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# The Relationships between Perfectionism, Stress, Coping Resources, and Burnout among Sign Language Interpreters

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## ACCEPTANCE

This dissertation, THE RELATIONSHIPS BETWEEN PERFECTIONISM, STRESS, COPING RESOURCES, AND BURNOUT AMONG SIGN LANGUAGE INTERPRETERS, by TOMINA J. SCHWENKE, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements of the degree Doctor of Philosophy in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

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Tomina J. Schwenke

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## ABSTRACT

### THE RELATIONSHIPS BETWEEN PERFECTIONISM, STRESS, COPING RESOURCES, AND BURNOUT AMONG SIGN LANGUAGE INTERPRETERS

by  
Tomina J. Schwenke

The multidimensional construct of perfectionism is well studied as it relates to coping with stress and burnout (Flett & Hewitt, 2002). Bontempo and Napier (2011) identify the personality trait of conscientiousness, which includes perfectionistic traits, as beneficial to an interpreter's job performance. In contrast, several studies suggest that constructs related to maladaptive perfectionistic traits play a role in the development of burnout among interpreters, although perfectionism has not been explicitly identified or used as a research variable (Qin, Marshall, Mozrall, & Marschark, 2008). These studies identify key components of both adaptive and maladaptive perfectionism in the assessment of stress-related outcomes, thereby laying the groundwork for a more focused study on the particular role of perfectionism among interpreters who experience burnout.

The current study evaluated the relationship between perfectionism, stress, coping resources and burnout in a sample of sign language interpreters. The results provided support for the mediating role of stress in the association of maladaptive perfectionism and burnout within a sign language interpreting sample. Coping resources did not serve as a moderator between perfectionism variables and burnout or a moderated mediator between perfectionism variables and perceived stress. The implications of these findings for sign language interpreters are discussed.

*Keywords:* sign language interpreters, burnout, perfectionism, stress, coping resources.

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Doctor of Philosophy  
in  
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## ABBREVIATIONS

APS-R	Almost Perfect Scale – Revised
CRIS	Coping Resource Inventory for Stress
DC-S	Demand Control Schema for Interpreting Work
DISC	Discrepancy
EE	Emotional Exhaustion
MBI	Maslach Burnout Inventory
PSS	Perceived Stress Scale
RID	Registry of Interpreters for the Deaf
STAND	Standards

## CHAPTER 1

### SIGN LANGUAGE INTERPRETERS AND BURNOUT: THE RELATIONSHIP BETWEEN PERFECTIONISM, STRESS AND COPING RESOURCES

Burnout is a syndrome characterized by increased emotional exhaustion and depersonalization and reduced feelings of personal accomplishment (Maslach & Jackson, 1981; Maslach & Leiter, 1997; Maslach, Schaufeli, & Leiter, 2001). Maslach, Schaufeli, and Leiter (2001) conceptualize burnout as a response to the ongoing emotional pressure of managing complex people-related interactions and as a form of work stress that develops from socially interacting and intervening between individuals. Across a variety of occupations job burnout is positively correlated with chronic job stress (Maslach & Jackson, 1981). Specific to sign language interpreters, job stress is positively associated with fatigue, injury, and burnout (Delisle, Lariviere, Imbeau, & Durand, 2005; Feuerstein, Carosella, Burrell, Marshal, & DeCaro, 1997; Heller, Stransfield, Stark, & Langholz, 1986; Shealy, Feuerstein, & Latko, 1991). The stress-induced syndrome of burnout is a threat to the profession of sign language interpreting because it is linked to distress among workers and early departure from the profession (Dean & Pollard, 2001; Delisle et al., 2005; Heller et al., 1986). Although researchers studying stress and burnout raise concerns about the prevalence of the phenomenon amongst interpreters, they have yet to identify the primary organizational and personal factors that contribute to the problem (Heller et al., 1986; Schwenke, 2010; Swartz, 1999; & Watson, 1987).

Researchers Timarovà and Salaets (2011) highlight that training and working as an interpreter as an interpreter are inherently stressful, in part because it is quick-paced, complex, and challenging. Students and interpreters typically work in a simultaneous mode, translating between a spoken language and a manual language at virtually the same



moment (Frishberg, 1990; Solow, 1996). Additionally, the assessment process to attain and maintain professional credentials stipulates that interpreters demonstrate numerous technical skills and the personal strength to cope with dynamic and stressful situations efficiently. Comprehensive professional standards established by the credentialing bodies of the National Association for the Deaf (NAD) and the Registry of Interpreters for the Deaf (RID) require that interpreters possess the necessary linguistic, cognitive and technical skills, as well as, physical stamina, emotional stability, endurance and a willingness to adhere to an ethical code of confidentiality (RID, 2012).

Scholars in the field of stress and coping consistently highlight the significant role of personality traits in how individuals appraise and manage stressors (Flett & Hewitt, 2002; Lazarus & Folkman, 1984; Stoeber & Otto, 2006). The construct of perfectionism is one particular personality trait consistently associated with the development of stress in clinical (Flett & Hewitt) and non-clinical populations (Chang, Watkins, & Banks, 2004). Perfectionism is also positively associated with the development of burnout amongst athletes (Chen, Kee, Chen, & Tsaim, 2008; Stoeber & Rennert, 2008) and within various professions (D'Souza, Egan, & Rees, 2011; Mitchelson & Burns, 1998).

Investigators focusing on sign language interpreters identify a wide range of cognitive and personality factors that contribute to career success, positive job performance, and effective stress management (Bontempo & Napier, 2011). Personality traits both influence how an interpreter perceives of and copes with stress and are precipitating factor to the development of burnout (Heller et al., 1986; Qin, Marshall, Mozrall, & Marschark, 2008). Several studies suggest that constructs related to perfectionism play a role in the development of burnout although perfectionism has not

been explicitly identified or used as a research variable. For instance, one recent study investigating completion rates for sign language interpreting programs identified conscientiousness, which includes perfectionistic traits, as critical for the successful management of stress. Conscientious interpreters typically are adaptively perfectionistic and strive for high professional standards and are willing to reflect upon their personal performance in ways that facilitate learning (Bontempo & Napier). In another study, Qin, Marshall, Mozrall, and Marschark (2008) found an association between interpreters' concerns about job performance, the use of ineffective coping strategies, and the development of stress-related physical injury on the job. In addition, Dean and Pollard (2001) examine the central role of intrapersonal factors within their model for stress appraisal among sign language interpreters, highlighting the effects of positive and negative self-appraisal, which are also constructs consistently related to perfectionism. These studies identify key components of perfectionism in their assessments of stress-related outcomes, laying the groundwork for a more focused study on the particular role of perfectionism among interpreters who experience chronic stress and develop burnout.

In the pages that follow, the problem of job burnout is described by introducing the literature related to the constructs of perfectionism, stress and coping. Psychological theories related to burnout and the role of emotional exhaustion, adaptive and maladaptive types of perfectionism, and prominent models of stress coping (e.g., the transactional model of stress) will inform the current conceptualization of the problem and relevant interventions. The presented clinical and academic interventions aim at bolstering self-awareness, enhancing stress management skills and developing effective

coping strategies to reduce the prevalence of burnout in the field of sign language interpreting.

### **Interpreting Profession and Stress**

The Registry of Interpreters for the Deaf's (RID) (2012) website states that there is a need for qualified interpreters to meet the growing demand for the service. Chronic job stress is high among sign language interpreters, a factor associated with burnout and early professional departure (Dean & Pollard, 2001; Delisle et al., 2005; Heller et al., 1986). There are both recruitment and retention issues that contribute to the insufficient supply of interpreters (Dean & Pollard). Attaining the requisite skills and completing all educational and credentialing requirements to become an interpreter requires a time commitment as well as the ability to cope with stressors inherent to the training process.

Researchers studying the process of interpreting identify an association between chronic stress and illness, injury and burnout amongst interpreters (Feuerstein, Carosella, Burrell, Marshal, & DeCaro, 1997; Qin et al., 2008). Their findings (Feuerstein et al.; Qin et al.) highlight a positive association between high levels of job stress and reports of fatigue, physical disorders, and burnout. Researchers identify that physical stressors and psychological distress significantly impair the interpreter's linguistic and cognitive capacity and reduce physical stamina and emotional stability. In one study (Qin et al., 2008), interpreters with increased physical pain in the wrist and back also reported higher levels of perceived stress. Within the sample, those interpreters who identified as "stressed," used an emphasized sign style (e.g., signs are produced faster and sharper and the non-dominant hand is used with greater frequency) and reported higher levels of increased physical tension and fatigue (Qin et al.). Additionally, researchers identified

that interpreters experience several occupational health problems associated with high levels of stress, such as upper extremity cumulative trauma disorder and carpal tunnel syndrome (Feuerstein et al., 1997; Qin et al., 2008; Shealy et al., 1991). Overall, stress can tax the body and mind and increase one's susceptibility to emotional and physical exhaustion, symptoms consistent with the construct of burnout.

Stress is frequently identified as a precursor to negative outcomes such as anxiety, depression, immune deficiency, and strokes (Matheny & McCarthy, 2000). However, chronic job stress is not necessarily associated with physical illness and emotional disturbances. For instance, in one study of differences in learning preferences and motivation among student interpreters, Timarovà and Salaets (2011) identify that successful interpreting students performed well with medium to high levels of reported anxiety and were skilled at coping effectively with stress. In this example, anxiety facilitated a helpful level of excitement and arousal, and was associated with a perceived challenge related to the interpreting task. Overall, student interpreters with efficient coping strategies for working in stressful work conditions demonstrated advantages with regard to their capacity to learn and perform (Timarovà & Salaets).

Timarovà and Salaets (2011) observe that interpreters must have the capacity to cope with a variety of challenging and potentially stressful situations. To assist interpreters in coping with daily challenges effectively, Dean and Pollard (2001) developed a stress-management model, the Demand Control Schema for Interpreting Work (DC-S). Drawing from the occupational research conducted by Robert Karasek (1979), Dean and Pollard (2001) developed this model to assist sign language interpreters in analyzing their work-related stressors. In using the DC-S interpreters identify personal

and environmental factors that comprise working conditions and assess personal reactions to stress in order to increase competency and maintain professional standards. First, the model assesses for contextual factors, specifically job challenges (demands) and resources (controls) that influence an interpreter's work. Second, the model emphasizes interpersonal (e.g., unique perceptions) and intrapersonal variables (e.g., doubts or questions about performance) that influence an interpreter's stress reactions. Third, the model views coping resources as essential buffers for interpreters when managing multiple work demands. In sum, the Demand Control Schema posits that an increased awareness of the various interpreting dynamics, both environmental and personal, will aid the interpreter in effectively navigating situations, particularly stressful ones (Dean & Pollard).

Dean and Pollard's model is consistent with Karasek's research, in which stressful experiences and job strains are not judged as inherently bad. Karasek (1979) hypothesized that high-stress jobs can optimally challenge workers, resulting in job satisfaction. Specifically, Karasek (1979) found that individuals who experience high levels of both demands and controls were typically satisfied with their work. In contrast, Karasek (1979) identified that individuals with high levels of job demands and low levels of controls (e.g., job decision latitude) were predictably less satisfied with their working conditions. In general, when workers appraised themselves as having insufficient resources to manage excessive job challenges they were at increased risk of feeling overwhelmed, overtaxed and dissatisfied (Karasek, 1979). Thus, for Karasek, while stress in and of itself is not the problem, a variety of individual and contextual variables coalesce to inform an individual's reaction to stressors.

Robert Karasek's (1979) demand-control theory, his job analysis method, and his developed research instruments were used extensively to study stress-related health outcomes. Karasek (1979) studied specific work environments, comparing those professions that yielded high levels of emotional and physical distress with those that yielded low levels of emotional and physical distress. Assessing the physical, psychological, social, and organizational aspects of a job he and was then able to categorize specific occupations in which workers consistently expressed higher rates of job dissatisfaction and stress-related illnesses. Utilizing Karasek and colleagues' instrument, the Job Content Questionnaire, (JQQ; Karasek, Brisson, Kawakami, Houtman, Bongers, & Amick, 1998), Dean and Pollard (2010) surveyed sign language interpreters to assess which contextual factors significantly contribute to distress. Dean and Pollard (2010) identified that higher job demands and distress were reported by interpreters working in Video Relay Service (VRS) call centers and school (K-12 education) settings compared to interpreters in free-lance interpreting settings. These data support Karasek's theory that environmental factors influence a worker's assessed level of job strain.

While the studies above focus on the organizational factors that contribute to stress, Karasek's (1979) job demand theory posits that personal and environmental factors work together. The theory posits that an individual who is optimally challenged at work and has sufficient resources will perceive work as satisfying and stressors as manageable. In contrast, an individual who perceives the availability of resources as insufficient to meet job demands will experience work as a source of chronic stress, a factor increasing the risk of burnout (Karasek, 1979). In Dean and Pollard's (2001) DC-S

personality features, such as interpersonal and intrapersonal characteristics and resources are highlighted as influential on how the interpreter perceives his/her preparedness, ability, and success on an assignment. Overall, occupational health researchers acknowledge that stress reactions are contextually based and are dependent on several interrelated factors unique to the organizational setting and the individual's personality and capacity to cope with stressors (Dean & Pollard; Karasek).

### **Defining Burnout**

Psychiatrist Herbert Freudenberger first coined the term burnout in 1974. He observed that some clinicians who were once highly motivated and idealistic suffered from a gradual loss of commitment, motivation, and energy. Maslach and colleagues made similar observations, conceptualizing burnout as a syndrome of fatigue, cynicism, and inefficacy, and naming emotional exhaustion, depersonalization, and personal accomplishment as its three key dimensions (Maslach & Jackson, 1981; Maslach & Leiter, 1997; Maslach et al., 2001). Chronic symptoms of burnout erode an individual's engagement with work that was formerly viewed as important and meaningful, causing cynical and emotional fatigue (Maslach et al., 2001). Distinct from a clinical diagnosis, burnout develops from exposure to chronic work stress rather than traumatic natural events or stressors related to major life events (Etzion & Pines, 1986). Burnout is primarily discussed in relationship to work; however, there are a growing number of studies that have associated symptoms of burnout in settings that were not occupational, including marriage, school performance, and athletic competition (Chen, et al., 2008; Hill et al., 2008; Hill et al., 2010).

Maslach et al. (2001) identify emotional exhaustion as the core element of burnout and the construct most frequently described by individuals who refer to themselves as burned out. Kristensen, Borritz, Villadsen, and Christensen (2005) argue that burnout involves only emotional exhaustion. Shirom (1989) identifies emotional exhaustion as the hallmark of burnout and conceptualizes that it results from high levels of work demands that render an individual feeling overextended and depleted of coping resources. Emotional exhaustion closely resembles other stress reactions explored in the occupational stress literature, including fatigue, psychosomatic complaints, and anxiety (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) and shares overlapping characteristics with clinical depression (Etzion & Pines, 1986).

Maslach and colleagues conceptualize that in addition to the role of emotional exhaustion, high levels of depersonalization and low levels of personal accomplishment contribute to burnout (Maslach & Jackson, 1981; Maslach & Leiter, 1997; Maslach et al., 2001). The aspect of burnout called depersonalization is similar to cynicism and is defined by a sense of callousness and dehumanizing feelings towards others. Personal accomplishment, another aspect of burnout, relates to the individual's feelings of success, competence, and ability to perform on the job. Maslach and Jackson (1981) identify that reduced feelings of personal accomplishment result in habitual and negative self-assessments and overall dissatisfaction with one's professional performance.

