# AN EXPLORATORY EXAMINATION OF BURNOUT AND COPING STRATEGIES IN TRAUMATIC BRAIN INJURY REHABILITATION WORKERS

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# ABSTRACT

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An exploratory study of burnout and coping strategies of traumatic brain injury (TBI) rehabilitation workers (N=29) using the Maslach Burnout Inventory (MBI) and the Revised Ways of Coping Checklist (RWCC) revealed that these workers were experiencing moderate to high levels of burnout and were frequently using social support and problem-solving to cope. A bivariate correlation revealed a significant relationship between burnout and wishful thinking. The relationship may be the result of the MBI and RWCC measuring depression or depersonalization, a burnout factor, or the MBI being a coping strategy itself. Possible implications to organizations and workers are discussed, as are suggestions for additional research.

# CHAPTER I

# INTRODUCTION

## *The Human Service Industry*

The human service industry has the unique characteristic of servicing consumers who are usually in some state of crisis (Rees and Cooper, 1992). The industry, which includes occupations such as nursing, medicine, law enforcement, social work, and counseling, demands job duties and responsibilities that have a direct impact on people and their lives (McCarthy, 1989). Work in this industry is client focused and driven by a continual search to help people in trouble (Rimmerman, Portowicz, Ehrlich, 1989). Human service workers generally have extensive and exhaustive interpersonal interactions (Donat, Neal, and Middleton, 1991) and often must address the physical and emotional needs of their clients (Acker, 1999). Shinn and colleagues (Shinn, Rosario, Morch, and Chestnut, 1984) stated that the primary means of accomplishing work in the human service industry is through the interpersonal relationships established by workers with the individuals they serve and with other human service workers.

The demands of working in this industry are most apparent in the field of rehabilitation. Having to care for vulnerable people (Tyler and Crushway, 1998), workers in the rehabilitation field assist their clients with avoiding physical complications and teach their clients to manage themselves in as normal a means as possible (Prigatino,

1989). While the work may be intrinsically rewarding, it is inherently stressful (Walko, Pratt, Siiter, and Ellison, 1993; Acker, 1999). Caseload size and intense interpersonal relationships with clients and other rehabilitation workers often cause stress (Tyler and Crushway, 1998), and these stresses can lead to burnout.

*Burnout*

Freudenberger first described burnout in 1974 and it has been identified as an occupational hazard since 1978 (Rimmerman, 1985). Burnout is the result of prolonged, intense, and unresolved stress (Stout, 1984) and a negative reaction to work stress (Acker, 1999; Thorton, 1992). Commonly, it is brought on by pressures (Balloch, Pahl, and McLean, 1998) and the negative features of work (Shinn et al., 1984). Burnout is recognized as a condition that rehabilitation workers in the human service industry are particularly apt to confront (Himle, Jayaratne, and Thyness, 1989; Erera, 1992). According to Bradley and Sutherland (1995), it may be the key reason for physical and mental exhaustion in human service workers.

Maslach and Jackson (1981) describe emotional exhaustion, depersonalization, and lack of personal accomplishment as the features of burnout. Emotional exhaustion refers to the feeling of being emotionally overextended and drained by work (Maslach and Jackson, 1981; Blumanthal, Lavender, and Hewson, 1988). Depersonalization describes the lack of feelings that workers experience toward their clients and their work (Maslach and Jackson, 1981; Blumanthal et al., 1988). Lack of personal accomplishment is reflected in a worker's feeling that he or she lacks the competence to perform their work and lacks feelings of achievement from performing their work (Maslach and Jackson, 1981; Blumanthal et al., 1988). Koeske and Koeske (1989) considered

emotional exhaustion "the essence of burnout" and reported it as the best indicator of burnout. Conversely, they thought personal accomplishment moderated the effects of emotional exhaustion and depersonalization (Koeske and Koeske, 1989).

Erera (1992) describes a burnout model whereby workers develop depersonalization and apathy toward their work, states which develop into a loss of personal accomplishment, and increase in emotional exhaustion. Bradley and Sutherland (1995) suggested several variables that contribute to burnout. These researched variables include organizational policies (Blankertz and Robinson, 1997), a worker's lack of influence on these policies (Tyler and Crushway, 1998), worker fatigue (Hardy, Shapiro, and Borhill, 1997), poor quality of supervision (Dehlinger and Baron, 1978; Himle et al., 1989), lack of co-worker support (Himle et al., 1989), and role ambiguity (Erera, 1992).

*Coping*

However, not all rehabilitation workers experience burnout. One suspects that those workers who use effective coping strategies experience less stress. Coping is a mechanism that may reduce stress experienced by an individual (Folkman and Lazarus, 1980; Neale, Davidson, and Haaga, 1996). How these workers cope with work demands is of great importance to the workers and the organizations for which they work for. Unfortunately, coping strategies vary (Shinn et al., 1984), and there is no consensus among researchers about which strategies are the most effective in reducing burnout (Aldwin and Revenson, 1987). Nevertheless, strategies may provide reduce stress. Strategies are generally divided into problem-focused coping and emotion-focused coping (Folkman and Lazarus, 1980).

Problem-focused coping strategy has also been called active coping (Pines, Aronson, and Kafry, 1981) and internal coping (Geuritault-Chalvin, Demi, Peterson, and Kalichman, 2000). Regardless, this strategy encompasses actively changing the situation or seeking additional information in order to produce a change or solution to the circumstances (Folkman and Lazarus, 1980; Vitaliano, Russo, Carr, Maiuro, and Becker, 1985; Carver, Scheier, Weintraub, 1989; Neale, et al., 1996). Emotion-focused strategy has been called inactive coping (Pines, et al., 1981) and external coping (Geuritault-Chalvin, et al., 2000). This strategy attempts to manage or reduce the negative emotional response produced by a stressor, regardless of any situational changes (Folkman and Lazarus, 1980; Vitaliano, et al., 1985; Carver, Scheier, Weintraub, 1989; Mishel and Sorenson, 1993; Neale et al., 1996). Rowe (2000) found that workers use problem-focused strategies when they think they can change a situation and use emotion-focused strategies when they think that no change in the situation can be made. Both strategies have been shown to moderate stress (Carver, Scheier, Weintraub, 1989), Shinn and colleagues (1984) speculated that problem-focused strategies generally are the more effective means of coping.

