 41. I am not doing well academically for the amount of time I put in. | * * * * * * * * * * * |
| 42. I am having difficulty feeling at ease with other people at college. | * * * * * * * * * * * |
| 43. I am satisfied with the quality or caliber of courses available at college. | * * * * * * * * * * * |
| 44. I am attending classes regularly. | * * * * * * * * * * * |
| 45. Sometimes my thinking gets muddled up too easily. | * * * * * * * * * * * |
| 46. I am satisfied with the extent to which I am participating in social activities at college. | * * * * * * * * * * * |
| 47. I expect to stay at this college for a bachelor's degree. | * * * * * * * * * * * |
| 48. I haven't been mixing too well with the opposite sex lately. | * * * * * * * * * * * |
| 49. I worry a lot about my college expenses. | * * * * * * * * * * * |
| 50. I am enjoying my academic work at college. | * * * * * * * * * * * |
| 51. I have been feeling lonely a lot at college lately. | * * * * * * * * * * * |
| 52. I am having a lot of trouble getting started on homework assignments. | * * * * * * * * * * * |
| 53. I feel I have good control over my life situation at college. | * * * * * * * * * * * |
| 54. I am satisfied with my program of courses for this semester/quarter. | * * * * * * * * * * * |
| 55. I have been feeling in good health lately. | * * * * * * * * * * * |
| 56. I feel that I am very different from other students at college in ways that I don't like. | * * * * * * * * * * * |
| 57. On balance, I would rather be home than here. | * * * * * * * * * * * |
| 58. Most of the things I am interested in are not | * * * * * * * * * * * |

| | |
|---|---|
| related to any of my coursework at college. | |
| 59. Lately I have given a lot of thought to transferring to another college. | * * * * * * * * * * * |
| 60. Lately I have given a lot of thought to dropping out of college altogether and for good. | * * * * * * * * * * * |
| 61. I find myself giving considerable thought to taking time off from college and finishing later. | * * * * * * * * * * * |
| 62. I am very satisfied with the professors I have now in my courses. | * * * * * * * * * * * |
| 63. I have some good friends or acquaintances at college with whom I can talk about any problems I may have. | * * * * * * * * * * * |
| 64. I am experiencing a lot of difficulty coping with the stressed imposed upon me in college. | * * * * * * * * * * * |
| 65. I am quite satisfied with my social life at college. | * * * * * * * * * * * |
| 66. I am quite satisfied with my academic situation at college. | * * * * * * * * * * * |
| 67. I feel confident that I will be able to deal in a satisfactory manner with future challenges here at college. | * * * * * * * * * * * |

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APPENDIX F: Individual Consent Form

Individual Consent for Participation in Research Study being Conducted under the auspices of the University of Oklahoma, Norman Campus

We are asking you to participate in a research study titled "The Impact of Perceived Stress and Coping Behaviors on College Adjustment: Implications for University Students With Learning Disabilities" being conducted by Amber N. Adkins, M.Ed., doctoral candidate in the OU Counseling Psychology Program, and being sponsored by Dr. Avraham Scherman. This study is designed to provide information to educators and counselors that may help them to assist students with learning disabilities to attain higher degrees. If you decide to participate in this study, you involvement will require no more than 60 minutes of your time. We will ask you to complete three questionnaires interested in aspects of your college experiences such as writing papers, living in a college dorm and experiences in academic classrooms.

Your participation is completely voluntary, and you will be free to refuse or stop at any time without penalty. All information will be number coded to ensure confidentiality and anonymity in your responses. Your identity will not be revealed and only aggregate, group results will be reported.

There is a possibility that some students might experience mild emotional discomfort responding to items concerning their college experience. If you experience any discomfort, please feel free to contact the OU Counseling Psychology Clinic at 325-2914. If you have any questions, please feel free to contact Amber N. Adkins at 706-5179 or Dr. Avraham Scherman at 325-5974. If you have any questions about your rights as a research participant, please call the Office of Research Administration at 325-4757. You must be 18 years or older to participate.

By returning the survey in the envelope provided, you signify your understanding of the purpose and procedures of the study, and I hereby agree to participate. You understand that your participation is voluntary and that you are free to refuse to participate or stop participating at any time without penalty. Since no identifying information is collected in the survey, once the survey is submitted, it cannot be withdrawn.

Appendix G: IRB Approval Letter

*The University of Oklahoma*

OFFICE OF RESEARCH ADMINISTRATION

November 6, 2001

Ms. Amber N. Adkins
6716 Evergreen Drive
Little Rock, AR 72207

Dear Ms. Adkins:

Your research application, "The Impact Perceived Strees and Coping Behaviors on College Adjustment: Implications for University Students With Learning Disabilities," has been reviewed according to the policies of the Institutional Review Board chaired by Dr. E. Laurette Taylor, and found to be exempt from the requirements for full board review. Your project is approved under the regulations of the University of Oklahoma - Norman Campus Policies and Procedures for the Protection of Human Subjects in Research Activities.

Should you wish to deviate from the described protocol, you must notify me and obtain prior approval from the Board for the changes. If the research is to extend beyond 12 months, you must contact this office, in writing, noting any changes or revisions in the protocol and/or informed consent form, and request an extension of this ruling.

If you have any questions, please contact me.

Sincerely yours,

Susan Wyatt Sedwick

Susan Wyatt Sedwick, Ph.D.
Administrative Officer
Institutional Review Board

SWS:lk
FY2002-155

cc: Dr. E. Laurette Taylor, Chair, Institutional Review Board
Dr. Avraham Scherman, Educational Psychology



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