Demerouti, Bakker, Nachreiner, and Schaufeli (2001) found that the pathways to developing burnout altered the presentation of the symptoms. In a study of burnout, Demerouti, et al. (2001) utilized the job demands-resources model of burnout (JD-R) to identify specific constellations of demand and control factors predictive of either



emotional exhaustion or disengagement. Their research findings indicate that there are distinct cluster response patterns that are dependent on situational stress factors. For instance, high job demands were positively related to Maslach's (1982) characterization of emotional exhaustion, with increased symptoms of fatigue, psychosomatic complaints, and anxiety (Demerouti et al., 2001). By comparison, a unique pattern emerged in which insufficient or low levels of job resources correlated with the depersonalization or disengagement component of burnout (Demerouti et al.). The above research suggests that sign language interpreters may be particularly at risk for experiencing emotional exhaustion given the demanding nature of their work.

Burnout theory posits that the problem of increased emotional exhaustion and depersonalization arises from a mismatch between people and their jobs (Maslach & Leiter, 1997). Specific factors that contribute to the development of burnout are person-environment conflicts related to work overload, lack of control, insufficient reward, breakdown in community, absence of fairness, and conflicting values (Maslach & Leiter). Maslach and colleagues (Maslach & Leiter; Maslach & Jackson, 1981) identify several negative outcomes associated with burnout, including the deterioration in the quality of care and service to recipients, increased job turnover, absenteeism, low morale, and psychological and medical problems, including insomnia, substance abuse issues, marital problems, and fatigue (Maslach & Jackson, 1981). In total, the consequences of burnout are far-reaching and have intrusive ramifications for the individual and society.

Maslach and Leiter (2008) describe burnout and work engagement as conditionally related to the person-environment match. Whereas burnout is associated with several undesirable outcomes, work engagement is associated with several desirable

outcomes, including improved psychological well-being, work satisfaction and contentment with job performance (Maslach et al., 2001; Schaufeli & Bakker, 2004). The interrelated theoretical dimensions that characterize the dichotomous relationship between burnout and work engagement include: exhaustion-energy, cynicism-involvement, and inefficacy-efficacy (Leiter & Maslach, 2005; Schaufeli & Bakker).

The person-environment match influences where an individual falls on the theoretical burnout-work engagement continuum. In general, workers that are on the burnout end of the continuum feel disengaged and dissatisfied with work, while those that are on the engaged end of the continuum feel fulfilled and satisfied (Maslach & Leiter, 2008; Schaufeli & Bakker, 2004). Individual factors such as personality traits act upon environmental factors, influencing whether a person feels engaged in work or burned out by particular work conditions. Personality differences explain why some individuals thrive in challenging work environments when others find the same situation overwhelming. Overall, personality plays a critical role in how an individual experiences his/her work setting, which influences whether that individual views the situation as stressful or not.

Theories of burnout (Demerouti et al., 2001; Maslach & Leiter, 2008; Schaufeli & Bakker, 2004) and occupational health (Dean & Pollard, 2001; Karasek, 1979) provide a framework for understanding the dynamics between a worker and his/her work environment. Working conditions, primarily the relationship between job demands and controls, are predictive of an individual's pattern of responses to stress (Dean & Pollard; Karasek). Whereas high job demands are positively associated with emotional exhaustion, low resources are precursors to feelings of depersonalization (Demerouti et

al., 2001). Burnout theory underscores the importance of the fit between the person and the environment, specifically noting that personality characteristics, as much as contextual variables, are predictive of where the individual falls on the job engagement-burnout continuum (Maslach & Leiter, 2008).

While burnout in interpreters is a well-recognized phenomenon, the precipitating factors are not well understood. However, among the few published studies related to burnout within the profession there are incidental findings which suggest that personality traits contributes to increased levels of burnout. For instance, several studies of burnout identify high personal expectations, concerns over mistakes, and impairments in stress coping - all perfectionistic traits - as possible contributors to distress (Dean & Pollard, 2001; Heller et al., 1986; Qin et al., 2008; Roziner & Shlesinger, 2010). Specifically, in a study of stress and burnout among interpreters Heller et al. (1986) observed that interpreters' perceptions of high performance expectations, limited support outlets, and perceived skill inadequacies were contributing factors to burnout. In another study of conference interpreters, a majority of the sample reported both low levels of satisfaction with the quality of their job performance and high levels of burnout (Roziner & Shlesinger, 2010). Also, in a study by Branam (1991) related to burnout and sign language interpreters, stress was most commonly associated with unattainably high performance expectations and perceived skill inadequacies. These findings highlight the distressing relationship between a desire to produce quality work and a critical self-assessment of work performance as inadequate. Although the above-mentioned studies of burnout do not explicitly identify a specific personality characteristic, there is conceptual overlap between their findings and the construct of perfectionism.

## **Relationship between Perfectionism and Burnout**

Freundenberger (1974) observed that those who were conscientious and enthusiastic experienced burnout and he hypothesized that personality characteristics, specifically perfectionistic tendencies, played a critical role in the development of fatigue and cynicism. In addition to identifying a type of worker that he thought was more vulnerable to burnout, Freundenberger suggested that burnout develops from a series of sequential events that worsen the symptoms for individuals with particular personalities and stress response styles. He observed that an idealistic worker attempts to maintain high performance standards, but then begins to lack the commitment and energy required to maintain their high standards. Over time, the discrepancy grows between perceived performance and personal standards and the worker becomes increasingly distressed. Chronic feelings of distress contribute to increased fatigue, which make it difficult to sustain the motivation and energy needed to work. Empirical findings support Freundenberger's early observations. A positive correlation between perfectionistic tendencies and the development of burnout is observed across numerous occupations including clinical psychologists (D'Souza, Egan & Rees, 2011), schoolteachers (Stoeber & Rennert, 2008), career mothers (Mitchelson & Burns, 1998), clergy (Grosch & Olsen, 1998), physicians (Houkes, Winants, & dTwellaar, 2008), and coaches (Tashman, Tenenbaum, & Eklund, 2010).

While some researchers conceptualize perfectionism as a negative and problematic personality trait other researchers acknowledge the potential advantages of perfectionism. Burns (1980) defines the construct of perfectionism as unidimensional and as negative and neurotic, culminating in an increased level of distress for the individual

who possesses this characteristic. According to Burns (1980), individuals with a perfectionistic drive are generally unrealistic and directed towards maintaining abnormally high standards in personal performance or occupational endeavors. A balanced view of the construct positions positive or *normal* perfectionism as distinct from negative or *neurotic* perfectionism (Hamachek, 1978). Specifically, the normal perfectionist pursues high standards, tolerates mistakes, and derives satisfaction following task completion. In contrast, the neurotic perfectionist fears failure, does not easily tolerate mistakes, and derives little self-satisfaction from task accomplishment.

Various researchers have elaborated upon the construct of perfectionism. Frost, Marten, Lahart, and Rosen (1991) incorporate intrapersonal issues into their conceptualization of perfectionism and emphasize more neurotic aspects of perfectionism, such as concerns about meeting social expectations, tendencies towards critical self-evaluations, and doubts about the effectiveness of one's actions. Additionally, Hewitt and Flett (1991) include interpersonal issues into their conceptualization and identify three types of perfectionism, including self-oriented, other-oriented, and socially prescribed. As the categorical names suggest, self-oriented perfectionists set high standards for themselves; other-oriented perfectionism maintain high standards on behalf of significant others; and socially prescribed perfectionism believe that significant others are maintaining high standards for them (Flett & Hewitt, 1991). Especially applicable to the work of sign language interpreters is Hewitt and Flett's (1991) notion of the self-oriented perfectionists who demands high personal standards for him or herself but is not easily satisfied with his/her resulting performance. This echoes research findings related to stress and the development of burnout within the

interpreting profession, in which interpreters set high personal standards and are self-critical of their perceived job performance (Dean & Pollard, 2001; Heller et al., 1986; Qin et al., 2008; Roziner & Shlesinger, 2010).

While some academic debate remains regarding perfectionism, contemporary scholars generally define it as a multidimensional construct characterized by the setting of high personal standards and that can be experienced as either maladaptive or adaptive (Stoeber & Otto, 2006). The maladaptive perfectionist experiences distress from the discrepancy experienced between personal standards and his/her negative appraisals of performance (Rice & Slaney, 2002). In contrast, the adaptive perfectionist experiences less distress when goals are not met and experiences less of a disparity between personal standards and his/her assessed performance (Rice & Slaney). Thus, the distress experienced by a perfectionist does not arise from the establishment of high performance standards in and of itself, but rather from the discrepancy experienced between one's established standards and the negative appraisal of one's performance (Stoeber & Otto, 2006).

Research findings provide evidence that maladaptive perfectionists experience greater negative psychological outcomes, including elevated levels of depression (Frost, Benton, & Dowrick, 1990), elevated levels of anxiety (Flett, Hewitt, & Dyck, 1989), decreased self-esteem (Ashby, Rice, & Martin, 2006), elevated self-criticism (Flett, Hewitt, Blankstein, & Mosher, 1991), lower satisfaction with life (Ashby, et al., 2006), increased fear of intimacy (Martin & Ashby, 2004) and elevated levels of burnout (Grosch & Olsen, 1998; Houkes et al., 2008; Mitchelson & Burns, 1998; Stoeber & Rennert, 2008; Tashman et al., 2010). Clinically, maladaptive perfectionism is associated

with greater levels of personal distress and clinical diagnoses, including eating disorders, anxiety disorders and depression (Egan, Wade, & Shafran, 2011). In contrast, adaptive perfectionists' appraisals of their performance are less likely to induce stress (Stoltz & Ashby, 2007) and are more likely to facilitate the learning of challenging new skill or sport (Gould, Dieffenbach, & Moffett, 2002). Adaptive perfectionistic traits are also associated with positive and beneficial outcomes such as psychological wellbeing (Slaney et al., 2001), higher levels of self-esteem (Ashby & Rice, 2002), greater life satisfaction and lower levels of depression (Wang, Yuen, & Slaney, 2009).

Generally, perfectionistic traits aid in the achievement of personal goals (Burns, 1980; Slaney & Ashby, 1996). Several empirical studies of high achieving students (Bieling, Israeli, Smith, & Antony, 2003), professionals (Houkes et al., 2008) and Olympic athletes (Gould et al., 2002) highlight the potential benefits of having perfectionistic traits, specifically with regard to establishing high personal standards. Therefore, perfectionists - adaptive or maladaptive - often do not wish to concede their perfectionistic traits (Burns, 1980) or lower their performance standards (Slaney & Ashby, 1996). Although the adherence to high personal standards is distressing for the maladaptive perfectionist, lightening up or lowering personal standards does not seem a desirable option.

Maladaptive perfectionists are more prone to negatively appraise performance resulting in feelings of discouragement and distress (Rice & Slaney, 2002; Ashby & Rice, 2002). Research suggests that perfectionistic tendencies, specifically negative appraisals of personal performance are predictive of burnout (Chen et al., 2008; Hill et al., 2008; Hill et al., 2010). For instance, researchers (Gould, Udry, Tuffey, & Loehr, 1996;

Lemyre, Hall & Roberts, 2008) have identified that amongst athletes, those with perfectionistic traits who repeatedly engage in maladaptive self-appraisals and self-criticism reported high levels of burnout (Appleton, Hall & Hill, 2009; Gould et al.; Lemyre et al.). Tashman et al. (2010) found that athletic coaches that reported high perfectionistic standards and chronic feelings of inadequacy related to their job performance also reported high levels of burnout. In the few studies that address stress and burnout within the interpreting profession it is observed that stress and burnout are more prevalent when interpreters engage in patterns of thinking dominated by negative self-talk, concerns about performance, and critical assessments of skill competency (Dean & Pollard, 2001; Heller et al., 1968; Roziner & Shlesinger, 2010).

Bontempo and Napier (2011) and Dean and Pollard (2001) identify that the personality characteristics of sign language interpreters influence their capacity to manage stress and perform on the job. Furthermore, environmental stressors influence interpreters' personal stress reactions, which in turn influence behaviors, cognitive functioning, mood, and psychological wellbeing (Dean & Pollard, 2001). Dean and Pollard (2001) recognize that work demands, stressors and coping resources are experienced through the filter of the individual personalities of interpreters and influence how interpreters judge their capacity to successfully convey a message.

Personality characteristics such as perfectionistic traits play a part in determining how successful interpreters are throughout training and at work (Bontempo & Napier, 2011). In research looking at the "soft skills," or personality traits that are helpful for the development of interpreting skills, conscientiousness, which includes the constructs of striving for achievement, efficiency, hard-work, and perfectionist traits, is identified as a



significant predictor of occupational performance (Bontempo & Napier). These findings highlight the adaptive potential of conscientiousness and perfectionistic traits for sign language interpreters throughout their careers.

Researchers have identified numerous conceptual links between perfectionism and the personality traits of conscientiousness. Rice, Ashby, and Slaney (2007) have empirically studied whether adaptive perfectionism as measured by the Almost Perfect Scale-Revised (APS-R; Slaney et al., 1996, 2001) could be differentiated from seemingly related personality factors, such as the personality domain of Conscientiousness as measured on the NEO Five-Factor Inventory Form S (NEO-FFI-S; Costa & McCrae, 1992). When the scales related to the multidimensional construct of perfectionism were compared to the Five-Factor model of personality, a positive correlation was identified between the Conscientiousness scale of the NEO-FFI-S and adaptive perfectionistic traits as measured by the High Standards scale of the APS-R. These findings suggest that while there are distinct conceptual differences between perfectionistic traits and the personality traits of conscientiousness there are significant conceptual points of overlap.

Perfectionistic traits, adaptive or maladaptive, have bearing on interpreters' work, positively or negatively. Research findings emphasize that perfectionistic traits and striving for achievement assist interpreters in developing skills and achieving educational and professional goals (Bontempo & Napier, 2011). Additionally, adaptive perfectionistic traits appear advantageous with regard to work satisfaction and engagement. In contrast, hallmarks of maladaptive perfectionism disadvantage the interpreter. For instance, a primary stressor reported in samples of sign language and spoken language conference interpreters was perceived skill inadequacies and self-criticism in light of high

professional standards (Heller et al., 1986; Roziner & Shlesinger, 2010). Dean and Pollard (2001) also recognize the detrimental effects of doubts about performance. While these studies do not name the personality trait of maladaptive perfectionism, there is overlap with the construct, specifically with regard to interpreters reporting both high personal standards and self-criticism regarding perceived job performance. Given that interpreting can be stressful and is likely more challenging for the maladaptive perfectionist, coping resources are an essential protective factor for professionals in the field.

### **Relationship between Perfectionism and Coping Resources**

According to the transactional model of stress (Lazarus, 1966) personality factors shape an individual's appraisal of demands and the capacity to effectively cope with stress. Within Lazarus's (1966) theoretical framework a stressor occurs within an environment and the response to the stressor is dependent on individual perceptions and contextual factors. The perceived demands of a situation are personal requirements that are either internal, such as perfectionistic standards or expectations regarding the completion of a task, or external, such as being asked by a supervisor to complete a work task (Matheny & McCarthy, 2000). Within this framework stress is experienced by the individual when the perceived demands appear to exceed perceived resources (Lazarus & Folkman, 1984).

The stress and coping framework of Lazarus and Folkman (1984) distinguishes two phases of the stress appraisal process - the primary appraisal and the secondary appraisal. First, an individual is confronted with a demand. A primary appraisal occurs as an individual initially assesses the potential for challenge or stress and determines a

subjective level of threat to his/her physical and psychological wellbeing. Second, the individual determines through a secondary appraisal how to respond to or cope with the assessed danger or challenge.