*Justification*

There is considerable research concerning burnout and coping strategies for human service workers. The research has primarily focused on licensed professionals, such as counselors, social workers, nurses, rather than on rehabilitation workers (Lieter and Harve, 1996;Cranswick, 1997b). Few studies have examined burnout among non-licensed, direct care workers, even though these workers perform the brunt of the "hands

on" technical work (Donat et al., 1991). Therefore, this study will focus on non-licensed, direct care workers employed at rehabilitation facilities.

Specifically, it examines workers catering to the individuals who have survived traumatic brain injury (TBI). It is estimated that there are two million individuals who have suffered a brain injury each year (Braunling-McMorrow, Niemann, and Savage, 1998, p1.2). Some 373,000 individuals are hospitalized as a result of their injuries, and 99,000 of those survivors have moderate to severe disabilities (Krause and Sorenson, 1994). TBI survivorship has been on the rise over the last decade, largely in part to a twenty-two percent decrease in the death rate related to TBI (Sosin, Sniezek, and Waxweiller, 1995). More people are surviving head injury because of improvements in safety standards, safety devices, and more advanced medical technologies (Braunling-McMorrow et al., 1998, p. 1.2-1.3).

In many cases, TBI is catastrophic. The sequelae of TBI may affect the survivor both cognitively and physically (Stambrook, Peters, and Moore, 1989). TBI survivors may have difficulty with language, reasoning, problem solving, memory functions, balance, coordination, and fine and/or gross motor functioning. Furthermore, survivors may have difficulty developing or maintaining interpersonal relationships and may exhibit emotional and behavioral dysfunction (Braunling-McMorrow et al., 1998, p. 3.3-3.6).

It is often the responsibility of the direct care worker to ensure that TBI survivors follow rehabilitation programs developed by licensed staff on a daily basis (Marini, 1995). Because of these demands and responsibilities, caring for head-injured individuals can be highly stressful for the worker (Van den Broek and Lye, 1996). For example, the

direct-care worker must know basic body mechanics to assist with physical therapy and occupational therapy and must learn as many as twenty or more individualized treatment programs, one for each of the TBI survivors.

In some cases, the workers must contend with their clients' inability to control their emotions, which can range from depressed states to episodes of violent anger. The workers may have clients who have poor attention spans, requiring a worker's constant prompting to keep the client focused on a task. The workers may care for survivors with limited understanding or insight regarding the severity of their disability and are unable to perform tasks independently (i.e. unable to drive a car or walk to the corner store on a busy street). The job of the TBI rehabilitation worker is to intervene on such tasks, while at the same time providing a safe and stable environment that will encourage the survivors' rehabilitative progress (Braunling-McMorrow et al., 1998, p. 5.1-5.2). These are examples of some of the stressful demands that may contribute to burnout.

The effects of burnout can be costly in terms of revenue and service. With worker turnover estimated as high as sixty percent (Ben-Dor, 1994), hiring and training new staff members is an expensive process (Stout, 1984; Erera, 1992; Blankertz and Robinson 1996; Cranswick, 1997a; Martin and Schinke, 1998). Add the costs of absenteeism and tardiness (Stout, 1984; Erera, 1992; Blankertz and Robinson 1996; Martin and Schinke, 1998) and the cost to companies is in the hundreds of millions of dollars per year (Stout, 1984).

Additionally, turnover can negatively affect the quality of service (Erera, 1992; Onyett and Dillinger, 1997; Blankertz and Robinson, 1997; Martin and Schinke, 1998). Experienced workers are replaced with less experienced workers who lack the knowledge

to care for their clients (Ben-Dor, 1994). Moreover, it takes time for a worker to learn individualized treatment programs, treatment techniques, and administrative issues required in performing their work. Workers cannot be easily replaced, and many of the job skills that are required can only be learned while "on the job." These drawbacks can slow the rehabilitative process (Cranswick, 1997a; Balloch, Pahl, and McLean, 1998).

*Statement of Purpose*

This exploratory study is intended to determine if TBI rehabilitation workers are experiencing burnout and determine what coping strategies they are using. Additionally, this study will examine and evaluate the relationships, if any, between burnout and coping strategies in TBI rehabilitation workers.

# CHAPTER II

# METHODOLOGY

*Target Group*

Participants for this study were recruited from Tangram-Premier (Tangram), a large, brain injury rehabilitation company. Tangram, which has nine centers in the San Marcos, Texas, area, employs nearly 150 people, and serves about 100 traumatic brain injury (TBI) survivors. This company has been in the brain injury rehabilitation business since 1978 and administrators granted permission to their employees to participate in this study. Employees' work tasks include behavior modification, teaching activities of daily living, vocational training, education, and community integration. Services are conducted in supportive and transitional residential-living centers.

Participants were employees who worked in a clinical capacity rather than an administrative (i.e., managers) or support service (i.e., information/technology or accounting staff) capacity throughout the nine centers. Employees who worked overnight shifts were considered, but a pilot assessment showed that these workers had limited contact with the clients. Moreover, their job duties were vastly different, focusing on clerical and janitorial duties. Thus, these staff members (N=28) were excluded from this study. Likewise, staff members who had less than three months of employment were excluded, since they had insufficient direct care experience. Hence, the criteria for

participation in the study comprised of clinicians who worked the daytime shifts, had at least three months experience, and worked in a direct care capacity.

*Materials*

*Maslach Burnout Inventory*

Christina Maslach and her colleague, Susan Jackson, developed the Maslach Burnout Inventory (MBI) in 1981. The twenty-two item instrument identifies emotional exhaustion (nine items), depersonalization (eight items), and personal accomplishment (five items) as burnout factors (Appendix C). Each of these three factors are also evaluated on two dimensions that allow respondents to report how often (frequency) and how strong (intensity) they experience each item. Figure 1 illustrates the Likert scale that respondents use to quantify their feelings. Respondents rate themselves on frequency from 1 ("A few times a year") to 6 ("Every day") and intensity from 1 ("Very mild") to 7 ("Very Strong").