Lazarus's (2007) transactional model of stress and coping accounts for various factors influencing how an individual copes with stressors, such as issues of time (e.g., age of the individual, current circumstances) and type of stressful situations (e.g., life events or daily hassles). Lazarus (2001) distinguished between patterns of coping that incorporate healthy behaviors (e.g., diet and exercise; meditation) and those that incorporate non-healthy behaviors (e.g., dependence on drugs or alcohol) to manage stress. Lazarus (2001) also differentiates between coping strategies that are problem-focused, in which the individual attempts to confront or alter a stressor, and those strategies that are emotion-focused, in which the individual attempts to accept and live with a particular stressor. More active coping approaches include problem solving, resolving interpersonal conflicts, time management, use of humor and seeking out social support. In contrast, emotion-focused coping strategies include accepting the inevitable, reframing, suppressing distressing thoughts, self-disclosure, and discharging painful emotions, as well as avoidant approaches, such as the use of substances and self-blame to reduce stress (Lazarus, 2007; Matheny & McCarthy, 2000).

Matheny and McCarthy (2000) describe coping resources as established traits, abilities and assets that are utilized as strategies for coping with stress. Coping resources serve to buffer individuals from stressful daily hassles and life events and minimize the potentially detrimental effects of stressors as they occur (Matheny, Aycock, Curlette, & Junker, 2003; Lazarus, 2007). When coping resources are perceived as adequate an

individual experiences heightened self-confidence in their ability to manage situations - an awareness that serves as a protective factor against maladaptive outcomes (Matheny & McCarthy). Those individuals who are highly resourced with robust coping skills derive relief or protection from stressful events and are more willing to take risks and challenge themselves (Lazarus).

Hewitt and Flett (2002) use the diathesis-stress model to discuss the dysfunctional patterns and approaches that maladaptive perfectionists employ to appraise stressors. For instance, individuals with maladaptive perfectionistic traits develop patterns of judging their performance as inadequate and generally reflect self critically on their job performance, which produces, exaggerates, or prolongs stress responses. Maladaptive perfectionists engage in behaviors that result in stressful circumstances, such as a tendency to self-handicap (stress generation); anticipate future failure or maintain a pessimistic future orientation (stress anticipation); cope poorly with stressors and therefore prolong stressful episodes through negative automatic thinking, self-blame, preservation, and rumination (stress perpetuation); and intensify the negative impact of stressful conditions by associating self-worth with job performance (stress enhancement). The primary problem with maladaptive perfectionists' pessimistic patterns of thinking is that stressors are viewed as threatening while the availability of personal resources is judged as insufficient. Overall, the negative ego impact of maladaptive perfectionistic thinking seems to magnify stress by perpetuating and reinforcing negative patterns of reacting to stress (Rice & Slaney, 2002).

Flett and Hewitt (2005) observe that while strong coping resources and effective strategies for managing stress are protective against the "perils of perfectionism" (p. 14),

coping resources are often impaired and applied less effectively by the maladaptive perfectionist. Hewitt and Flett (2002) found that maladaptive perfectionists assess their coping resources as insufficient and are less successful at using effective coping strategies for the purpose of stress reduction. Maladaptive perfectionists are also prone to negatively appraise their problem-solving capabilities and engage in more maladaptive strategies of coping (e.g., emotion-focused).

For maladaptive perfectionists negative patterns of thinking and impaired coping skills result in increased psychological symptomatology. Maladaptive perfectionists with impaired coping resources are at greater risk for feelings of hopelessness and psychological distress (O'Connor & O'Connor, 2003). For instance, in one study Wei, Heppner, Russell, and Young (2006) identified that perfectionistic college students with low levels of coping resources were at greater risk for depression, anxiety, and emotional maladjustment. In another study, Rice and van Arsdale (2010) identified that maladaptive perfectionists had higher perceived stress scores and were more likely to utilize non-healthy coping strategies (e.g., alcohol use). Additionally, maladaptive perfectionists generally report lower perceptions of social support and utilize less effective strategies (e.g., avoidant coping) during times of stress (Rice & Slaney, 2002). In combination the research indicates that maladaptive perfectionists typically perpetuate distress through ongoing disabling self-criticism and lower levels of self-confidence (Rice & Slaney).

### **Interventions**

The purpose of reviewing the literature related to perfectionism, stress coping, and burnout is to use the findings to inform interventions suitable for sign language

interpreters. To summarize the literature, burnout theory posits that job satisfaction (or dissatisfaction) is dependent on a complex relationship between the person and the environment (Maslach & Leiter, 1997). Emotional exhaustion is a defining characteristic of the individual who is burned out, while energy and engagement are characteristic of the satisfied worker (Maslach & Jackson, 1981). Across various professions, high job demands are primarily associated with emotional exhaustion, which is defined by symptoms of fatigue, anxiety and various psychosomatic complaints (Demerouti et al., 2001). Within interpreting samples, burnout is associated with high job demands and chronic stress (Dean & Pollard, 2001; Heller et al., 1986). Personality characteristics, which influence the stress appraisal process (Folkman & Lazarus, 1984) are known to uniquely impact the way perfectionists assess and cope with stressors (Flett & Hewitt, 2002). For instance, maladaptive perfectionists are prone to exacerbate stress and to use ineffective strategies for coping with stress (Flett & Hewitt, 2002). Amongst interpreters, it is known that adaptive perfectionistic traits are beneficial when coping with stressors (Bontempo & Napier, 2011) and chronic self-criticism, a hallmark of maladaptive perfectionism, can place interpreters at risk for stress-related conditions (Qin et al., 2008).

The recommendations that follow are geared towards assisting interpreting students in training programs and interpreters working in the field to improve self-awareness, consider ways to facilitate systemic and environmental change, improve coping responses to job stress and ultimately reduce burnout in the profession. The interventions are summarized in Table 1 following the discussion.

First, it is known that beyond the linguistic skills and talents that are required of interpreters, personal characteristics such as perfectionistic traits influence the skill

development, linguistic competence and job performance of interpreters during training and beyond (Bontempo & Napier, 2011; Timarova & Salaets, 2011). Therefore, interpreters may benefit from acquiring psycho-educational information about career interests, personality type and coping strategies. Psychological assessments such as the Strong Campbell Interest Inventory-Fourth Edition (SCII-4; Campbell, 1987), Personality Assessment Inventory (PAI; Morey, 2007), the Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989), and the Coping Resources Inventory for Stress-Short Form (CRIS-SF; Matheny & Curlette, 2010) would provide detailed information related to vocational interest and job skills, individual personality traits and the perceived availability of coping resources. In addition to personality measures administered by psychologists, another recommendation is participation in therapist-led “growth groups.” Members of interpersonal process oriented psychotherapy groups learn through sharing thoughts, perceptions and feelings, testing out new behaviors and giving and receiving feedback. Evaluation and participation in psychologically oriented activities will assist interpreters to appraise their strengths, abilities and capacity to cope with stressors.

Second, it is recommended that interpreters familiarize themselves with the work of Dean and Pollard (2001) who have developed the Demand Control Schema for sign language interpreters. DC-S is a widely understood model that assists interpreters to identify and analyze work stressors. To explore the framework in-depth interpreters can read primary texts by Dean and Pollard or attend workshops related to DC-S.

Third, while individual efforts directed at reducing stress, injury and burnout, are important, additional systemic changes directed at improving job resources for

interpreters are also recommended. Dean and Pollard (2001) suggest systematic changes such as modifications to the interpreting code of professional conduct (e.g. with regard to confidentiality), improvements in the availability of mentoring and confidential supervision. Interpreters wishing to make systematic changes will likely need to advocate for change collectively, as activists, through national or local organization (e.g., NAD, RID, ADARA) channels. It is thought that efforts directed at reducing personal and environmental stress will help to thwart, to some degree, the development of burnout.

Fourth, given that stress is a part of life (e.g. daily hassles, stressful life events) and stressors are inherent in the interpreting profession, learning to cope or reduce stress is critical. It is recommended that individuals consider self-care strategies for managing stressors. Two suggested reads are *Why Zebras Don't Get Ulcers*, which is a 1994 (2ed 1998, 3ed 2004) book by Stanford University neuroscientist Robert Sapolsky and *Write Your Own Prescription for Stress*, published in 2000 by counseling psychologists Kenneth Matheny and Christopher McCarthy. For the interpreter who is experiencing burnout, Michael Leiter and Christina Maslach (2005) have authored a book titled, *Banishing Burnout: Six Strategies for Improving Your Relationship with Work*. Within this text, the authors provide the reader with a resource, the *Work Life Self-Assessment*. This is a tool interpreters can use to assess areas of work that are particularly stressful such as workload, control, reward, community, fairness, values.

Stress reduction interventions may be helpful for those suffering from chronic stress and burnout. Cognitive behavioral mindfulness based psychotherapy approaches are well researched and linked to beneficial mental health outcomes (Williams, Teasdale, Segal, & Kabat-Zinn, 2007). Psychotherapy groups that focus on mindfulness-based



interventions are prevalent in local communities. Jon Kabat-Zinn's (1994) book titled *Wherever you go there you are: Mindfulness meditation in everyday life* may be a place to start for those interested in mindfulness-based relaxation approaches. Furthermore, downloadable apps, audible relaxation files, CD or DVD are easily made available for use while traveling or at home. Biofeedback techniques and portable equipment for stress reduction (e.g., HeartMath) are additional resources. Interpreters may wish to attend weekend retreat, meditation or spiritual practice, or therapeutic massage to relieve stress. Therapeutic adventure therapy (e.g. ropes courses) is an option for interpreters interested in learning more about their own intrapersonal and interpersonal strengths and their ability to cope with stress.

Lazarus's (1966) transactional model of stress assesses for patterns of thoughts and behaviors that influence stress responses. According to this model, individuals should identify their stressors, assess the effectiveness of their current coping strategies (e.g., healthy or non-healthy behaviors), and consider the consequences of habitually using the same coping strategies during stressful situations. According to Lazarus and Folkman (1984) individuals should work to expand their repertoire of active coping strategies, and include in their repertoire strategies such consistently scheduled exercise, getting sufficient sleep, and eating healthy.

Fifth, individuals with maladaptive perfectionists burnout in a variety of situations (Hill et al., 2008; Hill et al., 2010; Mitchelson & Burns, 1998; Stoeber & Rennert, 2008; Tashman, et al., 2010). Additionally, researchers who study burnout identify that those with limited coping resources are at increased risk for developing symptoms of emotional exhaustion (Demerouti et al., 2001; Maslach & Jackson, 1986; Maslach & Leiter, 1997).

Hewitt and Flett (2002) identify that maladaptive perfectionists are uniquely vulnerable to stressors and experience limited coping abilities as a result of their personality structure. Maladaptive perfectionists routinely engage in stress generation, stress anticipation, stress perpetuation and stress enhancement, which actually exacerbate feelings of distress (Flett & Hewitt, 2002). Additionally, maladaptive perfectionists negatively appraise their problem-solving capabilities, are limited in their use of varied coping strategies and routinely chose emotion-focused and avoidant approaches (Flett & Hewitt, 2005). Thus, maladaptive perfectionists often need assistance to bolster active, problem-focused coping (Flett et al., 1994).

For the portion of the interpreters that identify as perfectionistic, understanding the adaptive and maladaptive potentialities of this personality trait has advantages regarding seeking appropriate interventions. For maladaptive perfectionistic interpreters, interventions during trainings, workshops, or continuing education workshops can be directed at working with the distress caused by chronic negative appraisals and dissatisfaction with job performance.

Blatt and colleagues (Blatt, 1995; Blatt, Quinlan, Pilkonis, & Shea, 1995; Blatt, Zuroff, Bondi, Sanislow, & Pilkonis, 1998) have explored the mechanisms by which individuals with maladaptive perfectionistic personality traits are at increased risk for the development of depression. Additionally, Blatt and colleagues have explored specific treatments for perfectionists diagnosed with depression. Egan and Hine (2008) write about the treatments proven efficacious for maladaptive perfectionists with clinical conditions, such as anxiety or depression, most of which incorporate cognitive behavioral techniques. Generally, the therapist aims to reduce negative thoughts and enhance

positive thoughts, while helping the client become aware of perfectionistic patterns of thinking (Egan & Hine). Therapeutic interventions attempt to interrupt the stress generation, anticipation, perpetuation and enhancement process to reduce acute distress.

As was previously discussed, several mindfulness-based interventions are proven effective in reducing the relapse rates of depression through the use of techniques that shift attention from negative content of thought to an intentional practice of observing and attending in a non-judgmental manner (Segal, Williams, & Teasdale, 2002).

Mindfulness/acceptance-based stress reduction programs have also proven effective for the treatment of stress (Kabat-Zinn, 2003) and generalized anxiety disorder (Roemer & Orsillo, 2002). While these techniques are not empirically validated as effective for treating maladaptive perfectionists, Argus and Thompson (2008) observed that amongst maladaptive perfectionism a lack of mindful awareness is associated with increased depression severity. This lends support for using mindfulness techniques with maladaptive perfectionists experiencing the symptoms of distress associated with job stress and burnout.

Finally, maladaptive perfectionists report lower self-perceived social skills and higher frequencies of negative social interactions (Flett et al., 1997). Therefore, maladaptive perfectionists are encouraged to explore their personality structure in individual therapy settings. For instance, Time Limited Dynamic Psychotherapy approaches (see Binder & Strupp, 1991) focus on the relationship between personality and interpersonal relationships.

Table 1. Intervention Summary for Sign Language Interpreters

Focus	Recommendation	Intervention	Examples
Self-Awareness	Learn about interests, strengths, and personality through psychological assessments	Complete an assessment of career, personality, and/or coping resources	Complete the Strong Campbell Interest Inventory-Fourth Edition (SCII-4; Campbell, 1987), Personality Assessment Inventory (PAI; Morey, 2007), Minnesota Multiphasic Personality Inventory-2 (MMPI-2; Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989), and/or Coping Resources Inventory for Stress-Short Form (CRIS-SF; Matheny & Curlette, 2010).
Self-Awareness	Learn about intrapersonal and interpersonal strengths and patterns of coping	Attend interpersonal process group, adventure therapy course and/or individual psychotherapy	Attend local therapeutic groups or individual psychotherapy. Resources will vary, check with insurance provider and local therapists (e.g., licensed psychologists, social workers, and counselors).
Job Analysis	Learn how to analyze job assignments	Become familiar with Dean and Pollard's Demand Control Schema (DC-S) for sign language interpreters	Attend a workshop or training related to DC-S (Dean & Pollard, 2001).
Systemic Analysis	Make systemic changes	Participate in local and national organizations	Join organizations, such as national and regional NAD, RID, ADARA, etc.
Stress Reduction	Learn about Stress Responses	Read stress related book(s)	Read Robert Sapolsky's <i>Why Zebras Don't Get Ulcers</i> (2ed 1998, 3ed 2004).
Stress Reduction	Learn relaxation techniques	Participate in mindfulness meditation, through resources such as readings, CDs, audible files, portable equipment	Read Jon Kabat-Zinn's (1994) book titled <i>Wherever you go there you are: Mindfulness meditation in everyday life</i> . Download related apps or audible relaxation files. Use biofeedback techniques and portable equipment for stress reduction (e.g., HeartMath). Attend weekend retreat, meditation or spiritual practice, or therapeutic massage to relieve stress (and get CEUs).
Coping Resources	Learn about Coping Resources	Read coping related book(s)	Read Kenneth Matheny and Christopher McCarthy's (2000) book titled <i>Write Your Own Prescription for Stress</i> .
Coping Resources	Learn about Coping Resources	Become familiar with Lazarus's (1966) transactional model of stress. Strive for a balanced and healthy lifestyle.	Lazarus and Folkman (1984) suggest to expand repertoire of active coping strategies, such as consistently scheduled exercise, getting sufficient sleep, and eating healthy.
Burnout	Learn about Burnout	Read burnout related book(s)	Read Michael Leiter and Christina Maslach's (2005) book titled <i>Banishing Burnout: Six Strategies for Improving Your Relationship with Work</i> and complete the <i>Work Life Self-Assessment</i> .
Perfectionism	Learn about Perfectionism (Adaptive vs. Maladaptive)	Attend specific workshops, trainings and curriculum lessons related to perfectionism	Increase awareness of the concept of perfectionism, enhancing stress management and bolster active, problem-focused coping (Flett et al., 1994).
Perfectionism	Learn about Maladaptive Perfectionism	Engage in psychodynamic or cognitive behavioral therapy to learn about personality structure and ways of managing and coping with stress.	Participation in psychodynamic approaches such as described by Blatt and colleagues (1998) or Time Limited Dynamic Psychotherapy approaches described by Binder and Strupp (1999). Egan and Hine (2008) suggest cognitive behavioral approaches to reduce negative thoughts and to understand perfectionistic patterns of thinking. Argus and Thompson (2008) suggest mindfulness techniques to use with maladaptive perfectionists.

## Conclusion

Concerns about chronic job stress in the profession of sign language interpreting are well documented. A national shortage of interpreters is blamed on the prevalence of physical disorders and burnout within the profession (Dean & Pollard, 2001; Qin et al., 2008). Maladaptive perfectionism is a personality characteristic consistently associated

with burnout across a variety of professions (D'Souza et al., 2011; Freudenberger, 1974; Houkes et al., 2008; Stoeber & Rennert, 2008; Tashman, et al., 2010).

Personality plays an essential role in informing the stress and coping appraisal process (Lazarus & Folkman, 1984) and intrapersonal and interpersonal factors influence interpreters as they cope with stress (Dean & Pollard, 2001). Interpreters striving for high standards may see their performance enhanced by adaptive perfectionistic traits (Bontempo & Napier, 2011) or hindered by pessimism and the negative appraisals of performance (Dean & Pollard, 2001; Qin et al., 2008). Furthermore, maladaptive perfectionists utilize coping strategies known to exacerbate and perpetuate the stress response (Flett & Hewitt, 2005).

Job stress and burnout in the interpreting profession are issues of great concern to educators, administrators, students, interpreters, and consumers. The above review of extant literature indicates that personality, perfectionism in particular, plays a more significant role in the phenomena of stress and burnout among interpreters than has been previously acknowledged. Additional research is needed in order to understand with greater precision the relationships between personality, stress, and burnout. Research findings will enable the sign language profession to develop more effective stress-related interventions in the areas of psychotherapy, didactics (e.g., trainings, workshops, and courses), mentoring, and supervision.

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## CHAPTER 2

### SIGN LANGUAGE INTERPRETERS AND BURNOUT: THE EFFECTS OF PERFECTIONISM, PERCEIVED STRESS, AND COPING RESOURCES

#### **Introduction**

Maslach and colleagues conceptualize burnout as emotional exhaustion and cynicism, which gradually erodes an individual's sense of work engagement (Maslach & Jackson, 1981; Maslach & Leiter, 1997). Burnout theory posits that the phenomenon develops when there is a mismatch between the person and the environment (Maslach & Leiter). According to the theory, individuals are prone to the hallmark characteristic of burnout, emotional exhaustion, when excessive job demands are paired with insufficient coping resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). A known antecedent to burnout across a variety of occupations is chronic job stress (Cordes & Dougherty, 1993; Maslach & Leiter). Within the profession of sign language interpreting, job stress is prevalent and positively associated with burnout and early departure from the profession (Dean & Pollard, 2001; Heller, Stansfield, Stark & Langholtz, 1986).

Although there are few published articles on the topic of burnout within the interpreting profession, several authors have written about the effects of personality, specifically perfectionistic characteristics, on an interpreter's stress response. For example, in their conceptual model, the Demand Control Schema (DC-S), Dean and Pollard (2001) highlight that intrapersonal factors (e.g., an interpreter's cognitive, emotional, and psychological reactions) are powerful influences on the functioning and wellbeing of the interpreter. Dean and Pollard emphasize the detrimental role of negative self-talk on an interpreters' capacity to manage stress and produce quality work. In one study, Seal (2004) specifically identified negative self-talk and perfectionistic traits as

impediments to an interpreter's ability to work flexibly and manage job stress. In another study, Qin, Marshall, Mozrall, and Marschark (2008) found an association between interpreters' concerns about maintaining high job performance standards and the development of stress-related physical injury and fatigue. However, in all of these examples, the authors and researchers conceptualize perfectionism as a unidimensional and problematic construct.

Researchers that study personality typically conceptualize perfectionism as multidimensional and indicate that while perfectionists might be either maladaptive or adaptive, each type consistently strives for high personal standards (Stoeber & Otto, 2006). Generally, maladaptive perfectionists are prone to negative appraisals and self-talk related to performance, which causes distress, while adaptive perfectionists are less self-critical, more forgiving of mistakes, and less distressed when goals are not met (Rice & Slaney, 2002). Maladaptive perfectionism is associated with a variety of negative psychological outcomes, including burnout (Tashman, Tenenbaum, & Eklund, 2010). In contrast, adaptive perfectionists tend to promote positive and beneficial outcomes such as higher levels of self-esteem (Ashby & Rice, 2002) and greater life satisfaction (Wang, Yuen, & Slaney, 2009). In fact, these traits are viewed by researchers as advantageous for individuals learning new skills or approaching personal challenges (Gould, Dieffenbach, & Moffett, 2002).

The aforementioned studies support the assertions of scholars (e.g., Stoeber & Otto, 2006) who claim that differential psychological outcomes are related to whether the individual is a maladaptive or an adaptive perfectionist. Given these findings, some researchers have proposed the potential mediational role of stress in the relationship

between perfectionism and psychological outcomes. Researchers such as Chang (2000, 2004) have specifically identified that perfectionistic tendencies influence an individual's perceptions of stressful events. This results in variation in perceptions of stress which then leads to different results regarding stress-related outcomes.

Although studies of interpreters have not specifically investigated perfectionism, a number of closely related variables have been addressed. For instance, maladaptive perfectionistic traits (e.g., self criticism) are consistently associated with stress and burnout. Researchers have also identified the connection between interpreters' concerns about the quality of their work, a key aspect of perfectionism, and fatigue, a critical aspect of emotional exhaustion (Branam, 1991; Heller et al., 1986; Roziner & Shlesinger, 2010). In another study of stress among sign language interpreters, Heller, Stansfield, Stark & Langholtz (1986) observed that interpreters' perceptions of high performance expectations, limited support outlets, and perceived skill inadequacies were contributing factors to emotional and physical exhaustion. Similarly, in a sample of spoken language interpreters, a majority reported high levels of concerns regarding the quality of their job performance and high levels of burnout (Roziner & Shlesinger, 2010). In another burnout study, Branam (1991) found that, within a sample of sign language interpreters, the most commonly cited stressor was the combination of unattainably high performance expectations and perceived skill inadequacies.

In contrast to studies that report the negative outcomes associated with maladaptive perfectionistic traits, some researchers highlight the advantages of adaptive perfectionistic traits for interpreters. For instance, in a recent study looking at completion rates for sign language interpreters, Bontempo and Napier (2011) identified the primary

and positive role of conscientiousness in the management of stress. Within the study, Bontempo and Napier (2011) describe the personality characteristic of conscientiousness as including striving for achievement and perfectionistic traits. Several researchers have identified a significant overlap between the personality characteristics of conscientiousness and adaptive perfectionism as well as neuroticism and maladaptive perfectionism (Dunkley, Blankstein, Zuroff, Lecce, & Hui, 2006; Stumpf & Parker, 2000; Ulu & Tezer, 2010).

Rice, Ashby, and Slaney (2007) and Ulu and Esin (2010) studied whether dimensions of perfectionism (e.g., adaptive and maladaptive) as measured by the Almost Perfect Scale-Revised (APS-R; Slaney et al., 1996, 2001) could be differentiated from the personality domains of Neuroticism and Conscientiousness as measured on the NEO Five-Factor Inventory Form S (NEO-FFI-S; Costa & McCrae, 1992). When the scales related to the multidimensional construct of perfectionism were compared to seemingly related constructs within the Five-Factor model of personality, associations were identified between the maladaptive perfectionistic traits measured by the Discrepancy scale (APS-R) and Neuroticism as measured by the NEO-FFI-S. This study also identified a positive correlation between the Conscientiousness scale of the NEO-FFI-S and adaptive perfectionistic traits as measured by the High Standards scale of the APS-R. Overall, these studies highlight that while there are distinct conceptual differences between multidimensional perfectionistic traits and the personality characteristics of neuroticism and conscientiousness there are also conceptual points of intersection. Additionally, these studies support the use of the Almost Perfect Scale-Revised (APS-R; Slaney et al., 1996, 2001) as a measure of adaptive and maladaptive perfectionism.

Several studies have investigated the possible moderating role of coping resources in the relationship between perfectionism and stress. Coping resources are a variable of interest within perfectionism and burnout literature. For instance, researchers studying perfectionism observe that, compared to adaptive perfectionists, maladaptive perfectionists generally have fewer perceived coping resources to manage stressful situations and have a tendency to utilize ineffective coping strategies in order to reduce stress (Rice & Slaney, 2002). Additionally, according to burnout theory, the risk of developing burnout is heightened when coping resources are limited or perceived to be insufficient (Maslach & Leiter, 1997). These findings suggest that higher levels of coping resources serve to buffer individuals from the effects of chronic stress, serving as a protective factor against burnout.

### **Associations Between Perfectionism, Stress, Coping Resources and Burnout**

Several studies identify a theoretical link between emotional exhaustion and perfectionism. Researchers studying burnout within various professions, such as psychologists, teachers, and physicians, have found significant and positively correlated relationships between maladaptive perfectionistic tendencies and burnout (D'Souza, Egan & Rees, 2011; Houkes, Winants, & Twellaar, 2008; Stoeber & Rennert, 2008). Furthermore, studies have identified that maladaptive perfectionism is associated with greater negative psychological outcomes, including elevated levels of depression (Frost, Benton, & Dowrick, 1990), elevated levels of anxiety (Flett, Hewitt, & Dyck, 1989), elevated self-criticism (Flett, Hewitt, Blankstein, & Mosher, 1991), and elevated levels of burnout (Grosch & Olsen, 1998; Houkes et al., 2008; Mitchelson & Burns, 1998; Stoeber & Rennert, 2008; Tashman et al., 2010). In contrast, adaptive perfectionistic traits are

associated with beneficial outcomes including higher levels of self-esteem (Ashby & Rice, 2002) and psychological wellbeing (Slaney et al., 2001), as well as greater life satisfaction and lower levels of depression (Wang et al., 2009). In addition, in their meta-analysis of the relationships between personality variables and burnout, Alarcon, Eschleman, and Boling (2009) identified that conscientiousness is inversely associated to emotional exhaustion.

### **Perceived Stress as a Mediator Between Perfectionism and Burnout**

The use of perceived stress as a mediator between perfectionism and burnout is suggested in the literature due to the critical role stress plays in the development of burnout (Maslach & Leiter, 1997). Job stress is associated with burnout in a variety of professions (Chen et al., 2008; Delisle, Lariviere, Imbeau, & Durand, 2005; Mitchelson, & Burns, 1998; Stoeber & Rennert, 2008) including sign language interpreting (Swartz, 1999; Watson, 1987). And yet stressors are differently experienced based on individual personality factors, such as adaptive versus maladaptive perfectionism (Flett & Hewitt, 2005; Chang, 2000).

Hamechek (1978) conceptualized that neurotic and normal perfectionist possessed distinct cognitive and behavioral approaches to assessing stressors. For Hamechek the neurotic perfectionist “commonly reports feeling anxious, confused, and emotionally drained before a new task is even begun. The normal perfectionist, on the other hand, is more likely to report feeling excited, clear about what needs to be done, and emotionally charged” (p. 26). Hewitt and Flett (2002) also identify that maladaptive perfectionists are uniquely vulnerable to stressors as a result of their personality structure. In the case of the maladaptive perfectionists there is a habitual cognitive pattern that results in stress

generation, stress anticipation, stress perpetuation and stress enhancement, which exacerbates distress (Flett & Hewitt, 2002). In contrast, Stoeber and Otto (2006) have reviewed the perfectionism literature and observe that adaptive perfectionistic traits distinctly advantage individuals as stressors are viewed as challenges and more rewarding outcomes are reported.

### **Coping Resources as a Moderator between Perfectionism and Burnout**

Perceived stress and coping resources are commonly explored variables within the perfectionism literature (Flett & Hewitt, 2005; Stoeber & Otto, 2006) and the burnout literature (Demerouti et al., 2001; Maslach & Leiter, 1997). Researchers who study burnout identify that those individuals with limited coping resources are at increased risk for developing symptoms of emotional exhaustion (Demerouti et al., 2001; Maslach & Leiter, 1997). According to the transactional model of stress (Lazarus, 1966) personality factors shape an individual's appraisal of demands and the capacity to effectively cope with stress. Within Lazarus's (1966) theoretical framework stress is experienced by the individual when the perceived demands appear to exceed perceived resources (Lazarus & Folkman, 1984).

Coping resources serve as a likely buffer for individuals from the potentially detrimental effects of stressors, such as burnout (Matheny, Aycock, Curlette, & Junker, 2003; Lazarus, 2007). When coping resources are perceived as adequate an individual experiences heightened self-confidence in their ability to manage situations - an awareness that serves as a protective factor against maladaptive outcomes (Matheny & McCarthy, 2000). For individuals with robust coping skills, there is relief from stressful events - a factor that encourages these individuals to take personal and professional risks



(Lazarus). Given the important protective capacity of coping resources, this study explored the moderator variable of coping resources between the variables of perfectionism and burnout.

### **Coping Resources as a Moderated Mediator between Perfectionism and Stress**

Lazarus and Folkman (1984) distinguish two phases of the stress appraisal process - the primary appraisal and the secondary appraisal. At the primary appraisal phase the individual is confronted with a demand. At the secondary appraisal phase the individual determines how to respond to or cope with the assessed danger or challenge. Lazarus and Folkman (1984) identify that the process of coping with a particular stressor is influenced by the individual's perceptions of events – an assessment that is subject to the individual's personality and prior experience. Related to the appraisals of stress made by perfectionists, Hewitt and Flett's (2002) diathesis-stress model posits that maladaptive perfectionists appraise and cope with stress in ways that are problematic. For instance, individuals with maladaptive perfectionistic traits develop dysfunctional patterns of judging their performance as inadequate and generally reflect self critically on their job performance, which produces, exaggerates, or prolongs stress responses. Specifically, maladaptive perfectionists engage in stress generation, stress anticipation, stress perpetuation, and stress enhancement. Overall, the pessimistic thinking employed by maladaptive perfectionistic seems to magnify stress by perpetuating and reinforcing negative patterns of reacting to stress (Rice & Slaney, 2002).

Flett and Hewitt (2005) observe that for maladaptive perfectionists stress reactions are typically amplified and exaggerated so high coping resources become protective against the “perils of perfectionism” (p. 14). Particularly distressing for the

maladaptive perfectionists is that they become prone to negatively appraising their problem-solving capabilities and engage in more maladaptive strategies of coping (e.g., emotion-focused). Overall, robust coping resources are described in the literature as providing a buffering effect for individuals when confronted with stressors (Lazarus & Folkman, 1984); however, they are often insufficient for the maladaptive perfectionist (Hewitt & Flett, 2002).