Six sub-scale scores are produced from a composite of the items for each of the three factors by two dimensions (i.e. frequency and intensity). Maslach and Jackson (1981) categorized three ranges (low, moderate, and high) for the factors. Figure 2 illustrates the ranges for each of the six sub-scales. The low frequency scores for emotional exhaustion are less than seventeen while high frequency scores are more than thirty, and low intensity scores are less than twenty-five and high intensity are scores greater than forty. Depersonalization's low frequency scores are less than five while high frequency scores are more than twelve and low intensity scores are less than six and high intensity are scores greater than fifteen. Lastly, low frequency scores for personal accomplishment are more than forty while high frequency scores are less than thirty-

three, and low intensity scores are more than forty-four and high intensity are scores less than thirty-six.

Figure 1
Item response format for the MBI.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | A few times a year | Monthly | A few times a week | Every week | Every day | A few times a day | |
| How often: | 1 | 2 | 3 | 4 | 5 | 6 | |
| | Very mild | | | Moderate | | | Very strong |
| How strong: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Figure 2
Ranges for MBI Subscale scores.

| | Range of Burnout that is experienced | | |
|---|---|---|---|
| MBI Subscales | Low | Moderate | High |
| Emotional Exhaustion | | | |
| frequency | < 17 | 18-29 | >30 |
| intensity | <25 | 26-39 | >40 |
| Depersonalization | | | |
| frequency | <5 | 6-11 | >12 |
| intensity | <6 | 7-14 | >15 |
| Personal Accomplishment | | | |
| frequency | >40 | 39-34 | <33 |
| intensity | >44 | 43-37 | <36 |

Reliability coefficients for each MBI sub-scale in two studies show robust alpha coefficients ranging from .71 to .90 (Maslach and Jackson, 1981; Koeske and Koeske, 1989).

*Revised Ways of Coping Checklist*

Folkman and Lazarus' Ways of Coping Checklist (WCC) of 1980 was designed to measure two factors of coping: problem-focused and emotion-focused. However, several

authors, including Folkman and Lazarus, made revisions to the original scale based on factor analyses (Folkman and Lazarus, 1980; Folkman and Lazarus, 1985; Vitaliano *et al,* 1985; Mishel and Sorenson, 1993). Aldwin and colleagues, for example, identified seven factors with reliability coefficients ranging from .83 to .91 (Aldwin, Folkman, Shaefer, Coyne, and Lazarus, 1980). Subsequently, Folkman and Lazarus (1985) found eight factors when they revised the Ways of Coping Checklist (RWCC), resulting in reliability coefficients ranging from .56 to .85. They also identified mixed coping that includes aspects of both problem-focused and emotional focused coping. Vitaliano and his collaborators (1985) identified five factors with reliability coefficients ranging from .75 to .88. For the purpose of this study, the revised Folkman and Lazarus (1985) version of the test (Appendix D), using a four point Likert scale, was administered (Figure 3) to the participants.

Figure 3
Item response format for RWCC.

| Never used | Rarely used | Sometimes used | Regularly used |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

Folkman and Lazarus (1985) identified three coping categories consisting of eight coping sub-scales, derived from their instrument. Problem-focused coping consisted of problem-solving strategies involve seeking solutions or more information to alter a situation (fourteen items). Five emotion-focused coping sub-scales were identified: Wishful thinking incorporates daydreaming as a means of coping with a situation (eight items); Blaming yourself (three items) and Blaming others (six items) assign fault; Avoidance refers to physically or cognitively removing oneself from the situation (ten items); Counting blessings focuses individuals on the positive aspects of their lives (six items). Two Mixed coping sub-scales, strategies that have emotion- and problem-

focused characteristics, were described: Using religiosity as a coping strategy turns people to their religious beliefs (three items); Turning toward friends and family to assist with alleviating the stressors provides social support (five items).

To score the coping strategies, Folkman and Lazarus (1985) suggested that the raw scores be transformed into Mean Item (MI) scores by summing the item responses and dividing the sum by number of items that comprised the scale. For example, the MI for religiosity would be calculated: $MI_{religiosity} = \Sigma Raw\ score_{religiosity}/Number\ items_{religiosity}$.

Then, to determine which coping strategies are predominately used, dividing a scale's MI by the sum of all eight MI scales and multiplying by 100% computed relative scores. For instance, the relative score for religiosity would be computed: Religiosity%= $[MI_{religiosity}/(MI_{problem\ solving}+MI_{wishful\ thinking}+MI_{social\ support}+MI_{blame\ self}+MI_{avoidance}+MI_{blame\ others}+MI_{counting\ blessings}+MI_{religiosity})]100\%$. The relative score is computed because an individual can use one or several of these strategies from situation to situation (Folkman and Lazarus, 1985).

*Survey Procedures*

Forty surveys were distributed to the forty workers who fit the criteria for participation in the study. The participants were asked to sign consent forms (Appendix A) and were administered one survey titled "Human Services Survey" (Appendix B). Maslach and Jackson (1981) recommended a non-descript title when presenting the survey to subjects to decrease any biasing effect. The survey comprised of the Maslach Burnout Inventory (MBI) (Maslach and Jackson, 1981) and the Revised Ways of Coping Checklist (RWCC) (Folkman and Lazarus, 1985). To control any biasing effect, half of the participants randomly received the MBI first while the other half received the RWCC

first. The third section requested demographic information, such as gender, education level, and years of service in the human service industry. Furthermore, they had an opportunity to make additional comments on the back of the survey Surveys were returned or mailed to the researcher anonymously.