### **Current Study**

To this author's knowledge, there are no studies that explore the role of perfectionism in the development of burnout among sign language interpreters. One aim of the present study is to contribute to the extant literature on stress and burnout by directly examining this relationship. Based on information extracted from existing literature, several hypotheses in this study were developed. First, it was hypothesized that significant and positive associations would exist between the maladaptive dimension of perfectionism, measured by the APSR Discrepancy scale, and burnout, measured by the Maslach Burnout Inventory Emotional Exhaustion scale. Second, it was expected that the adaptive dimension of perfectionism, measured by the APS-R Standards scale, would be inversely correlated with burnout. Third, it was hypothesized that perceived stress would significantly mediate the relationship between maladaptive perfectionism (Discrepancy) and burnout (Emotional Exhaustion). Fourth, it was hypothesized that perceived stress would not mediate the relationship between adaptive perfectionism (Standards) and burnout (Emotional Exhaustion). Fifth, it was hypothesized that coping resources as measured by the Coping Resources Inventory for Stress-Short Form, Coping Resources Effectiveness scale would moderate the relationship between the predictor, perfectionism

(Discrepancy and Standards) and the prediction of burnout (i.e., Emotional Exhaustion). Sixth, it was hypothesized that coping resources as measured by the Coping Resources Inventory for Stress-Short Form, Coping Resources Effectiveness scale would moderate the relationship between the predictor, perfectionism (Discrepancy), and the mediating variable of perceived stress in the prediction of burnout (i.e., Emotional Exhaustion).

## **Method**

### **Participants and Procedure**

Participants for this sample included individuals meeting basic eligibility criterion including: (1) being 18 years or older and (2) self-identifying as a sign language interpreter. For the purposes of this study, inclusion criteria was determined by self-identification as a working interpreter not by affiliation with the Registry of Interpreters for the Deaf (RID) or the passing of standard testing for certification, as it is understood that not all working interpreters are certified by RID. Participants were recruited for this convenience sample through social and professional networking sites (e.g., via flyers, electronic listserv, word of mouth, and email) and at a national biannual conference for sign language interpreters.

This study was approved by an institutional review board. Participants were able to complete the survey via online using SurveyGizmo or paper-and-pencil. Participation in the study was entirely voluntary and interested participants completed an informed consent prior to initiating the study (see Appendix B), a demographic questionnaire (see Appendix C), and four self-report instruments that are well tested for reliability and validity. These instruments included the Maslach Burnout Inventory-Human Services

Survey (MBI-HSS; Maslach & Jackson, 1996) (see Appendix D), the Almost Perfect Scale-Revised (APS-R; Slaney, et al., 2001) (see Appendix E), the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983) (see Appendix F), and the Coping Resources Inventory for Stress-Short Form (CRIS-SF; Matheny & Curlette, 2010) (see Appendix G). All incomplete surveys were excluded from the analysis.

Interpreters participating in the research were invited to complete a survey titled, “Sign language interpreters and burnout.” To recruit online participants an email containing a general recruitment announcement was sent to individuals and groups within interpreting social and professional networks (see Appendix A). The email provided a general description of the study and an embedded web link. Individuals were directed to a separate secured website hosting the study instruments and their item responses remained anonymous. After accessing the study online, the initial page included the informed consent form (i.e. informed consent-see Appendix B). Interested participants were then prompted to click on the “next” button to initiate the demographic items (see Appendix C). The sequence of measures was the same for all interpreters and included a demographic questionnaire with questions related to age, gender, hearing status of family members, and certification status. Subsequent survey items were then presented (see Appendixes D, E, F, and G). At the completion of the online survey, no identifying participant data was collected, thus upholding confidentiality.

Conference participants, opting to take the pencil-and-paper survey were similarly presented with an informed consent form (see Appendix B), and then the same sequence of measures including a demographic questionnaire and four self-report measures (see

Appendixes C, D, E, F, and G). Data collected at the completion of the paper-and-pencil survey, contained no identifying participant information to maintain confidentiality.

To manage and analyze the data set, online data were collected from interpreters, saved on the survey's database and then was exported directly into Statistical Package for the Social Sciences (SPSS), Version 19.0. Raw data from the paper-and-pencil survey responses were entered into an Excel spreadsheet, exported into SPSS, and merged with the online data prior to analysis.

**Characteristics of final participant sample.** In total 238 interpreters participated in the study. Within the sample, a majority of participants identified as female, White, and nationally certified. Participants were 85.7% ( $n = 204$ ) female, 13% ( $n = 31$ ) male, and 1.3% ( $n = 3$ ) transgender. RID compiled demographic data on the 15,010 interpreters within the membership and found that 87% identified as female (Nettles, 2010). Within this study, 88.2% ( $n = 210$ ) of the participants self-identified as Caucasian/White/European American, 3.8% ( $n = 9$ ) as Hispanic/Latina, 2.9% ( $n = 7$ ) as African American/Black, 1.7% ( $n = 4$ ) American Indian/Native American, .8% ( $n = 2$ ) Middle Eastern, and 2.5% ( $n = 6$ ) as Other. These findings are consistent with the recent national RID statistical report in which members that identify as White/Caucasian totaled approximately 88% (Nettles, 2010). Ages ranged from 22 to 70 years, with a mean of 42.29 years ( $SD = 10.68$ ). The majority of participants reported having obtained national certification ( $n = 185$ , 77.7%) compared to those participants that were pre-certified ( $n = 53$ , 22.3%). Concerning whether or not the participant had a deaf/hard of hearing person in their family (e.g. self, parent, sibling, child, partner, etc.), 24.4% ( $n = 58$ ) reported yes and 75.6% ( $n = 180$ ) reported no.

## Measures

**Burnout.** The Maslach Burnout Inventory-Human Services Survey (MBI-HSS; Maslach & Jackson, 1996) is a measure used to assess aspects of burnout, conceptualized as increased feelings of emotional exhaustion and depersonalization, as well as reduced feelings of personal accomplishment (see Appendix D). The MBI-HSS is a 22-item self-report measure of a respondent's personal feeling and attitude towards work.

The MBI was created using the word “recipient” to refer to an individual or group of individuals for whom services are provided. In this study the word “recipient” relates to consumers of interpreting services (i.e., hearing or deaf individuals). Participants responded to items on the MBI-HSS by selecting a response from a 0 (*Never*) to 6 (*Every day*) on a 7-point Likert-type rating scale. The MBI-HSS includes three subscales. There are nine-items in the Emotional Exhaustion (EE) subscale, five-item in the Depersonalization (DP) subscale and eight-item in the Personal Accomplishment (PA) subscale. The Depersonalization and Personal Accomplishment (PA) subscales were not used in this study, as previous research suggests that these two concepts are not central components of burnout (Koeske & Koeske, 1993; Reilly, 1994). Additionally, Wheeler, Vassar, Worley and Barnes (2011) cautioned against using the DP and PA subscale scores based on a meta-analysis in which they focused on internal consistency reliability of the MBI. Of the MBI subscales, only the EE subscale consistently produced adequate alpha coefficients, which were in a .80 range across samples (Wheeler, Vassar, Worley & Barnes, 2011).

Emotional exhaustion, the hallmark of burnout, is considered the central construct to the syndrome of burnout (Maslach & Jackson, 1981). Items from the subscale of

Emotional Exhaustion include, “I feel emotionally drained from my work” and “I feel burned out from my work.” Emotional exhaustion measures an individual’s feeling of being overextended and depleted of the emotional resources required to psychologically give to others (Maslach & Jackson). Regarding discriminant validity, Schaufeli, Bakker, Hoogduin, Schaap, and Kladler (2001) determined that scores from the MBI discriminated individuals who are “burned out” from those that are “non-burned out” in clinical and non-clinical samples. Furthermore, outpatients with symptoms of burnout could be discriminated from those with clinical diagnoses, including depressive and anxiety disorders (Schaufeli et al., 2001).

Internal consistencies were established for the MBI within a sample of 1,316 human services professionals utilizing Cronbach’s coefficient alpha (Maslach et al., 1996). Within the three subscales reliability coefficients were at .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment (Maslach et al., 1996). Using a previous study, Maslach and Jackson (1981) reported internal consistencies of .89 (Emotional Exhaustion), .77 (Depersonalization), and .74 (Personal Accomplishment). In a sample of 117 sign language interpreters (Schwenke, 2010) reliability coefficients were at .91 for Emotional Exhaustion, .70 for Depersonalization, and .53 for Personal Accomplishment. In a sample of teachers ( $n = 248$ ), tested at two points separated by a year time span, the test-retest validity for the three subscales yielded .60 for Emotional Exhaustion, .54 for Depersonalization, and .57 for Personal Accomplishment (Jackson, Schwab, & Schuler, 1986). For the current study, the Cronbach’s alpha for the Emotional Exhaustion subscale was .91.

**Perfectionism.** The Almost Perfect Scale-Revised (APS-R; Slaney, et al. 2001) is a 23-item self-report measure used to assess a respondent's perfectionistic traits (see Appendix E). The APS-R assesses dimensions of adaptive and maladaptive perfectionism and consists of three subscales: Standards (7 items), Order (4 items), and Discrepancy (12 items). Items are rated on an eight-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The Standards subscale includes items such as "I set very high standards for myself." This subscale, measures adaptive aspects of perfectionism and was designed as a measurement of personal standards set by an individual across domains. The Discrepancy subscale includes items such as "I am hardly ever satisfied with my performance." This subscale measures maladaptive aspects of perfectionism, such as negative reactions experienced by individuals when there is an assessed discrepancy between personal standards and performance. The Order subscale was not used in this study, based on previous research in which the concept of Order does not appear to be a central component of perfectionism (e.g., Rice & Ashby, 2007; Stoeber & Otto, 2006). Research on perfectionism conducted by Slaney et al. (2001) reported Cronbach's coefficient alphas for the APS-R as .85 (Standards) and .92 (Discrepancy). Internal consistency reliabilities for the current study were .78 for Standards and .94 for Discrepancy.

**Stress.** The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983; Cohen & Williamson, 1988) is used to measure a respondent's appraisal of life stress within the past month (see Appendix F). The PSS is a 14-item scale that measures a respondent's perceptions of stress using a 5-point Likert-type scale ranging from 0 (never) to 4 (very often). Item scores are totaled and the range is a sum of 0 to 47, with



higher scores suggestive of higher levels of perceived stress experienced throughout the past last month. Sample PSS items include, "In the last month, how often have you felt nervous and 'stressed'?" and "In the last month, how often have you found that you could not cope with all the things that you had to do?" Cohen et al. (1983) found adequate internal consistency as reported by coefficient alpha of .84 in a sample of college freshman, .85 in a sample of psychology students, and .86 in a sample of individuals involved with smoking-cessation groups. Adequate test-retest correlations were established for both shorter and longer versions of the PSS (Rice, Lever, Christopher, & Porter, 2006; Cohen et al., 1983). The internal reliability for the ten-item Perceived Stress Scale (PSS-10) was .78 in a Harris Poll sample and was higher, .91, with two eNation samples (Cohen & Janicki-Deverts, 2012). Internal consistency reliability for the current sample was .90.

**Coping Resources.** The Coping Resources Inventory for Stress-Short Form (CRIS-SF; Matheny & Curlette, 2010) is a 70-item self-report measure of a respondent's assessed stress coping resources (Matheny et al., 2003) (see Appendix G). The CRIS-SF was developed out of the transactional model of stress, specifically developed from the longer Coping Resources Inventory for Stress (CRIS; Matheny, Curlette, Aycock, Pugh, & Taylor, 1987), which reports excellent reliability and validity (see Matheny Aycock, Curlette, & Junker, 2003). The CRIS-SF provides calculations of one overall coping scale, six primary scales and twelve subscales. Respondents rate items on a 4-point Likert scale, which ranges from 1 (*strongly agree*) to 4 (*strongly disagree*). On the CRIS-SF the reliability coefficient was highest for the overall score (.93); however, coefficient alpha reliabilities for the primary scales were in the range of .84 to .88 and for the subscales

were in the range of .78 to .88 (Matheny & Curlette, 2010). For the current study, the Cronbach's alpha on the CRIS-SF (CRE scale) was .94.

The CRIS-SF consists of an overall Coping Resources Effectiveness (CRE) score. The CRE, which was used in this study, consists of six primary scales, which are further divided into two additional subscales to provide twelve total subscales. The following discussion of scales includes psychometric findings. Specifically, the internal consistency reliabilities of the CRIS-SF Primary Scales and Subscales obtained with a sample of U.S. College Students ( $n = 332$ ) are reported as alpha. Also, reported correlations indicate the relationship between the CRIS-Short Form Primary Scales and the original full scale CRIS Scales.

The Confidence primary scale includes ten items and ( $\alpha = .90$ , correlation = .95) assesses a respondent's sense that they can control their emotions and gain mastery over their environment in order to achieve established goals. Confidence is divided into the five-item Situational Control ( $\alpha = .86$ ) and the five items Emotional Control ( $\alpha = .83$ ) subscales. The primary scale Social Support includes twelve items ( $\alpha = .88$ , correlation = .94) and measures a respondent's perception of the quality of their social networks. Social Support is divided into the subscales of Support from Family, which includes five items ( $\alpha = .89$ ) and Support from Friends, which includes seven items ( $\alpha = .87$ ). The primary scale of Tension Control includes fifteen items ( $\alpha = .85$ , correlation = .95) assessing a respondent's perception that they are capable of utilizing relaxation techniques and cognitively based strategies and is divided into the five items Physical Tension Control ( $\alpha = .75$ ) and the ten items Mental Tension Control ( $\alpha = .84$ ) subscales. The primary scale of Structuring includes ten items

(alpha = .91, correlation = .94) and assesses the respondent's capacity to organize both time and personal resources. Structuring is divided into the five item Making Plans (alpha = .85) and five item Carrying out Plans (alpha = .89) subscales. The primary scale of Physical Health consists of eleven items (alpha = .85, correlation = .82) and assesses a respondent's overall sense of physical wellness and is further divided into the six-item Wellness (alpha = .82) and five items Energy (alpha = .83) subscales. The primary scale of Self-Directedness includes eleven items (alpha = .87, correlation = .96) and assesses a respondent's decision-making and assertiveness skills and consists of the six item Asserting One's Rights (alpha = .81) and the five items Trusting Oneself (alpha = .85) subscales.

## **Results**

The data analyses for this study included descriptive statistics, bivariate correlations, multiple regression, and mediation and moderation analyses. Several models were tested that included a number of predictors (e.g., perfectionism), potential mediators (perceived stress) and moderators (coping resources) in the prediction of burnout (emotional exhaustion).

### **Descriptive Statistics**

For the current study, a preliminary analysis included generating descriptive statistics. The means and standard deviations for measured variables (APS-R, High Standards; APS-R, Discrepancy; Perceived Stress; CRIS-SF, Coping Resources Effectiveness; MBI-HSS, Emotional Exhaustion) are presented in Table 1.