# CHAPTER III

# RESULTS

*The Study Sample*

Forty surveys were distributed to clinicians working at Tangram and twenty-nine of the surveys were completed and returned. The sample comprised of thirteen males and twelve females, with four individuals choosing not to identify their gender. Average age of the sample was 33.2 years, with a standard deviation of 9.7. Of those responding, fourteen were direct line workers, eleven were middle management (individuals who are both direct line workers and have administrative duties), and finally two individuals identified themselves as administrators (even though all administrative personnel were excluded from the study at the onset). Two respondents chose not to identify their work level.

The average length of employment with this company was 4.2 years (SD=4.0). The average number of years working in the TBI field was 4.8 (SD=4.2), the average number of years spent working in the rehabilitation field was 5.3 (SD=4.3), and the number of years working in the human service industry was 6.5 (SD=5.6). In this sample, four workers had a high school education, fourteen had some college, five had achieved a Bachelor's Degree, and two had postgraduate education. Ten of the respondents were Certified Brain Injury Specialists (a national certification for individuals working in the

brain injury field), and three workers indicated another form of certification (Certified Teacher, Certified Nurses Aid, and Certified Occupational Therapist Assistant).

*Burnout and Coping Styles*

Respondents reported moderate to high levels of burnout across the burnout subscales. Table 1 categorizes scores into high, moderate, or low burnouts ranges, as described by Malsach and Jackson (1981), and provides the average scores and standard deviations. Examining the frequency dimension of the burnout factors, sixteen of the sample subjects scored in the high range for emotional exhaustion (EE) with an average score of 37.44 (SD=6.44), twenty-three reported low personal accomplishment (PA) with an average score of 22.30 (SD=6.13) [recall that low PA is indicative of burnout], and twenty-three participants indicated high levels of depersonalization (DE) with an average score of 32.86 (SD=4.52). Exploring the intensity dimension of the burnout factors, seven of the participants reported moderate EE with an average score of 36.86 (SS=3.24), nine indicated low levels of PA with an average score 27.82 (SD=8.79), and eight scored moderate for DE with an average score of 10.75 (SD=2.30).

Table 1
MBI Sub-scale Scores

| | High | Moderate | Low |
|---|---|---|---|
| 1. EE frequency | | | |
| Percent | 55.17 | 37.93 | 6.79 |
| Average Score | 37.44 | 24.64 | 16.00 |
| SD | 6.44 | 3.84 | 1.00 |
| 2. EE intensity | | | |
| Percent | 24.13 | 48.28 | 27.59 |
| Average Score | 44.57 | 32.86 | 17.50 |
| SD | 5.38 | 3.24 | 4.33 |
| 3. PA frequency* | | | |
| Percent | 79.31 | 17.24 | 3.45 |
| Average Score | 22.30 | 36.00 | 41.00 |
| SD | 6.13 | 1.26 | 1.00 |
| 4. PA intensity* | | | |
| Percent | 37.93 | 37.93 | 24.14 |
| Average Score | 27.82 | 41.27 | 48.14 |
| SD | 8.79 | 1.71 | 3.09 |
| 5. DE frequency | | | |
| Percent | 79.31 | 20.69 | |
| Average | 19.48 | 10.17 | |
| SD | 4.52 | 1.07 | |
| 6. DE intensity | | | |
| Percent | 27.59 | 55.17 | 17.20 |
| Average Score | 19.13 | 10.75 | 5.00 |
| SD | 4.56 | 2.30 | 1.00 |

EE - Emotional Exhaustion; PA - Personal Accomplishment;
DE – Depersonalization
* High PA indicates low burnout.

A bivariate correlation of the MBI showed significant correlations among the sub-scales (Table 2). Only PA intensity failed to significantly correlate with the other sub-scales. All the other sub-scales were significant and positively related with each other, with coefficients ranging from 0.526 to 0.935.

Table 2
Correlation Matrix of Burnout Sub-scales

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1 | 1.000 | | | | | | |
| 2 | 0.935* | 1.000 | | | | | |
| 3 | 0.902* | 0.919** | 1.000 | | | | |
| 4 | 0.002 | -0.051 | 0.087 | 1.000 | | | |
| 5 | 0.838* | 0.861* | 0.874* | 0.146 | 1.000 | | |
| 6 | 0.532* | 0.576* | 0.631* | -0.163 | 0.526* | 1.000 | |
| 7 | 0.952* | 0.969* | 0.966* | 0.002 | 0.906* | 0.690* | 1.000 |

1) EE frequency; 2) EE intensity; 3) PA frequency; 4) PA intensity; 5) DE frequency; 6) DE intensity; 7) Burnout Composite
*p< 01 (two-tailed)

A factor analysis was computed to determine if the study sample followed the six categorizations described by Maslach and Jackson (1981). Additionally, factor analysis was used to increase the statistical power of the correlations since the number of subjects was very low (N=29). Extraction was done with principal component analysis and Varimax rotation. This analysis revealed two factors for this sample (Table 3), therefore this sample sis not match Maslach and Jackson's (1981) prediction. The first factor consisted of personal accomplishment frequency, emotional exhaustion intensity, emotional exhaustion frequency, depersonalization frequency, and depersonalization intensity (Eigenvalue=4.082) with factor loadings of 0.691 or higher. This factor accounted for sixty-eight percent of the variance and has an inter-item reliability coefficient of 0.8569. The second factor consists of personal accomplishment intensity (Eigenvalue=1.091) with a factor loading of 0.970. This factor accounted for eighteen percent of the variance and has a inter-item reliability coefficient of 0.7355.

Table 3
Factor loadings for MBI subscales

| | 1 | 2 |
|---|---|---|
| Personal Accomplishment frequency | 0.968 | |
| Emotional Exhaustion intensity | 0.961 | |
| Emotional Exhaustion frequency | 0.945 | |
| Depersonalization frequency | 0.922 | 0.158 |
| Depersonalization intensity | 0.691 | -0.346 |
| Personal Accomplishment intensity | | 0.970 |
| Eingenvalues | 4.082 | 1.091 |
| Inter-item Alpha | 0.8569 | 0.7355 |

It was decided that the personal accomplishment intensity factor would not be used in any correlation analysis because, as a sub-scale, it failed to correlate with the other sub-scales, was an independent factor, since only one item loaded on this factor. It is likely that in this sample, personal accomplishment intensity is measuring something other than burnout. The remaining five sub-scales were consolidated into one factor called Burnout (BF). This factor had positive and significant correlation coefficients (ranging from 0.609 to 0.969) with the five burnout sub-scales comprise BF. An inter-item reliability analysis of BF (the five sub-scales that loaded on factor one) showed a robust inter-item reliability coefficient of 0.9319. The usage of a composite score is consistent with other researchers' efforts to simplify burnout factors (Rimmerman, 1985; Rimmerman, Portowicz, and Ehrlich, 1989; Collings and Murray, 1996; Thorton, 1992; Blankertz and Robinson, 1997; Proser, Johnson, Kuipers, Spunkler, Bobbington, Thornicroft, 1997; Anderson, 2000; and Gueritault-Chavlin, Demi, Peterson, and Kalichman, 2000).

Relative scores for the Revised Ways of Coping Checklist (RWCC) reveal that the most used coping styles were social support (17.38%, SD=3.82) followed by problem solving (16.18%, SD=3.53). The least used styles were blaming yourself (0.98%, SD=3.51) and avoidance (0.95%, SD=3.04). Other styles were as follows: counting blessings (14.81%, SD=3.89), wishful thinking (11.50%, SD=4.14), religiosity (10.53%, SD=5.05), and blaming others (10.14%, SD=5.61).

Burnout Factor was correlated with RWCC coping styles (Table 4). Only wishful thinking significantly correlated (.01 level) with Burnout (r=0.637).

Table 4
Correlation matrix of Burnout and RWCC subscales

| | PS | SS | BS | WT | AV | BO | CB | RL |
|---|---|---|---|---|---|---|---|---|
| BF | -0.294 | -0.170 | -0.257 | 0.637** | 0.178 | -0.113 | 0.229 | -0.120 |

PS-Problem solving; SS-Social Support; BS-Blaming self; WT-Wishful thinking; AV-Avoidance; BO-Blaming others; CB-Counting blessings; RL-Religiosity; BF-Burnout factor
**Significant at .01 level (two tailed)

# CHAPTER IV

# DISCUSSION

## *Burnout and coping*

The purpose of this study was to evaluate burnout and coping strategies and explore their relationships in a sample of TBI rehabilitation direct-care workers. This study demonstrated that this sample of workers is experiencing moderate to high levels of emotional exhaustion and depersonalization. This sample mostly used social support and problem solving as their coping strategies. However, neither of these frequently used strategies significantly correlated with burnout, although support for such a relationship has been found before (Ogus, 1992; Geuritault-Chalvinet al., 2000; Rowe, 2000; Shinn et al., 1984).

Burnout, in the present sample, had a significant positive relationship with wishful thinking, an emotion-focused coping strategy. This finding is consistent with other researchers' findings. A study of 128 surgical and medical nurses discovered that nurses who relied on wishful thinking reported increased burnout levels (Ogus, 1992). Thorton (1992) examined 234 mental health workers and found that even though problem solving was the most frequently used coping strategy, only wishful thinking significantly related with burnout. She described wishful thinking as withdrawal coping strategy that are often used by human service workers to cope with work stress. Moreover, an

investigation of burnout in 151 child protective service (CPS) workers revealed that workers who used wishful thinking had elevated levels of burnout (Anderson, 2000). Finally, an examination of coping strategies and burnout in 445 nurses working with AIDS/HIV patients revealed a significantly positive relationship between wishful thinking and burnout (Gueritault-Chalvin et al., 2000).

To understand this relationship, we should first revisit characteristics of burnout and coping. Burnout is the result of intense, prolonged, and unresolved stress that is brought on by the pressures and undesirable features of work (Shinn et al., 1984; Stout, 1984; Thorton, 1992; Balloch et al., 1998; Acker, 1999). Coping is a mechanism that attempts to reduce stress experienced by an individual (Folkman and Lazarus, 1980; Neale et al., 1996). Furthermore, Rowe (2000) found that workers used emotion-focused coping strategies, particularly escape-avoidance strategies (including wishful thinking and avoidance) when they perceived that no change in a situation could be made. Additionally, through path analysis, Gueritalt-Chalvin and colleagues (2000) found that wishful thinking would predict higher burnout, especially when used as the primary means of coping.

It is reasonable that some workers may use wishful thinking as their primary means of coping, because they may have ineffectively used other coping strategies or they believe they may have exhausted other strategies, having to rely on wishful thinking (Rowe, 2000). When coping with stressful situations, their failure to effectively cope with the stress and their reliance on wishful thinking could increase their chance of burnout (Gueritalt-Chalvin, et al., 2000). Conversely, some workers use wishful thinking as their primary means to cope with burnout after they exhaust other strategies or their use of

other strategies prove ineffective. Therefore, workers may experience burnout as a result of increased wishful thinking or use wishful thinking to cope with burnout, particularly when they think that the situation cannot change.

Although this describes the positive relationship between burnout and wishful thinking, it does not explain why the relationship exists. Some have argued that some items on the RWCC and MBI evaluate symptoms of depression (Freudenberger, 1974; Aldwin and Revenson, 1987; Thorton, 1992). For example, items such as "Wished I were a stronger person" and "I feel like I am at the end of my rope" have correlated with symptoms of depression (Aldwin and Revenson, 1987; Thorton, 1992). Since features of the RWCC and MBI are related to depression, the relationship that developed in this study could be the result of the two instruments measuring the same construct (i.e., depression). Future research should measure and control for depression when evaluating the relationships between burnout and coping.

Winstanley and Whittington (2002) offered a second explanation for the relationship. These researchers suggested that the depersonalization factor of burnout is actually an escape-avoidance coping strategy, which includes wishful thinking. Although no research, as yet, has evaluated depersonalization as a coping strategy, the argument is plausible. Most of the items measuring depersonalization, such as "I feel I treat some participants as if they were impersonal objects," could be interpreted as ways workers distance themselves from their work. Likewise, some wishful thinking statements, such as "Wished the situation would go away or somehow be finished," could be construed by workers as ways to distance themselves from their work. If depersonalization is indeed a

form of escape-avoidance coping, then future studies should control for this phenomenon. Clearly, this hypothesis should be investigated further.