Table 2. Means and Standard Deviations for Perfectionism, Stress, Coping Resources and Burnout (N=238)

Scale	Min.	Max.	Mean	SD
1. APS-R: High Standards				
Male (n = 31)	32.00	49.00	42.97	4.25
Female (n = 204)	27.00	12.00	43.63	4.43
Transgender (n = 3)	42.00	47.00	43.67	2.89
Total (N = 238)	27.00	49.00	43.55	4.38
Conference (n =123)	27.00	49.00	43.62	4.29
Online (n =115)	27.00	49.00	43.46	4.50
2. APS-R: Discrepancy				
Male (n = 31)	21.00	70.00	40.74	13.65
Female (n = 204)	12.00	80.00	37.75	15.65
Transgender (n = 3)	19.00	58.00	36.00	19.97
Total (N = 238)	12.00	80.00	38.12	15.42
Conference (n =123)	12.00	80.00	37.04	15.56
Online (n =115)	13.00	78.00	39.27	15.26
3. Perceived Stress Scale				
Male (n = 31)	.00	29.00	13..39	5.97
Female (n = 204)	.00	37.00	15.62	7.24
Transgender (n = 3)	8.00	16.00	11.00	4.36
Total (N = 238)	.00	37.00	15.27	7.10
Conference (n =123)	.00	35.00	15.19	7.20
Online (n =115)	1.00	37.00	15.36	7.02
4. CRIS-SF: Coping Resources Effectiveness				
Male (n = 31)	2.49	3.51	2.96	.28
Female (n = 204)	2.04	3.81	2.92	.38
Transgender (n = 3)	2.64	3.25	3.04	.35
Total (N = 238)	2.04	3.81	2.93	.37
Conference (n =123)	2.10	3.81	2.95	.34
Online (n =115)	2.04	3.75	2.90	.39
5. MBI-HSS: Emotional Exhaustion				
Male (n = 31)	.00	43.00	14.48	9.28
Female (n = 204)	1.00	47.00	16.91	10.31
Transgender (n = 3)	13.00	18.00	15.67	2.52
Total (N = 238)	.00	47.00	16.58	10.13
Conference (n =123)	1.00	44.00	16.76	10.28
Online (n =115)	.00	47.00	16.38	10.00

Note. Min = minimum; Max = maximum; APS-R = Almost Perfect Scale-Revised; CRIS-SF = Coping Resources Inventory for Stress-Short Form; MBI-HSS = Maslach Burnout Inventory-Human Services Survey; Conference = Data set collected from conference participants; Online = Data set collected from on-line participants.

For the current study, reliability estimates (Cronbach coefficient alpha) for scale scores were obtained and are presented in the final column of Table 2. As recorded in the table, internal consistency for scores ranged from .78 to .94.

Table 3. *Correlations and Reliability Estimates for Perfectionism, Stress, Coping Resources and Burnout (N=238)*

Scale	1	2	3	4	5	$\alpha$
1. APS-R: High Standards	-					.78
2. APS-R: Discrepancy	-.06	-				.94
3. Perceived Stress Scale	-.001	.51**	-			.90
4. CRIS-SF: Coping Resources Effectiveness	.23**	-.54**	-.62**	-		.94
5. MBI-HSS: Emotional Exhaustion	-.11	.35**	.50**	-.46**	-	.91

Note. APS-R = Almost Perfect Scale-Revised; CRIS-SF = Coping Resources Inventory for Stress-Short Form; MBI-HSS = Maslach Burnout Inventory-Human Services Survey

\*  $p$  value < .05. \*\*  $p$  value < .01.

Independent t-tests of the variables (APS-R, High Standards; APS-R, Discrepancy; Perceived Stress; CRIS-SF, Coping Resources Effectiveness; MBI-HSS, Emotional Exhaustion) by gender were conducted and yielded no significant differences. Men did not score significantly different than women on the APS-R, High Standards scale,  $t(233) = -0.78, p = .43$ ; the APS-R, Discrepancy scale,  $t(233) = 1.01, p = .31$ ; the Perceived Stress scale,  $t(233) = -1.63, p = .10$ ; the CRIS-SF, Coping Resources Effectiveness scale,  $t(233) = 0.57, p = .57$ ; or the MBI-HSS, Emotional Exhaustion scale,  $t(233) = -1.24, p = .22$  (See mean differences in Table 1).

In addition, the sample was composed of participants that completed the survey by paper-and-pencil at an interpreting conference ( $n = 123$ ) and participants that completed the survey online ( $n = 115$ ). Independent t-tests of the variables (APS-R, High Standards; APS-R, Discrepancy; Perceived Stress; CRIS-SF, Coping Resources Effectiveness; MBI-HSS, Emotional Exhaustion) were conducted to determine if there

were differences between the two groups on the outcome variables. Results yielded no significant differences. Participants completing the paper-and-pencil survey did not score significantly different than participants completing the online survey on the APS-R, High Standards scale,  $t(236) = 0.29, p = .77$ ; the APS-R, Discrepancy scale,  $t(236) = -1.12, p = .26$ ; the Perceived Stress scale,  $t(236) = -0.18, p = .85$ ; the CRIS-SF, Coping Resources Effectiveness scale,  $t(236) = 0.92, p = .36$ ; or the MBI-HSS, Emotional Exhaustion scale  $t(236) = 0.29, p = .77$ . Resulting mean differences are listed in Table 1.

### **Associations between Perfectionism, Stress, and Burnout**

First, it was hypothesized that the personality trait of adaptive perfectionism would be inversely associated with burnout. Second, it was hypothesized that the personality trait of maladaptive perfectionism would be positively associated with burnout. The anticipated directionality of these correlations within this sample of sign language interpreters is supported by research examining a variety of professions and clinical concerns (D'Souza, Egan & Rees, 2011; Houkes, Winants, & Twellaar, 2008; Stoeber & Rennert, 2008). To test these hypotheses, a bivariate correlational analysis was conducted using the variables of perfectionism, overall coping resources, perceived stress, and burnout. Bivariate correlations among the measures in this study revealed several significant relationships, which are presented above in Table 2. Consistent with the hypothesis two, the maladaptive dimension of perfectionism (Discrepancy) was significantly and positively correlated with burnout (Emotional Exhaustion),  $r(236) = .35, p < .01$ . In contrast, the adaptive dimension of perfectionism (Standards) was negatively correlated with burnout (Emotional Exhaustion),  $r(236) = -.11, p > .05$ .  $.35, p < .01$ .

Maladaptive perfectionism (Discrepancy) was significantly and positively correlated with perceived stress,  $r(236) = .51, p < .01$ , and was significant and inversely correlated with coping resources (Coping Resources Effectiveness),  $r(236) = -.54, p < .01$ . By comparison, adaptive perfectionism, the variable of Standards was negatively correlated with perceived stress,  $r(236) = -.001, p > .05$  and was significantly and positively correlated with coping resources (Coping Resources Effectiveness),  $r(236) = .23, p < .01$ .

### **Perceived Stress as a Mediator between Perfectionism and Burnout**

Mediation approaches are described in a number of relatively recent articles (see Muller, Judd, & Yzerbyt, 2005; Preacher, Rucker & Hayes, 2007) and are commonly used in psychological research as a methodology to determine the indirect effects of a mediator variable (Preacher & Hayes, 2004, 2008). The approach has the distinct advantage of not relying on the assumption of normality regarding the distribution of the sample (see Preacher & Hayes, 2004).

The third hypothesis of the current study was that the relationship between the personality trait of adaptive perfectionism and burnout would not be mediated by perceived stress. The fourth hypothesis was that the relationship between the personality trait of maladaptive perfectionism and burnout would be mediated by perceived stress. To test these hypotheses a mediation approach was used. Initially, to control for the relationship between perfectionism dimensions in the analyses, APS-R subscales were entered as covariates in the analyses (e.g., Rice, Tucker, & Desmond, 2008; Rice, Vergara, & Aldea, 2006). For instance, a measure of maladaptive perfectionism was created by entering the APS-R Discrepancy scale after controlling for the effects of the

APS-R Standards scale. To represent adaptive perfectionism the APS-R Standards scale was entered while controlling for the effects of the APS-R Discrepancy scale.

A bootstrapping approach (Preacher & Hayes, 2004, 2008), which is an extension of the Sobel Test (Baron & Kenny, 1986; Sobel, 1982), was utilized to test the hypothesis that perceived stress mediates the relationship between adaptive and maladaptive perfectionism and burnout. Consistent with this approach (Preacher & Hayes, 2004), five thousand equal sized resamples of the original data were created by random sampling with replacement. The indirect effect is the  $ab$  path, which is the product of the independent variable (adaptive or maladaptive perfectionism while partialling out the effects of the other APS-R scale)  $\rightarrow$  mediator (perceived stress) path (the  $a$  path) and the mediator (perceived stress)  $\rightarrow$  dependent variable (emotional exhaustion) path (the  $b$  path). The point estimate of the indirect effect is the mean  $ab$  path value computed over the samples. A 95% confidence interval is calculated; if the upper and lower bounds of these bias-corrected and accelerated (BCa) confidence intervals do not contain zero, the indirect effect is significant. The mediation effects, using the variable of perceived stress to mediate the relationship between perfectionism and burnout, are depicted pictorially.

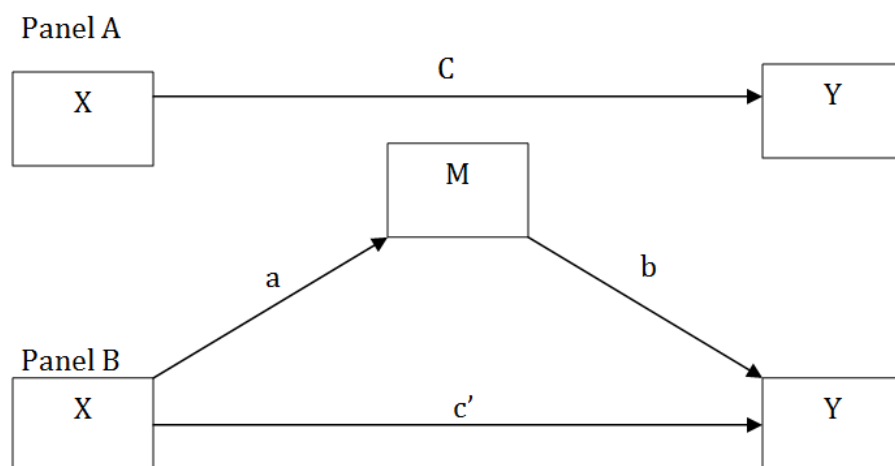
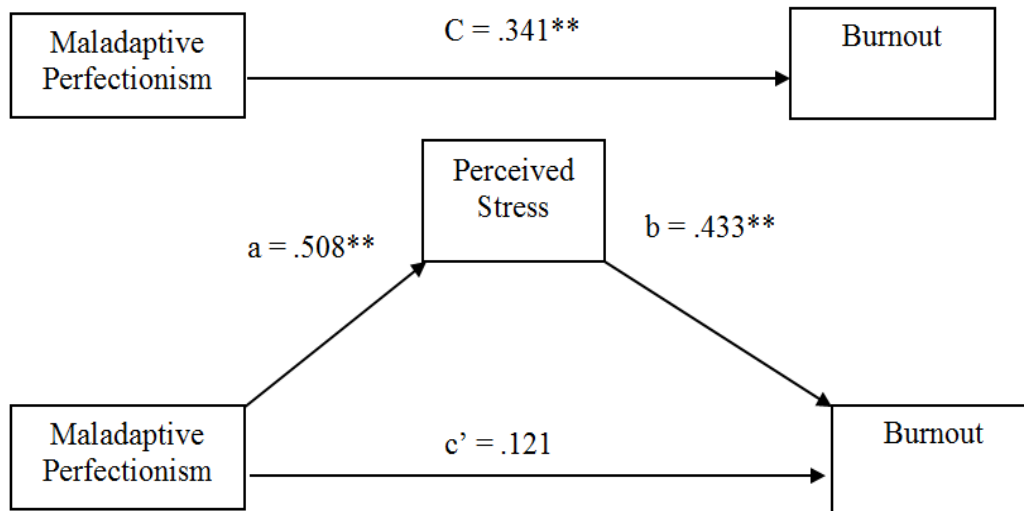


Figure 1. Panel A: Illustration of a direct effect; Panel B: Illustration of a mediation design (Preacher & Hayes, 2004).

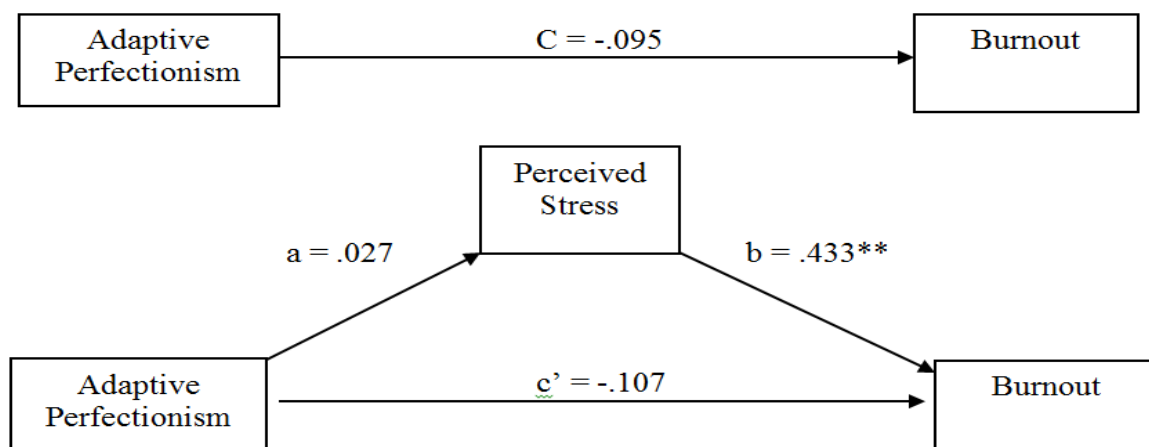


The results of the analysis indicated that the total effect of maladaptive perfectionism on emotional exhaustion was significant suggesting the possibility of mediation (see Table 3). Results of the bootstrapping analysis showed that maladaptive perfectionism had a significant indirect effect through perceived stress with a 95% BCa confidence interval of .0908 to .2171. Because zero was not within the confidence interval range, it can be concluded that perceived stress mediated the relationship between maladaptive perfectionism and burnout (Preacher & Hayes, 2008). Figure 2 is a path model showing the relations between maladaptive perfectionism, burnout, and perceived stress. The path coefficients are standardized regression coefficients. For paths,  $c$  = total effect of maladaptive perfectionism on burnout;  $c'$  = direct effect of maladaptive perfectionism on burnout. \* $p < .05$ .



*Figure 2.* Path model of the relations between maladaptive perfectionism, burnout, and perceived stress.

The results of the analysis further indicate that the total effect of adaptive perfectionism on Emotional Exhaustion was not significant (see Table 3). Given that there was a nonsignificant association between adaptive perfectionism and burnout, a mediation model cannot exist (see Preacher & Hayes, 2004). It is, however, possible for an indirect effects model to exist in which adaptive perfectionism is significantly related to perceived stress, which is significantly related to depression. To determine whether an indirect effects model was present, a bootstrapping analysis was performed. Results of the analysis indicated that perceived stress does not mediate the relationship between adaptive perfectionism and emotional exhaustion with a 95% BCa confidence interval of  $-.0933$  to  $.1590$ . In this case, zero was within the confidence interval range, indicating that perceived stress did not mediate the relationship between adaptive perfectionism and burnout (Preacher & Hayes, 2008). Figure 3 represents the path model of the relations between adaptive perfectionism, burnout, and perceived stress. The path coefficients are standardized regression coefficients. For paths,  $c$  = total effect of adaptive perfectionism on burnout;  $c'$  = direct effect of maladaptive perfectionism on burnout. \* $p < .05$ .



*Figure 3.* Path model of the relations between adaptive perfectionism, burnout, and perceived stress.

Summaries of the mediation analysis results are found within Table 3. The outcome variable is burnout and the table documents the path or effects of the characteristic of adaptive perfectionistic traits and maladaptive traits with regard to the mediator variable of perceived stress.