*Implications*

The result of this study has both economic and clinical implications. The consequences of wishful thinking are workers who ineffectively reduce burnout, become un-focused, and fail to adequately perform their job duties. The consequences of failing to perform job duties related to ineffective coping and burnout costs organizations hundreds of millions of dollars (Stout, 1984) related to turnover (Ben-Dor, 1994), increased absenteeism and tardiness (Martin and Schinke, 1998; Onyett and Dillinger, 1997; Blankertz and Robinson 1996; Erera, 1992; Stout, 1984), and the cost to hire and train new employees in order to replace those who have left the field (Cranswick, 1997a). The consequences not only can affect the bottom line, but also can negatively affect the quality of service (Martin and Schinke, 1998; Blankertz and Robinson, 1997; Onyett and Dillinger, 1997; Erera, 1992). Workers may feel inadequate in their positions, develop apathy toward their work, or leave their job, which can disrupt services to the clients (Balloch, Pahl, and McLean, 1998). Finally, it takes time for new employees gain the knowledge of treatment programs, treatment techniques, and administrative issues to complete their job duties, which can slow the rehabilitation process for their clients.

*What can TBI rehabilitation organizations do?*

To assist TBI rehabilitation workers, companies may want to screen workers to determine which coping strategies workers are using, particularly wishful thinking. Workers who use wishful thinking as the primary means of coping can be taught other strategies. Cranswick (1997a) suggested that organizations screen their workers for

burnout on a regular basis. Rowe (2000) found in a two and a half year study that workers who participated in initial training in coping and completed periodic courses focusing on when to use certain coping strategies experienced less burnout than co-workers who did not receive any training. Equally important is training supervisors on how to recognize and monitor burnout in their employees. Also, counseling workers in reevaluating beliefs related to work stress and role playing, encouraging workers to take short vacations, and participation in leisure activities may prove to be beneficial in moderating burnout (Matheny, Gfroerer, and Harris, 2000).

*Limitations and Future Study*

This study was a correlational study, and therefore no causal inferences can be made concerning the relationships that were observed. This study was not able to show if burnout leads workers to use wishful thinking to cope, or if wishful thinking leads to burnout. The surveys that were used were self-report instruments. Such instruments face inherent weaknesses, such as respondents giving false information or having the inability to identify their coping thoughts or behaviors.

Another weakness of this study was the low number of subjects. Kerlinger (1986) stated that small sample sizes tend to produce larger sampling error (p. 117) because there is less randomization in smaller sample sizes (p. 119). The low number of subjects could inflate correlation coefficients, thereby providing inaccurate information.

The results of this study cannot be generalized to the larger TBI rehabilitation workforce. This sample consisted of a largely homogeneous group, who faced the some organizational confines, such as organizational policies, the level of supervision, co-worker support, role ambiguity, and rehabilitative setting (Himle et al., 1989; Dehlinger

and Perlman, 1978; Erera, 1992. These issues should be addressed in future studies across a larger sample or workers. Workers non-residential settings, such as those who work in hospitals or home health care, may experience similar variables as residential rehabilitation workers. However, these two groups of workers may not respond to these variables in similar ways. To develop a more complete picture of TBI rehabilitation workers, workers in non-residential settings should also be examined.

Finally, stressors stemming from the worker's personal life were not examined. Stressors from outside work, such as divorce and financial stress, may confound stresses experienced by the worker. Future studies should examine all of these variables and their links to burnout and coping relationships.

*Final Remarks*

This study was intended to explore relationships between burnout and coping strategies for rehabilitation workers in the TBI field. The results indicated that there is at least one statistically significant relationship between burnout and wishful thinking, which is consistent with previous research on different human service industry workers. However, this cannot be generalized to the larger TBI rehabilitation work force. The positive relationship that was observed may be the result of the RWCC and MBI measuring depression or the result of depersonalization, measured by the MBI, acting as an escape-avoidance coping strategy. It is possible that further examinations, using a larger sample of TBI rehabilitation workers, across various settings and organizations and controlling for depression, could produce more reliable correlations. Information obtained from future studies would enable TBI rehabilitation companies to develop programs and training to identify and moderate the effects of burnout and the use of

ineffective coping strategies within their organization. In turn, this would save them money in hiring and training new staff members, they would not lose valuable resources, and TBI survivors would be provided better service.

APPENDIX A

Participant Consent Form

**Survey of TBI Rehabilitation Workers**

This questionnaire is part of an exploratory study designed to gain a better understanding of the attitudes and experiences of rehabilitation workers who work with traumatic brain injury survivors. Your contribution to this project is very important, as you are in the unique position to help identify factors that affect this population of workers' attitudes toward their work.

There is no obligation to answer and return this questionnaire, but your participation would be greatly appreciated. Answers to all of the questions are entirely voluntary and are completely confidential. Your responses will only be used for statistical analysis in combination with the responses of others. In the analysis of the surveys there will be no identification of individuals or their specific place of employment.

Participation in this study should take about twenty to thirty minutes of your time. You can return the survey to the researcher in the large pre-addressed and stamped envelope that has been provided. Please do not sign, put your social security number, driver's license number, or any other identifiers on the survey. This survey is meant to be anonymous. Two consent forms are also provided. If you decide to participate, please sign one of these forms and return it to the researcher in the small pre-addressed and stamped envelope provided. Keep the second one for your records. Signing the consent form does not obligate you to participate in the study, and you may withdraw at anytime.

If you have any questions or concerns, please feel free to contact me at:

Jose' Levy
Southwest Texas State University
Psychology Department
601 University Dr.
San Marcos, TX 78666

**Statement of Consent**

I, _____, understand that participation in this study is entirely voluntary and any responses that I provide will be confidential. Furthermore, I can choose to not participate in this study, even after having signed consent or receiving a survey.

_____
Your printed name

_____ _____
Your Signature Date

_____ _____
Researcher's Signature Date

APPENDIX B

Survey Instrument

**Human Services Survey**

The following items address the attitudes that workers may have in regards to their workplace. There are two factors that are addressed: frequency (How often) and intensity (How strong). The scales for frequency and intensity are given below. For frequency, the scale runs from "A few times a year" (1) to "Every Day" (6). For intensity, the scale runs from "Very Mild" (1) to "Very strong" (7). There are no wrong answers. Please answer all of the following items by circling the appropriate score for each factor in how the item relates to you.

| | A few times a year | Monthly | A few times a week | Every week | A few times a day | Every day |
|---|---|---|---|---|---|---|
| How often: | 1 | 2 | 3 | 4 | 5 | 6 |

| | Very mild | | | Moderate | | | Very strong |
|---|---|---|---|---|---|---|---|
| How strong: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

1. I feel emotionally drained from my work.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

2. I feel used up at the end of the workday.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

3. I feel fatigued when I get up in the morning.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

4. Working with other people all day is really a strain for me.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

5. I feel burned out by my work.
How often: 1 2 3 4 5 6

How strong: 1 2 3 4 5 6 7

6. I feel frustrated by my job.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

7. I feel I'm working too hard on my job
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

8. Working with people directly puts too much stress on me.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

9. I feel like I'm at the end of my rope.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

10. I can easily understand how my participants feel about things
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

11. I deal very effectively with the problems of my participants.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

12. I am positively influencing other people through my work.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

13. I feel very energetic.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

14. I can easily create a relaxed atmosphere with my participants.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

15. I feel exhilarated after working closely with my participants.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

16. I have accomplished many worthwhile things in this job.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

17. In my work, I deal with emotional problems very calmly.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

18. I feel I treat some participants as if they were impersonal objects.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

19. I've become more callous toward people since I took this job.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

20. I worry that this job is hardening me emotionally.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

21. I don't really care what happens to some participants.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

22. I feel participants blame me for some of their problems.
How often: 1 2 3 4 5 6
How strong: 1 2 3 4 5 6 7

The following items address the ways in which people may respond to stressors in their workplace. Please think about those aspects of your work that cause you stress and describe them on the back of the study. The scale ranges from "Never used" (1) to "Regularly used" (4). There are no wrong answers. Please answer all of the following items by circling the appropriate score for how the item relates to you.

| Never used | Rarely used | Sometimes used | Regularly used |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

1. Bargained or compromised to get something positive from the situation. 1 2 3 4

2. Counted my blessings. 1 2 3 4

3. Blamed your self. 1 2 3 4

4.Concentrated on something good that could come out of the whole thing. 1 2 3 4

5. Kept my feelings to my self. 1 2 3 4

6. Figured out who is to blame. 1 2 3 4

7. Hoped a miracle would happen. 1 2 3 4

8. Asked someone I respected for advice and followed it. 1 2 3 4

9. Prayed about it. 1 2 3 4

10. Talked to someone about how I was feeling. 1 2 3 4

11. Stood my ground and fought for what I wanted. 1 2 3 4

12. Refused to believe that it had happened. 1 2 3 4

13. Criticized or lectured yourself. 1 2 3 4

14. Took it out on others 1 2 3 4

15. Came up with a couple of different solutions to the problem. 1 2 3 4

16. Wished I were a stronger person-more optimistic and forceful. 1 2 3 4

17. Accepted my strong feelings, but didn't let them interfere with other things too much. 1 2 3 4

18. Focused on the good things in my life. 1 2 3 4

19. Wished that I could change the way that I felt. 1 2 3 4

20. Changed something about my self so that I could deal with the situation. 1 2 3 4

21. Accepted sympathy and understanding from someone. 1 2 3 4

22. Got mad at the people or things that caused the problem. 1 2 3 4

23. Slept more than usual. 1 2 3 4

24. Spoke to my clergy about it. 1 2 3 4

25. Realized you brought the problem on yourself. 1 2 3 4

26. Felt bad that I couldn't avoid the problem. 1 2 3 4

27. I knew what had to be done, so I doubled my efforts and tried harder to make things work. 1 2 3 4

28. Thought that others were unfair to me. 1 2 3 4

29. Daydreamed or imagined a better time or place that the one I was in. 1 2 3 4

30. Tried to forget the whole thing. 1 2 3 4

31. Got professional help and did what they recommended. 1 2 3 4

32. Changed or grew as a person in a good way. 1 2 3 4

33. Blamed others. 1 2 3 4

34. Went on as if nothing had happened. 1 2 3 4

35. Accepted the next best thing to what I wanted. 1 2 3 4

36. Told myself things could be worse. 1 2 3 4

37. Talked to someone who could do something concrete about the problem. 1 2 3 4

38. Tried to make myself feel better by eating, drinking, smoking, taking medication, etc. 1 2 3 4

39. Tried not to act too hastily or follow my own hunch. 1 2 3 4

40. Changed something so things would turnout right. 1 2 3 4

41. Avoided being with people in general. 1 2 3 4

42. Thought how much better off I am than others. 1 2 3 4

43. Had fantasies or wishes about how things might turn out. 1 2 3 4

44. Just took things one-step at a time. 1 2 3 4

45. Wished the situation would go away or some how be finished. 1 2 3 4

46. Kept others from knowing how bad things were. 1 2 3 4

47. Found out what other person was responsible. 1 2 3 4

48. Thought about fantastic or unreal things (like perfect revenge or finding a million dollars) that made me feel better. 1 2 3 4

49. Came out of the experience better than when I went in. 1 2 3 4

50. Told myself how much I have already accomplished. 1 2 3 4

51. Wished that I could change what had happened. 1 2 3 4

52. Made a plan of action and followed it. 1 2 3 4

53. Talked to someone to find out about the situation. 1 2 3 4

54. Avoided my problem. 1 2 3 4

55. Relied on my faith to get me through. 1 2 3 4

56. Compared myself to others who are less fortunate. 1 2 3 4

57. Tried not to burn my bridges behind me, but left things open somewhat. 1 2 3 4

The following items are intended to collect information regarding present job and will be for comparative purposes with other workers in your field. Please answer the following items.