Table 4. *Mediation Analysis Results*

Outcome variable	Path/effect	B	SE	B	95% CI
Burnout (EE) $\Delta R^2 = .27$	C	-.220	.141	-.095	
	a (Adaptive perfectionism -> PSS)	.043	.091	.027	
	b (PSS -> EE)	.618	.093	.433**	
	c' (Adaptive perfectionism -> DEP)	-.247	.130	-.107	
	a x b	.027	.057	.012	[-.0933, .1590]
$\Delta R^2 = .26$	C	.224	.040	.341**	
	a (Maladaptive perfectionism -> PSS)	.234	.026	.508**	
	b (PSS -> EE)	.618	.093	.433**	
	c' (Maladaptive perfectionism -> EE)	.080	.043	.121	
	a x b	.145	.027	.144	[.0908, .2171]

*Note.* Almost Perfect Scale – Revised (APS-R) Standards Subscale with APS-R Discrepancy Subscale as covariate = adaptive perfectionism; APS-R Discrepancy Subscale with APS-R Standards Subscale as covariate = maladaptive perfectionism; Maslach Burnout Inventory-Human Services= Emotional Exhaustion Scale = Burnout (EE). For paths, C = total effect of independent variable (IV) on dependent variable (DV) with covariate; a = IV to mediators; b = direct effect of mediator on DV. c' = direct effect of IV on DV; a x b = indirect effect of IV on DV through mediator. CI = confidence interval. \*  $p < .05$ . \*\*  $p < .01$ .

## Moderation

The fifth hypothesis was that coping resources would moderate the relationship between maladaptive perfectionism and burnout. This hypothesis is based on the transactional model of stress, in which Lazarus and Folkman (1984) posit that when a stressor arises, those individuals who perceive themselves as more highly resourced are more likely to trust that they can cope with the given demands and, as a result, experience less stress and stress related outcomes, such as emotional exhaustion. Therefore, those individuals who perceive of him/herself as highly resourceful, experience less stress and

are buffered from the negative effects of chronic stressors. To test this hypothesis a moderation approach was applied.

Moderation is utilized when an attempt is being made to explain how a specific factor influences the strength or direction of the relationship between the independent or predictor variable and the dependent variable (Muller, Judd, & Yzerbyt, 2005). To test whether coping resources served as a moderating variable, the recommendations of Baron and Kenny (1986) and Aiken and West (1991) were followed in this study. Specifically, hierarchical regression analyses were conducted. In the initial block after controlling for the effects of one APS-R subscale (Standards in the case of maladaptive perfectionism), the main effects for the predictors (Discrepancy in the case of maladaptive perfectionism) and the hypothesized moderating variable (Coping Resources) were entered in an initial block. The interaction terms (Discrepancy x Coping Resources Effectiveness) were entered in the second step of the regression model. While there were significant main effects for Discrepancy and Emotional Exhaustion ( $b = .34, p < .01$ ), the interaction term did not account for significant variation in burnout scores ( $\Delta R^2$  ranged from .001 to .002,  $p > .62$ ).

### **Moderated Mediation**

To test the sixth hypothesis, that coping resources would serve as a moderating mediator between maladaptive perfectionism and perceived stress moderated mediation approach was utilized. This hypothesis is consistent with Hewitt and Flett's (2002) diathesis-stress model which identifies the dysfunctional approaches that maladaptive perfectionists employ to cope with stressors. Generally, maladaptive perfectionists assess their coping resources as insufficient and are less successful at using effective coping

strategies for the purpose of stress reduction (Flett & Hewitt, 2002). Given the critical role of coping in the management of stress (Lazarus & Folkman, 1984) and given that there was evidence found for mediation, a test of moderated mediation was used in order to focus on the role of coping resources.

Moderated mediation approaches are designed to test the mediated effect that varies across levels of a moderator on the path from the independent variable to a mediator variable (Edwards & Lambert, 2007; Muller et al., 2005). Preacher et al., (2007) describe several types of moderated mediational analysis and note that moderated mediation models explain how and when a particular effect occurs. One path described by Preacher et al., (2007) is that a fourth variable (coping resources) affects the mediated *a* path (perfectionism to perceived stress). In order to test moderated mediation, the MODMED macro developed by Preacher et al. (2007) was used to perform the required regression analyses and to determine the conditional indirect effects at specific values of the moderator in addition to bootstrap standard errors. Results confirmed that although perceived stress mediated the relationship between maladaptive perfectionism and burnout, coping resources did not moderate the path between maladaptive perfectionism and perceived stress ( $p = .83$ ). A similar result was found as well for adaptive perfectionism ( $p = .82$ ).

## **Discussion**

The purpose of this study was to investigate the relationship between personality factors, particularly perfectionism, perceived stress, and coping resources, to better understand how burnout develops amongst sign language interpreters. Burnout is a particular problem for the interpreting profession, as it is a factor that has played a part in

a national shortage of sign language interpreters (Dean & Pollard, 2001). An important contribution of this study was the testing of a model of burnout that accounts for the way that personality traits, in this case perfectionistic tendencies, impact the stress and coping appraisal process. Although no known studies of sign language interpreters are published that directly investigate the interactions between these variables, this study extended the findings of earlier research investigating the association between perfectionism, stress, and burnout amongst athletes (Chen et al., 2008; Stoeber & Rennert, 2008) and within various professional fields (D'Souza, Egan, & Rees, 2011; Mitchelson, & Burns, 1998).

Perfectionism is a multidimensional construct in which distinct advantages are associated with adaptive perfectionism and disadvantages are associated with maladaptive perfectionism (see Stoeber & Otto, 2006). Research findings provide evidence that adaptive perfectionism tends to promote positive outcomes including openness to learning new skills (Gould et al., 2002), completion of interpreter training programs (Bontempo & Napier, 2011), higher levels of self-esteem (Ashby & Rice, 2002), and greater life satisfaction (Wang et al., 2009).

Results from the current study are consistent with a multidimensional conceptualization of perfectionism. Specifically, bivariate correlations suggest that adaptive perfectionism and maladaptive perfectionism have differing associations with stress, coping, and burnout. For instance, the adaptive dimension of perfectionism (holding high standards) was negatively correlated with burnout. Additionally, findings indicate a clear inverse relationship between adaptive perfectionism and stress as well as a significant and positive correlation with coping resources. Consistent with the study's

hypotheses, these associations are in the expected direction and support a conceptualization of adaptive perfectionistic traits as beneficial to the individual.

In contrast, previous research findings have provided evidence that maladaptive perfectionism is associated with increased negative psychological outcomes, including decreased self-esteem (Ashby, Rice & Martin, 2006) as well as elevated levels of depression (Frost, Benton, & Dowrick, 1990), anxiety (Flett, Hewitt, & Dyck, 1989), self-criticism (Flett, Hewitt, Blankstein, & Mosher, 1991), and burnout (Grosch & Olsen, 1998; Houkes et al., 2008; Mitchelson & Burns, 1998; Stoeber & Rennert, 2008; Tashman et al., 2010). The results of the current study were consistent with research in this area. In contrast to the beneficial associations that were observed in relationship to adaptive perfectionism, within this sample of sign language interpreters, maladaptive perfectionism was associated with burnout, stress and coping resources in ways that were less advantageous. For instance, the variable of maladaptive perfectionism was significantly and positively correlated with burnout and perceived stress. Furthermore, maladaptive perfectionism was significantly and inversely correlated with coping resources.

In this study, the role of stress as a mediator and coping resources as a moderator were tested. There is precedent within the literature to use stress as a mediator between aspects of perfectionism and negative psychological outcomes, such as burnout. For instance, several researchers have identified stress as a mediating variable between maladaptive perfectionism and various negative psychological outcomes including depression (Frost, Benton, & Dowrick, 1990), anxiety (Flett, Hewitt, & Dyck, 1989) and

burnout (Grosch& Olsen, 1998; Mitchelson & Burns, 1998; Stoeber & Rennert, 2008; Tashman et al., 2010).

In this study, the results were consistent with previous conceptualizations of perfectionism, previous research in the area, and several of the hypotheses. For instance, while perceived stress did not fully mediate the relationship between maladaptive perfectionism and burnout, there was a significant indirect effect between maladaptive perfectionism and burnout through stress. These results suggest that perceived stress partially mediates the relationship between maladaptive perfectionism and burnout.

As hypothesized, the results of the study offered no support for the mediational role of perceived stress in the association between adaptive perfectionism and burnout. In addition, the analyses offered no support for an indirect effects model between adaptive perfectionism and burnout. By comparison, these findings suggest that interpreters with higher levels of maladaptive perfectionism are likely to experience higher levels of perceived stress and, as a result, increased burnout. As Hewitt and Flett (2002) noted, mechanisms of stress (e.g., stress generation, stress anticipation, stress perpetuation, and stress enhancement) influence the ways that maladaptive perfectionists react and cope with stressors. Consistent with this framework, the findings of this study suggest the possibility that maladaptive perfectionists are more prone to influence and interact with stress in ways that produce or maintain negative states, such as burnout.

Many of the emotional, personal, and social challenges experienced by maladaptive perfectionists are due not only to problematic stress-management but also to ineffective coping efforts (Dunkley, Zuroff, & Blankstein, 2003). According to Lazarus and Folkman (1984) coping resources play a critical role in the stress appraisal process.



Also, coping resources are identified as protective because they may serve to buffer individuals from stressful daily hassles and life events as well as to minimize the potentially detrimental effects of stressors as they occur (Lazarus, 2007; Matheny, Aycock, Curlette, & Junker, 2003). Consistent with these research findings, the current study investigated the potential moderating role of coping resources in the relationship between perfectionism and burnout. In contrast to what was anticipated, the results of the study offered no evidence for a significant interaction between coping resources and perfectionism in the prediction of burnout.

Coping resources were a variable of interest because general findings in the area of stress and coping suggest that high levels of coping resources serve as a positive and stress-buffering influence for individuals (Lazarus, 2007; Matheny, Aycock, Curlette, & Junker, 2003). In contrast, researchers (e.g., Bolger & Zuckerman, 1995; Hewitt & Flett, 2002) have noted that stress reactivity, or the coping choices made in response to stress, play a critical role in the maintenance or development of negative outcomes. Consistent with these research results, in the current study a moderated mediation model was tested. Specifically, the model tested included an interaction between maladaptive perfectionism and coping resources in the prediction of a mediator variable, perceived stress, in the prediction of burnout. Although results of the analyses supported the mediator role of perceived stress in the relationship between maladaptive perfectionism and burnout, no evidence was found for the moderator role of coping resources in the relationship between maladaptive perfectionism and perceived stress.

The results of this study are consistent with previous research as coping resources were inversely related to both perceived stress and burnout. Similarly, there were

significant relationships between maladaptive perfectionism and coping resources. However, the pattern of the relationship between perfectionism, coping resources, perceived stress, and burnout appears to be other than, and potentially more complex than, the moderated mediation model tested.

In this study, stress was explored as a mediator and coping as a moderator variable. There is also precedence for an alternative path analysis that was not tested in this study that would emphasize the mediating role of coping resources. There is theoretical merit to exploring the effects of a coping-mediation model for perfectionism and burnout. In fact, there is a growing body of evidence that identifies that unhealthy coping partially mediates the relationship between maladaptive perfectionism and psychological distress (e.g., Dunkley et al., 2006; Wei, Heppner, Russell, & Young, 2006).

Support for a coping-meditational model is found in Hamachek's (1978) conceptual description of how individuals with adaptive and maladaptive perfectionism vary when coping with perceived stressors. Hamachek emphasizes that individuals with maladaptive perfectionistic traits are focused on the potential to make a mistake, typically use avoidant coping strategies, and are easily distressed. By comparison, those individuals with adaptive perfectionistic traits are less concerned about making mistakes, typically use effective coping strategies, and experience less distress from perceived challenges. Hamachek's observations are supported by research suggesting that individuals with maladaptive perfectionism consistently engage in avoidant coping (Dunkley, Sanislow, Grilo, & McGlashan, 2006) and ineffective coping (Wei, et al., 2006). In contrast, studies suggest that individuals with adaptive perfectionism tend to

utilize more effective coping strategies such as problem-focused coping (Rice & Lapsley) and task-oriented coping (O'Connor & O'Connor, 2003).

The design of a more complex moderated mediation model would include specific coping resources variables, such as social support, which are associated with buffering individuals from the effects of burnout (Baker, O'Brien, & Salahuddin, 2007). In addition to exploring a coping-meditational model there is support within the interpreting literature (see Shlesinger & Pöchhacker, 2011) for the exploration of variables related to aptitudes, such as cognitive skills, personality factors, or language fluency that effect burnout. Future researchers may wish to explore additional pathways beyond coping resources and perceived stress that inform the relationship between perfectionism and burnout.

### **Implications**

The results of this study have several implications for interpreters, trainers and trainees. These findings provide evidence that maladaptive perfectionism is positively associated with burnout. By comparison, adaptive perfectionism appears unrelated to burnout. It is therefore important for instructors and administrators of interpreter training programs to understand the distinction between adaptive and maladaptive perfectionism (see Stoeber & Otto, 2003). Instead of viewing perfectionism as unidimensional and negative, interpreters, trainers and trainees will likely benefit from conceptualizing perfectionism as multidimensional and nuanced.

Hamachek's (1978) distinction between adaptive and maladaptive perfectionists may assist interpreters, trainers, and trainees in recognizing the professional advantages of "normal" or adaptive forms of perfectionism. Hamechek asserts that the label "normal

perfectionist” is analogous to a “skilled artist or a careful worker or masters of their craft” (p.27). Adaptive perfectionists feel a strong sense of satisfaction in striving and are encouraged to improve upon their work. Furthermore, they “derive a real sense of pleasure from the labors of a painstaking effort” (p.27). In contrast, the “neurotic” or maladaptive perfectionist is “unable to feel satisfaction because in their own eyes they never seem to do things good enough to warrant that feeling” (p. 27). The maladaptive perfectionist generally feels “anxious, confused, and emotionally drained before a new task is even begun” (p. 28). An awareness of the conceptual differences between types of perfectionism may help trainers to identify the signs and symptoms of maladaptive and adaptive perfectionism and to encourage interpreters and trainees towards adaptive perfectionistic traits, which are related to lower levels of burnout.

The findings of this study suggest that maladaptive perfectionists are susceptible to negative outcomes, such as burnout, in large part due to the ways that they perceive of and manage stressors. Perfectionists are unified in their desire to attain high standards and yet, for the maladaptive perfectionist, the process of striving towards goals is cause for distress (Stoeber & Otto, 2003). Hamechek (1978) noted that, when faced with a stressor, the maladaptive perfectionist “concentrates on how to avoid doing things wrong,” whereas the adaptive perfectionist “concentrates on how to do things right” (p. 28). Adaptive perfectionist respond to challenges with feelings of excitement and are emotionally charged, but maladaptive perfectionists react to stressors by becoming constantly alert, defensive, and emotionally drained (Hamechek, 1978). Hewitt and Flett (2002) describe that, due to the link between maladaptive perfectionism and elevated levels of stress generation and stress reactivity, those individuals with perfectionistic

traits are good candidates for stress reduction treatments. Specifically, cognitive behavioral techniques are endorsed in the literature, which are designed to address maladaptive perfectionists' stress-producing and stress-prolonging tendencies (Blatt, 1995; Hewitt & Flett, 2002; Matheny & McCarthy, 2000). Because interpreter training programs emphasize the skill of giving and receiving feedback to one another, they are ideally positioned to promote self-awareness and self-assessment of stress-response patterns among interpreting trainees. Instructors should be trained to identify individuals displaying maladaptive perfectionistic stress responses in order to provide them with additional support and to refer them to appropriate stress reduction resources.

In addition to short-term stress reduction deficits, maladaptive perfectionists also employ limited and ineffective coping strategies (Hewitt & Flett, 2002). Maladaptive perfectionists are particularly at risk for negative psychological outcomes because of their coping styles, which are avoidance-focused and emotion-focused, involving rumination, self blame, and negative appraisals of problem-solving ability (Flett & Hewitt, 2011). Intervention strategies for maladaptive perfectionists focus on the direct teaching of coping strategies and the improvement of problem-solving coping resources (Hewitt & Flett). In order to prevent and mitigate the negative short-term and long-term consequences associated with maladaptive perfectionistic traits, sign language interpreting educators and continuing education providers should include basic stress-reduction techniques and coping skills into their training curricula.