1. What is your position?
   - □ Direct-line worker (work with participants)
   - □ Middle Management (work with participants and staff supervision)
   - □ Management (staff supervision)

If you supervise staff, how many do you supervise? _____

2. During the past twelve months, what portion of your time was spent doing the following.

| | |
|---|---|
| Work directly with the participants | _____% |
| Work doing paper work | _____% |
| Work involving meetings | _____% |
| Other (specify):_____ | _____% |
| Total | 100% |

Rank the following types of activities in terms of what you do most often to less often while at work.

| Never | Most often | | | Less often |
|---|---|---|---|---|
| 0 | 1 | 2 | 3 | 4 |

- Group activities/training _____
  Average group size_____
- 1:1 Crisis/behavior management _____
- 1:1 support of activities/training _____
- 1:1 activities of daily living _____
- Non-participant responsibilities at your facility _____

- Involved in community activities _____

4. Are you working: □ full time □ part time

5. How many hours are you scheduled to work in an average week? _____

6. How many hours, over your scheduled hours, do you average in a week? _____

7. In what year did you start working:
   At your current position? _____
   At this organization? _____
   With people with head injuries? _____
   In the rehabilitation field? _____
   In the human service industry? _____

8. How many people work at you current facility? _____
   How many participants are at your current facility? _____

The following items are intended to collect information on background characteristics of workers in your field.

9. What is your year of birth? 19____

10. What is your gender? □ Male □ Female

11. What is your marital status? □ Single
    □ Married
    □ Other (specify)_____

12. How many dependents live with you? _____

13. How many of you close relatives or close friends live with in easy driving distance?
_____

What is the highest level of education that you have completed (check one)?
□ GED
□ High School
□ Some College
□ Bachelor's Degree
□ Some Graduate School or post graduate work
□ Master's Degree
□ PhD
If college was attended, what was your major? _____

15. What, if any, licenses or certifications do you possess?

_____

16. What is your income level (check one)?
□ less than $11,999 □ $12,000-17,999
□ $18,000-23,999 □ $24,000-29,999
□ $30,000-35,999 □ more than $36,000

17. How much of your earnings contribute to your household income (check one)?
□ less than 25% □ about 50% □ about 75% □ all earnings

Please add any additional comments concerning your work attitudes on the back. Thank you for your participation in this study. Being this survey is conducted anonymously, your individual results can not be determined. However, the results of this research should be available by May 2002. You may contact the researcher for a summary of the results

# APPENDIX C

## MBI Sub-Scale Items

Emotional Exhaustion:

I feel emotionally drained from my work.

I feel used up at the end of the work day.

I feel fatigued when I get up in the morning and have to face another day on the job.

Working with people all day is really a strain for me.

I feel burned out from my work

I feel frustrated by my job.

I feel I'm working too hard on my job.

Working with people directly puts to too much stress on me.

I feel like I'm at the end of my rope.

Personal Accomplishment:

I can easily understand how my participants feel about things.

I deal very effectively with the problems of my participants.

I feel I'm positively influencing other people's lives through my work.

I feel very energetic.

I can easily create a relaxed atmosphere with my participants.

I feel exhilarated after working closely with my participants.

I have accomplished many worthwhile things in this job.

In my work, I deal with emotional problems very calmly.

Depersonalization:

I feel I treat some participants as if they were impersonal objects.

I've become more callous toward people since I took this job.

I worry that this job is hardening me emotionally.

I don't care what happens to some participants.

I feel participants blame me for some of their problems.

# APPENDIX D

## RWCC Sub-Scale Items

Problem Focused:

Bargained or compromised to get what something positive from the situation.

Concentrated on something good that could come out of the whole thing.

Stood my ground and fought for what I wanted.

Came up with a couple of different solutions to the problem.

Accepted my strong feelings but didn't let them interfere with other things too much.

Changed something about myself so I could deal with the situation better.

I knew what had to be done, so I doubled my efforts and tried harder to make things work..

Changed or grew as a person in a good way.

Accepted the next best thing to what I wanted.

Tried not to act too hastily or follow my own hunch.

Changed something so things would turn out right.

Just took things one step at a time.

Came out of the experience better than when I went in.

Made a plan of action and followed it.

Seeking Social Support:

Asked someone I respected for advice and usually followed it.

Talked to someone about how I was feeling.

Accepted sympathy and understanding from someone.

Got professional help and did what they recommended.

Talked to someone about the situation.

Blaming Your Self:

Blamed your self.

Criticized or lectured your self.

Realized you brought the problem on your self.

Wishful Thinking:

Hoped a miracle would happen.

Wished I were a stronger person- more optimistic and forceful.

Wished I could change the way I felt.

Daydreamed or imagined a better time or place than the one I was in.

Had fantancies or wishes about how things might turnout.

Wished the situation would go away or somehow be finished.

Thought about fantastic or unreal things (like perfect revenge or finding a million dollars) that made me feel better.

Wished that I could change what happened.

Avoidance:

Kept my feelings to myself.

Refused to believe it had happened.

Slept more than usual.

Felt bad that I couldn't avoid the problem.

Tried to forget.

Went on as if nothing happened.

Tried to make myself feel better by eating, drinking, smoking, taking medications.

Avoided being with people in general.

Kept others from knowing how bad things are.

Avoided my problem.

Blaming Others:

Figured out who to blame.

Took it out on others.

Got mad at people or things that caused the problem.

Thought that others were unfair to me.

Blamed others.

Found out what other person was responsible.

Counting Your Blessings:

Counted my blessings.

Focused on the good things in my life.

Told myself things could be worse.

Thought how much better off I am than others.

Told myself how much I have already accomplished.

Compared myself to others who are less fortunate.

Religiosity:

Prayed about it.

Spoke to my clergyman about it.

Relied on my faith to get me through.

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