### **Limitations of the Study**

There are several limitations to this study. Sound measures were used for analyses, but the results were based on self-report and were correlational. Additionally,

this sample was relatively homogeneous with regard to gender and ethnicity. However, the predominance of females that identify as Caucasian/White within the sample is consistent with the national demographics reported by RID (Nettles, 2011). Thus, while these findings may be generalizable to the interpreting population, they may be less applicable to male interpreters and individuals from diverse ethnic backgrounds. Further research should also be conducted to determine the applicability of these findings to a broader demographic of interpreters.

Collecting data from individuals who are burned out may be challenging. For instance, those with impairing levels of burnout may be disengaged from the profession or not willing or able to complete a survey that takes approximately 45 minutes. Future researchers may want to consider the use of longitudinal designs to examine the relationship between the constructs of perfectionism, perceived stress, coping resources, and burnout. A longitudinal model would provide additional information, such as details related to work, family, and school demands that vary over the course of an interpreter's career. A longitudinal design would also enable researchers to track, with greater precision, those interpreters who have reduced their hours working or have left the field due to burnout.

Additionally, researchers may want to explore through qualitative and quantitative methods how personality traits, stress, coping resources influence the development of burnout. For instance, in this study, based on the theoretical literature and an a priori power analysis, only a measure of overall coping resources (the CRIS-SF, CRE) was used rather than measures of specific coping resources. In future studies, measures of different coping resources might be included to see if isolating specific coping resources

as variables might moderate the stress response. For example, with a larger sample size various scales from the CRIS-SF (Matheny & Curlette, 2010) could be used to test the potential moderating effects of social support, tension control, self-directedness and/or physical health. Additionally, because of the associations identified between maladaptive perfectionism and coping resources future studies may wish to consider using the CRIS-CRE as a mediator variable and if there are significant effects, perceived stress as a moderator variable. A mediated moderation analysis that uses coping as the mediator may prove helpful in describing the effects of coping on burnout.

Finally, it should be noted that the models were not intended to predict burnout but instead to explore a potential pathway for the development of emotional exhaustion, the key component of burnout. Therefore, these findings are limited to the personality trait and outcome variable explored.

### **Summary**

In summary, the present study provided evidence for the effects of perfectionism, stress, and coping resources on burnout among sign language interpreters. In particular, adaptive perfectionism was not associated with burnout but maladaptive perfectionism was associated with burnout within this interpreting sample. The study also provided additional support for the mediating role of perceived stress in the relationship between maladaptive perfectionism and burnout.

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## APPENDIXES

## APPENDIX A

## General Research Announcement

Hello Everyone:

I am writing you today to let you know that I am collecting data for a research study, and would really appreciate any support you may be able to provide. I am looking for sign language interpreter volunteers to complete an online survey study. I am looking for a total of 150-200 for the study, so please pass this along to anyone who you think may be interested.

I am exploring the experiences of sign language interpreters and their feelings of well being. In order to participate, you must be:

- 18 years or older
- Identify as a sign language interpreter

The LINK for the study is: <http://edu.surveymzmo.com/s3/297550/Sign-Language-Interpreting-Stress-Coping-Satisfaction>

The research is being conducted under the direction of Tomina Schwenke and Dr. Jeffrey S. Ashby from the Department of Counseling and Psychological Services at Georgia State University (Dr. Ashby's Georgia State University Profile could be found on: <http://education.gsu.edu/cps/821.html>. I have also attached a copy of the GSU Approved Informed Consent Form).

If you have any questions please email Tomina Schwenke at <mailto:tschwenke1@student.gsu.edu>

Tomina Schwenke, MA/MA  
Counseling Psychology Doctoral Student  
Georgia State University  
Sign Language Interpreter, CI/CT

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## APPENDIX B

Georgia State University  
Department of Counseling & Psychological Services  
Informed Consent

**Title:** Sign language interpreters and burnout  
**Principal Investigator:** Jeffrey S. Ashby, Ph.D.  
**Student Principal Investigator:** Tomina Schwenke, M.A.

**Introduction/Background/Purpose:**

You are being asked to participate in a study on burnout. The purpose of this research study is to examine the effects of social support and psychological demands on sign language interpreters. Your participation will take approximately 45 minutes and no more than 60 minutes. There will be approximately 150-200 participants in this study.

**Procedures:**

You will be asked to complete a written survey. This study will take place online, during the time frame of February 1, 2011-February 1, 2012 or by pencil and paper, from July 17-22, 2012. You will be asked to complete a survey, which may take you up to 60 minutes to complete.

**Risks:**

There are minimal foreseeable risks to participating in this study. Because some survey questions ask about stressors, there is the possibility of some emotional distress. If this occurs, you can contact the investigator or co-investigator of this study. Tomina Schwenke (404-285-0608) or Jeff Ashby (404-413-8170) can refer you to a counselor to address your distress. Please note that you will be financially responsible for any associated costs.

**Benefits:**

Participation in this study may not benefit you personally. Overall, we hope to gain information about how interpreters cope with stress. What we learn from the study may help us to better understand interpreters and burnout.

**Voluntary Participation and Withdrawal:**

Participation in research is voluntary. You have the right to refuse to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. You may skip questions or discontinue participation at any time.

Whatever you decide, you will not lose any benefits to which you are otherwise entitled.

**Confidentiality of Data:**

We will keep your records private to the extent allowed by law. The Primary Investigator, Dr. Jeff Ashby and the research team, Tomina Schwenke, M.A. will have access to the information you provide. Information may also be shared with those who make sure the study is done correctly (GSU Institutional Review Board, the Office for Human Research Protection (OHRP) and/or the Food and Drug Administration (FDA), and the sponsor). We will use a study number rather than your name on study records. The information you provide will be stored on a password and firewall-protected computer. Your name and other facts that might point to you will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally.

**Contact Persons:**

Contact Tomina Schwenke at 404-285-0608 or Jeff Ashby at 404-413-8170 if you have questions about this study.

If you have questions or concerns about your rights as a participant in this research study, you may contact the Institutional Review Board (IRB), which oversees the protection of human research participants. Susan Vogtner in the office of research compliance can be reached at 404-413-3513.

**Copy of Consent Form to Subject:**

You will be provided a copy of a consent form to keep.

## APPENDIX C

## Demographics Form

**Instructions:** CIRCLE THE RESPONSE or FILL IN THE BLANK to describe yourself.

1. Gender (circle one):        **MALE**        **FEMALE**        **TRANSGENDER**
  
2. Please indicate your age: \_\_\_\_\_
  
3. How would you describe your race/ethnicity?
  1. Hispanic/ Latina
  2. African American/Black
  3. American Indian/ Native American
  4. Caucasian/White/European American
  5. Asian/Pacific Islander
  6. East Indian
  7. Middle Eastern
  8. Other (specify) \_\_\_\_\_
  
4. Are you currently nationally certified?
  0.     No
  1.     Yes, I hold a certificate
  
5. Do you have a deaf/hard of hearing person in your family (e.g. self, parent, sibling, child, partner, etc.)?
  0.     No
  1.     Yes



## APPENDIX D

## Maslach Burnout Inventory–Human Services Survey (MBI)

Directions: The purpose of this survey is to discover how various persons in the human services or helping professions view their jobs and the people with whom they work closely. Because persons in a wide variety of occupations will answer this survey, it uses the term "recipients" to refer to the people for whom you provide your service, care, treatment, or instruction. When you answer this survey please think of these people as recipients of the service you provide, even though you may use another term in your work.

Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write a "0" (zero) before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

How often:

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

**How Often****0–6 Statements**

1. \_\_\_\_\_ I feel emotionally drained from my work .
2. \_\_\_\_\_ I feel used up at the end of the workday.
3. \_\_\_\_\_ I feel fatigued when I get up in the morning and have to face another day on the job.
4. \_\_\_\_\_ I can easily understand how my recipients feel about things.
5. \_\_\_\_\_ I feel I treat some recipients as if they were impersonal objects.
6. \_\_\_\_\_ Working with people all day is really a strain for me.
7. \_\_\_\_\_ I deal very effectively with the problems of my recipients.
8. \_\_\_\_\_ I feel burned out from my work.
9. \_\_\_\_\_ I feel I'm positively influencing other people's lives through my work.
10. \_\_\_\_\_ I've become more callous toward people since I took this job.
11. \_\_\_\_\_ I worry that this job is hardening me emotionally.
12. \_\_\_\_\_ I feel very energetic.
13. \_\_\_\_\_ I feel frustrated by my job.
14. \_\_\_\_\_ I feel I'm working too hard on my job.
15. \_\_\_\_\_ I don't really care what happens to some recipients.
16. \_\_\_\_\_ Working with people directly puts too much stress on me.
17. \_\_\_\_\_ I can easily create a relaxed atmosphere with my recipients.
18. \_\_\_\_\_ I feel exhilarated after working closely with my recipients.
19. \_\_\_\_\_ I have accomplished many worthwhile things in this job.
20. \_\_\_\_\_ I feel like I'm at the end of my rope.
21. \_\_\_\_\_ In my work, I deal with emotional problems very calmly.

22. \_\_\_\_\_ I feel recipients blame me for some of their problems.

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## APPENDIX E

## Almost Perfect Scale – Revised (APS-R)

Instructions: The following items are designed to measure certain attitudes people have toward themselves, their performance, and toward others. It is important that your answers be true and accurate for you. In the space next to the statement, please enter a number from "1" (strongly disagree) to "7" (strongly agree) to describe your degree of agreement with each item.

<b>STRONGLY DISAGREE</b> 1	<b>DISAGREE</b> 2	<b>SLIGHTLY DISAGREE</b> 3	<b>NEUTRAL</b> 4	<b>SLIGHTLY AGREE</b> 5	<b>AGREE</b> 6	<b>STRONGLY AGREE</b> 7
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- \_\_\_\_\_ 1. I have high standards for my performance at work or at school.
- \_\_\_\_\_ 2. I am an orderly person.
- \_\_\_\_\_ 3. I often feel frustrated because I can't meet my goals.
- \_\_\_\_\_ 4. Neatness is important to me.
- \_\_\_\_\_ 5. If you don't expect much out of yourself you will never succeed.
- \_\_\_\_\_ 6. My best just never seems to be good enough for me.
- \_\_\_\_\_ 7. I think things should be put away in their place.
- \_\_\_\_\_ 8. I have high expectations for myself.
- \_\_\_\_\_ 9. I rarely live up to my high standards.
- \_\_\_\_\_ 10. I like to always be organized and disciplined.
- \_\_\_\_\_ 11. Doing my best never seems to be enough.
- \_\_\_\_\_ 12. I set very high standards for myself.
- \_\_\_\_\_ 13. I am never satisfied with my accomplishments.
- \_\_\_\_\_ 14. I expect the best from myself.
- \_\_\_\_\_ 15. I often worry about not measuring up to my own expectations.
- \_\_\_\_\_ 16. My performance rarely measures up to my standards.
- \_\_\_\_\_ 17. I am not satisfied even when I know I have done my best.
- \_\_\_\_\_ 18. I am seldom able to meet my own high standards for performance.
- \_\_\_\_\_ 19. I try to do my best at everything I do.
- \_\_\_\_\_ 20. I am hardly ever satisfied with my performance.
- \_\_\_\_\_ 21. I hardly ever feel that what I've done is good enough.
- \_\_\_\_\_ 22. I have a strong need to strive for excellence.

- \_\_\_\_\_ 23. I often feel disappointment after completing a task because I know I could have done better.

## APPENDIX F

## Perceived Stress Scale (PSS)

Instructions: The questions in this scale ask you about your feelings and thoughts **during the last month**. In each case, you will be asked to indicate by circling *how often* you felt or thought a certain way.

**0 = Never    1 = Almost Never    2 = Sometimes    3 = Fairly Often    4 = Very Often**

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and “stressed”?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

## APPENDIX G

## Coping Resources Inventory for Stress - Short Form (CRIS-SF)

Instructions. This inventory is designed to help you better understand your stress coping resources. Its value to you will depend on your honesty and accuracy in completing it. Using the 4-point scale below, indicate the extent to which you agree or disagree with each item.

1 = strongly agree    2 = agree    3 = disagree    4 = strongly disagree

1. When compared with others, my coping ability is excellent.
2. My family is not as supportive of what I do as I would like them to be.
3. I slow down my breathing to become less emotional.
4. I'm satisfied with my time management skills.
5. I think of myself as being in good health.
6. I'm very good at defending my rights.
7. I cope with difficult situations better than most people do.
8. Members of my family do not encourage one another.
9. When I feel the pressure mounting, I usually practice a relaxation technique.
10. I manage my time better than most people.
11. My physical health is a problem to me.
12. I'm good at asserting myself.
13. I'm very good at putting my problems in proper perspective.
14. Members of my family are seldom willing to compromise.
15. Sometimes when highly stressed, I have calmed myself down by sitting quietly and breathing slowly.
16. I assign priorities to daily matters and stay with them.
17. I have a health problem that limits my physical movements.
18. If I don't like what someone is doing, I usually say so.
19. I can manage most stressful situations very well.
20. Members of my family are not willing to listen to my problems.
21. When facing stressful situations, I know how to become calm by sitting quietly and turning my mind inward.
22. I am a well-organized person.
23. I have a health problem that causes me pain.
24. I do not let others get away with criticizing me unfairly.
25. In stressful situations, I put things in perspective better than most persons do.
26. Members of my family do not respect my rights as much as they should.
27. When I'm afraid, I often regulate my breathing to get control.
28. I plan my tasks to insure a steady pace.
29. I suffer some from ill health.
30. I have a hard time giving criticism, even when it's needed.
31. When dealing with scary situations, I often have racing thoughts and runaway emotions.

32. I do not get enough affection from my closest friends.
33. Often I lower my stress by controlling my thoughts
34. I have difficulty staying with my goals.
35. I usually feel full of energy.
36. I try too hard to get people's approval.
37. Often my feelings get the best of me.
38. When things go wrong, there aren't many friends I can ask for help.
39. I do not know what to say to myself to calm down
40. I usually do not complete the tasks I start.
41. I do not tire easily.
42. I try too hard to please other people.
43. I tend to view things as being much worse than they are.
44. I receive a great amount of emotional support from friends.
45. When under tension, I'm good at turning my thoughts to less stressful things.
46. I am good at carrying out my plans.
47. I'm often so lacking in energy that I can't finish things I start.
48. If anyone disapproves of me, I try very hard to change my behavior.
49. Other people adjust to stressful situations better than I do
50. I have friends that I enjoy greatly.
51. When I'm under stress, I seldom examine my thinking.
52. I have a hard time carrying out a plan of action.
53. I have to restrict my activities because my energy is limited.
54. I need everyone to like me.
55. I can handle my emotions very well.
56. If I'm in conflict with others, my friends tend to back me up.
57. When upset, I usually tell myself good things in order to calm down.
58. Often I do not get the important things done.
59. I have much less energy that I would like to have.
60. When someone is angry with me, I usually feel that it's my fault.
61. I have a health problem that causes me to worry.
62. If I'm anxious, I make an effort to think of positive things.
63. If someone has taken advantage of me, I seldom say any thing to him or her about it.
64. When in need, my friends give me a lot of help.
65. When I become afraid, I cannot think straight.
66. I sometimes walk or jog to reduce tension.
67. When I'm distressed, I usually think that things will turn out okay.
68. If my friends notice that I'm feeling down, they try to cheer me up.
69. When I feel worried, I try not to think negatively.
70. When I'm under stress, I think too much about the worst possible outcomes.

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